

STATE LEVEL EXPERT APPRAISAL COMMITTEE (SEAC), BIHAR

2nd Floor, BELTRON Bhawan, Shastri Nagar, Patna – 800023.

Ref. No. - 489

Patna Dated: - 27/12/2022

**MINUTES OF 15th MEETING OF STATE LEVEL EXPERT APPRAISAL
COMMITTEE (SEAC), BIHAR CONSTITUTED ON 12.08.2021**

VENUE: SEIAA Office

DATE: 26th December, 2022

Minutes/Proceeding of the Meeting

- 1. Opening Remarks of the Chairman:** The Chairman and Members extended warm welcome with each other and other participants of the meeting. Thereafter, the meeting was opened for the proceedings as per the agenda adopted for the meeting.
- 2. Confirmation of Minutes of 14th Meeting (13/2022)** vide Ref. No.- 484, dated 21.12.2022 of State Expert Appraisal Committee held on 11th December, 2022. The State Expert Appraisal Committee, hereinafter called the SEAC, was informed that no representation has been received regarding projects considered in meeting held on 11th December, 2022. Minutes of meeting of the said SEAC was confirmed.
- 3. Consideration of Proposals:** The SEAC considered the proposals received as per the agenda adopted for 15th meeting (15/2022) vide ref no. 485 dated- 22.12.2022. The key points of deliberations held were as follows.
- 4.** With regard to the proposals submitted for the real-estate/ apartment/ residential building projects, industry, etc. and various issues concerning the green belt area/greenery, human health hazards and status of Waste Management, etc. were thoroughly discussed and scrutinized.



Consideration of Environmental Clearance Proposal

AGENDA ITEM NO. 01

Proposed Residential Building Project "Kirti Raman Residency "at Mauza:-Saguna, Thana:- Danapur, District:-Patna, State:- Bihar; by M/s Kirti Sagar Construction Private Limited [Total Plot Area:- 7,753.65 m², Total Built-up Area:- 29,909.96 m² (Existing Built-up Area:- 19,359.36 m²+ Proposed Built-up Area:- 10,550.60 m²)]- Reg. Environmental Clearance

(File No.: SIA/8(a)/2051/2022, Proposal No.: SIA/BR/INFRA2/402400/2022).

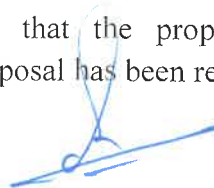
Environment Consultant: M/s Rian Enviro Private Limited.

Application along with filled up Form - I, Form - I(A) and Conceptual Plan in the prescribed format was submitted to SEIAA, Bihar on 01st December, 2022 for obtaining Environmental Clearance (EC).

Earlier in the meeting dated-11.12.2022, the committee had directed the Project Proponent to submit documents as mentioned in the proceeding of that meeting. Project Proponent has submitted the compliance of above meeting which was placed before the committee and the Project Proponent along with environmental consultant made a presentation. Based on discussion, the Committee observed that the:-

1. The area (space) between the two buildings blocks (Block B & Block C), which is already raised up to 2nd floor (G+2) has been covered with the concrete slab upto the roof top of the ground floor (GF). In such a situations, during fire exigency and due to lack of sufficient open space area, it will be difficult to undertake evacuation process and manage emergency situation.
2. In the wake of any calamity there is no proper space for assembling of a large number of occupants of the building.
3. During site visit, positioning of STP was not found satisfactory and has to comply the prescribed specifications.

Therefore, the Committee decided that the proposal is not fit for granting Environmental Clearance and as such the proposal has been recommended for rejection.



AGENDA ITEM NO. 02

Proposed Residential Building Project "Construction of Permanent Structures in Campus of State Disaster Response Fund (S.D.R.F.) Bihta, Patna on Engineering Procurement and Construction (EPC) basis" at Village:- Dilawarpur, Tehsil:- Bihta, District:- Patna, State:- Bihar; by M/s BCD Division -03 Patna [Total Plot Area:- 1,01,171 m², Total Built-up Area:- 55,044 m² – Reg. Environmental Clearance (File No.: SIA/8(a)/2074/2022, Proposal No.: SIA/BR/INFRA2/409622/2022).

Environment Consultant: M/s Rian 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 16th December, 2022 for obtaining Environmental Clearance (EC).

The Project Proponent along with environmental consultant Rian Enviro Private Limited, made a presentation on the key parameters and salient features of the project. Based on the discussion, the committee found their presentation and proposal satisfactory and acceptable, hence the Committee decided to recommend the proposed proposal for grant of Environmental Clearance subject to the following additional conditions along with standard condition in Annexure "A".

1. Three row plantations should be raised around the entire campus beyond the compulsory set-back as required under the Bihar Building Bye-laws. If further space is available under the green area head, block plantation should also be raised inside the campus;

AGENDA ITEM NO. 03

Proposed Hospital Building of "Vardhman Institute of Medical Sciences (VIMS)" at Mauza:- Darshratpur, Thana:- Pawapuri, District:- Nalanda, State:- Bihar; by M/s Vardhman Institute of Medical Sciences (VIMS) [Total Plot Area:- 1,01,171 m², Total Built-up Area:- 1,88,171 m²] – Reg. Environmental Clearance (File No.: SIA/8(b)/688/2019, Proposal No.: SIA/BR/MIS/69268/2019).

Environment Consultant: M/s Rian 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 14th May, 2019 for obtaining Terms of

Reference (ToR). SEIAA, Bihar issued ToR vide F. No. SIA/8(b)/688/2019, dated 24.07.2019. Revised EIA report in the prescribed format was submitted to SEIAA, Bihar on 29th August, 2022 for obtaining Environmental Clearance (EC).

Earlier, meeting of SEAC/SEIAA, Bihar were held on 26.10.2013 (SEAC) and 27.10.2013 (SEAC), 24.05.2018 (SEIAA), 13.08.2018 (SEIAA), 20.09.2018 (SEAC) and 21.09.2018 (SEAC), 12.10.2018 (SEIAA), 31.05.2019 (SEAC), 03.07.2019 (SEIAA), 04.12.2021 (SEIAA), 03.09.2022 (SEAC). At the meeting held on 04.12.2021 the Project Proponent requested for providing some time to complete all the information as-required by the Committee and also to consult concerned authorities in their own department e.g. the Health Department, Govt. of Bihar regarding payment of environmental compensation and penalty.

The Committee, after considering the O.M. No. 22-21/2020-IA.III [E 138949] Dated 28.01.2022 of the MoEF&CC, GoI, calculated the amount of environmental compensation and penalty and the same has been calculated. The Environmental Compensation comes to be Rs. 8.3812 Cr. and the Penalty comes to be Rs. 5.45 Cr. for the violations of the prescribed provisions of EIA Notifications, The Committee directed **Vardhman Institute of Medical Sciences (VIMS)**, the Project Proponent, to deposit the same to the Bihar State Pollution Control Board (BSPCB), Patna. Accordingly, the Committee after discussion, unanimously decided that the above penal action will be a precondition for recommendation / reconsideration for Environmental Clearance.

Till the time remedial action plan is implemented fully, the authorised Officer of the SEIAA, Bihar and the Bihar State Pollution Control Board, Patna will jointly inspect the said site once in every six months (with respect to the Half yearly report submitted by the Project Proponent) and report will be submitted to Bihar State Pollution Control Board, Patna and SEIAA, Bihar, for necessary action, as deemed fit, as per the prescribed provisions.

Since no communication has been received with regard to intimation to the Project Proponent of the previous directives, so, the Committee decided to recommend for giving Environmental Clearance with conditions as contained in annexure "B" subject to the payment of environmental compensation and penalty amounts till the date of compliance of the direction of the Committee given at its previous meeting dated 20.10.2022 and SEIAA meeting on 09.11.2022 which has been intimated vide SEIAA, Bihar letter No. 444, dated 23.11.2022.

Consideration of Terms of Reference Proposal

AGENDA ITEM NO. 04

Proposed Residential cum Commercial Building Project "Ujjwal City" at Mauza:- Sohagi, Thana:- Gaurichak, Tehsil:- Sampatchak, District:- Patna, State:- Bihar; by M/s Ujjwal Homes Private Limited [Total Plot Area:- 10,733.48 m², Total Built-up Area:- 47,847.02 m²]- Reg. Terms of Reference (File No.: SIA/8(a)/2050/2022, Proposal No.: SIA/BR/INFRA2/407958/2022).

Environment Consultant: M/s PARAMARSH (Servicing Environment and Development).

Application along with filled up Form - I, Pre-feasibility Report and Environment Management Plan in the prescribed format was submitted to SEIAA, Bihar on 01st December, 2022 for obtaining Terms of Reference (ToR).

Earlier in the meeting dated- 11.12.2022, the committee had directed the Project Proponent to submit documents as mentioned in the proceeding of that meeting. Project Proponent has submitted the compliance of above meeting which was placed before the committee and the Project Proponent along with environmental consultant made a presentation. During the presentation they asserted that forest clearance is not required for utilizing the road (Patna-Gaya Road) side land as the approach road to the project site. Accordingly the same was accepted, accordingly the Committee decided to recommend the proposed proposal for grant of Term of Reference with additional condition as well as standard conditions as mentioned in Annexure "C". The project proponents are asked to submit the flowing documents on or before submitting the proposal for EC.

- I. The Project Proponent will have to submit a letter from competent authority of the Department of Environment, Forest & Climate Change, Govt. of Bihar to the effect that there is no requirement of Forest Clearance for the use of road (Patna - Gaya Road) side land for utilization as approach road to the project.

AGENDA ITEM NO. 05

Proposed Metallurgical Project "Magadh Metal Industries Private Limited" at Mauza:- Simlimurarpur, Abdul Rahmanpur Road, Thana:- Didarganj, Tehsil:- Patna Rural, District:- Patna, State:- Bihar; by M/s Magadh Metal Industries Private

Limited[Proposed production capacity MS Billet 3,50,000 TPA]– Reg. Terms of Reference

(File No.: SIA/3(a)/2049/2022, Proposal No.: SIA/BR/IND1/408155/2022).

Environment Consultant:-M/s-PARAMARSH (Servicing Environment and Development)

Application along with filled up Form - I, Pre-feasibility Report and Environment Management Plan in the prescribed format was submitted to SEIAA, Bihar on 01st December, 2022 for obtaining Terms of Reference (ToR).

Earlier in the meeting dated- 11.12.2022, the committee had directed the Project Proponent to submit documents as mentioned in the proceeding of that meeting. Project Proponent has submitted the compliance of above meeting which was placed before the committee and the Project Proponent along with environmental consultant made a presentation the same was accepted, accordingly the Committee decided to recommend the proposed proposal for grant of Term of Reference as standard conditions as mentioned in Annexure "D".

Sand Mining Project - Bhojpur District

AGENDA ITEM NO. 06

Sand Mining Project on Son River at Bhojpur Son 02 Balu Ghat, of District- Bhojpur, Area - 12.0 Ha, Production Capacity-2,16,000 Cum or 3,88,800 TPA(**File No. - SIA/1(a)/2066/2022**), **Online Proposal No.:-SIA/BR/MIN/409367/2022**).

Proponent:- M/s Rajeev Ranjan Singh,

Consultant:- M/s Rian Enviro Private Limited.

Application along with filled up Form - I and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 14th December,2022 for obtaining Terms of Reference (ToR).

AGENDA ITEM NO. 07

Sand Mining Project on Son River at Bhojpur Son 06 Balu Ghat, of District- Bhojpur, Area - 37.0 Ha, Production Capacity-6,66,000 Cum or 11,98,800 TPA (**File No. - SIA/1(a)/2062/2022**), **Online Proposal No.:-SIA/BR/MIN/409536/2022**).

Proponent:- M/s Kochas Power Private Limited(Director -Kunal Ahuja),

Consultant:- M/s Rian Enviro Private Limited.

Application along with filled up Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 13th December, 2022 for obtaining Terms of Reference (ToR).

AGENDA ITEM NO. 08

Sand Mining Project on Son River at Bhojpur Son 35 Balu Ghat, of District- Bhojpur, Area - 65.0 Ha, Production Capacity-11,70,000 Cum or 21,06,000 TPA (File No. - SIA/1(a)/2056/2022), Online Proposal No.:-SIA/BR/MIN/408909/2022).

Proponent:- M/s Manjeet Chawla,

Consultant:- M/s Rian Enviro Private Limited.

Application along with filled up Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 09th December,2022 for obtaining Terms of Reference (ToR).

AGENDA ITEM NO. 09

Sand Mining Project on Son River at Bhojpur Son 14 Balu Ghat, of District- Bhojpur, Area - 46.0 Ha, Production Capacity-8,28,000 Cum or 14,90,400 TPA (File No. - SIA/1(a)/2069/2022), Online Proposal No.:-SIA/BR/MIN/408715/2022).

Proponent:- M/s Mahalaxmi Enterprises, (Proprietor -Digvijay Singh),

Consultant:- M/s Rian Enviro Private Limited.

Application along with filled up Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 14th December,2022 for obtaining Terms of Reference (ToR).

AGENDA ITEM NO. 10

Sand Mining Project on Son River at Bhojpur Son 07 Balu Ghat, of District- Bhojpur, Area - 30.0 Ha, Production Capacity-5,40,000 Cum or 9,72,000 TPA (File No. - SIA/1(a)/2068/2022), Online Proposal No.:-SIA/BR/MIN/409200/2022).

Proponent:- M/s Vaishnavi Udyog, (Proprietor - Vishwajeet Kumar),

Consultant:- M/s Rian Enviro Private Limited.

Application along with filled up Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 14th December,2022 for obtaining Terms of Reference (ToR).

AGENDA ITEM NO. 11

Sand Mining Project on Son River at Bhojpur Son 05 Balu Ghat, of District- Bhojpur, Area - 55.0 Ha, Production Capacity-9,90,000 Cum or 17,82,000 TPA (File No. - SIA/1(a)/2067/2022), Online Proposal No.:-SIA/BR/MIN/409440/2022).

Proponent:- M/s Sunita Singh, W/o-Prabhudha Kumar Singh,

Consultant:- M/s Rian Enviro Private Limited.

Application along with filled up Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 14th December,2022 for obtaining Terms of Reference (ToR).

AGENDA ITEM NO. 12

Sand Mining Project on Son River at Bhojpur Son 19 Balu Ghat. of District- Bhojpur, Area - 33.0 Ha, Production Capacity-5,94,000 Cum or 10,69,200 TPA (File No. - SIA/1(a)/2055/2022), Online Proposal No.:-SIA/BR/MIN/409184/2022).

Proponent:- M/s LAV Kumar Singh,

Consultant:- M/s Rian Enviro Private Limited.

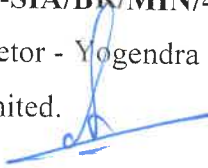
Application along with filled up Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 09th December,2022 for obtaining Terms of Reference (ToR).

AGENDA ITEM NO. 13

Sand Mining Project on Son River at Bhojpur Son 39 Balu Ghat, of District- Bhojpur, Area- 24.5 Ha, Production Capacity-4,41,000 Cum or 7,49,700 TPA (File No. - SIA/1(a)/2061/2022), Online Proposal No.:-SIA/BR/MIN/408134/2022).

Proponent:-M/s Satyam Distributors, (Proprietor - Yogendra Kumar),

Consultant:- M/s P&M Solutions Private Limited.



Application along with filled up Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 13th December,2022 for obtaining Terms of Reference (ToR).

AGENDA ITEM NO. 14

Sand Mining Project on Son River at Bhojpur Son 16 Balu Ghat, of District- Bhojpur, Area- 10.0 Ha, Production Capacity-1,80,000 Cum or 3,06,000 TPA (File No. - SIA/1(a)/2060/2022), Online Proposal No.:-SIA/BR/MIN/408241/2022).

Proponent:-M/s Ram Uday Pratap Singh,

Consultant:- M/s P&M Solutions Private Limited.

Application along with filled up Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 13th December,2022 for obtaining Terms of Reference (ToR).

AGENDA ITEM NO. 15

Sand Mining Project on Son River at Bhojpur Son 13 Balu Ghat, of District- Bhojpur, Area- 71.0 Ha, Production Capacity-12,78,000 Cum or 21,72,600 TPA (File No. - SIA/1(a)/2063/2022), Online Proposal No.:-SIA/BR/MIN/408277/2022).

Proponent:-M/s Somya Enterprises, (Proprietor - Devraj Kumar),

Consultant:- M/s P&M Solutions Private Limited.

Application along with filled up Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 13th December,2022 for obtaining Terms of Reference (ToR).

AGENDA ITEM NO. 16

Sand Mining Project on Son River at Aurangabad Son 21 Balu Ghat, of District- Aurangabad, Area- 87.92 Ha, Production Capacity-15,82,560 Cum or 28,48,608 TPA (File No. - SIA/1(a)/2052/2022), Online Proposal No.:-SIA/BR/MIN/408007/2022).

Proponent:- M/s Gautam Filling Centre, Proprietor-Babita Sinha,

Consultant:- M/s Rian Enviro Private Limited.



Application along with filled up Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 02nd December,2022 for obtaining Terms of Reference (ToR).

AGENDA ITEM NO. 17

Sand Mining Project on Son River at Aurangabad Son 04 Balu Ghat, of District- Aurangabad, Area- 86.85 Ha, Production Capacity-15,63,300 Cum or 28,13,940 TPA (**File No. - SIA/1(a)/2053/2022**), **Online Proposal No.:-SIA/BR/MIN/408550/2022**).

Proponent:-M/s Om Enterprises, Prop-Rangesh Kumar Gautam,

Consultant:- M/s Rian Enviro Private Limited.

Application along with filled up Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 02nd December,2022 for obtaining Terms of Reference (ToR).

AGENDA ITEM NO. 18

Sand Mining Project on Son River at Aurangabad Son 31 Balu Ghat, of District- Aurangabad, Area- 60.00 Ha, Production Capacity-10,80,000 Cum or 19,44,000 TPA (**File No. - SIA/1(a)/2065/2022**), **Online Proposal No.:-SIA/BR/MIN/409621/2022**).

Proponent:-Shri Ajay Kumar, S/o-Shri Upendra Singh,

Consultant:- M/s Rian Enviro Private Limited.

Application along with filled up Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 14th December,2022 for obtaining Terms of Reference (ToR).

AGENDA ITEM NO. 19

Sand Mining Project on Son River at Patna Son 06 Balu Ghat, of District- Patna, Area- 40.98 Ha, Production Capacity-7,37,640 Cum or 13,27,752 TPA (**File No. - SIA/1(a)/2054/2022**), **Online Proposal No.:-SIA/BR/MIN/409153/2022**).

Proponent:-Mr. Lalan Kumar,

Consultant:- Rian Enviro Private Limited.

Application along with filled up Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 09th December,2022 for obtaining Terms of Reference (ToR).

AGENDA ITEM NO. 20

Sand Mining Project on Son River at Patna Son Cluster 11 Balu Ghat (Sone-11,12,13 & 14), of District- Patna, Area- 42.09 Ha, Production Capacity-7,57,620 Cum or 13,03,107 TPA (File No. - SIA/1(a)/2064/2022), Online Proposal No.:-SIA/BR/MIN/408445/2022).

Proponent:-M/s Rana Enterprises, Proprietor-Rana Saurav,

Consultant:- M/s P&M Solutions Private Limited.

Application along with filled up Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 14th December,2022 for obtaining Terms of Reference (ToR).

AGENDA ITEM NO. 21

Sand Mining Project on Kiul River at Lakhisarai Kiul Block No.-10,Balu Ghat, of District- Lakhisarai, Area- 39.30 Ha, Production Capacity-2,35,800 Cum or Capacity-4,88,106 TPA (File No. - SIA/1(a)/2058/2022), Online Proposal No.:-SIA/BR/MIN/408523/2022).

Proponent:-Shri Amit Singh,

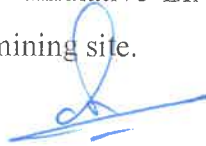
Consultant:- M/s P&M Solutions Private Limited.

Application along with filled up Form - I' and Prefeasibility report in the prescribed format was submitted to SEIAA, Bihar on 13th December,2022 for obtaining Terms of Reference (ToR).

The Project Proponent along with concerned environmental consultant made a presentation on the key parameters and salient features of the project. Based on the discussion, the committee found their presentation and proposal satisfactory and acceptable; hence it was decided to recommend the proposals for grant of Term of Reference as per standard Term of Reference conditions recommended by the MoEF&CC, Govt. of India as **Annexure "E"** along with additional specific conditions mentioned below:

1. Submit a report based on cumulative assessment of increase in air pollutants due to increase in traffic load in view of proposed mining activities on all the roads located within aerial distance of 10 km using suitable air model.
2. If the proposed mining lease has overlapping areas with previously allotted mining lease or already working or worked out mining lease, the same should be clearly

- shown (in map) and details about quantity of sand extracted from overlapped area should be furnished duly certified from the concerned District Mining Officer.
3. The satellite imageries (high resolution) of last three years for summer, rainy and winter seasons of each proposed mining lease shall be submitted.
 4. Submit a map on appropriate scale to show extraction paths to be used outside the mining lease boundary to approach major public roads (Rural/District road or State/National Highway). Alternative route shall be explored if extraction path is passing through dense population/ human settlements. Also submit cumulative traffic management plan for cluster sand mining proposal.
 5. Submit a map of the area falling within 2.5 km radius from boundary of each mining lease showing all man-made public utility features such as bridge/public civil structure (including water intake points), culverts etc. and highways, and a table showing distance of the above mentioned man-made features from the mining lease boundary to facilitate decision making pertaining to relevant rules / Guidelines.
 6. Submit a report of the cumulative EIA/EMP study for the cluster sand mining blocks of the proposed mining site.



LIST OF PARTICIPANTS IN 15th MEETING OF SEAC, BIHAR HELDON 26th DECEMBER 2022

Sl. No.	Name	Designation	Attended on 26.12.2022
1.	Dr. Gopal Sharma	Chairman	Present
2.	Dr. Ramakar Jha	Member	Present
3.	Dr. Bibha Kumari	Member	Present
4.	Dr. Anshumali	Member	Absent
5.	Dr. Aditya Mohanty	Member	Present
6.	Shri Mokhtarul Haque	Member	Present
7.	Shri Ajit Samaiyar	Member	Present
8.	Shri Ranjan Kumar	Member	Absent
9.	Shri S. Chandrasekar	Member Secretary	Present

Signature(s) of the Members Present

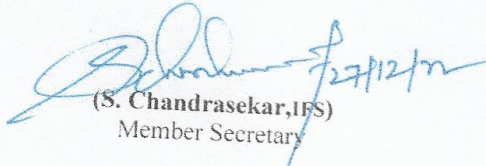
Sd/-
(Dr. Ramakar Jha)
Member, SEAC

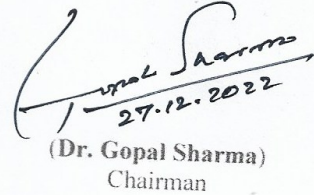
Sd/-
(Dr. Bibha Kumari)
Member, SEAC

Sd/-
(Ajit Samaiyar)
Member, SEAC

Sd/-
(Dr. Aditya Mohanty)
Member, SEAC

Sd/-
(Mokhtarul Haque)
Member, SEAC

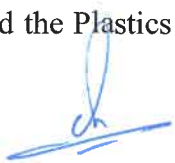

(S. Chandrasekar, IFS)
Member Secretary


(Dr. Gopal Sharma)
Chairman

Annexure – A (S.D.R.F., Bihta - EC)

I. Statutory compliance:

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

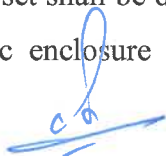


10. The Project Proponent shall follow the ECBC / ECBC-R prescribed by Bureau of Energy Efficiency, Ministry of Power, GoI. strictly.
11. The facilities provided for collection, segregation, handling, on site storage & processing of solid waste such as chute system for multi-storey buildings, wet & dry bins, collection center & mechanical composter, etc. shall be properly maintained. The collected solid waste shall be segregated at site. The recyclable solid waste shall be sold out to the authorized vendors / recyclers for which a written tie-up must be done with the authorized vendors / recyclers.
12. Hazardous waste / E-waste should be disposed off as per Rules applicable and with the necessary approval of the Bihar State Pollution Control Board.
13. Solar power plant or other solar energy related equipment's shall be operated and maintained properly.
14. Provisions shall be made for the integration of solar water heating system.
15. Environmental Clearance conditions applicable for construction and operation phase which are in the interest of public at large must be displayed at prominent place which can be easily accessible to public along with address and contact number of authorities to whom violation of EC conditions can be reported.
16. Project site shall be adequately barricaded before the start of construction activity by erecting suitable windscreen upto. $1/3^{\text{rd}}$ of the building height or 10 meters height whichever is more to prevent dispersion of dust particulate (fugitive emission) matter from the construction site.
17. Construction of appropriate civil structure and creation of other facilities shall be undertaken to provide benefit of the person suffering from disability in accordance with Hon'ble Supreme Court of India order dated 15th December 2017 in Writ Petition (Civil) 292 of 2006 with WP (Civil) 997 of 2013 (Disabled Rights Grout & Anr. Vs Union of India & Ors).

II. Air quality monitoring and preservation

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

2. Project site shall be adequately barricaded before the start of construction activity by erecting suitable windscreen upto 1/3rd of the building height or upto 10 meters height whichever is more to prevent dispersion of particulate matter (fugitive emission) from the construction site. Dust, smoke & other air pollution prevention measures shall be provided for the building as well as the site. Plastic / tarpaulin sheet covers shall be provided for vehicles bringing all loose construction material e.g sand, cement, murrum and other construction materials prone to causing dust pollution at the site as well as taking out debris from the site.
3. A Management Plan shall be drawn up and implemented to contain the current exceedance in ambient air quality at the site.
4. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets.
5. Dust, smoke& other air pollution prevention measures shall be provided for the building as well as the site.
6. All loose construction material e.g sand, soil, cement, stored on site shall be covered adequately so as to prevent dust pollution.
7. Wet jet shall be provided for grinding and stone cutting.
8. Unpaved surfaces and loose soil shall be adequately sprinkled with water to suppress dust.
9. All construction and demolition debris shall be stored at the site (and not dumped on the roads or open spaces outside) before they are properly disposed. All demolition and construction waste shall be managed as per the provisions of the Construction and Demolition Waste Rules, 2016.
10. The diesel generator sets to be used during construction phase shall be low sulphur diesel type and shall conform to Environmental (Protection), Act 1986 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



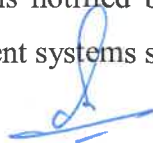
mitigate the noise pollution. The location of the DG set and exhaust pipe height shall be as per the provisions of the Central Pollution Control Board (CPCB) norms.

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

III. Water quality monitoring and preservation:

1. The natural drain system should be maintained for ensuring unrestricted flow of water. No construction shall be allowed to obstruct the natural drainage through the site, on wet land 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. Rainwater 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. 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 into municipal drain.
17. No sewage or untreated effluent water would be discharged through storm water drains.
18. 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.



19. Periodical monitoring of water quality of treated sewage shall be conducted. Necessary measures should be made to mitigate the odour problem from STP.
20. 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.
21. 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.
22. Possibilities need to be explored to use STP waste water during construction phase. Fresh water shall be used only after exhausting the possibility of obtaining STP waste water located in municipal jurisdiction.

IV. Noise monitoring and prevention:

1. Ambient noise levels shall conform to residential area silence zone both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality shall be closely monitored during construction phase. Adequate measures shall be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB / SPCB.
2. 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:

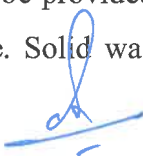
1. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC.
2. Outdoor and common area lighting shall be LED.
3. Concept of passive solar design that minimize 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 Energy Conservation Building Code (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-law's 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:

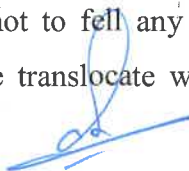
1. A certificate from the competent authority handling municipal solid wastes, indicating the existing civic capacities of handling and their adequacy to cater to the Municipal Solid Waste (M.S.W.) generated from project shall be obtained.
2. Proper composting / vermi-composting of municipal and biodegradable solid wastes shall be carried out. All municipal solid wastes shall be segregated, collected, transported, treated and disposed as per provisions of the Solid Wastes Management, 2016 (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 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 Bihar State Pollution Control Board.
9. Use of environment friendly materials in bricks, blocks and other construction materials ,shall be required for at least 20% of the construction material quantity. These include Fly Ash bricks, hollow bricks, AACs, Fly Ash Lime Gypsum blocks, Compressed earth blocks, and other environment friendly materials.
10. Fly ash should be used as building material in the construction as per the provision of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016, Ready mixed concrete must be used in building construction.
11. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
12. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

VII. Green Cover:

1. No tree should be felled unless exigencies demand. Wherever absolutely necessary, tree translocation shall be done with prior permission from the concerned regulatory authority. Old trees should be retained/translocated 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. 2,130.23 m² (20%) of the total plot area shall be kept under green belt cover within the project site.
3. All the efforts shall be made not to fell any tree however if any tree need to be removed necessarily, it may be translocate with prior permission from concerned

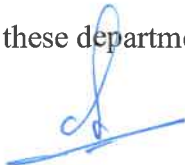


local Authority. In case of felling, plantations to be ensured in the ratio of species cut / removed to species planted. Area for green belt development shall be provided as per the details provided in the Project document.

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 re-applied 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.
 - e) Proper signages.
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 beduly 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 OMvideF.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
2. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms /conditions. The company shall have defined system of reporting infringements/deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
3. A separate Environmental cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly the head of the organization.

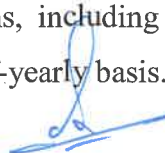
4. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted 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. Additional Conditions:-

1. Provide Waste water drain, rainwater drain and water supply pipe separately. Nothing should be drained outside the campus through underground pipes and nothing should be pumped to groundwater. All the sewage drains shall be covered.
2. Provide Safety measures (Fire, disaster, flood, etc.), /medical facilities and arrangement for physically challenged persons.

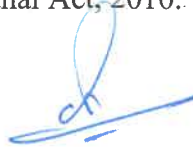
XII. Miscellaneous:

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 Environmental Clearance and the details of MoEF&CC/SEIAA, Bihar 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. The Project Proponent shall upload the status of compliance of the stipulated Environmental Clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.



6. 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.
7. 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.
8. The Project Proponent shall submit the environmental statement for each financial year in Form-V to the Bihar State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
9. 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.
10. The project authorities must strictly adhere to the stipulations made by the Bihar State Pollution Control Board and the State Government.
11. No further expansion or modifications in the plant shall be carried out without prior approval of the SEIAA, Bihar.
12. 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.
13. The Environmental Clearance granted on the basis of submitted layout plan of the proposed construction of buildings/establishments of industries shall be provisional for a period of one year or till its approved by the competent authority whichever is earlier. Should there be any deviation / change in the layout plan (as contained in the project proposal on which Environmental Clearance is granted), the Project Proponent shall furnish a copy along with a request to SEIAA, Bihar to make necessary correction/revision in the Environmental Clearance accordingly. Any failure on part of the Project Proponent in doing so will be treated as a violation of Environmental Clearance condition.

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 which shall be implemented in a time bound manner.
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. Project Proponent shall erect a signboard on his project site and display information regarding name of the project, Environmental Clearance letter No., date and validity period of Environmental Clearance, and Environmental Clearance conditions which affect general public at large along with name of authority to which violation of Environmental Clearance conditions can be reported.
18. 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 trans boundary 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.
19. Environmental Clearance shall remain valid for a maximum period of 10 years or completion of project whichever is earlier.
20. Any appeal against this Environmental Clearance shall lie with the Hon'ble National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.



Annexure – B (Vardhman – EC)

Statutory compliance:

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

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

Specific Conditions:

1. The PP shall complete the Remediation and Natural and Community Resource Augmentation within a span of three years and duly spend the budget earmarked (₹ 8.3812 Cr) for the same. The PP should annually submit the audited statement along with proof of activities viz. photographs (before & after with geo-location date & time), details of activities carried out etc. to the Regional Office of MoEF&CC , SEIAA, Bihar before 1st July of every year for the activities carried out during previous year.
2. The bank guarantee shall be released after successful implementation of the Remediation Plan and the Natural and Community Resource Augmentation Plan, and after the recommendation by regional office of the Ministry, SEIAA, Bihar and approval of the Regulatory Authority.
3. Approval/permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities, if applicable. State Pollution Control Board (SPCB)

concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.

4. A separate Environmental Management Cell (having qualified persons with Environmental Science/Environmental Engineering/specialization in the project area) equipped with fullfledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. PP shall engage General manager (01), Manager EHS (01), supervisor (01), chemist (01), worker safety (01), worker Environment (01). In addition to this one safety & health officer with suitable qualification and experience shall be engaged within six month of grant of EC. PP should annually submit the audited statement of amount spent towards the engagement of qualified persons in EMC along with details of person engaged to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
5. The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented. The PP should submit the annual audited statement along with proof of implementation of activities proposed under EMP duly supported by photographs (before & after with geo-location date & time) and other document as applicable to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.
6. The project proponent shall explore possibilities for recycling and reusing of treated water in the unit to reduce the fresh water demand and waste disposal.

Post Construction/Operation Phase

1. The environmental safeguards and mitigation measures contained in the application shall be implemented in letter and spirit.
2. All the conditions, liabilities and legal provisions contained in the Environmental Clearance shall be equally applicable to the successor management of the project in the event of the project proponent transferring the ownership, maintenance of

management of the project to any other entity. Ground water shall not be abstracted without prior permission from the competent authority.

3. The storm water management plan shall be implemented in such a manner that the storm water is discharged through an existing dedicated Storm Water Outfall only.
4. The height of the stack of the DG sets should be as per norms of Central Pollution Control Board (C.P.C.B.), New Delhi.
5. Medical (First-Aid) facility must be provided for visitors & employees. Para-medical staff should be attached as Medical facility provider.
6. Plantation along the side of the buildings & roads and in the open spaces shall be developed to act as sinks of air pollutants. The plantation of trees shall be completed in the construction stage. The plantations shall consist of mixture of available indigenous, fast growing and sturdy species of trees, shrubs and herbs. Preferential plantation of flowering trees with less timber and fruits value shall be carried out.
7. Two chambered container or two separate containers (one for recyclable wastes and other for all organic and compostable wastes) shall be placed at appropriate distance on the roadsides and inside the building. Covered dustbins/garbage collector in convenient places to collect the Municipal solid wastes shall be provided.
8. Proper composting / vermi-composting of municipal 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).
9. The use of hand gloves, shoes and safety dress for all waste collectors and sorters shall be enforced.
10. Water saving practices such as usage of water saving devices/fixtures, low flushing systems, sensor based fixtures, auto control walls, pressure reducing devices etc. should be adopted.
11. Water budget should be adopted as per the plan submitted in the supplementary Form I A & EMP.
12. All the generated domestic effluent should be sent to ETP/STP for treatment & further recycling & reuse.
13. Treated water recovered from STP would be used for flushing the toilets, gardening purpose, make up water in air conditioning systems, etc. As proposed, Fluidized Bed

Reactor (FBR) type sewage treatment plant should be installed. The Sewage Treatment Plant shall be ensured before the completion of Building Complex.

14. Rainwater from open spaces shall be collected and reused for landscaping and other purposes. Rooftop rainwater harvesting shall be adopted for the proposed Buildings. Every building of proposed extension project shall have rainwater-harvesting facilities. Before recharging the surface runoff, pre-treatment must be done to remove suspended matter and oil and grease.
15. Municipal solid wastes generated in the proposed extension buildings shall be managed and handled in accordance with the compliance criteria and procedure laid down in Schedule- II of the Municipal Wastes (Management and handling) Rules, 2000 (As amended).
16. The standard for composting & treated leachates as mentioned in Schedule-IV of the Municipal Wastes (Management and handling) Rules, 2000 (As amended) shall be followed.
17. All hazardous wastes shall be segregated, collected, transported, treated and disposed as per provisions of the Hazardous Wastes (Management and Handling) Rules, 1989 (As amended).
18. Recycling of all recyclable wastes such as newspaper, aluminium cans, glass bottles, iron scrap and plastics etc. shall be encouraged through private participation. Project proponent shall take appropriate action to ensure minimum utilization of plastic carry bags and plastic small containers etc. within the proposed buildings shall be ensured.
19. Project proponent shall operate and maintain the sewage collection/conveyance system, sewage pumping system and sewage treatment system regularly to ensure the treated water quality within the standards prescribed by Ministry of Environment and Forests, Government of India.
20. Properly treated and disinfected (Ultra Violet Treatment) sewage shall be utilized in flushing the toilets, gardening purpose, make up water in air conditioning systems etc.
21. Non-mixing of faecal matter with the municipal solid wastes shall be strictly ensured.
22. Non-mixing of sewage/sludge with rainwater shall be strictly ensured.
23. Noise barriers shall be provided at appropriate locations so as to ensure that the noise levels do not exceed the prescribed standards. D.G. sets shall be provided with necessary acoustic enclosures as per Central Pollution Control Board norms.

24. Back up supply shall be based on natural Gas/cleaner fuel subject to their availability.
25. The project proponent shall resort to solar energy at least for street lighting and water heating for Proposed Building Complex, gardens/park areas.
26. During maintenance, energy efficient electric light fittings & lamps- low power ballasts, low consumption high power luminaries, lux level limiters & timers for street lighting shall be provided.
27. A report on the energy conservation measures confirming to energy conservation norms finalized by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, "R" and "U" factors etc.
28. Monitoring of AAQ as per NAAQS 2009, Monitoring of Ambient Noise Level & Analysis of Ground Water Samples, Monitoring of Stack Emissions from DG sets & Testing of Untreated & treated effluent samples of STPs should be conducted and report should be submitted on six monthly basis to SPCB, SEIAA, Bihar, Regional Office, MoEF&CC, GoI.

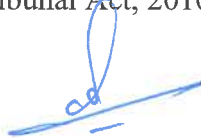
Miscellaneous:

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 Environmental Clearance and the details of MoEF&CC/SEIAA, Bihar 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. The Project Proponent shall upload the status of compliance of the stipulated Environmental Clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

6. 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.
7. 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.
8. The Project Proponent shall submit the environmental statement for each financial year in Form-V to the Bihar State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
9. 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.
10. The project authorities must strictly adhere to the stipulations made by the Bihar State Pollution Control Board and the State Government.
11. No further expansion or modifications in the plant shall be carried out without prior approval of the SEIAA, Bihar.
12. 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.
13. The Environmental Clearance granted on the basis of submitted layout plan of the proposed construction of buildings/establishments of industries shall be provisional for a period of one year or till its approved by the competent authority whichever is earlier. Should there be any deviation / change in the layout plan (as contained in the project proposal on which Environmental Clearance is granted), the Project Proponent shall furnish a copy along with a request to SEIAA, Bihar to make necessary correction/revision in the Environmental Clearance accordingly. Any failure on part of the Project Proponent in doing so will be treated as a violation of Environmental Clearance condition.



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 which shall be implemented in a time bound manner.
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. Project Proponent shall erect a signboard on his project site and display information regarding name of the project, Environmental Clearance letter No., date and validity period of Environmental Clearance, and Environmental Clearance conditions which affect general public at large along with name of authority to which violation of Environmental Clearance conditions can be reported.
18. 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 trans boundary 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.
19. Any appeal against this Environmental Clearance shall lie with the Hon'ble National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.



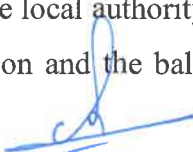
Annexure – C (Ujjwal Homes - ToR)

A. STANDARD TERMS OF REFERENCE

1. Project description, its importance and benefits.
2. Project site details (location, toposheet of the surrounding study area of 10 km, coordinates, Google map, layout map, landuse, geological features and geo-hydrological status of the study area, drainage).
3. Land use as per the approved Master Plan of the area, Permission/approvals required from the land-owning agencies, Development Authorities, Local Body, Water Supply & Sewerage Board, etc.
4. Land acquisition status, R&R details.
5. Forest and Wildlife and eco-sensitive zones, if any in the study area of 10 km – Clearances required under the Forest (Conservation) Act, 1980, the Wildlife (Protection) Act, 1972 and/or the Environment (Protection) Act, 1986.
6. Baseline environmental study for ambient air (PM10, PM 2.5, SO_x, NO_x& CO), water (both surface and ground), noise and soil for one month (except monsoon period) as per MoEF&CC/CPCB guidelines at minimum 5 locations in the study area of 10 km.
7. Details of flora and fauna and socio-economic aspects in the study area.
8. Likely impact of the project on the environmental parameters (ambient air, surface and groundwater, land, flora and fauna and socio-economic, etc).
9. Source of water for different identified purposes with the permissions required from the concerned authorities ,both for surface water and the groundwater (by CGWA/SGWC) as the case may be, Rainwater harvesting, etc.
10. Wastewater management (treatment, reuse and disposal) for the project and also the study area.
11. Management of solid waste and the construction & demolition waste for the project vis-a-vis the Solid Waste Management Rules, 2016 and the Construction & Demolition Rules, 2016.



12. Energy efficient measures (LED lights, solar power, etc) during construction as well as during the operational phase of the project.
13. Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.
14. Preparation of EMP comprising remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to the violation.
15. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.
 - i. The EIA would study the impact of dewatering and draw up an action plan for disposal of the excess water.
 - ii. The EIA would study the impact of Demolition and conformance to the Construction and Demolition Rules under the E(P) Act, 1986.
 - iii. If applicable, then submit Certified Compliance Report issued by the MoEF&CC, Regional Office or concerned Regional Office of Central Pollution Control Board or the Member Secretary of the respective State Pollution Control Board for the conditions stipulated in the earlier environmental clearance issued for the project along with an action taken report on issues which have been stated to be partially complied or not/not compiled.
 - iv. The Air Quality Index shall be calculated for base level air quality.
 - v. A detailed report on compliance with ECBC-2017 norms.
 - vi. A certificate from the local body supplying water, specifying the total annual water availability with the local authority, the quantity of water allotted to the project under consideration and the balance water available. This should be



specified separately for groundwater and surface water sources, ensuring that there is no impact on other users.

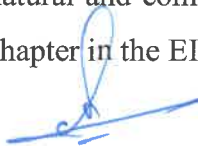
- vii. An assessment of the cumulative impact of all development and increased inhabitation being carried out or proposed to be carried out by the project or other agencies in the core area shall be made for traffic densities and parking capabilities in a 2 km radius from the site. Detailed traffic management and a traffic decongestion plan drawn up through an organization of repute and specializing in Transport Planning shall be submitted with the EIA and the plan to be implemented to the satisfaction of all the concerned state departments and implementing agencies.
- viii. The permission of the CGWA for abstraction of groundwater if any and for basement / excavation dewatering if applicable.
- ix. A certificate of the adequacy of available power from the agency supplying power to the project along with the load allowed for the project.
- x. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point.
- xi. 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 the project.
- xii. The Air Quality Index shall be calculated for base level air quality.

Violation:-

1. The State Government/SPCB to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986, and further no consent to operate to be issued till the project is granted EC.
2. The project proponent shall be required to submit a bank guarantee equivalent to the amount of remediation plan and natural and community resource augmentation plan with the SPCB prior to the grant of EC. The quantum shall be recommended by the

SEAC and finalized by the regulatory authority. The bank guarantee shall be released after successful implementation of the EMP, followed by recommendations of the SEAC and approval of the regulatory authority.

3. Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and Industrial Research (CSIR) institution working in the field of environment.
4. Preparation of remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
5. Budget of remediation plan and natural and community resource augmentation plan corresponding to the ecological damage shall be completed within three years and to be prepared accordingly.
6. Fund allocation for Corporate Environment Responsibility (CER) shall be made as per Ministry's O.M. No. 22-65/2017-IA.III dated 1st May, 2018 and its amendment for various activities therein. The details of fund allocation and activities for CER shall be incorporated in EIA/EMP report.
7. Copy of permission obtained from concerned state Ground water department /CGWA for Ground water withdrawal.
8. Plantation details (Existing/Proposed) along with species to be used, capital and recurring expenditure with maintenance; Layout plan earmarking space for development of peripheral green belt.
9. Calculate the penalty provision of violation case as per (O.M. F. No. 22/21/2020-IA.III(E 138949, dated 28.01.2022 of MoEF&CC, GoI) Observation of Hon'ble Supreme Court with reference to the SoP dated 07.07.2021 for identification and handling of violation cases under EIA Notification 2006.
10. The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter in the EIA report by the accredited consultants.



Annexure – D (Magadh Metal - ToR)

A. STANDARD TERMS OF REFERENCE (TOR)

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 (quantities) 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 whether existing plant is a satisfactory compliant of Factory Act.
- x. The proposal of the expansion of capacity to include thorough renovation/up-gradation 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. Submit a copy of application submitted to competent authority / agency with regard to supply of PNG gas pipe line.
- xiii. 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 A₃/A₂ sheet. (including all eco-sensitive areas and environmentally sensitive places).
- iii. Details w.r.t. option analysis for selection of site.

- iv. Co-ordinates (lat-long) of all four corners of the site.
- v. Google map-Earth downloaded of the project site.
- vi. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
- vii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
- viii. Landuse break-up of total land of the project site (identified and acquired), government/private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area).
- ix. A list of major industries with name and type within study area (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.

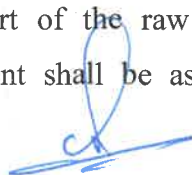
5. Environmental Status

- 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. Surface water quality of nearby River (100meter upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
- 

- iii. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.
- iv. Ground water monitoring at minimum at 8 locations shall be included.
- v. Noise levels monitoring at 8 locations within the study area.
- vi. Soil Characteristic as per CPCB guidelines.
- vii. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
- viii. A detailed report shall be submitted using suitable model used to predict increase in air pollutants due to increased traffic load due to proposed project.
- ix. 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.
- x. 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. Ground water classification as per the Central Ground Water Authority and NOC from CGWB.
- iv. 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.

- v. 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.
- vi. Details of stack emission and action plan for control of emissions to meet standards.
- vii. Measures for fugitive emission control.
- viii. 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.
- ix. Proper utilization of fly ash, shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
- x. Arrangement of land/alternative sites for green-belt development inside unit or in the proximity of unit.
- xi. Submit an action plan for the three tier plantation to develop a 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.
- xii. 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.
- xiii. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
- xiv. Action plan for post-project environmental monitoring shall be submitted.

- xv. 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. The Project Proponent shall prepare report with the provisions contained in Ministry of Environment, Forest & Climate Change OM Vide F. No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibilities.

- iii. 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.
 - iv. 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.
 - v. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report.
9. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.
- 10. Enterprise Social Commitment (ESC)**
- i. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Consultation issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.
11. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

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 capacity 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.
19. A tabular chart with index for point wise compliance of above ToR.



Annexure – E (Sand Mining Projects - ToR)

STANDARD TERMS OF REFERENCE (TOR)

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

to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stake holders at large ,may also be detailed in the EIA Report.

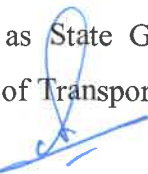
8. Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
9. The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA.
10. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary ,national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass pre operational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
11. Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
12. A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
13. Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.

14. Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
15. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
16. A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
17. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
18. A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and Rare Endangered and Threatened (RET) Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
19. Proximity to Areas declared as 'Critically Polluted' or the Project areas attracting court restrictions for mining operations, should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.
20. R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation

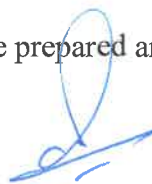
& Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, anteed based sample survey, family-wise, should be undertaken to assess their requirements, and action programmers prepared and submitted accordingly, integrating the sectoral programmers of line departments of the State Government. It may be clearly brought out whether the village(s)located in the mine lease area will be shifted or not. The issues relating to shifting of village(s)including their R&R and socio-economic aspects should be discussed in the Report.

21. One season (non-monsoon) primary baseline data on ambient air quality as perCPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM₁₀, particularly for free silica, should be given.
22. Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. Details of the model used and input parameters used for modeling should be provided for both mining and non-mining scenario. The air quality contours should be shown on a location map clearly indicating the location of the site, location of sensitive receptors, and the habitation. The wind roses showing pre-dominant wind direction also be indicated on the map.
23. The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
24. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
25. Description of water conservation measures proposed to be adopted in the Project should be given.

26. Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
27. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
28. Details of any stream, seasonal or otherwise, passing through the lease area and modification /diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
29. Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.
30. A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory a forestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
31. Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck / tractor and other vehicular traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.



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



42. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
43. Besides the above, the below mentioned general points are also to be followed:-
- a) All documents to be properly referenced with index and continuous page numbering.
 - b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
 - c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project.
 - d) Where the documents provided are in a language other than English, an English translation should be provided.
 - e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
 - f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.
 - g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.
 - h) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the Environment Clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.

- i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

