State Expert Appraisal Committee, Bihar

Ref. No- 140.

Patna- 23, Date- 18/07/18.

To,

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

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

3. Dr. Amar NathVerma,
   10192 ATS Advantage, AhinshaKhand - 1,
   Near Habitat Centre, Indirapuram,
   Ghaziabad - 201014.

4. Dr. Shardendu,
   Department of Botany,
   Patna Science College, Patna.

Sub :- Proceedings of meeting of State level Expert Appraisal Committee held on 13.07.2018

Sir,

Please find enclosed herewith proceedings of the State Expert Appraisal Committee (SEAC) held on 13th July, 2018 in the meeting hall of SEIAA, Bihar, Patna.

Sincerely Yours

18/7/18

(Alok Kumar)

A meeting of SEAC was held in the meeting hall of SEIAA, Bihar, 2nd Floor, Beltron Bhawan, Shastri Nagar, Patna- 13th July, 2018 presided over by the Chairman, SEAC. The following members of the committee were present in the meeting:

1. Dr. Amar Nath Verma, Member, SEAC
2. Dr. Shardendu, Member, SEAC
3. Dr. Samir Kumar Sinha, Member, SEAC

The records of the projects included in the agenda were put up before the committee by supporting staffs/officers for necessary appraisal.

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

1. **Kamper Concast Ltd. (Expansion Project), Village:- Mahadeopur Phulari, Tehsil:- Bihta, District:- Patna, State:- Bihar, Existing Capacity:- MS Ingot :- 29,600 MT/Annum Proposed :- MS Ingot:- 53,600 MT/ Annum, Total Capacity:- MS Ingot:- 83,200 MT/Annum. (File No. - SIA/3(a)/532/18). Online Proposal No.:- SIA/BR/IND/26138/2018). (Proponent:- Kamper Concast Ltd.)**

Kamper Concast Ltd. (KCL), is situated at Mahadeo[pur Phulari, Bihta, District patna, Bihar having latitude 25° 34' 47.17" N & longitude 84° 51' 58.18" E.

Manufacturing and Production Details:-

Manufacturing facilities	Product	Existing Capacity	Proposed Expansion	Total Capacity
Induction furnace	MS Ingot	29,600 MT/Annum	53,600 MT/Annum	83,200 MT/ Annum

The total cost of the proposed expansion project will be approx. 425 lakhs.

The Proponent and Consultant presented the proposal before the committee.

During presentation, the Project Proponent and consultant informed that a project (Balajee Mini Steel & Rerolling Mill) is under consideration of SEIAA, Bihar for Environmental Clearance, and in respect whereof the baseline data (for EIA Report) has been generated during March 2017 to May 2017, the same may please be allowed to be used in the instant case also. Since the Balajee Mini Steel & Rerolling Mill is situated within 150 M to Kamper Concast Ltd, the SEAC felt that there is no objection in doing so, and as such the request is accepted.

After due discussion and consideration, the committee recommended to issue ToR, (As Annexure- I).

2. **Stone Mining project at Sheikhpura, Village:- Chakandara/ Barari, Block:- Chewra, District:- Sheikhpura, State:- Bihar (File No. - SIA/1(a)/526/18). Online Proposal No.:- SIA/BR/MIN/74976/2018). (Proponent:- Natraj Iron & Castimg Pvt. Ltd.)**

Stone Mining (Quartzite) project at Sheikhpura is located at village:- Chakandara/ Barari, Block- Cherwa, District:- Sheikhpura of Bihar. The project site having mining lease area is 5.06 ha. Project is located at Block No.- 24, Plot No.- 1692 (P), 1644(P). The project site having Latitude & Longitude of four coordinates are Corner A - 25° 05' 47.13" N 85° 53' 17.91" E, Corner B - 25° 05' 40.41" N 85° 53' 19.75" E, Corner C - 25° 05' 45.93" N 85° 53' 31.40" E, Corner D - 25° 05' 49.24" N 85° 53' 29.90" E. The proposed production of the project is 7, 00,000 TPA. Total cost of the proposed project is Rs. 20,02,00,000/-.

Earlier, in the meeting dated 01-06-2018, the committee had directed the project proponent to submit the revised plan and documents. The Project Proponent has complied.

The committee considered the compliance by project proponent and the proposal is recommended for necessary Environmental Clearance, (as Annexure - II).

3. **Stone Mining project at Sheikhpura, Village:- Barari, Block:- Sheikhpura, District:- Sheikhpura, State:- Bihar (File No. - SIA/1(a)/527/18). Online Proposal No.:- SIA/BR/MIN/74975/2018). (Proponent:- Natraj Engineers Pvt. Ltd.)**

Stone Mining project at Sheikhpura is located at village:- Barari, Block - Sheikhpura, District:- Sheikhpura of Bihar. The project site having mining lease area is 5.06 ha. Project is located at Block No.- 25, Plot No.- 1644 (P). The project site having Latitude & Longitude of four coordinates are Corner A - 25° 05' 40.02" N 85° 53' 04.21" E, Corner B - 25° 05' 37.45" N 85° 53' 05.33" E, Corner C - 25° 05' 40.41" N 85° 53'

19.75" E, Corner D - 25° 05' 47.13" N 85° 53' 17.91" E. The proposed production of the 6,30,000 TPA. Total cost of the proposed project is Rs. 19,99,21,000/-.

Earlier, in the meeting dated 01-06-2018, the committee had directed the project proponent to submit the revised plan and documents. The Project Proponent has complied.

The committee considered the compliance by project proponent and the proposal is recommended for necessary Environmental Clearance, (as Annexure - II).

4. **Stone Mining project at Mauja:- Pachar, Anchal:- Rafiganj, District:- Aurangabad, State:- Bihar, (File No.- SIA/1(a)/531/18) Online Proposal No.- SIA/BR/MIN/75052/2018. (Proponent:- K. P. S. Structure Makers Pvt. Ltd.)**

Stone Mine project at Aurangabad is located at Mauja:- Pachar, Anchal - Rafiganj, District:- Aurangabad of Bihar. The project site having mining lease area is 5.25 ha. Project is located at Plot No.- 1269. The project site having Latitude & Longitude of four coordinates of are Corner A - 24° 47' 07.17" N 84° 39' 01.61" E, Corner B - 24° 47' 04.47" N 84° 39' 01.58" E, Corner C - 24° 47' 04.67" N 84° 39' 24.13" E, Corner D - 24° 47' 07.37" N 84° 39' 24.17" E. The proposed production of the project is 11,20,000 TPA. Total cost of the proposed project is Rs. 41,43,00,000/-.

Earlier, in the meeting dated-01-06-2018. the committee had directed the project proponent to submit the revised plan and documents. The Project Proponent has complied.

The committee considered the compliance by project proponent and the proposal is recommended for necessary Environmental Clearance.(as Annexure - II)

5. **Proposed Capacity Expanision at BPCL POL Depot, Muzaffarpur., Village:- Sherpur, Near Annat Railway Station, NH - 28, P.O.- MIC Bela, District- Muzaffarpur, State- Bihar, Pin- 842005. (File No.:- SIA/6(b)/434/17) Online Proposal No.:- SIA/BR/IND2/16935/2016. (Proponent:- Bharat Petroleum Corporation Limited)**

The project site is located near Sherpur village in Muzaffarpur District. The distance between the project site and Sherpur village is around 0.5 km. The latitude and longitude of the Muzaffarpur POL are 26° 05' 10.32" N & 85° 24' 26.00" E. Total project cost of the proposed expansion is estimated Rs. 476 Lakhs.

An application along with filled up 'Form - I' and pre-feasibility report in the prescribed format was submitted to SEIAA, Bihar on 10.02.2017 for obtaining approved Terms of Reference (ToR).The proposal was considered by the SEAC in its meeting held on 18th & 19th February ,2017 to determine the ToR for preparation of EIA/EMP Report. The SEIAA issued ToR vide Ref. No. 574 dated 16.03.2017 and Final EIA report submitted on 03.07.2018.

The Project Proponent and Consultant presented the proposal and the final EIA report. It was observed that an essential requirement with reference to expansion/modernization of existing project vide Standard Term of Reference issued by MoEF&CC in 2015 for 6(b) category projects point no. 3(x)(a), has not been included in the project proposal. The Committee, therefore directed the project proponent to submit the revised proposal accordingly.

6. **Proposed Additional Storage Facilities 2x600 MT Mounded storage vessel at Fatuha Industrial area, Mauza- Raipura, Fathua Patna, Bihar-803201. BPCL (File No.:- SIA/6(b)/533/18) Online Proposal No.:- SIA/BR/IND2/25643/2018. (Proponent:- Bharat Petroleum Corporation Limited)**

Bharat Petroleum Corporation Limited is proposing an expansion of its existing LPG Bottling facility by installing 2 No.s of Mounded Storage Vessels of 600 MT capacity at Fatuha Industrial Area, Mauza- Raipura, Fatuha, Patna, Bihar. The project site having Latitude: 25°30' 07.57" N and Longitude: 85°19' 02.62" E. Total project area is 21.28 Acres which is already under the possession of BPCL, The total investment for the proposed project works out to approximately INR 3546 Lakhs.

The Project Proponent and Consultant presented the proposal and the final EIA report. It was observed that an essential requirement with reference to expansion/modernization of existing project vide Standard Term of Reference issued by MoEF&CC in 2015 for 6(b) category projects point no. 3(x)(a), has not been included in the project proposal. The Committee, therefore directed the project proponent to submit the revised proposal including the above.

7. **Anuanand Cement Private Limited (Cement Grinding Unit) , Chiraura , Naubatpur, Dist- Patna. Production- 90,000 TPA, (File No.:- SIA/3(b)/534/18) Online Proposal No.:- SIA/BR/IND/27988/2018. (Proponent:- Bimal Kumar)**

Cement Grinding Unit of M/s Anuanand Cement Pvt. Ltd. will be located at Mauza:- Chiraura, Naubatpur, District:- Patna, Bihar. Project site is about 15 kms southwest from district Headquarter at Patna & which is well connected by road and rail with rest of the country. Project site of Anuanand Cement Pvt. Ltd. is located about 250 m. away from NH-98 at Chiraura, Naubatpur, of District:- Patna, Bihar.

Anuanand Cement Pvt. Ltd. is establishing a Cement Grinding Unit of 0.09 Million Ton /annum (MTPA) capacity to produce Ordinary Portland Cement (OPC) & Portland Pozzolona Cement (PPC). In the production process of OPC & PPC production Clinker, Fly-ash, & Gypsum will be used as raw materials.

Total 0.72 Ha. (1.80 Acres) of land has been acquired under lease agreement at Khata No.- 08, 469, 669, 469/2, Khesra Nos. 1697, 1698, 1699, 1700, 1701, 1720, 1720A, Mauza: Chiraura, P.S.:- Naubatpur of District- Patna. Total cost of the proposed project is Rs. 9,19,00,000/-.

The Proponent and Consultant presented the proposal before the committee. After due discussion and consideration, the committee recommended to issue ToR. (As Annexure- III).

18/7/18

(Dr. Shardendu)
(Member, SEAC)

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

Sd/-
(Dr. Amar NathVerma)
(Member, SEAC)

M mishra 18/7/18

(Murarijee Mishra)
Chairman, SEAC

Annexure- I

A. 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. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
   iv. List of raw materials required and their source along with mode of transportation.
   v. Other chemicals and materials required with quantities and storage capacities.
   vi. Details of Emission, effluents, hazardous waste generation and their management.
   vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract).
   viii. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided.
   ix. Hazard identification and details of proposed safety systems.
   x. Compliance of requirements sought by Govt. of India, MoEF&CC (Impact Assessment Division) F. No. 22-8/2018-IA.III dated 20.04.2018.
   xi. Expansion/modernization proposals:
      a.) Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing existing operation of the project from SPCB shall be attached with the EIA-EMP report.
      b.) In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or

EIA Notification, 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4) Site Details.

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

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

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

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

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

5) **Environmental Status.**

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

ii. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.

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

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

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

vi. Ground water monitoring at minimum at 8 locations shall be included.

vii. Noise levels monitoring at 8 locations within the study area.

viii. Soil Characteristic as per CPCB guidelines.

ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.

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

xi. Socio-economic status of the study area.

6) **Impact and Environment Management Plan.**

i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data

used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.

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

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

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

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

vi. Measures for fugitive emission control.

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

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

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

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

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

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

xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency.

xiv. 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 analysed data of above mentioned parameters as per age, sex, duration of exposure and department wise.

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

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

8) Corporate Environment Policy.

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

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

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

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

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

10) Corporate Environment Responsibility (CER).

i. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time.

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

1) Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs & outputs (material and energy balance).
2) Details on blast furnace/ open hearth furnace/ basic oxygen furnace/ladle refining, casting and rolling plants etc.
3) Details on installation/activation of opacity meters with recording with proper calibration system.
4) Details on toxic metals including mercury, arsenic and fluoride emissions.
5) Details on stack height requirement for integrated steel.
6) Details on ash disposal and management -Non-ferrous metal.
7) Complete process flow diagram describing production of lead/zinc/copper/ aluminium, etc. Raw materials substitution or elimination.
8) Details on smelting, thermal refining, melting, slag fuming, and Waelz kiln operation.
9) Details on Holding and de-gassing of molten metal from primary and secondary aluminum, materials pre-treatment, and from melting and smelting of secondary aluminum.
10) Details on solvent recycling.
11) Details on precious metals recovery.
12) Details on composition, generation and utilization of waste/fuel gases from coke oven plant and their utilization.
13) Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
14) Trace metals Mercury, arsenic and fluoride emissions in the raw material.
15) Trace metals in waste material especially slag.
16) Plan for trace metal recovery.
17) Trace metals in water.

Annexure - II

A. Specific Conditions

1. Prior to stone mining, the proponent shall get the vibration studies of blasting (Zone of influence) done by a recognized Institute e.g. Indian Institute of Mines (ISM), Dhanbad, and submit report to SEIAA office before mining operation. If mining activities is carried out without the vibration studies, the Environmental Clearance shall be considered revoked automatically.

2. Habilitation if any within the zone of influence of the project site shall have to rehabilitated.

3. The project proponent shall adopt best mining practice. In the mining area, adequate numbers of check dams, retaining walls, garland drains and setting ponds should be provided to arrest the wash-off with rain water in catchment area.

4. The natural water bodies and streams which are flowing in and around the village should not be disturbed. The water table should be natured so as not to go down below the pre-mining period. Regular monitoring of water table in the open dug well located in the villages should be done to ascertain the impact mining over the ground water table.

5. The Proponent must ensure that at night (noise levels are be within prescribed limits of MoEF&CC).

6. The Project proponent should not disturb the grazing ground for cattle.

7. Main Haulage road in the mine should be provided with permanent water sprinklers as well as other roads be wetted with water tankers fitted with sprinklers.

8. The Project proponent shall ensure that the productivity of the agricultural crops is not adversely affected due to mining operations.

9. Transportation of the minerals by road passing through the village should be allowed only by the consent of the villages or else shall construct by pass road at the expense of the proponent. Proponent shall bear the cost towards widening and strengthening the existing public road network in case the same is used for the project.

10. The Project Proponent shall expend 2.5% of the total project cost on Corporate Environment Responsibility (CER) as committed by them.

11. The environmental clearance is coterminous with mining lease by the Department of Mines, Government of Bihar to Project Proponent and all other Statutory Conditions as imposed by various agencies / District Authorities.

12. No mining shall be undertaken in the forest area without obtaining requisite prior forestry clearance. Minimum distance shall be maintained from Reserved / Protected Forest as stipulated in MoEF&CC Guidelines.

13. Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project (in case any endangered fauna occurs / is found in the Project area). No damage is to be done to fauna if found in Mining Lease (ML) area (as mentioned in various schedules). In case found they should be given protection, collected alive with the help of the expert and transferred them or handling over them to the concerned authorities. Conservation Plan, if applicable has to be adhered to.

14. The top soil, if any shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation.

15. There shall be no external dump(s). Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the SEIAA, Bihar Patna/ BSPCB, Patna its nearest Regional Office on six monthly basis.

16. Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, sub-grade and mineral dump(s) to prevent run off of water and flow of sediments directly into the agricultural fields, and other water bodies. The water so collected should be utilized for watering the mine area, haul roads, green belt development etc. The drains shall be regularly desilted particularly after the monsoon and maintained properly.

17. Dimension of the retaining wall at the toe of the OB benches within the mine to check run-off and siltation shall be based on the rain fall data.

18. Greenbelt shall be developed all along the mine lease area. The Project proponent shall do tree plantation area equivalent to 33% of the leased area preferably along the periphery and in vacant space within or including the lease area. Fast growing and local species will be planted. Plantation should be completed within 3 Years.

19. Toilet for BPL family must be provided and facilities of drinking water for villagers for its established of a tank for drinking water.

20. Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as loading and unloading point and transfer points. Extensive water sprinkling shall be carried out on haul roads which should be made pucca with suitable water drainage arrangements. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.

21. The project proponent should implement suitable conservation measures to augment ground water resources in the area in consultation with the Ground Water Directorate, Government of Bihar / Central Ground Water Board.

22. Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded. No transportation of ore outside the mine lease area shall be carried out after the sunset.

23. No blasting shall be carried out after the sunset. Blasting operation shall be carried out only during the daytime. Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.

24. Drills shall either be operated with the dust extractors or equipped with water injection system.

25. Effective safeguard measures should be taken to control fugitive emissions so as to ensure that RSPM (PM10 and PM 2.5) levels are within prescribed limits.

26. Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained.

27. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, septic tanks, safe drinking water, medical health care, etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

28. Proper safety measures as per statutory requirement are to be implemented around the mined out Pit prior to closure of site.

29. The phase-wise reclamation and afforestation shall be started simultaneously in production year.

30. The project proponent shall obtain NOC and Consent to establish/Consent to Operate from the Bihar State Pollution Control Board, Patna and effectively implement all the conditions stipulated therein.

31. The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which should in the vernacular language, informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Environment Impact Assessment Authority, Bihar, and the same may also be sent to Bihar State Pollution Control Board (B.S.P.C.B.), Patna. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional Office of MoEF&CC at Ranchi.

B. <u>General conditions</u>

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

2. No change in the calendar plan including excavation, quantum of mineral and waste should be made.

3. The Project proponent shall make all internal roads pucca and shall maintain a good housekeeping by regular cleaning and wetting of the haul roads and the premises.

4. The Project proponent shall maintain register for production and dispatch and submit return to the Board.

5. The Project proponent shall not cut trees / carry out tree felling in leased out area without the permission of competent authority.

6. Measures should be taken for control of noise levels below prescribed norms in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.

7. Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards Oil and grease trap should be installed before discharge of workshop effluents.

8. Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.

9. Dispensary facilities for First Aid shall be provided at site.

10. A separate environmental management / monitoring cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.

11 The SEIAA, Bihar directly shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) by furnishing the requisite data / information / monitoring reports.

12 The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as soft copy by e-mail) to the SEIAA, Bihar.

13 A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the project proponent.

14 All statutory clearances shall be obtained before start of mining operations.

C. Other points

1. The responsibility for implementation of environmental safeguards rest fully with the project proponent.

2. Project Proponent shall submit (to the SEIAA, Bihar, Regional Office of MoEF&CC at Ranchi, Bihar State Pollution Control Board) six monthly compliance report of the conditions within a fortnight after the end of every six month till validity period of E.C.

3. EC shall be liable to be revoked if furnished information provided description /Certificates/Affidavits/Undertaking etc. are found false/ concocted at any stage of its validity.

4. This EC is issued without affecting any court order / statutory other institutions as well as revelant other laws enacted by MoEF&CC, GoI, New Delhi.

5. Mining and transportation of mined material from mine site to stock yard shall be done in the day time only to avoid noise pollution in the nearby human habitation area.

6. The Authority reserves the right to add any new condition or modify the above conditions or to revoke the clearance if conditions stipulated above are not implemented to the satisfaction of Authority if that be so, legal action as per the provision of Environment (protection) Act, 1986.

7. The Environmental Clearance accorded shall be valid for the period of grant of lease for the mine (generally 5 years). The PP shall not increase production rate and alter lease area during the validity of Environmental Clearance.

8. In case of any deviation or alteration in the project proposed from those submitted to SEIAA, Bihar for clearance, a fresh reference should be made to SEIAA to assess the adequacy of the conditions imposed and to incorporate any new conditions if required.

9. The above stipulations would be enforced among others under the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Tran boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/ High Court of Bihar and any other Court of Law relating to the subject matter.

10. Any Appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Annexure- III

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

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

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

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

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

   viii. Process description along with major equipment's and machineries, process flow sheet (quantative) from raw material to products to be provided.

   ix. Hazard identification and details of proposed safety systems.

   x. Compliance of requirements sought by Govt. of India, MoEF&CC (Impact Assessment Division) F. No. 22-8/2018-IA.III dated 20.04.2018.

4) **Site Details.**

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

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

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

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

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

   vi. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial

area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.

vii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.

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

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

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

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

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

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

5) Environmental Status.

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

ii. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.

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

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

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

vi. Ground water monitoring at minimum at 8 locations shall be included.

vii. Noise levels monitoring at 8 locations within the study area.

viii. Soil Characteristic as per CPCB guidelines.

ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.

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

xi. Socio-economic status of the study area.

6) Impact and Environment Management Plan.

i. (a) 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.

(b) Concrete measures shall be insure to counter and minimize the inhouse air quality free from pollution which may be prejudicial to the health of staff and workers.

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

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

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

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

vi. Measures for fugitive emission control.

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

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

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

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

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

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

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

7) Occupational health.

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

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

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

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

8) Corporate Environment Policy.

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

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

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

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

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

10) Corporate Environment Responsibility (CER).

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

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

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