MINUTES OF THE 68TH MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE (SEAC), JHARKHAND HELD ON 14TH & 15TH MARCH, 2019

The 68th meeting of State Level Expert Appraisal Committee (SEAC), Jharkhand was held on 14th & 15th March, 2019 under the Chairmanship of Sh. K.P. Bhawsinka in the Conference Room at SEAC, Ranchi.

1. Sri K.P. Bhawsinka - Chairman
2. Dr. B.K. Tewary - Member
3. Sri R.N. Singh - Member
4. Sri Y.K. Singh - Member
5. Sri S.P. Srivastava - Member
6. Dr. R. V. Singh - Member
7. Dr. V.P. Sinha - Member
8. Sri Om Prakash - Member Secretary

Sri U.P. Singh & Sri Mohan Sriram Bhagwat, Member, SEAC could not attend the meeting due to personal reason.

Various projects as received from SEIAA after the previous SEAC meeting held on 25th, 26th & 27th February, 2019 and forwarded to SEAC for the technical appraisal, were put up for discussions. Besides, those Projects which were already appraised in SEAC's earlier meetings, where PP's were asked to provide additional information / clarifications, were also considered for examination / scrutiny. The Project proponents replied with required documents. Accordingly, the Project Proponents were asked to make technical presentation for the appraisal of their projects before the committee.

The following observations /recommendations were made during the presentation (Project - wise), as under:-

Day 1 : March 14, 2019 [Thursday]

- **Discussion on matter related to :**

i. **Regarding review of EC granted earlier without getting proper clearance from NBWL / SBWL.**

SEIAA has asked SEAC to examine the proposals of 40 Mining & other projects, which were earlier granted EC, without obtaining requisite prior clearance from NBWL/SBWL, etc.

SEAC has already decided in its 66th meeting to appraise the said the proposals on case to case basis, in a phased manner in forthcoming SEAC meetings. M.S, SEAC has been requested to put up 10 proposals in each ensuing meeting for appraisal.

ii. **(a) Dangawar (b) Ranideva (c) Dewarikala (d) Badepur (e) Birdhwar & Kolhua Sand Mining Project of Sri Upendra Singh, Dist. Palamau.**

SEIAA has asked in its 67th meeting to provide clear recommendation in the issue of sand mines of PP Sri Upendra Singh, Haidernagar, Palamau.

SEAC has already communicated its viewpoints in minutes of its 66th meeting. On perusal of the files of these projects, it is observed that the said PP Sri Upendra Singh, Haidernagar, Palamau has filed a writ petition bearing WP(C) no. 6393/2018 before the Hon'ble Jharkhand

High Court, Ranchi for quashing the DMO, Palamau letter no. 1027, dated 10.08.18, whereby DMO has imposed a penalty to the tune of Rs. 2.24 crores against the said PP.

Besides, the PP Upendra Singh, Haidernagar has himself admitted in its letter dated 10.01.2019 addressed to M.S., SEIAA that he had made excess production of sand with respect to production capacity mentioned in the CTO.

It is being re-iterated that since, the matter is *subjudice* before the Hon'ble Jharkhand High Court on the said issue, SEAC is not the competent authority to make any comment / recommendation in this regard. Legal advice could be taken on the said issue, if they feel so, to execute penal action.

Consideration of Proposals

Agenda no. 1

Khokha Sand Mining Project located on river bed of Son River of M/s Ganga Kaveri Construction Pvt. Ltd at Vill. : Khokha, Anchal : Kharaundhi, Dist. : Garhwa (23.00 Ha).

(Proposal No. SIA/JH/MIN/ 77868/2018)

This is a Sand Mining Project with an area of 23.00 Ha [Khata No. - 59, Plot No.- 199 (P)]. It is a proposal for grant of mine lease after auction vide DMO's allotment letter no.- 833, dated-04.07.2015. The latitude and longitude of the project site is 24° 29' 45.93" N to 24° 30' 4.45" N and 83°23'55.42" E to 83° 24' 15.20" E respectively. The nearest railway station is Nagar Untari at a distance of 27 km in SE direction and the nearest airport is Lal bahadur Shashtri International Airport, Varanasi at a distance of 118 km in NW direction. Total water requirement is about 9.4 KLD (5.4 KLD Domestic & Drinking uses) + 4 KLD Dust suppression), this water will be supplied from nearby village by tankers.

The indicated project cost is Rs 60 Lakh and a provision of Rs 3.60 Lakh has been indicated for Environment management. Budget for Corporate Environmental Responsibility (CER) is 1.40 Lakh.

The proposed estimated mineable reserve is 10,29,600 t and annual production capacity as per Form-I has been indicated as 10,29,600 t per annum.

The Project Proponent request for issuance of standard ToR in compatible with Sustainable Sand Mining Guidelines, 2016 issued by MoEF&CC.

DFO, North Garhwa vide letter no. 1222, dated - 18.03.17 certified that the distance of forest is 348 m from project site and not within 10 km from National Park, Bio-Diversity & Sanctuary. The CO, Kharoundhi vide letter no. 239, dated - 06.10.18 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in the Khatiyan or Register -II .

The proposal was presented in SEAC on 25-27.02.19 in which requisite inforamations were sought as under -

Though PP and the consultant started the presentation but at the outset it was observed by the members that the documents like PFR and mining plan submitted do not match each other. The geology of the area was surprisingly depicted for Raj Mahal area in place of the site at Garhwa district. Similarly DSR was not addressed. The Committee

deliberated on this issue and opined that presentation be made based on correct facts & documents. PP was suggested to submit the correct documents.

PP has collected baseline monitoring data in December, 18 to February, 19.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 14th March 2019, the Committee recommends in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 for issuing of TOR for consideration of SEIAA for undertaking detailed EIA / EMP study as mentioned in **Annexure I**.

SEIAA is requested to take decision on the "recommendation" of SEAC, in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF&CC O.M dated 12.12.18.

Agenda no. 2

Simariya Stone Deposit of M/s Pawanputra Stone Works at Village- Simariya, Thana-Jirwabari, Dist.- Sahibganj, (6.07 Ha).

The project proponent has not attended the meeting. The committee recommends to defer this proposal to the next meeting.

Agenda no. 3

Sand Mining Project at Banai River of M/s Anokha Ram at Vill.-Mahil&Ghaghra, Murhu, Khunti. (6.975 Ha)

The project proponent & consultant have not attended the meeting. The committee recommends to defer this proposal to the next meeting.

Agenda no. 4

Barano Sand Deposit of M/s JSMDC Ltd at Vill.- Barano, Thana & Block - Chalkusha Dist. – Hazaribagh, (5.241 Ha).

The project proponent & consultant have not attended the meeting. The committee recommends to defer this proposal to the next meeting.

Agenda no. 5

Chainpur Panchayat Sand Mine in Bohta River of Sri Sitaram Prasad at Vill.-Semarbudhini, Ahirpurwa & Bahertatoli, P.S. - Mahuatand, Dist. – Latehar (7.36 Ha).

PP was asked to submit following requisite documents :

i. Status of Letter of Intent.
ii. CO certificate regarding class of land (recorded as Jangal Jhari or not).
iii. DFO certificate regarding distance from notified forest.

Once the PP provides the information, SEAC will examine the case.

Agenda no. 6

Bhowra River Bed Sand Mining Project in Damodar River of M/s JSMDC Ltd. at Vill.- Bhowra, Dist. – Dhanbad (12.00 Ha).

(Proposal No. SIA/JH/MIN/75021/ 2018)

The project proponent & consultant have not attended the meeting. The committee recommends to defer this proposal to the next meeting as per request of the Consultant.

Agenda no. 7

Lohapatti River Bed Sand Mining Project in Damodar River of M/s JSMDC Ltd. at Vill.- Lohapatti, Tehsil - Baghmara, Dist. – Dhanbad (16.00 Ha).

(Proposal No.SIA/JH/MIN/ 75022/2018)

The project proponent & consultant have not attended the meeting. The committee recommends to defer this proposal to the next meeting as per request of the Consultant.

Agenda no. 8

Kajra Stone Mine of M/s Vinod Kumar Jain (Partner: Sri Mukesh Kumar Jain and others) at Vill. Kajra, Kamdara, Gumla (2.02 Ha).

(Proposal No. SIA/JH/MIN/94269/ 2019).

This is a Stone Mining Project with an area of 2.02 Ha [Khata no. 128, Plot No.- 2199 (P)]. The latitude and longitude of the project site is 22° 56' 49.03" N to 22° 56' 54.72" N and 84° 52' 55.97" E to 84° 53' 05.00" E. The nearest railway station is Pokla at a distance of 10 km and the nearest airport is Ranchi at a distance of 75 km . Total water requirement is about 9KLD (Potable : 1 KLD, Dust suppression : 6 KLD, green belt : 2 KLD), will be met by dug well / mine pit water.

The indicated project cost is Rs 1.80 Crore and a provision of Rs 5.90 Lakh has been indicated for Environment management.

The details of mine capacity as per Approved Mining Plan are

Proved Mineral Reserve	:	8,75,164 cum
Probable Mineral Reserve	:	92,269 cum

Year-wise Production as per Approved Mining Plan Report for five years is as follows

1st Year	:	1,01,750 cum
2nd Year	:	1,01,970 cum
3rd Year	:	1,02,080 cum
4th Year	:	1,02,300 cum
5th Year	:	96,930 cum

The daily production as per Form I is 341 m^3.

DFO, Gumla vide letter no. 2114, dated - 28.07.18 certified that the distance of notified forest is 1200 m from proposed project site & not within 10 km from National Park, Bio-Diversity &

Wildlife Sanctuary and not proposed project situated in any Eco Sensitive Zone. The CO, Kamdara vide letter no. 360, dated - 27.10.18 has mentioned the plot no. of the project site is not recorded as Jangal Jhari in R.S. Khatiyan & Register - 2.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the proposal for **Kajra Stone Mine of M/s Vinod Kumar Jain (Partner: Sri Mukesh Kumar Jain and others) at Vill. Kajra, Kamdara, Gumla (2.02 Ha)** be recommended for consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as **Annexure - II.**

Agenda no. 9

Kumhari Stone Mine of M/s Vinod Kumar Jain (Partner: Sri Mukesh Kumar Jain and others) at Vill. Kumhari, Basia, Gumla (2.02 Ha).

(Proposal No. SIA/JH/MIN/94283/ 2019).

This is a Stone Mining Project with an area of 2.02 Ha [Khata no. 321, Plot No.- 2085 (P)]. The latitude and longitude of the project site is 22° 55' 56.19" N to 22° 56' 00.07" N and 84° 48' 30.97" E to 84° 48' 41.06" E. The nearest railway station is Pokla at a distance of 18 km and the nearest airport is Ranchi at a distance of 75 km . Total water requirement is about 9KLD (Potable : 1 KLD, Dust suppression : 6 KLD, green belt : 2 KLD), will be met by dug well / mine pit water.

The indicated project cost is Rs 1.80 Crore and a provision of Rs 5.90 Lakh has been indicated for Environment management.

The details of mine capacity as per Approved Mining Plan are

Proved Mineral Reserve	:	9,82,514 cum
Probable Mineral Reserve	:	1,02,244 cum

Year-wise Production as per Approved Mining Plan Report for five years is as follows

1st Year	:	94,430 cum
2nd Year	:	92,340 cum
3rd Year	:	90,060 cum
4th Year	:	92,340 cum
5th Year	:	85,500 cum

The daily production as per Form I is 315 m^3.

DFO, Gumla vide letter no. 2115, dated - 28.07.18 certified that the distance of notified forest is 2000 m from proposed project site & not within 10 km from National Park, Bio-Diversity & Wildlife Sanctuary and not proposed project situated in any Eco Sensitive Zone. The CO, Basia vide letter no. 431 (ii), dated - 25.10.18 has mentioned the class of land is Pahari in R.S. Khatiyan & Register – 2 & not recorded as Jangal Jhari.

Based on the presentation made and information provided, the Committee in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 decided that the proposal for **Kumhari Stone Mine of M/s Vinod Kumar Jain (Partner: Sri Mukesh Kumar Jain and others) at Vill. Kumhari, Basia, Gumla (2.02 Ha)** be recommended for consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as **Annexure - II.**

Agenda no. 10

Parasi Gold Deposit and Beneficiation Plant of M/s Rungta Mines Ltd, Vill. : Parasi, Kothadih, Kutachauli, Tehsil : Tamar, Dist. : Ranchi (75.273 Ha).

(Proposal No. SIA/JH/MIN/30477/ 2018).

The proposal was considered by the committee to determine the "Terms of Reference (TOR)" for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006 and amendments thereafter. For this purpose the project proponent has submitted the prescribed Form - I & PFR the proposed project falls under item 1 (a) Mining of Minerals & 2 (b) Mineral beneficiation as per EIA Notification, 2006.

The mine lease is located in Parasi, Kothadih, Kutachauli, Tehsil : Tamar, Dist. : Ranchi falling between latitude 22° 59'14.013" N to 22° 59'43.902" N and longitude 85° 42'47.251" E to 85° 43'49.223" E. As per Form I they have mentioned a Peak rated capacity of Ore 60006.18 TPA, Beneficiation Plant 200 TPD.

The salient features of the tailing pond and sump is as follow :

Tailing pond	
Area of tailing pond	1 ha
Dimensions	159 m x 64 m
Operational technology	The slurry tailing pond will be divided into two equal chambers of 79.5 m x 64 m. The slurry tailing will be drained / pumped into the 1st chamber of the tailing pond, where after settling down of the solids, the water will be decanted and drained into the tail water sump and settled solid cake will be hauled to the 2nd chamber for drying. The dried tailing will then be shifted to the tailing dump.
Location	North west corner of central block
Elevation	248 m (NW corner) – 253 m (SE corner)
Depth	5.5 m below ground level
Freeboard	0.5 m
Type of embankment	No embankment as pond will be dug below ground level. The

	side slopes will be linked with impervious lining and protected by pitching.
Type of lining	Impervious, concrete with overlain clay or hybrid with HDPE.
Capacity	• 1 year, without shifting dried tailing to the tailing Dump • Life long, with simultaneous shifting of dried tailing to the tailing dump.
Wet tailing generation	600.7 TPD
Water recovery & recycling	200 TPD (or 200 KLD)
Water loss with material	Approx. 30 KLD
Water loss in evaporation	Approx. 170 KLD
Tailing by dry weight	220.7
Sump	
Area of tailing pond	0.31 ha
Dimensions	95.8 m x 35.5 m
Elevation	249-253 m
Depth	5 m

The Director of Mines, Deptt. of Industries, Mines & Geology, Govt. of Jharkhand has issued Letter of Intent for the grant of mining lease on 03.01.2018 vide letter no. Kha.Ni (Ranchi/Gold)-18/2016/15M and subsequent clarification vide letter no. 1770, dated 09.07.18 & letter no. Kha.Ni (Ranchi/Gold)-18/2016/2221M/Ranchi, dated 27.08.2018 for 75.273 ha and 50 years.

M/s Rungta Mines Ltd has obtained approval of Mining Plan along with Progressive Mine Closure Plan in respect of Parasi Gold deposit over an area of 75.273 ha vide approval letter no. RAN/RNC/Gold/MP-14/2018-19, dated 28.11.2018.

The CO, Tamar, Ranchi vide letter no. 95 (ii), dated - 05.02.19 has mentioned that the khata no. 247 & 280, plot no. 1037, 830, 835, 836, 838, 840, 843, 847 & 1023 of proposed site are recorded as Jangal Jhari & Jangal Paras in R.S Khatiyan. Besides, CO has certified that human habitation, Kuta Chawali School and Seasonal check dam lie within 500 m from the said project site. Moreover, size, population and proximity of habitation likely to be affected, proximity of school & no. of students likely to be affected, as well as location (whether in upstream & downstream), size & submergence area etc. would be required for appraisal in future.

The DFO, Khunti vide letter no. 2502, dated 14.12.2018 has mentioned that out of the proposed area 10.89 acre and 18.66 acre respectively are notified forest & Jangal Jhari land. However, the said letter has not enlisted all the proposed plot nos. DFO, Khunti vide letter no. 334, dated

01.02.19 has certified some of the plots of khata no. 280 & 247 are 0 (zero) m from notified forest and said plots are not within 10 km of National Park / Sanctuary / Biodiversity and ESZ. However, the said certificate is required for all the plots of proposed site.

It is further submitted that total mining lease area is 75.273 ha out of which 11.959 has is forest land including the above mentioned Jangal-Jhari (i.e 4.407 ha notified forest + 7.552 ha Jangal-Jhari forest land). Application for Forest Clearance over an area of 11.959 ha has been submitted vide online proposal no. FP/JH/MIN/37423/2018 seeking prior approval of Central Govt. under Forest (Conservation) Act, 1980.

Total water requirement for mining and beneficiation plant and its allied activities is estimated as 461 KLD which includes 456 KLD industrial water and 5 KLD potable water. Potable water shall be sourced from bore well and industrial / other purpose will be met from mine seepage and Karkari nadi (3.2 km) and / or Kanchi Nadi (17.5 km). Water will be sourced depending upon the permission granted by the competent authorities of the State Govt.

2 MW power will be required for beneficiation as well as allied activities and will be sourced from Jharkhand State Electricity Board. Stand by DG set will also be provided in case of emergency. Diesel will be used in DG set, trucks, dumpers, mining machinery, etc.

Identification of Gold in prospect area and exploration Parasi was carried out by GSI and subsequently by Mineral Exploration Corporation Ltd (MECL). It is estimated than a reserve of 9.94 million tonnes of ore at 1.051 gram / tonnes Au is available. Exploration in Parasi Gold Deposit is almost complete and is of G-1 level upto 155 m RL. It will be an opencast mechanized mining. Mineralization is open down the dip direction. Shear hosted hydrothermal gold deposits are generally deep seated so there is a possibility of extending the deposit below 155 m RL.

The beneficiation & processing of the ROM is planned based on the Beneficiation Studies carried out by Regional ore dressing laboratory, Banglore of Indian Bureau of Mines (IBM) on Gold ore samples from Parasi Gold Deposit.

The PP & the consultant presented the project and in the process a number of quarries an mining, beneficiation and R&R etc. were raised by the members. The replies as required have been submitted by PP on 15.03.19.

SEAC recommends to SEIAA issuing of ToR comprising the specific and standard of mining of minerals & beneficiation.

The representative of the project proponent and their consultant M/s Pollution & Ecology Control Services have participated in the meeting.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meeting held during 07th 14th March, 2019 the Committee recommends issuing of TORs for consideration of SEIAA for undertaking detailed EIA / EMP study is enclosed as **Annexure - III.**.

Agenda no. 11

"NUCLEUS CITY" of M/s Chalice Real Estate LLP at Vill. : Gari, Anchal : Bargi, Dist. : Ranchi.

(Proposal No. SIA/JH/MIN/94476/ 2019).

The salient feature of project is given in table given below :

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Details</th></tr>
<tr><td>1.</td><td>Proposal is for</td><td>New Project</td></tr>
<tr><td>2.</td><td>Type of Project</td><td>Residential (High Rise)</td></tr>
<tr><td>3.</td><td>Project / Activity No. [8(a) or 8(b)]</td><td>8 (a) Building & Construction Projects</td></tr>
<tr><td>4.</td><td>Name of the project</td><td>"NUCLEUS CITY""</td></tr>
<tr><td>5.</td><td>Name of Developer</td><td>CHALICE REAL ESTATE LLP</td></tr>
<tr><td>6.</td><td>Estimated Project Cost (Rs. In Crores)</td><td>Rs. 94.519 Cr.</td></tr>
<tr><td>7.</td><td>Site coordinates</td><td>23°23'31.07" N - 85°22'36.69" E
23°23'33.85" N - 85°22'37.37" E
23°23'34.16" N - 85°22'37.26" E
23°23'35.13" N - 85°22'33.87" E
23°23'34.69" N - 85°22'33.44" E
23°23'33.65" N - 85°22'33.26" E
23°23'31.53" N - 85°22'33.78" E
23°23'31.47" N - 85°22'34.03"E</td></tr>
<tr><td>8.</td><td>Project location</td><td>Village : Gari, Anchal : Bargi, Dist.: Ranchi,
Khata no. : 33, Plot no. : 254, 275</td></tr>
<tr><td>9.</td><td>Project Details</td><td>Land / Plot Area (m^2): 10,734.21
FSI area (m^2): 37,669.95 (3.509)
Total BUA (m^2): 57,023.32
New Construction Area (F.S.I) (m^2): --
<table><tr><td></td><td>Proposed</td></tr><tr><td>FSI Area (m^2)</td><td>37,669.95</td></tr><tr><td>Ground Coverage (m^2)</td><td>3110.49</td></tr><tr><td>Common Plot Area (m^2)</td><td>1073.42</td></tr><tr><td>Max. building height (m)</td><td>42.70</td></tr></table>*As per Airport N.O.C.</td></tr>
<tr><td>10.</td><td>Building Details</td><td>No. of Buildings: 01 Nos.
No. of Blocks: --</td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Details</th></tr>
<tr><td></td><td></td><td>Scope of buildings/blocks: G (H.P) + 13 floors Residential Building
No. & size of Residential Units: 342 Nos.
No. & type of Commercial Units: ---
Details of amenities if any: --</td></tr>
<tr><td>11.</td><td>No. of expected residents / users</td><td>Expected residents: 1710
Expected shop users: ---
Expected visitors: 700</td></tr>
<tr><td>12.</td><td>Water & waste water details during construction phase</td><td>Water requirement: 14.0+ 2.4 KL/day
Source of water: Tanker water
Waste water generation quantity: 1.80 KL/day
Mode of disposal: Soak pit
Details of reuse of water, if any: W/W generated from washing of equipment will be reused for curing after necessary treatment.</td></tr>
<tr><td>13.</td><td>Water & waste water details during operation phase</td><td>Fresh water requirement: 271.50.00 KL/day
Source of water: R.M.C (RMC Water supply line is passing 450 m away from our plot boundary).
Waste water generation quantity: 214.00 KL/day
Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be used for gardening &toilet flushing purpose within premises and remaining quantity of treated sewage will be discharged into the drainage line of RMC.
In case of STP provision, capacity of STP: 250.00 KL/day
STP Technology: Ozonation treatment based STP.
Purposes for treated water utilization: Treated sewage will be utilized in gardening and toilet flushing.
Quantity of treated water to be reused: 1. Gardening: 4.50 KL/Day
2. Flushing: 91.00 KL/Day
Provision of dual plumbing system (Yes/No): Yes
Quantity and type (treated/~~untreated~~) of water to be discharged: 108.00 KL/day
Mode of disposal: Into the underground drainage line of RMC after treatment and reuse within premises.</td></tr>
<tr><td>14.</td><td>Status of water supply and drainage line</td><td>RMC Water supply line is passing adjacent to our plot boundary</td></tr>
<tr><td>15.</td><td>Solid waste Management</td><td>Construction Phase:
<table>
<tr><th></th><th>Generation (m^3)</th><th>Quantity to be reused (m^3)</th><th>Mode of Disposal / Reuse</th></tr>
<tr><td>Top Soil</td><td>536.71</td><td>536.71</td><td>Reuse for developing garden area</td></tr>
<tr><td>Other excavated earth</td><td>89,225.03 MT</td><td>2909.07 MT</td><td>Will be reuse at our other project site</td></tr>
<tr><td>Construction debris</td><td>608 MT</td><td>289 MT</td><td>Reused as a filler up to plinth level or reused in outer road development& balance quantity will be disposed to our other project site.</td></tr>
<tr><td>Steel scrap</td><td>23</td><td>--</td><td>Sold to local scrap vendors</td></tr>
</table></td></tr>
</table>

Sr. No.	Particulars	Details

Discarded packing materials	14	--	**Sold to local vendors**

Operation Phase:

Sr. No.	Type of Waste	Quantity	Source of Generation	Category of Waste	Disposal
1.	Domestic wet Waste (Food/vegetable waste etc.)	410.50 kg/day	Peoples working within premises	MSW	Collection in separate bin and convert in fertilizer by putting organic waste converter machine with in premises Fertilizer will be reused in Garden Area within the premises.
2.	Domestic Dry Waste (Plastic, Paper, packing mat., ppbag, glass, etc.)	615.50 kg/day	Peoples working within premises	MSW	Collected in separate bin and disposed to nearest bin of RMC.
3.	Used oil	200.00 lit/year	DG SET	HW	Sell to register recyclers approved by PCB/CPCB.
4.	E-waste	100.00 kg/year	Entire BLDG.	E waste	Collection, Storage and disposal to approved agency whom is registered recyclers approved by PCB/CPCB.
5.	STP Sludge	25.00 kg/day	STP	MSW	Collection, Storage and reuse as manure in garden within premises.

- Details of segregation if to be done: **Separate bins will be provided to collect dry and wet waste.**
- Capacity and no. of community bins to be placed within premises: **0.5 m^3 in each building**
- Landfill site where waste will be ultimately disposed by local authority: **Landfill site of RMC.**

Sr. No.	Particulars	Details
16.	Parking Details	• Total number of CPS requirement for the project as per NBC: **267** • Number of CPS requirement for residential units as per NBC: **267** • Number of CPS requirement for Commercial units as per NBC: **---** • Total Parking area provided (m^2) & No. of ECS: **19,013.69 m^2 & 626** • Parking area provided in basement (m^2) & No. of ECS: **16,189.80 m^2& 506 ECS** • Parking area provided in hollow plinth (m^2) & No. of ECS: **288.92 m^2& 10 ECS** • Parking area provided as open surface (m^2) & No. of ECS: **2534.97 m^2& 110 ECS**
17.	Traffic Management	• Width of adjacent public roads: **6.12 m wide road in E direction.** • Number of Entry & Exit provided on approach road/s: **1 Entry & 1 Exit** • Width of Entry & Exit provided on approach road/s: **7.50 m** • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): **6.00 m & 6.50 m** • Width of all internal roads: **6.00 m & 6.50 m**
18.	Details of Green Building measures proposed.	Use of fly ash based material, provision of flush tank instead of direct flushing in toilet, provision of foam type aerated cock for water usage, use of LED light in common building areas, solar lights for landscape areas, maximum use of natural lighting, reflective / white tiles on terrace floor etc.
19.	Energy Requirement, Source and Conservation	• Power supply • Maximum demand: **7000 KVA** • Connected load:NIL • Source: **J.S.E.B** • Energy saving measures: **Use of LED light in common areas, solar lights for landscape areas, maximum use of natural lighting, reflective / white tiles on terrace floor etc.** • D.G. sets: • No. and capacity of the DG sets: **02 x 125 KVA** • Fuel & its quantity: **Low Sulphur High speed Diesel (HSD) & quantity 55 L/h in each.**
20.	Fire and Life Safety Measures	Fire extinguisher, hose reel, wet riser, automatic sprinkler system in basement, manually operated electric fire alarm system, underground water tank of 75 KL x 04 Nos. capacity, terrace tank of 10 KL x 08 Nos. capacity, one electric & one diesel pump of capacity 2280 L/min. & one electric pump of capacity 200 L/min. having pressure 4.0 kg/cm^2 at terrace level etc.
21.	Details on staircase	

Building	Floor No.	Floor Area (m^2)	No. of Staircase	No. of Fire Lift	No. of Passenger Lift	Width of Staircase (m)	Maximum Travel Distance up to the Staircase (m) (< 30 m)
	Ground Floor	3110.49	04	07	11	1.25	20.45
			04			1.50	
			01			1.30	
	1st Floor	2950.70	04	07	11	1.25	20.45
			04			1.50	
			01			1.30	
	2nd Floor	2904.42	04	06	11	1.25	20.45
			04			1.50	

Sr. No.	Particulars	Details						
		3rd Floor TO 13th Floor	2897.14	04 04	06	11	1.25 1.50	20.45
22.	Rain Water Harvesting (RWH)	• Level of the Ground water table: **2.50 m** • No. & dimensions of RWH tank(s): **05 no. of RWH tanks;** Size: **4 m x 3 m x 3 m** Size of Bore: **350 mm dia.** Size of pipe: **150 mm dia.** • No. and depth of percolations wells: **05 nos. of percolating well, depth will be kept 5 m above ground water table.** • Details on Pre-treatment facilities: **A de-silting chamber will be provided to de-silt and remove floating material through bar screen**						
23.	Green area details	• Tree covered area :**365.00 m²** • Area covered by shrubs and bushes (m²): **--** • Lawn covered area: **745.00 m²** • Total Green Area: **1073.42 m²** • Green Area % of plot area: **10.00 %** • No. of trees and species to be planted: **44 trees of Asopalav, 37 Almond Tree, 37 Neem Tree, 37 Gulmohar etc.**						
24.	Budgetary allocation for Environmental Management Plan (Rs. in lacs)							

Sr. No.	Particulars	Approximate recurring cost per annum (Rs. In Lacs)	Approximate Capital cost (Rs. In Lacs)
1.	Air pollution	0.38	0.65
2.	Water pollution including **STP**	4.22	37.27
3.	**OWC**, Solid and hazardous waste management including **STP sludge**	2.18	4.90
4.	Green belt development	0.44	1.36
5.	Rain water harvesting	0.60	7.00
	Total	**7.82**	**47.99**

25.	Proposed dust control measures during the construction phase	Covering of building materials by tarpaulin, sprinkling of water, covering structure with Hessian clothes will be made to curb fugitive emission.
26.	Eco friendly building material usage details	Fly ash bricks, aerated blocks, paving blocks PP Cement in concrete will be used.
27.	Corporate Environment Responsibility	Fund of Rs. 190.00 Lacs for activities like Provision of toilet block with water tank & drainage network up to RMC U/G sewage line within 05 Km radius of project site after consultation with RMC District Collector. Provision of Sanitation facilities. Provision of Computers, Printers, educational materials & Benches * In consultation with District

Sr. No.	Particulars	Details
		Collector/ Authority. Provision of Solar street light on RMC road within 2 km of our project site. Tree plantation activity on RMC road within 05 km of our project site.
28.	Basic amenities to be provided to construction workers	Drinking water & tap water, sanitation facilities, first aid box, free medicines, medical services, PPE will be provided.

DFO, Ranchi vide letter no. 285, dated - 21.01.19 certified that the distance of notified forest is 2000 m from proposed project site & not within 10 km from National Park, Bio-Diversity & Wildlife Sanctuary and not proposed project situated in any Eco Sensitive Zone. The CO, Baragai, Ranchi vide letter no. 11 (ii), dated - 08.01.19 has mentioned the plot no. of proposed project sit is not recorded as Jangal Jhari in R.S. Khatiyan & Register – 2.

The committee discussed on the adherence of the stipulated safety norms, energy conservation measures, green building envelop, waste management, renewable energy, rain water harvesting and traffic management and follow-up the time bound implementation of all these issues.

Based on the presentation made and information provided, the Committee decided that the proposal for **"NUCLEUS CITY" of M/s Chalice Real Estate LLP at Vill. : Gari, Anchal : Bargi, Dist. : Ranchi** be recommended for consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as **Annexure - IV.**

Agenda no. 12

"NUCLEUS MALL" of RANCHI" of M/s Chalice Real Estate LLP at Vill. Gari, Bargi, Ranchi.

(Proposal No. SIA/JH/MIN/94476/ 2019).

The salient feature of project is given in table given below :

Sr. No.	Particulars	Details
1.	Proposal is for	**New Project**
2.	Type of Project	**Commercial**
3.	Project / Activity No. [8(a) or 8(b)]	**8(a)**
4.	Name of the project	**"NUCLEUS MALL OF RANCHI""**
5.	Name of Developer	**CHALICE REAL ESTATE LLP**
6.	Estimated Project Cost (Rs. In Crores)	**Rs. 103.21 Cr.**

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Details</th></tr>
<tr><td>7.</td><td>Site coordinates</td><td>23°23'22.90" N - 85°22'37.42" E
23°23'28.91" N - 85°22'45.41" E
23°23'29.81" N - 85°22'38.02" E
23°23'30.96" N - 85°22'38.24" E
23°23'31.21" N - 85°22'38.15" E
23°23'31.63" N - 85°22'37.15" E
23°23'31.22" N - 85°22'37.02" E
23°23'30.97" N - 85°22'37.71" E</td></tr>
<tr><td>8.</td><td>Project location</td><td>Village : Gari, Anchal : Bargi, Dist.: Ranchi,
Khata no. : 33, 53, 54, 93, 137, Plot no. : 253, 489 to 492</td></tr>
<tr><td>9.</td><td>Project Details</td><td>Land / Plot Area (m^2): 19249.94
FSI area (m^2): 36,094.71(1.875)
Total BUA (m^2): 65,445.47
New Construction Area (F.S.I) (m^2): --
<table><tr><td></td><td>Proposed</td></tr><tr><td>FSI Area (m^2)</td><td>36,094.71</td></tr><tr><td>Ground Coverage (m^2)</td><td>8912.70</td></tr><tr><td>Common Plot Area (m^2)</td><td>2166.00</td></tr><tr><td>Max. building height (m)</td><td>35.87</td></tr></table>*As per Airport N.O.C.</td></tr>
<tr><td>10.</td><td>Building Details</td><td>No. of Buildings: 01 Nos.
No. of Blocks: --
Scope of buildings/blocks: G + 08 floors Parking & G+07 floors Commercial malll
No. & size of Residential Units:
No. & type of Commercial Units: 93 Nos. of Shop, 7 Screen 1282 Seat Theator & 04 Restorant
Details of amenities if any: --</td></tr>
<tr><td>11.</td><td>No. of expected residents / users</td><td>Expected residents: ---
Expected shop users: 1869
Expected visitors: 2500</td></tr>
<tr><td>12.</td><td>Water & waste water details during construction phase</td><td>Water requirement: 14.0+ 2.4 KL/day
Source of water: Tanker water
Waste water generation quantity: 1.80 KL/day
Mode of disposal: Soak pit
Details of reuse of water, if any: W/W generated from washing of equipment will be reused for curing after necessary treatment.</td></tr>
<tr><td>13.</td><td>Water & waste water details during operation phase</td><td>Fresh water requirement: 100.50 KL/day
Source of water: R.M.C (RMC Water supply line is passing adjacent to our plot boundary).
Waste water generation quantity: 74.00 KL/day
Mode of disposal: Sewage to be generated will be treated in the proposed onsite STP. Treated sewage will be used for gardening &toilet flushing purpose within premises</td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Details</th></tr>
<tr><td></td><td></td><td>and remaining quantity of treated sewage will be discharged into the drainage line of RMC.
In case of STP provision, capacity of STP: 100.00 KL/day
STP Technology: Ozonation treatment based STP.
Purposes for treated water utilization: Treated sewage will be utilized in gardening and toilet flushing.
Quantity of treated water to be reused: 1. Gardening: 9.00 KL/Day
2. Flushing: 31.50 KL/Day
Provision of dual plumbing system (Yes/No): Yes
Quantity and type (treated) of water to be discharged: 108.00 KL/day
Mode of disposal: Into the underground drainage line of RMC after treatment and reuse within premises.</td></tr>
<tr><td>14.</td><td>Status of water supply and drainage line</td><td>RMC Water supply line is passing adjacent to our plot boundary</td></tr>
<tr><td>15.</td><td>Solid waste Management</td><td>Construction Phase:
<table>
<tr><th></th><th>Generation (m^3)</th><th>Quantity to be reused (m^3)</th><th>Mode of Disposal / Reuse</th></tr>
<tr><td>Top Soil</td><td>1083.00</td><td>1083.00</td><td>Reuse for developing garden area</td></tr>
<tr><td>Other excavated earth</td><td>1,81,070.46 MT</td><td>15,572.80 MT</td><td>Will be reuse at our other project site</td></tr>
<tr><td>Construction debris</td><td>1610 MT</td><td>1610 MT</td><td>Reused as a filler up to plinth level or reused in outer road development& balance quantity will be disposed to our other project site.</td></tr>
<tr><td>Steel scrap</td><td>26</td><td>--</td><td>Sold to local scrap vendors</td></tr>
<tr><td>Discarded packing materials</td><td>16</td><td>--</td><td>Sold to local vendors</td></tr>
</table>
Operation Phase:
<table>
<tr><th>Sr. No.</th><th>Type of Waste</th><th>Quantity</th><th>Source of Generation</th><th>Category of Waste</th><th>Disposal</th></tr>
<tr><td>1.</td><td>Domestic wet Waste (Food/vegetable waste etc.)</td><td>98.30 kg/day</td><td>Peoples working within premises</td><td>MSW</td><td>Collection in separate bin and convert in fertilizer by putting organic waste converter machine with in premises Fertilizer will be reused in Garden Area within the premises.</td></tr>
<tr><td>2.</td><td>Domestic Dry Waste (Plastic, Paper,</td><td>147.30 kg/day</td><td>Peoples working within</td><td>MSW</td><td>Collected in separate bin and disposed</td></tr>
</table></td></tr>
</table>

Sr. No.	Particulars	Details
		<table><tr><td></td><td>packing mat., ppbag, glass, etc.)</td><td></td><td>premises</td><td></td><td>to nearest bin of RMC.</td></tr><tr><td>3.</td><td>Used oil</td><td>200.00 lit/year</td><td>DG SET</td><td>HW</td><td>Sell to register recyclers approved by PCB/CPCB.</td></tr><tr><td>4.</td><td>E-waste</td><td>100.00 kg/year</td><td>Entire BLDG.</td><td>E waste</td><td>Collection, Storage and disposal to approved agency whom is registered recyclers approved by PCB/CPCB.</td></tr><tr><td>5.</td><td>STP Sludge</td><td>10.00 kg/day</td><td>STP</td><td>MSW</td><td>Collection, Storage and reuse as manure in garden within premises.</td></tr></table> • Details of segregation if to be done: **Separate bins will be provided to collect dry and wet waste.** • Capacity and no. of community bins to be placed within premises: **0.5 m^3 in each building** • Landfill site where waste will be ultimately disposed by local authority: **Landfill site of RMC.**
16.	Parking Details	• Total number of CPS requirement for the project as per NBC:**526** • Number of CPS requirement for residential units as per NBC: **---** • Number of CPS requirement for Commercial units as per NBC:**526** • Total Parking area provided (m^2) & No. of ECS: **28463.44 m^2 & 956** • Parking area provided in basement (m^2) & No. of ECS: **13,686.51 m^2& 427 ECS** • Parking area provided in hollow plinth (m^2) & No. of ECS: **950.59 m^2& 34 ECS** • Parking area provided as open surface (m^2) & No. of ECS: **5144.58 m^2& 224 ECS**
17.	Traffic Management	• Width of adjacent public roads: **30.48 m wide road in E direction.** • Number of Entry & Exit provided on approach road/s: **2 Entry & 1 Exit** • Width of Entry & Exit provided on approach road/s: **7.50 m** • Minimum width of open path all around the buildings for easy access of fire tender (excluding the width for the plantation): **7.00 m & 7.50 m** • Width of all internal roads: **7.00 m & 7.50 m**

Sr. No.	Particulars	Details
18.	Details of Green Building measures proposed.	Use of fly ash based material, provision of flush tank instead of direct flushing in toilet, provision of foam type aerated cock for water usage, use of LED light in common building areas, solar lights for landscape areas, maximum use of natural lighting, reflective / white tiles on terrace floor etc.
19.	Energy Requirement, Source and Conservation	• Power supply • Maximum demand: **3000 KVA** • Connected load:NIL • Source: **J.S.E.B** • Energy saving measures: **Use of LED light in common areas, solar lights for landscape areas, maximum use of natural lighting, reflective / white tiles on terrace floor etc.** • D.G. sets: • No. and capacity of the DG sets: **02 x 125 KVA** • Fuel & its quantity: **Low Sulphur High speed Diesel (HSD) & quantity 55 L/h in each.**
20.	Fire and Life Safety Measures	Fire extinguisher, hose reel, wet riser, automatic sprinkler system in basement, manually operated electric fire alarm system, underground water tank of 75 KL x 06 Nos. capacity, terrace tank of 10 KL x 06 Nos. capacity, two electric & one diesel pump of capacity 3000 L/min. & one electric pump of capacity 200 L/min. having pressure 4.0 kg/cm^2 at terrace level etc.
21.	Details on staircase	

Building	Floor No.	Floor Area (m^2)	No. of Staircase	No. of Fire Lift	No. of Passenger Lift	Width of Staircase (m)	Maximum Travel Distance up to the Staircase (m) (< 45 m)
A	Upper Basement	8851.32	04 Escalator-02	2.15 1.63	03	03	< 45.00
	Ground Floor	8912.70	04 Escalator-07	2.15 1.63	03	03	< 45.00
	1st Floor	2258.55	04 Escalator-06	2.15 1.63	03	03	< 45.00
	2nd Floor	8516.88	04 Escalator-04	2.15 1.63	03	03	< 45.00
	3rd Floor	8677.36	04 Escalator-03	2.15 1.63	03	03	< 45.00
	4th Floor to 7th floor	2286.95	01 Escalator-02	2.15 1.63	03	03	< 45.00

<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Details</th></tr>
<tr><td>22.</td><td>Rain Water Harvesting (RWH)</td><td>• Level of the Ground water table: 2.50 m
• No. & dimensions of RWH tank(s): 10 no. of RWH tanks;
Size: 4 m x 3 m x 3 m
Size of Bore: 350 mm dia.
Size of pipe: 150 mm dia.
• No. and depth of percolations wells: 10 nos. of percolating well, depth will be kept 5 m above ground water table.
• Details on Pre-treatment facilities: A de-silting chamber will be provided to de-silt and remove floating material through bar screen</td></tr>
<tr><td>23.</td><td>Green area details</td><td>• Tree covered area :641.00 m^2
• Area covered by shrubs and bushes (m^2): --
• Lawn covered area: 1525.00 m^2
• Total Green Area: 1073.42 m^2
• Green Area % of plot area: 10.00 %
• No. of trees and species to be planted:80 trees of Asopalav, 75 Almond Tree, 70 Neem Tree, 75 Gulmohar etc.</td></tr>
<tr><td>24.</td><td>Budgetary allocation for Environmental Management Plan (Rs. in lacs)</td><td>
<table>
<tr><th>Sr. No.</th><th>Particulars</th><th>Approximate recurring cost per annum (Rs. In Lacs)</th><th>Approximate Capital cost (Rs. In Lacs)</th></tr>
<tr><td>1.</td><td>Air pollution</td><td>0.80</td><td>2.00</td></tr>
<tr><td>2.</td><td>Water pollution including STP</td><td>3.60</td><td>20.00</td></tr>
<tr><td>3.</td><td>OWC, Solid and hazardous waste management including STP sludge</td><td>4.50</td><td>6.00</td></tr>
<tr><td>4.</td><td>Green belt development</td><td>1.20</td><td>2.70</td></tr>
<tr><td>5.</td><td>Rain water harvesting</td><td>0.90</td><td>7.00</td></tr>
<tr><td colspan="2">Total</td><td>11.00</td><td>37.70</td></tr>
</table>
</td></tr>
<tr><td>25.</td><td>Proposed dust control measures during the construction phase</td><td>Covering of building materials by tarpaulin, sprinkling of water, covering structure with Hessian clothes will be made to curb fugitive emission.</td></tr>
<tr><td>26.</td><td>Eco friendly building material usage details</td><td>Fly ash bricks, aerated blocks, paving blocks PP Cement in concrete will be used.</td></tr>
<tr><td>27.</td><td>Corporate Environment Responsibility</td><td>Fund of Rs. 155.00 Lacs for activities like Provision of toilet block with water tank & drainage network up to RMC U/G sewage line within 05 Km radius of project site after consultation with RMC District Collector. Provision of Sanitation facilities. Provision of Computers, Printers, educational materials & Benches * In consultation with District</td></tr>
</table>

Sr. No.	Particulars	Details
		Collector/ Authority. Provision of Solar street light on RMC road within 2 km of our project site. Tree plantation activity on RMC road within 05 km of our project site.
28.	Basic amenities to be provided to construction workers	Drinking water & tap water, sanitation facilities, first aid box, free medicines, medical services, PPE will be provided.
29.	Documents related to land possession.	Land is in the name of applicant, copy has been submitted.

DFO, Ranchi vide letter no. 285, dated - 21.01.19 certified that the distance of notified forest is 2000 m from proposed project site & not within 10 km from National Park, Bio-Diversity & Wildlife Sanctuary and not proposed project situated in any Eco Sensitive Zone. The CO, Baragai, Ranchi vide letter no. 11 (ii), dated - 08.01.19 has mentioned the plot no. of proposed project sit is not recorded as Jangal Jhari in R.S. Khatiyan & Register – 2.

The committee discussed on the adherence of the stipulated safety norms, energy conservation measures, green building envelop, waste management, renewable energy, rain water harvesting and traffic management and follow-up the time bound implementation of all these issues.

Based on the presentation made and information provided, the Committee decided that the proposal for **"NUCLEUS MALL" of RANCHI" of M/s Chalice Real Estate LLP at Vill. Gari, Bargi, Ranchi** be recommended for consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as **Annexure - IV.**

Agenda no. 13

2 x 63 MW Thermal Power Plant of M/s Inland Power Ltd. at Vill. : Tonagatu, Block - Goal, District Ramgarh.

(Proposal No. SIA/JH/MIN/29621/ 2018).

This is case for Validity Extension to the existing Environment Clearance (EC) of **M/s Inland Power Limited** at village Tonagatu, Gola,Distt.- Ramgarh, Jharkhand for 2x63 MW Thermal Power Plant along with Fly Ash Bricks Plant.

M/s Inland Power Limited was granted Environment Clearance by MoEF & CC, New Delhi vide F. No. J-13012/115/2008-IA.II(T), dated 20th December 2011 to set up 2x63 MW Thermal Power Plant along with Fly Ash Bricks Plant. The land requirement for the Power plant is 79.92 acres. No forestland is involved. No national park/sanctuary is located within 10 Km distance. River swarnrekha flows at a distance of 4.5 Km in North. The site falls in seismic zone-II. Total cost of the project is envisaged as Rs. 633.90 Crores. Rs. 25.30 Crores and Rs. 12.30 Crores has been earmarked for capital cost and recurring cost/annum for environment pollution control measures at final stage. The coordinates of the site are at Latitude 23° 28' 947" N to 23° 29' 303" N and Longitude 85° 39' 368" E to 85° 39' 773" E

The major pollutants expected from the plant are PM, SO_2 and NOx. Appropriate pollution control arrangements have been done in the existing plant and same is proposed for installation of balance units. ESP for CFBC Boiler and bag filters in raw material handling and bag filters in fly ash section will be provided to control the particulate emissions below 50 mg/m3.Fugitiveemissions from coal and fuel handling, storages oils etc. will be controlled by providing covered sheds for storage of raw materials fully covered conveyors for transportation of materials etc.

Water requirement will be 4.5 MCM/annum and will be sourced from the senegrah River and Bhairvi River through a pipeline. Water linkage was allocated from Govt. of Jharkhand on 05.05.2010. Rain water harvesting will be implemented for the premises.

The dust collected from the various air pollution control measures like bag houses/filters, ESP etc. will be totally recycled in the process either as fuel or for fly ash manufacturing. Fly ash from thermal power plant will be either used in house or sold to outside parties as per the Fly Ash notification 2009.

The Thermal Power Plant units upto 500 MW are covered under Category" B" as per no.1(d) of the Schedule of the EIA notification 2006, and apprised by the SEIAA/SEAC.

Present status of the project and schedule for implementation of balance units is as below:

S. No.	Production Facility	Production Capacity as per EC	Status - Capacity		Time frame by which Unit shall be Installed
			Installed	To be installed	
1.	Thermal Power Plant	2 x 63 MW	1 x 63 MW	1 x 63 MW	November 2021
2.	Fly ash Bricks Plant	92 million bricks/yr	46 million bricks per year	46 million bricks per year	December 2021

- Expenditure made till date is Rs. 351.24 Crores.
- Compliance with the conditions of Environmental Clearance is regularly being submitted to the concerned offices regularly.
- Monitoring of Environmental parameters is being done regularly and are in compliance with the standards prescribed.

Reasons for the delay in implementation of the project:

- There was suspension of operations in construction and installation of the proposed units owing to Signing of Power Purchase Agreement with Jharkhand State Electricity Board.
- We have signed the MOU with the govt. of Jharkhand for setting up a 2x63 MW power project in the state of Jharkhand. IPL has created all the infrastructure & clearances like Land, EC, Water Permission, Transmission Line etc for 2x63 MW. But power purchase agreement has been signed by JSEB for only for first unit of 63MW. IPL has successfully commissioned the 1st unit of 63 MW in the year 2014 and still waiting for signing of PPA by the State Electricity Board which pending at the State Electricity Board level. We hope

that PPA will be within the year 2019 and we have created almost all the infrastructure so 2nd unit of 63 MW will be completed by the end of the year 2021.

- Anti-social element attack at the plant also has hampered the regular speed of work. These attacks have resulted in loss of properties and have created a deeper sense of insecurity in the staff & workers. The matter taken up by appropriate authority and resolved through proper channels.

DFO, Ramgarh vide letter no. 3116 & 3118, dated - 14.12.18 certified that the distance of notified forest is 670m & 2000 m from proposed project site & not within 10 km from National Park, Bio-Diversity & Wildlife Sanctuary and not proposed project situated in any Eco Sensitive Zone. The CO, Dulmi vide letter no. 129, dated - 18.12.18 & CO, Gola vide letter no. 2661, dated 29.12.18 has mentioned the plot nos. of proposed project sit is not recorded as Jangal Jhari in R.S. Khatiyan.

PP and the consultant presented the project along with compliance of the EC and requested for extension of EC granted earlier.

The SEAC discussed that the project is following the MoEF & CC EC conditions as well as CTO provided by JSPCB. The application for validity extension is submitted before the expiry date.

In view of the above the committee recommends to SEIAA for issuance of extension of validity beyond the stipulated time for 02 years.

The meeting concluded with thanks to all present.

(Dr. B.K. Tewary)
Member

(R. N. Singh)
Member

(Y.K. Singh)
Member

(S.P. Srivastava)
Member

(R.V. Singh)
Member

(Dr. V.P. Sinha)
Member

(Om Prakash)
Member Secretary

(K.P. Bhawsinka)
Chairman

Annexure - I

The TORs prescribed for undertaking detailed EIA study are as follows:

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 order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.
8. 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 such as waste generation etc. should be for the life of the mine / lease period.

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 preoperational, 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 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 alongwith 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 likely to come under the 'Aravali Range', (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 Department should be secured and furnished to the effect that the proposed mining activities could be considered.

20. Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL. HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).

21. R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.

22. One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)]primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.

23. 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. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.

24. 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.

25. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.

26. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.

27. 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.

28. 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.

29. 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.

30. 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.

31. A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.

32. Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck 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.

33. Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.

34. 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.

35. 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.

36. 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.

37. 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.

38. 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.

39. 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.

40. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

41. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

42. A Disaster management Plan shall be prepared and included in the EIA/EMP Report.

43. 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.

44. Besides the above, the below mentioned general points are also to be followed :-

a) Executive Summary of the EIA/EMP Report

b) All documents to be properly referenced with index and continuous page numbering.

c) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.

d) 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.

e) Where the documents provided are in a language other than English, an English translation should be provided.

f) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.

g) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF& CC 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.

h) 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.

i) 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.

j) 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.

45. After preparing the draft EIA (as per the generic structure prescribed in Appendix- III of the EIA Notification, 2006) covering the above mentioned issues, the proponent will get the public hearing conducted and take further necessary action for obtaining environmental clearance in accordance with the procedure prescribed under the EIA Notification, 2006.

46. The prescribed TORs would be valid for a period of three years for submission of the EIA / EMP reports, as per the O.M. No. J-11015/109/2013-IA.II(M) , dated 12.01.2017.

Annexure -II

A. Specific Conditions

1. The environmental clearance is subject to period of lease of the mine by the Department of Mines, Government of Jharkhand to PP and all other Statutory Conditions as imposed by various agencies / District Authorities are complied with.
2. No mining shall be undertaken in the forest area without obtaining requisite prior forestry clearance.
3. Environmental clearance is subject to final order of the Hon'ble Supreme Court of India / National Green Tribunal / MOEF Guidelines applicable to Minor Minerals.
4. 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 the fauna in general and endangered species in particular, if found in ML area (as mentioned in various schedules). In such case they should be given protection, capture alive with the help of the subject expert and transfer them or handing over them to the concerned authorities. Conservation Plan, if applicable has to be adhered to.
5. The mining operations shall be restricted to ground above water table and it should not intersect the groundwater table. In case of working below the ground water table, prior approval of the Ground Water Directorate, Government of Jharkhand / Central Ground Water Board shall be obtained. Benches height and slope shall be maintained as per approved Mining Plan. The Mining Plan has to be got approved by concerned authorities as per IBM or equivalent agencies. Safety measures shall be adopted in line with DGMS Guidelines.
6. PP shall maintain minimum distance from Reserved / Protected Forests as stipulated in applicable guidelines.
7. The project proponent shall ensure that no natural watercourse and / or water resources shall be obstructed / diverted due to any mining operations. Adequate measures shall be taken for conservation and protection of the first order and the second order streams, if any emanating / passing through the mine lease area during the course of mining operation.
8. 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 by spreading on the land reclamation and plantation.
9. 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 Jharkhand State Pollution Control Board, Ranchi and its nearest Regional Office on six monthly basis.
10. Catch drains and siltation ponds of approved size to contain silt & water and its location 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 nearby agricultural fields, and other water bodies. The water so collected should be utilized for watering the haul roads, green belt development etc. A periodical report shall be sent. The drains shall be regularly desilted particularly after the monsoon and maintained properly.

11. 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.

12. Greenbelt of approved width shall be developed all along the length of mine lease area and haul roads. The Project proponent shall do adequate no at least 50 bamboo gabion plantation each year and maintain it for the life of the mine along the transport road and vacant space, preferably along the periphery of mining lease. Fast growing and local species will be planted.

13. Effective safeguard measures such as regular water sprinkling shall be carried out in the identified 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 as per approved plan shall be carried out on haul roads which should be made pucca as per approved specification of Govt. of Jharkhand 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.

14. The project proponent shall implement approved conservation measures to augment ground water resources in the area in consultation with the Ground Water Directorate, Government of Jharkhand / Central Ground Water Board.

15. The project proponent shall if required, obtain necessary prior permission/NOC from the competent authorities for drawl of requisite quantity of water required from the source for the project.

16. Suitable rainwater harvesting measures shall be planned and implemented in consultation with the Ground Water Directorate, Government of Jharkhand / Central Ground Water Board.

17. Vehicular emissions shall be kept under control by regular repairing of transport road and regular air quality monitoring. 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 stone / sand outside the mine lease area shall be carried out after the sunset.

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

19. Drilling shall either be operated with the dust extractors or equipped with water injection system.

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

21. Pre-placement medical examination and periodical medical examination of the workers engaged in the project conducted by a Registered Medical Officer shall be carried out and records maintained.

22. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna.

23. Provision shall be made for the housing of construction labour at a suitable place away from 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.

24. Proper Safety measures as per statutory requirement shall be implemented around the mined out Pit prior to closure of site.
25. A final mine closure Plan along with corpus fund duly approved by Competent Authority shall be submitted to the Jharkhand State Pollution Control Board, Ranchi and to concerned DMO in advance of final mine closure for approval.
26. The project proponent shall obtain Consent to establish and Consent to Operate from the Jharkhand State Pollution Control Board, Ranchi and effectively implement all the conditions stipulated therein.
27. The Project Proponent shall submit six monthly report on the expenditure incurred on environmental management plan submitted by them.
28. Since blasting and mining on Hillock / Rock out crop may also be carried out, suitable scheme for access / ramp to the highest elevation with gradient shall be submitted for approval from competent authorities.
29. Approved devices for dust suppression shall be installed.

B. General conditions

1. No change in mining technology and scope of working should be made without prior approval of the Statutory authorities / Department of Mines, Government of Jharkhand / Jharkhand State Pollution Control Board, Ranchi 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 as per approved specification of Govt. of Jharkhand 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 be provided with 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. Detailed report shall be sent to Pollution Control Board periodically.

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 funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Jharkhand State Pollution Control Board, Ranchi. PP shall carry out CSR activities as per Government Guidelines (%of Profit / turnover) or at least Rs 1 per ton whichever is higher.

12. The Jharkhand State Pollution Control Board, Ranchi directly or through its Regional Office, 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.

13. 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 by e-mail) to the SEIAA / JSPCB and to its concerned Regional Office.

14. The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to Jharkhand State Pollution Control Board and its concerned Regional Office The criteria pollutant levels namely ; SPM ,RSPM,SO_2 ,NOx (ambient levels) or critical sectoral parameters , indicated for the project shall be monitored and displayed at a convenient location near the project shall be monitored and displayed at a convenient location near the main gate of the company in the company in the public domain.

15. A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, ZilaParisad / 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.

16. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the Jharkhand State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986,as amended subsequently ,shall also be put on the website of the company along the status of compliance of EC conditions and shall also to the concerned Regional Office of JSPCB by e-mail.

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

C. Other points

1. 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 or for that matter for any other Administrative reason.

2. The Environmental Clearance accorded will be valid for the period of lease of the mine, till the PP does not increase production rate and alter lease area during the validity of Environmental Clearance.

3. In case of any deviation or alteration in the project proposed from those submitted to SEIAA, Jharkhand 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.

4. 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 and other Wastes (Management and Transboundary Movement) Rules, 2016 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 Jharkhand and any other Court of Law relating to the subject matter.

5. 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

The TORs prescribed for undertaking detailed EIA study are as follows:

Specific Conditions :

1. Process of beneficiation needs to be specified in terms of technology to be used in beneficiation.
2. Report on water audit and water foot print in the entire value chain.
3. Tailing management cynidation, arsenite and iron sulphide containment, spill over from tailing pond needs to be prepared and onside, offside emergency plan needs to be prepared.
4. Hazon and Hazop studies needs to be undertaken.
5. Risk analysis and life cycle studies needs to be undertaken.
6. Beneficiation plan shall be integrated with bioleaching process.
7. Policy on health and safety issues arising out of the ingredient shall be undertaken.
8. A study of leaching in the natural environmental plan arising out of contact of ore and beneficiation products.
9. Toxicity and safety data on various lixivients used in mining and beneficiation stages needs to be presented.

Standard ToR for Mining of Minerals

A. Standard Conditions :

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

8. 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 such as waste generation etc. should be for the life of the mine / lease period.

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 preoperational, 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 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 alongwith 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 likely to come under the 'Aravali Range', (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 Department should be secured and furnished to the effect that the proposed mining activities could be considered.

20. Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL. HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).

21. R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.

22. One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)]primary baseline data on

ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.

23. 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. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.

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25. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.

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27. 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.

28. 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.

29. 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.

30. 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.

31. A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory

afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.

32. Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck 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.

33. Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.

34. 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.

35. 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.

36. 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.

37. 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.

38. 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.

39. 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.

40. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

41. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

42. A Disaster management Plan shall be prepared and included in the EIA/EMP Report.

43. 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.

44. Besides the above, the below mentioned general points are also to be followed :-

k) Executive Summary of the EIA/EMP Report

l) All documents to be properly referenced with index and continuous page numbering.

m) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.

n) 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.

o) Where the documents provided are in a language other than English, an English translation should be provided.

p) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.

q) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF& CC 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.

r) 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.

s) 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.

t) 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.

47. After preparing the draft EIA (as per the generic structure prescribed in Appendix- III of the EIA Notification, 2006) covering the above mentioned issues, the proponent will get the public hearing conducted and take further necessary action for obtaining environmental clearance in accordance with the procedure prescribed under the EIA Notification, 2006.

Standard ToR for Mineral Beneficiation :

1. The alternate sites considered, the relative merits and demerits and the reasons for selecting the proposed site for the Beneficiation Plant should be indicated.
2. Details of the technology and process involved for beneficiation should be given.
3. Location of the proposed Plant w.r.t. the source of raw material and mode of transportations of the ore from mines to the beneficiation plant should be justified.
4. Treatment of run of mine (ROM) and or of the fines/waste dump should be spelt out.
5. Estimation of the fines going into the washings should be made and its management described.
6. Details of the equipment, settling pond etc. should be furnished.
7. Detailed material balance should be provided.
8. Sources of raw material and its transportation should be indicated. Steps proposed to be taken to protect the ore from getting air borne should be brought out.
9. Management and disposal of tailings and closure plan of the tailing pond, if any after the project is over, should be detailed in a quantified manner.
10. 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 also be indicated.
11. A copy of the document in support of the fact that the Proponent is the rightful lessee of the unit should be given.
12. All documents including EIA and public hearing should be compatible with one another in terms of the production levels, waste generation and its management and technology and should be in the name of the lessee.
13. All corner coordinates of the Unit, superimposed on a High Resolution Imagery/Toposheet should be provided. Such an Imagery of the proposed Unit should clearly show the land use and other ecological features of the study area (core and buffer zone).
14. It should be clearly indicated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.

15. Issues relating to Safety should be detailed. The proposed safeguard measures in each case should also be provided. Disaster management plan shall be prepared and included in the EIA/EMP Report.

16. The study area will comprise of 10 km zone around the Plant.

17. Cumulative impact study of both Beneficiation Plant with suggested mitigation measures as per the study should be described.

18. Location of Railway siding with its handling capacity and safety measures should be indicated.

19. Option to provide only silo for storage of minerals instead of open stacking to avoid fugitive dust should be explored and arrangements finalized justified.

20. 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 lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.

21. Details of the land for any Over Burden Dumps outside the lease, such as extent of land area, distance from lease, its land use, R&R issues, if any, should be given.

22. 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.

23. 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.

24. 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.

25. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.

26. A study shall be got done to ascertain the impact of the 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.

27. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, 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.

28. 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 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.

29. Proximity to Areas declared as 'Critically Polluted' shall also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB/CPCB shall be secured and furnished to the effect that the proposed activities could be considered.

30. Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL. HTL, CRZ area, location of the unit w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).

31. R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s)located in the 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.

32. One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the unit in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.

33. 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. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.

34. 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.

35. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be secured and copy furnished. .

36. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.

37. 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.

38. 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.

39. 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. 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 the pollution.

40. Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck 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.

41. Details of the onsite shelter and facilities to be provided to the workers should be included in the EIA report.

42. 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 should be be detailed.

43. 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.

44. 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.

45. Public hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.

46. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the project should be given.

47. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

48. A brief background of the Project, its financial position, Group Companies and legal issues etc should be provided with past and current important litigations if any.

49. Benefits of the Project, if the project is implemented should be outlined. The benefits of the projects shall clearly indicate environmental, social, economic, employment potential, etc.

50. Besides the above, the below mentioned general points are also to be followed:-

a) Executive Summary of the EIA/EMP Report.

b) All documents to be properly referenced with index and continuous page numbering.

c) Where data are presented in the report especially in Tables, the period in which the data were collected and the sources should be indicated.

d) 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.

e) Where the documents provided are in a language other than English, an English translation should be provided.

f) The Questionnaire for environmental appraisal of project as devised earlier by the Ministry shall also be filled and submitted.

g) While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF & CC 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 also be followed.

h) 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.

i) 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.

j) 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 by the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.

51. The prescribed TORs would be valid for a period of three years for submission of the EIA / EMP reports, as per the O.M. No. J-11015/109/2013-IA.II(M) , dated 12.01.2017.

Annexure - IV

PART A – GENERAL CONDITIONS

I. Pre- Construction Phase

i. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel (kerosene/gas) for cooking, safe drinking water, medical health care, etc. The housing may be in the form of temporary structures to be removed after completion of the project.

ii. Provision of drinking water, waste water disposal, solid wastes management and primary health facilities shall be ensured for labour force. Proper sanitation facilities shall be provided at the construction site to prevent health related problems. Domestic as well as sanitary wastes from construction camps shall be cleared regularly.

iii. Adequate safety measures shall be adopted for the construction workers.

iv. All the labourers to be engaged for construction works shall be screened for health and adequately treated before issue of work permits. The contractor shall ensure periodic health check-up of construction workers.

v. Fencing of the project boundary before start of construction activities.

vi. Use of energy efficient construction materials shall be ensured to achieve the desired thermal comfort.

vii. Use of fly ash based bricks/blocks/tiles/products shall be explored to the maximum extent possible.

viii. Lay out of proposed buildings and roads within premises etc. shall be made in such a way that it shall cause minimum disturbance to existing flora and fauna. Appropriate green belt shall developed to compensate the habitat loss of tree cutting (if any) from competent authority as per prevailing Act/Rules. The exotic species existing within the existing premises, if any, shall be protected. The greening programme shall include plantation of both exotic and indigenous species.

ix. Dedicated pedestrian paths shall be provided along the proposed Buildings. Appropriate access shall be provided for physically challenged people in the Pedestrian Paths.

x. The design of service roads and the entry and exit from the buildings shall conform to the norms & standards prescribed by the State Public Works Department.

xi. The road system shall have the road cross sections for general traffic, exclusive ways for public mass transport (bus) system, pedestrian paths and ways, utility corridors and green strip.

xii. Topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site. Balance top soil should be disposed at in planned manner for use elsewhere adequate erosion and sediment

control measures to be adopted before ensuing construction activities.

xiii. Prior permission should be obtained from the competent authority for demolition of the existing structure, if any. Waste recycling plans including top soil should be developed prior to beginning of demolition and construction activity. The plans should identify wastes to be generated and designate handling, recycling and disposal method to be followed.

xiv. Disposal of muck including excavated material during construction phase should not create any adverse effects in the neighborhood and the same shall be disposed of taking the necessary precautions for general safety and health aspects.

xv. 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, Jharkhand and the same matter also be sent to Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi. 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 this Ministry at Ranchi.

xvi. Risk assessment study along with Disaster Management Plan (DMP) shall be prepared. The mitigate measures for disaster prevention and control shall be prepared and get approval from competent authority. All other statutory clearances/licenses/permissions from concerned State Governments Departments, Boards and Corporations shall be obtained for directions issued by Central Government/State Government, Central Pollution Control Board/Jharkhand State Pollution Control Board.

xvii. Baseline Environmental Condition of Project area i.e. Monitoring of AAQ as per NAAQS 2009, Monitoring of Ambient Noise Level & Analysis of Ground Water Samples should be conducted and report should be submitted to State Environment Impact Assessment Authority (SEIAA), Jharkhand and Jharkhand State Pollution Control Board (JSPCB), Ranchi prior to start of construction activities.

II. Construction Phase

i. It shall be ensured that the construction debris is properly stored on the site prior to disposal. Such requirements shall be made part of the contractor agreement.

ii. All the top soil excavated during construction activities shall be stored for use in horticulture/landscape development within the project site. Proper erosion control and sediment control measures shall be adopted.

iii. Earth material generated from excavation shall be reused to the maximum possible extent as filling material during site development. The construction debris and surplus excavated material shall be disposed off by mechanical transport through the Ranchi Municipal Corporation.

iv. Disposal of muck, including excavated material during construction phase, shall not create any adverse effects on the neighbouring communities and shall be disposed off taking the necessary precautions for general safety and health aspects.

v. Low Sulphur diesel generator sets should be used during construction phase. Diesel generator sets during construction phase shall have acoustic enclosures and shall conform to Environment (Protection) Rules, 1986 prescribed for noise emission standards.

vi. All vehicles/equipment deployed during construction phase shall be ensured in good working condition and shall conform to applicable air and noise emission standards. These shall be operated only during non-peaking hours.

vii. Ambient noise levels shall confirm to the standards prescribed by MoEF & CC, Govt. of India.

viii. The protective equipment such as nose mask, earplugs etc. shall be provided to construction personnel exposed to high noise levels.

ix. Construction spoils, including bituminous material and other hazardous materials including oil from construction equipment must not be allowed to contaminate soil/ground water. The dumpsites for such material must be secured so that they shall not leach into the ground water.

x. Proper and prior planning, sequencing and scheduling of all major construction activities shall be done. Construction material shall be stored in covered sheds. Truck carrying soil, sand and other construction materials shall be duly covered to prevent spilling and dust emission. Adequate dust suppression measures shall be undertaken to control fugitive dust emission. Regular water sprinkling for dust suppression shall be ensured.

xi. Use of Ready-Mix concrete is recommended for the project.

xii. Accumulation/stagnation of water shall be avoided ensuring vector control.

xiii. Regular supervision of the above and other measures shall be in place all through the construction phase so as to avoid disturbance to the surroundings.

xiv. Water during construction phase should be preferred from Municipal supply.

xv. All directions of the Airport Authority, Director of Explosives and Fire Department etc. shall be complied.

xvi. Unskilled construction labourers shall be recruited from the local areas.

xvii. Provisions shall be made for the integration of solar water heating system.

xviii. Provision of vermin-composting for the biodegradable solid wastes generated from the proposed extension buildings as well as the large amount of biomass that shall be available from the tree plantation shall be made.

xix. Monitoring of ground water table and quality once in three months shall be carried out. Construction of tube wells, bore wells shall be strictly regulated.

xx. Permeable (porous) paving in the parking areas, and walkways should be used to control surface runoff by allowing storm water to infiltrate the soil and return to ground water.

xxi. All intersections shall be designed and developed as roundabouts.

xxii. 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.

xxiii. The road drainage shall be designed to enable quick runoff of surface water and prevent water logging.

xxiv. Adequate provision shall be made to cater the parking needs. Parking spaces standards as given in "Manual on Norms and Standards for Environmental Clearance of Large Construction Projects" issued by Ministry of Environment and Forests, Government of India shall be adopted.

xxv. Rest room facilities shall be provided for service population.

xxvi. Monitoring of AAQ as per NAAQS 2009, Monitoring of Ambient Noise Level & Analysis of Ground Water Samples, should be conducted and report should be submitted on monthly basis to SEIAA, Jharkhand & Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi.

Water Body Conservation :-

i. Water body falling within premises (if any) shall not be lined or no embankment shall be cemented. The water bodies, if any, shall be kept in natural conditions without disturbing the ecological habitat.

ii. Improvement or rehabilitation of existing nallas (if any) shall be carried out without disturbing the ecological habitat.

III. Post Construction/Operation Phase

i. The environmental safeguards and mitigation measures contained in the application shall be implemented in letter and spirit.

ii. 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.

iii. The storm water management plan shall be implemented in such a manner that the storm water is discharged though an existing dedicated Storm Water Outfall only.

iv. 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.

v. Medical (First-Aid) facility must be provided for visitors & employees. Para-medical staff should be attached as Medical facility provider.

vi. 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.

vii. 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.

viii. 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).

ix. The use of hand gloves, shoes and safety dress for all waste collectors and sorters shall be enforced.

IV. Entire Life of the Project

i. The project proponent should implement Environmental Monitoring Programme as per details submitted in EMP.

ii. No expansion/modification activity should be carried out obtaining prior Environmental Clearance as per EIA Notification 2006.

iii. Monitoring of AAQ as per NAAQS 2009, Monitoring of Ambient Noise Level & Analysis of Ground Water Samples, Monitoring of Stock Emissions & Testing of emission from DG sets should be conducted and report should be submitted on monthly basis to SEIAA, Jharkhand & JSPCB, Ranchi.

PART B- SPECIFIC CONDITIONS

I. Pre-Construction Phase

i. Project Proponent should obtain prior consent to establish (NOC) under Section 25 & 26 of the Water (Prevention & Control of Pollution) Act' 1974 and under Section 21 of the Air (Prevention & Control of Pollution) Act' 1981 from State Pollution Control Board before start of construction activities.

ii. It was also advised that CSR activity of the Project Proponent should be measurable and quantifiable, and it should be visible even after the completion of the project. The Project Proponent was also directed to deposit 10% of the CSR cost (2.5% of the total project cost). The security deposit is imposed to ensure the proper performance/implementation of the committed CSR activities.

iii. Project Proponent should obtain prior permission for ground water withdrawal from CCWA/CGWB if applicable.

iv. Construction shall conform to the requirements of local seismic regulations. The project proponent shall obtain permission for the plans and designs including structural design, standards and specifications of all construction work from concerned authority.

v. Use of energy efficient construction materials to achieve the desired thermal comfort shall be incorporated. The desired level of roof assembling "U" factor and insulation "R" value must be achieved. Roof assembling "U" factor for the top roof shall not exceed 0.4 watt/sq.m./degree centigrade with appropriate modifications of specifications and building technologies. The provisions of National Building Code 2005 shall be strictly followed.

vi. Street/Corridor lighting shall be energy efficient. The High Pressure Sodium Vapour (HPSV) Lamps & Compact Fluorescent Lamps (CFL) along Building premises shall be provided. High intensity, high mast lights to be installed at few strategic points. Solar energy may be used for outdoor lighting.

vii. Reduction of hard paving-onsite (Open area surrounding all buildings) and/or provision of shades on hard paved surfaces to minimize heat island effect and imperviousness of the site should be undertaken.

viii. All proposed air/conditioned buildings should follow the norms proposed in the ECBC regulations framed by the Bureau of Energy Efficiency.

ix. Monitoring of AAQ as per NAAQs 2009, Monitoring of Ambient Noise Level & Analysis of Ground Water Samples, Monitoring of Stack Emissions from DG sets should be conducted, and reports should be submitted on monthly basis to State Pollution Control Board (SPCB).

x. Project proponent shall install Wind Augmentation and Air Purifying Unit (4 Units at one location in Ranchi) on Pilot basis to deal with particulate matter pollution.

II. Construction Phase

i. All the conditions laid down in NOC issued by SPCB should be strictly complied with during entire construction cycle of the Project.

ii. The water treatment plant shall be provided for treatment of water. The treatment shall include screening, sedimentation, filtration and disinfections. Appropriate arrangement shall be made for treatment and reuse of backwash water of filtration plant.

iii. Project proponent shall provide adequate measuring arrangement at the inlet point of water uptake and at the discharge point for the measurement of water utilized in different categories and monitoring daily water consumption.

iv. Regular water sprinkling shall be done all around the site to minimize fugitive dust emission during construction activities.

v. Rain water harvesting structures should be provided as per submitted Plan.

III. <u>Post Construction / Operation Phase</u>

i. Project Proponent should obtain prior consent to operate under Air Act, 1981 & Water Act, 1974 from State Pollution Control Board before commissioning of the project.

ii. 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.

iii. Water budget should be adopted as per the plan submitted in the supplementary Form I A & EMP.

iv. All the generated domestic effluent should be sent to ETP/STP for treatment & further recycling & reuse.

v. 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.

vi. 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.

vii. 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).

viii. 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.

ix. 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).

x. 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.

xi. 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.

xii. 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.

xiii. Non-mixing of faecal matter with the municipal solid wastes shall be strictly ensured.

xiv. Non-mixing of sewage/sludge with rainwater shall be strictly ensured.

xv. 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.

xvi. Back up supply shall be based on natural Gas/cleaner fuel subject to their availability.

xvii. The project proponent shall resort to solar energy at least for street lighting and water heating for Proposed Building Complex, gardens/park areas.

xviii. 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.

xix. 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.

xx. 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 monthly basis to SPCB.

IV. Entire Life of the Project

i. All the conditions laid down in NOC & consent to operate issued by SPCB should be strictly complied with during entire life cycle of the project.

ii. 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 reports should be submitted on monthly basis to SPCB.

iii. The project authorities shall ensure that the treated effluent and stack emissions from the unit are within the norms stipulated under the EPC rules or SPCB

whichever is more stringent. In case of process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.

iv. The overall noise levels in and around the project area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules 1989 viz. 75 DBA (day time) and 70 DBA (night time).

v. The project authorities shall provide requisite funds for both recurring and non-recurring expenditure to implement the conditions stipulated by SEIAA, Jharkhand with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.

vi. 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. 15% of the total plot area shall be used for plantations.

vii. Whenever developer will hand over building to the society, the developer must mention in the agreement or sale deed that 15% green belt area of total plot area should mentioned & Environmental Conditions given by SEIAA, Jharkhand has to be complied.

viii. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, ZilaParishad/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 proponent.

ix. The funds earmarked for the environmental protection measures shall not be diverted for other purposes.

x. In case of any changes in the scope of the project, the project shall require a fresh appraisal by the SEAC/SEIAA.

xi. The SEAC/SEIAA, Jharkhand will have the right to amend the above conditions and add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.

xii. It shall be mandatory for the project management to submit six (06) monthly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard copies and soft copies to the regulatory authority concerned

Regional Office of MoEF & CC at Ranchi and Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi.

xiii. Any appeal against this Environmental Clearance shall lie with the National Green Tribunal (NGT), if preferred within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.