

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

Ref. No- 275

Patna- 23, Date- 26/09/19

To,

1. Shri Murarijee Mishra  
Vijay Nagar, Near Temple,  
Rukunpura, Patna - 800014
2. Dr. Amar Nath Verma,  
10192 ATS Advantage, Ahinsha Khand - 1,  
Near Habitat Centre, Indirapuram,  
Ghaziabad - 201014,
3. Dr. Shardendu,  
Department of Botany,  
Patna Science College, Patna
4. Shri Vijay Kumar Sinha, IFS (Retd.),  
Prasad Bhawan, R. K. Path,  
Pirmohani, Kadamkuan, Patna - 800 003.
5. Dr. Birendra Prasad,  
Department of Botany,  
Patna University,  
Patna - 800 005.
6. Dr. Sudhanshu Kumar,  
C - 3/1401, Puri Pranayama  
Sector 82 & 85, Faridabad - 121 007 (Haryana)
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 19.09.2019, 20.09.2019 and 21.09.2019.

Sir,

Please find enclosed herewith proceedings of the State Expert Appraisal Committee (SEAC) meeting held on 19, 20 and 21 September, 2019.

Yours sincerely,

 26/9/19  
(Alok Kumar)

Member Secretary  
SEAC, Bihar

Proceedings of the State Expert Appraisal Committee (SEAC) meeting dated 19, 20 and 21 September, 2019 -

A meeting of SEAC was held in the meeting hall of SEIAA, Bihar, Patna on - 19, 20 and 21 September, 2019 presided over by the Chairman, SEAC. The following members of the Committee were present in the meeting:

1. Shri Vijay Kumar Sinha,
2. Dr. Amar Nath Verma
3. Dr. Shardendu,
4. Dr. Birendra Prasad,
5. Dr. Sudhanshu Kumar,
6. Dr. Dilip Kumar Paul,

(Dr. Sudhanshu Kumar attended the meeting only on 19.09.2019)

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

The Committee discussed project proposals as per the agenda for respective dates.

1. Proposed 100 KLPD molasses based distillery along with 4.0 MW co-generation power plant at Village:- Bucheya, P.O. Sidhwali, Tehsil:- Sidhwalia, District:- Gopalganj, Bihar by Magadh Sugar and Energy Limited Unit : Bharat Sugar Mills (Distillery Division) (File No. - SIA/5(g)/691/19). Online Proposal No.:- SIA/BR/IND2/40509/2018). Proponent:- M/s Magadh Sugar and Energy Limited Unit : Bharat Sugar Mills (Distillery Division).  
(Consultant :- I M Environet Private Limited).

Application along with filled up 'Form - I', Prefeasibility report and Environment Management Plan in the prescribed format was submitted to MoEF&CC on 04<sup>th</sup> December, 2018 for obtaining Terms of Reference (ToR). MoEF&CC issued ToR Vide No. - IA-J-11011/402/2018-IA-II (I), dated 07.01.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 24.06.2019.

Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 05.09.2019 for obtaining Environmental Clearance (EC).

The Proponent and Consultant presented the proposal before the Committee. After consideration the Committee sought information / reports as under.

1. Compliance report of CTO issued earlier to the Magadh Sugar and Energy Limited.
2. Explore alternative water sources to avoid ground water tapping.
3. Water balance diagram (Pre & post Monsoon) considering Zero balance / discharge and its layout plan.
4. Revised CER proposal/plan (head wise breakup of amount to be spent under CER).
5. Provision for health checkup for employees and labours half yearly/quarterly.
6. Details of STP / ETP plant with technology.
7. Details of Air Quality data and modelling.
8. Detailed measures proposed for odour mitigation.

### **Sand Mining Proposals**

Sand Mining Proposals (serial No. 02 to 14) of agenda appraised on 19.09.2019 (serial No. 15 to 28) appraised on 20.09.2019, and (serial No. 29 to 41) appraised on 21.09.2019.

The sand mining proposals were appraised specially in the light of Public Consultation which is done revenue circle wise according to their situation.

2. Sand Mining Project on river Kiul at Birdaban Sand Ghat of Lakhisarai district, Area – 18 Ha (**File No.:- SIA/1(a)/566/18**). **Online Proposal No.:- SIA/BR/MIN/30913/2019**).  
Proponent : Westlink Trading Private Limited.  
Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 11<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/566/18, dated 26.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 30.07.2019. Final EIA report was submitted by Project

Proponent in the prescribed format to SEIAA, Bihar on 05.09.2019 for obtaining Environmental Clearance (EC).

3. Sand Mining Project on river Kiul at Tetarhat Sand Ghat of Lakhisarai district, Area – 21.5 Ha (File No.:- SIA/1(a)/608/19). Online Proposal No.:- SIA/BR/MIN/30921/2019).

Proponent :- Westlink Trading Private Limited.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 13<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/608/19, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 30.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 05.09.2019 for obtaining Environmental Clearance (EC).

4. Sand Mining Project on river Kiul at Garhi Bisanpur Sand Ghat of Lakhisarai district, Area - 24 Ha (File No. - SIA/1(a)/548/18). Online Proposal No.:- SIA/BR/MIN/30922/2019).

Proponent :- Westlink Trading Private Limited.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 11<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/548/18, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 30.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 05.09.2019 for obtaining Environmental Clearance (EC).

5. Sand Mining Project on river Kiul at Ghoshi Kundi Sand Ghat of Lakhisarai district, Area - 22 Ha (File No. - SIA/1(a)/546/18). Online Proposal No.:- SIA/BR/MIN/30928/2019).

Proponent :- Westlink Trading Private Limited.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 11<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/546/18, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 31.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 05.09.2019 for obtaining Environmental Clearance (EC).

6. Sand Mining Project on river Kiul at Kishanpur Sand Ghat of Lakhisarai district, Area - 23 Ha (Proposal No. - SIA/1(a)/543/18). Online Proposal No.:- SIA/BR/MIN/30930/2019).

Proponent :- Westlink Trading Private Limited.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 11<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/543/18, dated 11.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 30.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 05.09.2019 for obtaining Environmental Clearance (EC).

7. Sand Mining Project on river Kiul at Rampur Sand Ghat of Lakhisarai district, Area - 23.5 Ha (File No. - SIA/1(a)/550/18). Online Proposal No.:- SIA/BR/MIN/30937/2019).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 11<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/550/18, dated 26.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 31.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 06.09.2019 for obtaining Environmental Clearance (EC).

8. Maliya Sand Ghat on Kiul River of Lakhisarai district, Area - 24.5 Ha (File No. - SIA/1(a)/545/18). Online Proposal No.:- SIA/BR/MIN/30938/2019).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 11<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/545/18, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 30.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 05.09.2019 for obtaining Environmental Clearance (EC).

9. Dumri Sand Ghat on Barnar River of Jamui district, Area - 24 Ha (File No. - SIA/1(a)/577/18). Online Proposal No.:- SIA/BR/MIN/30943/2019).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 11<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/577/18, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 25.07.2019. Final EIA report was submitted by Project

Proponent in the prescribed format to SEIAA, Bihar on 03.09.2019 for obtaining Environmental Clearance (EC).

- 10.** Nariyana Chacho Sand Ghat on Kiul River of Jamui district, Area - 21.5 Ha (**File No. - SIA/1(a)/582/18**). **Online Proposal No.:- SIA/BR/MIN/30945/2019**).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 11<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/582/18, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 23.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 03.09.2019 for obtaining Environmental Clearance (EC).

- 11.** Kalai & Durga Mandir Sand Ghat on Ulai River of District-Jamui, Area - 24 Ha (**Proposal No. - SIA/1(a)/555/18**). **Online Proposal No.:- SIA/BR/MIN/30947/2019**).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 11<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/555/18, dated 11.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 24.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 06.09.2019 for obtaining Environmental Clearance (EC).



12. **Bihari Sand Ghat on Kiul River of Jamui district, Area - 20.5 Ha (File No. - SIA/1(a)/585/18). Online Proposal No.:- SIA/BR/MIN/30950/2019).**

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 11<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/585/18, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 23.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 03.07.2019 for obtaining Environmental Clearance (EC).

13. **Kalyanpur Sand Ghat on Kiul River of District- Jamui, Area - 21.5 Ha (Proposal No. - SIA/1(a)/557/18). Online Proposal No.:- SIA/BR/MIN/30958/2019).**

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 11<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/557/18, dated 11.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 23.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 03.09.2019 for obtaining Environmental Clearance (EC).

14. **Bhour Sand Ghat on Kiul River of Jamui district, Area - 23.5 Ha (File No. - SIA/1(a)/592/18). Online Proposal No.:- SIA/BR/MIN/30962/2019).**

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/592/18, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 24.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 03.09.2019 for obtaining Environmental Clearance (EC).

- 15.** Katauna Sand Ghat on Kiul River of Jamui district, Area – 22.5 Ha (**File No. - SIA/1(a)/576/18**). **Online Proposal No.:- SIA/BR/MIN/30963/2019**).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/576/18, dated 26.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 23.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 03.09.2019 for obtaining Environmental Clearance (EC).

- 16.** Kendih Sand Ghat on Kiul River of Jamui district, Area - 23 Ha (**File No. - SIA/1(a)/581/18**). **Online Proposal No.:- SIA/BR/MIN/30965/2019**).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/581/18, dated 26.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 24.07.2019. Final EIA report was submitted by Project

Proponent in the prescribed format to SEIAA, Bihar on 03.09.2019 for obtaining Environmental Clearance (EC).

17. Dinari Sand Ghat on Barnnar River of Jamui district, Area - 24 Ha (File No. - SIA/1(a)/616/19). Online Proposal No.:- SIA/BR/MIN/30967/2019).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 13<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/616/19, dated 20.05.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 24.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 06.09.2019 for obtaining Environmental Clearance (EC).

18. Kendua Balu Ghat on Barnnar River of District- Jamui, Area - 23 Ha (File No. - SIA/1(a)/559/18). Online Proposal No.:- SIA/BR/MIN/30968/2019).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/559/18, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 24.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 03.09.2019 for obtaining Environmental Clearance (EC).

19. Ghanshyamthan Koluha Balu Ghat on Barnnar River of Jamui district, Area - 24 Ha (File No. - SIA/1(a)/575/18). Online Proposal No.:- SIA/BR/MIN/30972/2019).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/575/18, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 24.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 03.09.2019 for obtaining Environmental Clearance (EC).

20. Giddheshwar Sand Ghat on Kiul River of Jamui district, Area - 23.5 Ha (File No. - SIA/1(a)/609/19). Online Proposal No.:- SIA/BR/MIN/30974/2019).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 13<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/609/18, dated 17.05.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 24.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 03.09.2019 for obtaining Environmental Clearance (EC).

21. Balthar and Hanjro Sand Ghat on Bannar River of Jamui district, Area - 22.5 Ha (File No. - SIA/1(a)/589/18). Online Proposal No.:- SIA/BR/MIN/30975/2019).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2019 for obtaining

Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/589/18, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 25.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 03.09.2019 for obtaining Environmental Clearance (EC).

22. Lipatwa Sand Ghat on Barnar River of Jamui district, Area - 22 Ha (File No. - SIA/1(a)/613/19). Online Proposal No.:- SIA/BR/MIN/30976/2019).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 13<sup>th</sup> February, 2017 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/613/19, dated 17.05.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 25.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 03.09.2019 for obtaining Environmental Clearance (EC).

23. Jogidiha Numar Sand Ghat on Anjana River of Jamui district, Area - 22.5 Ha (File No. - SIA/1(a)/612/19). Online Proposal No.:- SIA/BR/MIN/30996/2019).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 13<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/612/19, dated 17.05.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 23.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 06.09.2019 for obtaining Environmental Clearance (EC).

24. Judgi Balu Ghat on Barnar River of Jamui district, Area – 23.5 Ha (**File No. - SIA/1(a)/569/18**). **Online Proposal No.:- SIA/BR/MIN/30998/2019**).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/569/18, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 25.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 03.09.2019 for obtaining Environmental Clearance (EC).

25. Satgama Sand Ghat on Kiul River of Jamui district, Area - 23.5 Ha (**File No. - SIA/1(a)/586/18**). **Online Proposal No.:- SIA/BR/MIN/30999/2019**).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/586/18, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 23.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 03.09.2019 for obtaining Environmental Clearance (EC).

26. Sand Mining Project on river Kiul at Panbarwa Sand Ghat of Jamui district, Area – 22 Ha (**File No. - SIA/1(a)/584/18**). **Online Proposal No.:- SIA/BR/MIN/31021/2019**).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/584/18, dated 26.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 24.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 03.09.2019 for obtaining Environmental Clearance (EC).

27. Smarak Sand Ghat on Kiul River of District- Jamui, Area - 22 Ha (File No. - SIA/1(a)/563/18). Online Proposal No.:- SIA/BR/MIN/31025/2019).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2017 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/563/18, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 23.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 03.09.2019 for obtaining Environmental Clearance (EC).

28. Pakri Sand Ghat on Kiul River of Jamui district, Area - 24 Ha (File No. - SIA/1(a)/591/18). Online Proposal No.:- SIA/BR/MIN/31026/2019).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/591/18, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 24.07.2019. Final EIA report was submitted by Project

Proponent in the prescribed format to SEIAA, Bihar on 03.09.2019 for obtaining Environmental Clearance (EC).

29. Mandhata Sand Ghat on Barnar River of Jamui district, Area - 23.5 Ha (File No. - SIA/1(a)/611/19). Online Proposal No.:- SIA/BR/MIN/31028/2019).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 13<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/611/19, dated 16.03.2017 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 16.03.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 03.09.2019 for obtaining Environmental Clearance (EC).

30. Parsa Sand Ghat on Kiul River of Jamui district, Area - 24 Ha (File No. - SIA/1(a)/579/18). Online Proposal No.:- SIA/BR/MIN/31024/2019 (old) SIA/BR/MIN/41076/2019 (new)}.

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/579/18, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 24.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 06.09.2019 for obtaining Environmental Clearance (EC).

31. Gausala Sand Ghat on Ulai River of Jamui district, Area - 24 Ha {(File No. - SIA/1(a)/578/18), Online Proposal No.:- SIA/BR/MIN/30966/2019 (old) SIA/BR/MIN/41127/2019 (new)}.

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/578/18, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 24.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 06.09.2019 for obtaining Environmental Clearance (EC).

32. Chorghara and Amba Sand Ghat on Ulai River of Jamui district, Area – 23.5 Ha {(File No. - SIA/1(a)/570/18), Online Proposal No.:- SIA/BR/MIN/30959/2019 (old) SIA/BR/MIN/41143/2019 (new)}.

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/570/18, dated 26.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 25.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 06.09.2019 for obtaining Environmental Clearance (EC).

33. Sati and Garhi Sand Ghat on Ulai River of Jamui district, Area - 22 Ha (File No. - SIA/1(a)/597/18). Online Proposal No.:- SIA/BR/MIN/31019/2019 (old) SIA/BR/MIN/41164/2019 (new)}.

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/597/18, dated 26.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 25.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 06.09.2019 for obtaining Environmental Clearance (EC).

34. Sair and Pandeydih Sand Ghat on Ulai River of Jamui district, Area - 24 Ha (File No. - SIA/1(a)/580/18), **Online Proposal No.:- SIA/BR/MIN/30995/2019 (old) SIA/BR/MIN/41189/2019 (new)}**.

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/580/18, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 25.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 06.09.2019 for obtaining Environmental Clearance (EC).

35. Jaljoga Sand Ghat on Kiul River of Jamui district, Area - 23 Ha (File No. - SIA/1(a)/593/18). **Online Proposal No.:- SIA/BR/MIN/30983/2019 (old) SIA/BR/MIN/41216/2019 (new)}**.

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/593/18, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 24.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 06.09.2019 for obtaining Environmental Clearance (EC).

36. Auria Sand Ghat on Bannar River of Jamui district, Area - 24 Ha (File No. - SIA/1(a)/588/18). Online Proposal No.:- SIA/BR/MIN/30960/2019 (old) SIA/BR/MIN/41235/2019 (new)}.

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/588/18, dated 26.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 25.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 06.09.2019 for obtaining Environmental Clearance (EC).

37. Sono Balu Ghat on Barnar River of District- Jamui, Area - 21 Ha {(File No. - SIA/1(a)/561/18), Online Proposal No.:- SIA/BR/MIN/31027/2019 (old) SIA/DR/MIN/41270/2019 (new)}.

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/561/18, dated

25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 25.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 06.09.2019 for obtaining Environmental Clearance (EC).

- 38.** Garsanda Sand Ghat on Kiul River of District- Jamui, Area - 24 Ha (File No. - SIA/1(a)/558/18). Online Proposal No.:- SIA/BR/MIN/30961/2019 (old) SIA/BR/MIN/41334/2019 (new)}.

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/558/18, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 23.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 06.09.2019 for obtaining Environmental Clearance (EC).

- 39.** Lotun and Ratanpur Sand Ghat on Kiul River of Jamui district, Area - 24 Ha (File No. - SIA/1(a)/595/18). Online Proposal No.:- SIA/BR/MIN/30978/2019 (old) SIA/BR/MIN/41398/2019 (new)}.

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 12<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/595/18, dated 25.04.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 23.07.2019. Final EIA report was submitted by Project

Proponent in the prescribed format to SEIAA, Bihar on 06.09.2019 for obtaining Environmental Clearance (EC).

40. Darha & Bharari Sand Ghat on Anjana River of Jamui district, Area - 23.5 Ha (**File No. - SIA/1(a)/615/19**). **Online Proposal No.:- SIA/BR/MIN/30980/2019 (old) SIA/BR/MIN/41436/2019 (new)}**).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 13<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/615/19, dated 17.05.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 23.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 06.09.2019 for obtaining Environmental Clearance (EC).

41. Simaria Sand Ghat on Barnnar River of Jamui district, Area - 24 Ha (**File No. - SIA/1(a)/614/19**). **Online Proposal No.:- SIA/BR/MIN/31031/2019**).

Proponent :- Westlink Trading Pvt. Ltd.

Consultant :- Cognizance Research India Private Limited.

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 13<sup>th</sup> February, 2019 for obtaining Terms of Reference (ToR). SEIAA, Bihar issued ToR Vide SIA/1(a)/614/19, dated 17.05.2019 and public hearing for the proposed project was conducted by Bihar State Pollution Control Board on 24.07.2019. Final EIA report was submitted by Project Proponent in the prescribed format to SEIAA, Bihar on 06.09.2019 for obtaining Environmental Clearance (EC).

**The above mentioned proposals** were appraised as per the date and time set forth in the notice of the meeting. While considering proposals on 19.09.2019, it was

pointed out that there were discrepancies in air monitoring data as also there was no report on free silica as required in ToR Point No. 19 (a). Similarly there was no application of mind in EMP and CER in respect of certain components. The proponent and Consultant apologized and prayed for leave of the Committee to make necessary corrections and submitted a declaration in respect of the same. The Committee was pleased to accept the above plea. The proponent complied accordingly. The Project Proponent has also submitted a declaration that within a period four weeks or commencement of mining whichever is earlier, the required report on free Silica will be submitted to SEIAA, Bihar.

The Committee also observed that the sentiments of local people during Public Consultation have been proposed to be taken care of.

Three proposals (viz Kalyanpur, Katauna, Satgama Agenda item No. 13, 15 and 25) were put to reverse-auction by the Department of Mines and Geology, Govt. of Bihar 0 cft, 1100 cft and 64,800 cft respectively (as per Mines and Geology Deptt., Govt. of Bihar letter No. 4006 dated 15.10.2018) have been mined from them in 2018. The Committee decided to reduce above mentioned quantity from the proposed mining.

In the light of above the Committee decided to recommend the mining proposals (serial No. 02 to 41) for grant of Environmental Clearance as Annexure - I.

42. SHRI RAM JANAKI MEDICAL COLLEGE AND HOSPITAL, Village:- Narghoghi, Tehsil:- Sarairanjan, District:- Samastipur, Bihar Total Plot Area:- 85,652 m<sup>2</sup>, Total Build-up Area:- 1,24,288.714 m<sup>2</sup> (File No. - SIA/8(a)/692/19). **Online Proposal No.:- SIA/BR/MIS/115168/2019).**

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

Consultant :- Asenco Enviro 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 06<sup>th</sup> September, 2019 for obtaining Environmental Clearance (EC).

The Proponent and Consultant presented the proposal before the Committee, which observed.

1. Block No. 15 and Block No. 16 shown on the Master plan map shall be relocated.

The Project Proponent has since submitted compliance. The project proposal, therefore, is recommended for grant of Environmental Clearance as Annexure - II.

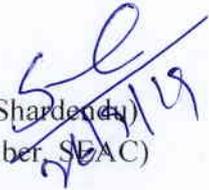
43. Shivshiva Steel Pvt. Ltd., (Expansion Project), Mauza:- Raipura, Tehsil:- Fatuha, District:- Patna, State:- Bihar, Proposed Production:- 1,50,000 TPA to 4,00,000 TPA and Induction Furnace:- 3,00,000 TPA, (File No. - SIA/3(a)/448/17/II/19). **Online Proposal No.:- SIA/BR/IND/37579/2019).**

Proponent :- Shivshiva Steel Private Limited.

Consultant :-

Application along with filled up 'Form - I' and Pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 24<sup>th</sup> July, 2019 for obtaining Terms of Reference (ToR).

The Project Proponent and Consultant presented the proposal before the Committee. Referring to O.M. No. J-11013/41/2006-IA-II (I) (Part) dated 29.08.2017 of the MoEF&CC, Govt. of India they requested that data collected in year 2017 and the public consultation done on 03.02.2018 may kindly be allowed to be used for preparation of the EIA report. They also requested in the light of the fact that the instant proposal includes expansion of the production capacity and change in technology, which involves reduction in pollution load, the above mentioned prayer is justified. The Committee considered the proposal and request of Project Proponent and decided that ToR be granted as Annexure- III, while accepting the above mentioned request of the Project Proponent.

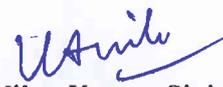
  
(Dr. Shardenendu)  
(Member, SEAC)

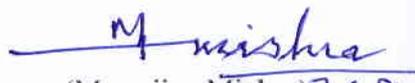
Sd/-  
(Dr. Sudhanshu Kumar)  
(Member, SEAC)

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

  
(Dr. Dilip Kumar Paul)  
(Member, SEAC)

(Dr. Birendra Prasad)  
(Member, SEAC)

  
(Shri Vijay Kumar Sinha)  
Member, SEAC

  
(Murarijee Mishra) 26.9.19  
Chairman, SEAC

## Annexure - I

### A. Specific Condition

1. The Project Proponent shall submit to SEIAA, Bihar a copy of the lease deed of each mining area / ghat (separately) before starting mining in the lease area.
2. Environmental clearance shall valid for a maximum period of 5 years or till expiry of lease period whichever is earlier.
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 of the mining officer. On each pillar Geo-Coordinate shall be written with permanent paint mark as described in the mining plan.
4. Sand mining in river bed shall be done semi-mechanized and preferably manual.
5. Excavation will be carried out up to a maximum depth of 3 meters from surface of mineral deposit and not less than one meter from the water level of the River channel whichever is reached earlier.
6. No mining shall be carried out in the areas prominently used by wild animals (birds and reptiles) for nesting.
7. No mining shall be carried out in 3 meter wide strip from the river bank in a River flood plain and within flowing/live water channel.
8. To maintain the safety and stability of Riverbanks, 3 meter or 10% of the width of the River whichever is more will be left intact as no mining zone.
9. No stream shall be diverted for the purpose of sand mining. No natural water course and / or water reservoirs shall be obstructed due to mining operations.
10. Restricted working hours. Sand mining operation shall be carried out in day hours only.
11. The pollution due to transportation load on the environment will be effectively controlled & water sprinkling will also be done regularly. Vehicles with PUCC only will be allowed to ply. The mineral transportation shall be carried out through covered vehicles / trucks only



and the vehicle shall not be overloaded. Project should obtain 'PUC' certificate for all the vehicles from authorized pollution testing centre.

12. The stacking area of mined-out sand which shall be situated near the mining site within a area fenced from all sides to avoid being spread in the nearby areas by high winds and the height stacking should not exceed 2 meter. Transportation shall be confined to day time only, that is from sunrise to sunset, to avoid inconvenience to local population any.
13. Rubbish burial shall not be done in the Rivers.
14. Adequate steps shall be taken to check soil erosion and control of debris flow etc. by constructing engineering structures.
15. Mining shall not be undertaken in a mining lease located in 200 - 500 meter of bridge, 200 meter upstream and downstream of water supply / irrigation scheme, 100 meters from the edge of National Highway and railway line, 50 meters from a reservoir, channel or building, 25 meter from the edge of State Highway and 10 meters from the edge of others roads.
16. Mining activity shall not be done for mine lease where mining can cause danger to site of flood protection works, places of cultural, religious, historical, and archaeological importance.
17. The approach road from loading point upto main road shall be properly developed with proper width and geometry required for safe movement of traffic by lease holder at his own cost.
18. Main haulage road in the mine shall be provided with permanent water sprinklers and other roads shall be regularly wetted with water tankers fitted with sprinklers.
19. Transportation of the Minerals by road passing through the village shall not be allowed. A 'bypass' road should be constructed (say, leaving a gap of at least 200 meters) for the purpose of transportation of the minerals so that the impact of sound, dust and accidents could be mitigated. The Project Proponent shall bear the cost towards the widening and strengthening of existing public road-network in case the same is proposed to be used for



the Project. No road movement should be allowed on existing village road network without appropriately increasing the carrying capacity of such roads.

20. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
21. Project Proponent shall appoint a Monitoring committee to monitor the replenishment study, traffic management, levels of production, river Bank erosion and maintenance of Road etc.
22. Project Proponent shall submit the annual replenishment report certified by an authorized agency. In case the replenishment is lower than the approved rate of production, then the mining activity / production levels shall be decreased / stopped accordingly till the replenishment is completed.
23. Regular monitoring of the flow rate of the springs and seasonal nallhas flowing in and around the mine lease shall be carried out and records maintained. Regular monitoring of water quality upstream and downstream of water bodies shall be carried out and record of monitoring data should be maintained and submitted to the SEIAA, Bihar, Regional office, Ranchi, Central Ground water Authority, Regional Director, Central Ground water Board, State Pollution Control Board and Central Pollution Control Board.
24. 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, annual production capacity of the mineral and other relevant information for the general public.
25. Apart from above the project proponent shall abide by the Sustainable Sand Mining Management Guidelines 2016 as issued MoEF&CC.
26. All specific and general conditions which are of public concern at large shall be permanently displayed at a prominent place for public along with address and contact details of authority where the violation of EC conditions can be reported.

27. The Project Proponent shall stick to the proposal mentioned in CER, and display the name of beneficiary and trainee and details of equipment provided to them. The size of sign board shall not be less than be 6x4 feet.

### **B. General condition**

1. No stacking of sand is allowed on road side along national highways/ State highways.
2. No labour camp shall be allowed in riverbed.
3. Provision shall be made for housing labour with all necessary infrastructure and facilities (out of mining Block and river-bed) such as fuel for cooking, toilets / mobile toilets, safe drinking water, First-Aid facilities, crèche etc. The housing shall be in the form of temporary structures to be removed after the completion of the project.
4. Labour & Personnels working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.
5. The Project Proponent shall make arrangements for safe drinking water, first aid facility along With anti-venom injection, in case of emergency for the workers.
6. The project proponent shall maintain register for production and dispatch and submit periodic return (six-monthly) to the SEIAA, Bihar.
7. The EC holder shall keep a correct account of quantity of mineral mined out, dispatched from the mine, mode of transport, registration number of vehicle and mine plan. This should be produced before officers of Central Government and State for inspection whenever asked for.
8. Regular monitoring of ground water table shall be carried out at the upstream and depth of water available in the dug well.

9. Monitoring of Ambient Air Quality, Water Quality & Noise Quality shall be carried out based on the Notification, as amended from time to time by the Central Pollution Control Board. Water sprinkling should be increased at places of loading and unloading points & transfer points to reduce fugitive emissions.
10. The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the SEIAA, Bihar.
11. The Project proponent shall provide all necessary logistic support to the authorised officer of this authority as when required. They will facilitate and assist the authority in site inspection and monitoring.
12. Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India vide order dated 27.02.2012 in Deepak Kumar case [SLAP(C) Nos. 19628-19629 of 2009] and order dated 05.08.2013 of the Hon'ble National Green Tribunal in application No. 171/2013 shall be strictly followed.
13. All the provisions made and restrictions imposed as envisaged in the Bihar Minor Mineral Rule, shall be complied with; particularly regarding Environment Management and payment of compensation to the land owners.
14. No change in mining technology and scope of working should be made without prior approval of the SEIAA, Bihar.
15. The ministry / SEIAA may alter / modify the above conditions or stipulate any additional condition in the interest of environment protection.
16. Concealing factual data or submission of false / fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal/suspension of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
17. The instruction contained here in above regarding air and noise pollution and details of mining proposals shall be displayed on Signboard in Hindi for public information.



18. 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

### I. Statutory compliance:

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

centre & mechanical composter etc. shall be properly maintained. The collected solid waste shall be segregated at site. The recyclable solid waste shall be sold out to the authorized vendors for which a written tie-up must be done with the authorized recyclers.

11. Bio-Medical waste to be generated in the hospital shall be handled and managed as per the provisions of Bio-Medical waste (Management & Handling) Rules, 2016. Radioactive waste management program shall be adopted and implemented at the site in order to mitigate the effects coming out due to use of atomic radiation in different equipment's.
12. Hazardous waste/E-waste should be disposed off as per Rules applicable and with the necessary approval of the Bihar State Pollution Control Board.
13. Solar power plant or other solar energy related equipment's shall be operated and maintained properly.
14. Provisions shall be made for the integration of solar water heating system.
15. EC conditions must be displayed at prominent place which can be easily visible to public mentioning the address and contact number of authority to whom violation of EC conditions can be reported.
16. Fencing of the project boundary by erecting 10 meter façade before start of construction activities.
17. Free Parking facility for patient and visitors shall be provided.

## **II. Air quality monitoring and preservation**

1. Notification GSR 94(F) dated 25.01.2018 of MoEF&CC regarding Mandatory Implementation of Dust Mitigation Measures for Construction and Demolition Activities for projects requiring Environmental Clearance shall be complied with.
2. A management plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.

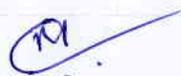


3. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5) covering upwind and downwind directions during the construction period.
4. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. 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. Construction site shall be adequately barricaded before the construction begins. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. These measures shall include screens for the building under construction, continuous dust / wind breaking walls all around the site (at least 3 meter height). Plastic/tarpaulin sheet covers shall be provided for vehicles bringing in sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
6. Sand, murrum, loose soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
7. Wet jet shall be provided for grinding and stone cutting.
8. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
9. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules 2016.
10. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection) prescribed for air and noise emission standards.

11. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution. Low sulphur diesel shall be used. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.
12. For indoor air quality the ventilation provisions as per National Building Code of India.
13. Real time Ambient Air Quality shall be measured on continuous basis and the data shall be displayed in public domain as per National Ambient Air Quality parameters and on the portal of hospital. The measured data shall be linked to the server of the State Pollution Control Board.

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

1. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wetland and water bodies. Check dams, bio-swales, landscape, and other sustainable urban drainage systems (SUDS) are allowed for maintaining the drainage pattern and to harvest rain water.
2. Buildings shall be designed to follow the natural topography as much as possible. Minimum cutting and filling should be done.
3. Total fresh water use shall not exceed the proposed requirement as provided in the project details.
4. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the, SEIAA/ Regional Office, MoEF&CC along with six monthly Monitoring reports.
5. A certificate shall be obtained from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water already committed, the quantity of water allotted to the project under consideration and the



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

6. At least 20% of the open spaces as required by the local building bye-laws shall be pervious. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as pervious surface.
7. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc. and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning etc. shall be done.
8. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc.) for water conservation shall be incorporated in the building plan.
9. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate recirculation lines for flushing by giving dual plumbing system be done.
10. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
11. The local bye-law provisions on rain water harvesting should be followed. If local byelaw provision is not available, adequate provision for storage and recharge should be followed as per the Ministry of Urban Development Model Building Byelaws, 2016. Rain water harvesting recharge pits/storage tanks shall be provided for ground water recharging as per the CGWB norms.
12. A rain water harvesting plan needs to be designed where the recharge bores of minimum one recharge bore per 5,000 square meters of built up area and storage capacity of minimum one day of total fresh water requirement shall be provided. In areas where ground water recharge is not feasible, the rain water should be harvested and stored for reuse. The ground water shall not be withdrawn without approval from the Competent Authority.
13. All recharge should be limited to shallow aquifer.

14. No ground water shall be used during construction phase of the project.
15. Any ground water dewatering should be properly managed and shall conform to the approvals and the guidelines of the CGWA in the matter. Formal approval shall be taken from the CGWA for any ground water abstraction or dewatering.
16. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured and recorded to monitor the water balance as projected by the project proponent. The record shall be submitted to the Regional Office, MoEF&CC along with six monthly Monitoring reports.
17. Sewage shall be treated in the STP with tertiary treatment. The treated effluent from STP shall be recycled/re-used for flushing, AC make up water and gardening. As proposed, no treated water shall be disposed in to municipal drain.
18. No sewage or untreated effluent water would be discharged through storm water drains.
19. Onsite sewage treatment of capacity of treating 100% waste water to be installed. The installation of the Sewage Treatment Plant (STP) shall be certified by an independent expert and a report in this regard shall be submitted to the Ministry before the project is commissioned for operation. Treated waste water shall be reused on site for landscape, flushing, cooling tower, and other end-uses. Excess treated water shall be discharged as per statutory norms notified by Ministry of Environment, Forest and Climate Change. Natural treatment systems shall be promoted.
20. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
21. Sludge from the onsite sewage treatment, including septic tanks, shall be collected, conveyed and disposed as per the Ministry of Urban Development, Central Public Health and Environmental Engineering Organization (CPHEEO) Manual on Sewerage and Sewage Treatment Systems, 2013.
22. Separate drainage system shall be developed for storm water so that end point discharge to nearest nallah / river is ensured to avoid water logging without any increase in the pollution load in receiving system.



**IV. Noise monitoring and prevention:**

1. Ambient noise levels shall conform to residential area 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. 17,132 m<sup>2</sup> of the 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.

**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. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
4. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the SEIAA/ Ministry, Regional Office along with the Six Monthly Compliance Report.

**XI. Miscellaneous:**

1. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC / SEIAA website where it is displayed.
2. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
3. All utility lines (electricity, telephone, cable, water supply, sewage, drainage, etc. shall be laid below ground level. Ducts shall be provided along and across the roads to lay the utility lines. Major trunk (water/sewerage) lines are to be laid along the utility corridor.
4. Rest room facilities shall be provided for service population.
5. 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 SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
15. The SEIAA reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

16. The Regional Office of 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.
17. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
18. Environmental clearance shall remain valid for a maximum period of 7 years or completion of project whichever is earlier.
19. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.



## **Annexure - III**

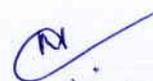
### **1. Executive Summary.**

### **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. 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, solid waste, 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 contractual).
- viii. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided.
- ix. Production of a report / certificate from concerned authority enforcing Factory Act regarding suitability of existing unit / plant for proposed expansion mentioning (specially adding one more furnace with all its accessories) whether existing plant is a satisfactory compliant of Factory Act.
- x. The proposal of the expansion of capacity to include thorough renovation / upgradation of all existing infrastructure of the unit consisting development/construction of First aid center/dispensary room for workers, development of facilities (toilets/urinals/washing rooms, canteen etc.)
- xi. Hazard identification and details of proposed safety systems.
- xii. 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 with description of surround covering village, Taluka / Tehsil, District and State, Justification for selecting the site, whether alternative 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 A<sub>3</sub>/A<sub>2</sub> 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 (10km 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 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects).
- 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 micrometeorological 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 as per 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, avifauna 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 on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- ii. Water Quality 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. Arrangement of land/alternative sites for green-belt development inside unit or in the proximity of unit.
- x. 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.
- xi. 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.
- xii. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
- xiii. Action plan for post-project environmental monitoring shall be submitted.
- xiv. 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.
- v. Making provisions for all personal safety/security related gears (shoes /hats/ helmets/ jacket/ gloves, specks, ear plugs etc.) for all workers and enforcing use of the same.

## 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 CER.

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.

**SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR METALLURGICAL INDUSTRIES (FERROUS & NON FERROUS)**

1. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs & outputs (material and energy balance).
2. Details on blast furnace/ open hearth furnace/ basic oxygen furnace/ladle refining, casting and rolling plants etc.
3. Details on installation/activation of opacity meters with recording with proper calibration system.
4. Details on toxic metals including mercury, arsenic and fluoride emissions.
5. Details on stack height requirement for integrated steel.
6. Details on ash disposal and management -Non-ferrous metal.
7. Complete process flow diagram describing production of lead/zinc/copper/ aluminium, etc.
8. Raw materials substitution or elimination.
9. Details on smelting, thermal refining, melting, slag fuming, and Waelz kiln operation.

10. Details on Holding and de-gassing of molten metal from primary and secondary aluminum, materials pre-treatment, and from melting and smelting of secondary aluminium.
11. Details on solvent recycling.
12. Details on precious metals recovery.
13. Details on composition, generation and utilization of waste/fuel gases from coke oven plant and their utilization.
14. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
15. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
16. Trace metals in waste material especially slag.
17. Plan for trace metal recovery.
18. Trace metals in water.