MINUTES OF THE 77TH MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE (SEAC), JHARKHAND HELD ON 29TH & 30TH AUGUST, 2019

The 77th meeting of State Level Expert Appraisal Committee (SEAC), Jharkhand was held on 29th & 30th August, 2019 under the Chairmanship of Sh. K.P. Bhawsinka in the Conference Room at SEAC, Ranchi.

The following members were present :

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

Dr. R. V. Singh, Member, SEAC could not attend the meeting due to personal reason.

SEIAA forwarded various projects to the SEAC for the technical appraisal after the last SEAC meeting held on 13th & 14th August, 2019. These projects have been put up for discussions. Besides, these Projects, wherein PP's were asked to provide requisite informations / clarifications in SEAC earlier meeting, were also considered for appraisal. The Project Proponents have been 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 : August 29, 2019 [Thursday]

A. Discussion on matter related to

1. **Minutes** of the **75th Meeting** of **SEIAA,** Jharkhand held on **04.07.2019.**
   i. **DSR** related **matter** – regarding.
   ii. **Kawabar Stone Mine** Project of **Sri Binod Kumar,** Vill. : Kawabar, Dist. : Koderma (0.81 ha)

   Deferred for next meeting.

2. **Minutes** of the **76th Meeting** of **SEIAA,** Jharkhand held on **31.07.2019 & 01.08.2019.**
   i. **JSMDC Ltd. letter no. 1062, dated 06.07.19** regarding **method** of **mining** for **sand** projects of JSMDC Ltd.
   ii. **Dharguli Stone Mine** of **M/s Balaji Enterprises** of Shri Jitendra Yadav at Vill. : Kalichatan, thana : Bagodar, Dist. : Giridih (4.47 ha).
   iii. **Bricks Clay Mining** of **M/s 555 Bricks (Prop : Shri Jitendra Singh)** at Vill. : Japkakona-Kumbharband, P.S. : Simdega, Dist. : Simdega (1.00 ha).

   Deferred for next meeting.

B. Consideration of Proposals

i. **New Ranchi High Court Building & Residential Complex of Building Construction Department, Govt. of Jharkhand at Site -1, HEC Campus, V ill. : Tiril, Dhurwa, Ranchi.**

(Proposal No. : SIA/JH/NCP/22998/2018)

The PP has requested for deferment of their project for next meeting vide letter no. 1105, dated 29.08.2019. Hence, it would be taken up in forth coming meeting.

ii. **Proposed Rehabilitation & Resettlement Package for HEC Displaced Persons of M/s Greater Ranchi Development Agency Ltd. (GRDA) at Site 1, HEC area, Vill. : Aani, Dhurwa, Ranchi.**

(Proposal No. : SIA/JH/NCP/22997/2018)

The proposed project is of Rehabilitation & Resettlement Package for HEC displaced persons developing by Greater Ranchi Development Agency limited (GRDA) of Jharkhand at Site-1, H.E.C area, Aani Dhruwa, Ranchi, Jharkhand. The project comprises of the Residence houses, Primary School, Community Centre and Convenience Shopping etc.

The Proposed project is being developed on the total plot area of 236835.4 sq.m. & the built up area of the proposed project is 48890.54 sq.m. including the FAR.

Project is classified as Category 8(a) as per EIA Notification as the built up area is less than 1,50,000 sq m and development area is less than 50 ha.

The project is a violation case since the BCD, Government of Jharkhand, Ranchi have started the construction without obtaining prior EC. In order to obtain EC from MoEF&CC we are applying to EAC, MoEF&CC to get the EC as per procedure prescribed in Notification dated 14.03.2017.

Chronological Events :

S. No	Particulars	Dates
1.	Land allotment	19th November, 2011
2.	Construction Work Started	15th December, 2018
3.	Proposal submitted to MoEF & CC in violation category	11th September, 2017
4.	Transferred proposal to SEIAA Jharkhand	28th March, 2018
5.	EDS Letter	15th May, 2018

6.	TOR Proposal (Resubmission) EDS reply	20th June, 2019
7.	Acceptance of ToR proposal	20th June, 2019

Salient features of the project:

1.	Name of the project	Rehabilitation & Resettlement Package for HEC displaced persons
2.	Name of applicant	Greater Ranchi Development Agency Limited (GRDA)
3.	Category of the project	8 (a) Building and Construction Projects
4.	Project location	Village Aani Dhruwa, Ranchi. Jharkhand **Latitude :** 23°19'22.9"N to 23°19'35.8"N **Longitude :** 85°17'03.8"E to 85°17'02.4"E
5.	**Total Plot Area**	236835.4 sq.m.
6.	Permissible Ground Coverage @ 50% of plot area	118417.719 sq.m.
7.	**Proposed Ground Coverage @ 20.505 % of plot area**	48563.107 sq.m.
8.	**Permissible FAR @ 2 of plot area**	473670.877 sq.m.
9	**Proposed FAR @0.2 of plot area**	48563.986 sq.m.
a	Area for 400 DU	47184.000 sq.m.
b.	Pre Primary School (G+1)	674.809 sq.m.
c.	Community Centre	460.736 sq.m.
d.	Convenience Shopping (2 NOS)	328.764 sq.m.
e	WW	109.56 sq.m.
f	LCS	132.67 sq.m.
	Total Built-up Area	48890.54 sq.m.
8.	Open Area (plot area - achieved ground coverage)	188272.3318 sq.m.
9.	Landscape area provided@10% of open area	18827.233 sq.m.
10.	Paved Area	169445.099 sq.m.
11.	Nearest Airport / Railway	Birsa Munda Airport, approx. 2.3 Km towards East
12.	Total Water Requirement	KLD
13.	Fresh Water Requirement	179 KLD
14.	Wastewater Generation	215 KLD
15.	Capacity of STP	STP - 260 KLD

16.	Solid Waste Generation	867 kg/day
17.	Parking Required & Provided	400 ECS
18.	Power Demand & Source	1020 KVA(by JSEB)
19.	RWH Pits	15 pit
20.	Total project cost	185 crores

S. No.	FEATURES	DESCRIPTION	DISTANCE & DIRECTION
1.	**Location**	Site-1, H.E.C. Area, Village-Aani, Dhruwa, Ranchi, Jharkhand.	
2.	**Connecting road**	Nayasarai Road Ring Road	0.6 km towards South 3.7 Km towards West
3.	**National Highway**	NH-75 NH-23	1.9 Km towards East 5.2 Km towards North West
4.	**Nearest Railway Station**	Hatia Railway station Ranchi Railway station	4 km towards South East. 3.8 Km towards North East
5.	**Airport**	Birsa Munda Airport, Ranchi	2.3 Km towards East

Water requirement:

During construction phase, source of water is private water tanker. It is estimated that water demand during the construction phase may vary from 20 KLD. Water requirement during the operational phase will be met through either Municipal supply (Ranchi Municipal Corporation or Ground water after taking permission from CGWA). The total water requirement for the proposed project has been estimated to be 310 KLD. Total domestic water requirement of the project is estimated as 176 KLD.

Power requirement:

Estimated power load for the project is 1020 kVA. Source of the power will be Jharkhand State Electricity Board. DG Sets are not proposed for power back up.

Parking facility:

The total parking 400 ECS has been proposed as 1 ECS for per Dwelling unit.

Solid waste generation and management

It is estimated that maximum solid waste generation would be about 867 kg/day and 156.52 kg of sludge (wet basis). Organic waste converter shall be providing to manage the biodegradable waste. The domestic solid waste will be generated by the occupants of the R & R Packages, pertains to the two categories, Bio-degradable and Non-biodegradable. Small area will be designated for secondary

processing, where the proper segregation of waste will take place before sending it for proper disposal. These solid wastes will be collected separately by putting three types of separate bins at the source of generation. For the biodegradable waste green bins will be provided, for the Non-biodegradable waste White bins and for the domestic hazardous waste black bins will be provided. The E-waste (Discarded computers, copiers, fax machines, electric lamps, cell phones, audio equipment, etc) generated will be managed as per the E-Waste (Management) Rules, 2016. The Hazardous waste (Used Oil, Oil Contaminated Wastes) generated will be managed as per the Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016.

Ecological Damage Assessment :

Project proponent has completed construction work and next to operational before getting Environmental Clearance under EIA Notification, 2006.

Natural Resources Damage Assessment

Components	Activities	Probable impact	Remark
Land resources	The land was allotted to project proponent by Jharkhand government for the development of assembly building project. Clearing of shrubs and herbs Excavation for laying foundation;	Loss of top soil; land use changes; changes in drainage patterns; soil erosion; & soil contamination.	The top soil is kept at the earmarked places within the project site and stabilized through vegetative means to stop wash off and erosion. No change in land use and effective storm water management system is proposed to ensure no change in drainage patterns.
Water resource	Water drawl of about 24 KLD for construction. Wastewater generation (90 KLD)	Depletion of ground and surface water resources, contamination of ground and surface water	Rainwater recharging with in project site and in study area; Maximum reuse of treated water (STP); reduce the load on ground water by providing treated water to the nearby building construction activities No discharge will be made to any water body.
Waste resource	Waste generation of 357 Kg per day , Excavated soil	Littering of waste Dumping of excavated soil in the open land in vicinity.	All the waste will be managed as per

Energy resource (Fuel; Electricity)	Utilization of wood/ coal, diesel and electricity	Deforestation for collecting wood; Impact on flora and fauna	LPG cylinder will be used for cooking and wood and coal will not be used. Ultra low sulphur diesel will be used in DG sets and vehicles.
Air Environment	Excavation Loose construction material Storage Use of DG sets	Particulate matter Emission Fugitive dust emission. Gaseous emission	Suppression of dust and fugitive emission, only PUC certified vehicle will be used. All loose construction material will be covered. DG sets will have stack having stack height as per CPCB. DG sets will be used only in case of power failure.
Noise Environment	Increase in traffic frequency and resultant noise. Noise from DG sets	Disturbance to vulnerable groups Disturbance to nearby residents	There will be acoustic enclosure for DG sets; construction activity will be during day time only. Only properly maintained and PUC vehicle will be used. Honking will be discouraged.
Water Environment	Water withdrawal Generation of waste water	Stress on water resources. Discharge of untreated sewage and domestic effluent.	Site is in safe zone as per CGWA; River Subarnarekha River is in vicinity; the water will be supplied by Nagar Nigam; There will be a provision of STP based on MBBR technology so as ensure that water resource are reused within site and ground water is not contaminated.
Land Environment	Excavation of laying down foundation Land loss Vegetation removal	Spillage Top soil deterioration; landuse & drainage pattern change; cutting	Vacant land with shrubs and herb; no tree cutting proposed – number of tree will be

		and filling.	planted at the site; Nonagricultural private land. Green belt development; RWH Proposed to reduce runoff from site as ground water recharge.
Ecology& Biodiversity Environment	Site clearance Clearing of shrubs and herbs	Loss of topography, Loss of vegetation Migration of flora and fauna	Proper levelling and filling The shrubs and herbs found at the project site were of common occurrence and similar type of habitat is abundantly available in the study are therefore no significant impact envisaged, conservation plan is proposed.
Socio-economic Environment	Migration of people Welfare activities Employment facilities Solar lights Environmental sustainability	Increase in infrastructural facilities. Improved employment; .	Positive Impact

DFO, Ranchi Division vide letter no. 3245, dated 10.07.19 certified that the distance of notified forest is 1100 m from proposed project site and not within 10 km from National Park, Bio-Diversity & Sanctuary, not under the No Mining Zone, and proposed project is not situated in any ESZ.

PP and the consultant presented the project and submitted the earlier required documents. They admitted that the large amount of construction work has been before the grant of EC. Thus this is a violation case as per the E (P) Act, 1986 and MoEF&CC notification S.O. 1030 (E), dated 08.03.18 as construction work 90% completed without prior EC.

SEAC is concerned to find the violation of E (P) Act by the implement agency of a number of projects in the plea of ignorance. There is a need to identify the reason of lapses of not taking prior EC before starting the work. This amounts to repeated violation under E (P) Act.

The proposal was presented in SEAC on 24-26.07.19 in which requisite documents were sought as under -

i. *PP to submit an Undertaking / Affidavit that the work has now been stopped till the EC awarded.*
ii. *The work order / scope of work to the Architect / Contractor as the work was awarded earlier.*
iii. *CO certificate regarding class of land (whether as Jangle Jhari or not).*

The above mentioned requisite documents have been submitted by the PP, except CO certificate regarding class of land (whether recorded as Jangle Jhari or not).

On scrutiny the document eg :

(1) Undertaking : The PP has submitted the undertaking that all activities, as per SEAC direction have been stopped till EC is obtained.

(2) CO certificate regarding the nature of land submitted this Certificate is provided by Addl. Collector but the class of land in Khatiyan and Register II for Jungle-Jhari has not been properly addressed.

(3) Geotechnical report for the site is yet to be submitted.

In the work order of the Architect it is observed that is in para 3.2.8, Stage II, column (c) – that the architect has been entrusted to get the approval and clearances from the statutory authorities as required. The contractor has not adhered to the task & directly started the work without prior E.C and thus the embrassing situation to the PP has been made.

To identify the damage to the environment and assessment of the corrective measures as per the MoEF&CC notification S.O. 1030(E) dated 08.03.2018 a site visit was conducted by the SEAC members on 26.07.2019. The observations of site visit is as follows :

(i) The construction work of the individual units of 400 dwelling units have been almost completed.

(ii) The roads, drainage system fire fighting measures have been undertaken.

(iii) On the system side a nalla flows & a large amount of the debris have been thrown out. There is a need to develop protective measures for maintaining the ecology of the nalla.

(iv) A large number of soak pits have been constructed towards the nalla which apprehends for a future disturbance to the flow of nature & its ecology.

(v) The status of completion of Rehabilitation colony was observed to be about 90%. The location of cluster of septic tanks and soak pits for the entire Rehabilitation colony was observed to on the western/south western bank of the natural perennial stream/water course. Since proximity of the septic tanks/soak pit is close to the natural stream and the terrace level on which these are located is also lower by about 1.25m from terrace level of the colony's road, possibly on the river terrace itself during monsoon, contamination of water in the stream is imminent to take place due to dispersion of effluent from soak pit. The original contour plan needs to be studied along with the made up terrace levels of the colony and its infrastructure.

Prima facie, for protecting the stream and its downstream from imminent contamination and Environmental hazard, the two possible mitigation measures. therefore, could be as follows:

i. Complete relocation of cluster of Septic Tanks and Soakpits to far away (farther from stream) so that after dispersion and its dilution of the effluent, concentration of polluting effluent will be minimum.

ii. Abandoning all the soakpits/cluster of soakpits and taking the discharged effluent from the soakpit and routing and treating it to a suitably located and adequately designed STP system with strong consideration on the quality of effluent from STP likely to be discharged from STP (within all admissible limits of ingredients).
Beside the above, Permission from Water Resources Deptt., GOI for grant of consent to discharge in the natural stream may have to be sought by the project proponent.

(vi) Presently the work is stopped.

In this meeting the PP & consultant presented a preliminary result of the evaluations as per matrix method and the storm water drainage system proposed and sewerage system, safety measures to be adopted parking & other activities. The identification of community development measures were discussed.

The PP has submitted undertaking vide Executive Engineer, Special Works Division, Building Construction Deptt., Jharkhand letter no. 1100, dated 28.08.2019 that in case the proposed project site is found to be Jungle-Jhari land then in that case PP would abide by the provisions of Forest (Conservation) Act, 1980 and submit requisite proposal.

The Deputy Commissioner, Ranchi has submitted certificate regarding Jungle-Jhari as per Revenue and Land Reform Department, Govt. of Jharkhand letter no. 4792, dated 04.12.18 that user agency would abide by the provisions of Forest (Conservation) Act, 1980 and submit requisite proposal, if the project site found to be Jungle –Jhari.

SEAC observations :

1. Since, construction phase is over, budgetary provisions made for Rs. 37.5 lakhs in Table 12-3 has no relevance for the Ecological/Environment damage assessment.

   A detailed analysis need to be prepared for the true / realistic assessment based on each affected component of project site like quantity of Excavation, Transportation of quantified qty. of raw materials, land use pattern, drainage & discharge pattern happening during all these 4 years of construction.

2. Cost of Remediation measure for "Water Environment" is as follows :

   It mentions that DG with acoustic enclosure = "Rs. 5 Lakh x 5 year Capital cost and Rs. 0.5 lakh X 5 yrs. recurring cost"

   Since it is a remediation measure, budgetary quotation need to be submitted as the amount needs to be deposited on account of this Similarly Budgetary quotation for Noise protective equipment to the obtained & submitted.

3. In Preamble Pg 1-1 mentions that approx. 80% of construction activities have been done on the site at other place it is mentioned as 90% & other place it is mentioned that construction is completed.

4. In 1.2 Brief description of project, it is mentioned that topography "almost plain" but from contour plan it is not plain.

5. CO, Nagri letter dt. 14.08.19, it is mentioned that Dhurwa Dam is located within 500 m distance but in page I-4, it is mentioned that Hatia Reservoir as 6.5 km SW. Both these documents are Contradictory ?

6. For proposed Water Conservation Measures, page XII-13 mentions :

"All concrete structures will be painted with anti-curing agent to save water" since construction work is over, the PP need to submit contractor's approved BoQ for this specified work . In absence of evidence for this, it will be concluded that no such paint has been used in the construction, in spite of being envisaged/planned.

7. Page XII-13 mentions that "Ponds should be made using Cement & Sand mortar to avoid water flowing away from the flat surface while curing". The PP need to submit documentary evidence from the contractor's contract showing availability of this work in contractor's scope or any evidence substantiating that this pond construction work has been carried out & made use of, during curing activity of constructions work requiring curing, which is now completed.

8. Rain Water Harvesting Pits PXII-14

In calculation of R.W. Harvesting pit, no provision has been kept for free board. Considering free board, the numbers of pits would be increased. Location of recharging pit need to be shown in key Plan.

9. Conclusion & Discussion (Construction phase)

Construction of Silt fences/berms is proposed to minimise soil runoff. The PP to confirm whether these silt fences/berms proposed during construction phases were constructed. If not constructed, it is concluded that soil run off has taken place during construction. During site visit, silt fences / berms were these not visible.

10. Disposal of Construction debris in "earmarked area" shall be submitted . PP to confirm the same & mark on drawing / key plan, the earmarked area for its verification.

11. Nature Resource damage assessment :

Water Source : Maximum reuse of treated water for building construction activities were envisaged by PP, (treatment through STP). Since STP not constructed, this aimed reuse of Water not achieved during Building Construction.

12. Table 12.1 Page XII-2 Land Resource :

Remarks that "no change in Land use & Drainage system is proposed" is not a correct statement & needs to be corrected."

13. Energy Resource : (Fuel : Electricity)

Remark column states that wood & coal will not be used & Low sulpher diesel will be used PP need to certify the same as construction phase is over.

14. Water Environment Table 12.2 pg XII-4 :

There is no provision for STP for the effluent from septic tanks, it has presently been planned to be discharged into soak pits constructed adjacent to perennial stream flowing – Needs Re-planning

15. Ecological Environment Status XII-20 Here it is mentioned that:

(a) That proposal is for development of residential & commercial project (needs correction)
(b) Project site is 5656.30 acres (needs correction)

16. Reply to compliance ToR point no. 4 "Entire area has been virgin land no trees have been cut during project development". In this chapter XII, it is mentioned that during field investigation in core zone more than 25 tree species were observed. There seems to be some contradiction.

17. In reply to specific condition point no. 3 compliance of ToR, wherein nallah river flowing on northern side, it is mentioned on page I-12, that there is no nallah flowing : But on Page XII-20, it is clearly mentioned "Two streams are observed in the core zone namely LAMATA & NATI STREEMS." This is a contradiction & needs elaboration. These streams have not been indicated in the key plan or in the contour plan. A1 details like its width, route etc shall be indicated is the contour plan to examine the drainage scheme of the project.

18. Table XII-24 500 trees estimate need to corrected with road length of the colony.

19. Table 12.10 Damage Assessment

Damage assessment on all the six fronts needs breakup calculation, analysis & elaboration

20. Chapter 2.12

While details of construction materials have been identified, these have not been quantified. For remediation, estimate, quantification of these need to be done, based on which material movement/material handling undertaken will be estimated to assess the damage.

PP has submitted reply vide letter no. 1110 (NE) dated 29.08.19 wherein reply to query no. 1 they have indicated quantification of soil for the project & indicated depth of excavation. These figures have not been substantiated with the BOQ in the contract, excavated quantity at site as per contractor's approved upto date bills cumulative quantity on account of all earth works carried out for the project in all types of excavation for foundation, site preparation, terracing backfilling site levelling to achieve the finished terrace level drains, boundary wall etc. The quantities appear to be too low for a project of this magnitude.

iii. **Proposed Assembly Building (Jharkhand Vidhan Sabha) of M/s Greater Ranchi Development Agency Ltd. (GRDA) at Site 1, HEC area, Vill. : Kute, Dhurwa, Ranchi.**

(Proposal No. : SIA/JH/NCP/23001/2018)

This project i.e. proposed Assembly Building (Jharkhand Vidhan Sabha) is developing by Greater Ranchi Development Agency limited (GRDA), an undertaking of Govt. of Jharkhand, at Site-1, H.E.C area, Village-Kute, Dhruwa, Ranchi. The Assembly Complex comprises of the prestigious Assembly Building, the highest seat of democracy where peoples' representatives.

The Proposed Assembly Building is being developed on the total plot area of 1, 59,523 sq.m. The built up area is 56,579.5 sq.m. Project is classified as Category 8(a) as per EIA Notification as the built up area is less than 1,50,000 sq m and development area is less than 50 ha. The Assembly Complex comprises of the prestigious Assembly Building, the highest seat of democracy where peoples representatives shall formulate laws / public policies, supporting offices & staff and is equipped with world class state-of-the-art infrastructure & thus is not a commercial complex..

The project is a violation case since the BCD, Government of Jharkhand, Ranchi have started the construction without obtaining prior EC. In order to obtain EC from MoEF&CC. The proponent applied initially to EAC, MoEF&CC to get the EC as per procedure prescribed in Notification dated 14.03.2017. The PP was asked by the committee about the reason and responsible persons for violation of a very important project like Assembly complex of the state. The committee has taken it violation of serious nature where the project must have been planned and monitored by highest level of authorities and it appear that all of the concerned person have ignored it. The committee recommends that the responsibility must be fixed by the competent authority and appropriate action must be initiated under E (P) Act, 1986 using relevant section. However, the committee has taken up the project for appraisal as per the direction under S.O. 1030 (E) dated 08.03.18 notification of MoEF&CC.

The chronological events is as below :

S.No	Particulars	Dates
1.	Construction Work Started	25th January 2016
2.	Proposal submitted to MoEF & CC in violation category	11th September 2017

3.	Transferred proposal to SEIAA Jharkhand	28th March 2018
4.	EDS Letter	15th May 2018
5.	TOR Proposal (Resubmission) EDS reply	20th June 2019
6	Acceptance of TOR Proposal	20th June 2019

Though the EC application was submitted to MoEF&CC, no direction received and the PP went on progressing with basic construction work at site.

Salient features of the project :

1.	Name of the project	Proposed Assembly Building (Jharkhand Vidhan Sabha)
2.	Name of applicant	Greater Ranchi Development Agency Limited (GRDA)
3.	Category of the project	8 (a) Building and Construction Projects
4.	Project location	Village Kute, Dhruwa, Ranchi, Jharkhand **Latitude :** 23°19'27.85"N to 23°19'19.39"N **Longitude :** 85°16'15.30"E to 85°16'21.24"E
5.	Plot area	1, 59,523 sq.m.
6.	**Permissible Ground Coverage @ 50 % of Plot area**	79, 761.5 sq.m.
7.	**Achieved Ground Coverage @ 15.6% of Plot area**	24,834.14 sq.m.
a. b. c. d. e	Assembly Building Service Block Parking Block Watch Tower Gate house	15,743.891 sq.m. 2,292.69 sq.m. 6,522.156 sq.m. 242 sq.m. 162 sq.m.
8.	**Permissible FAR @ 2.5**	3,98,807.5 sq.m.
9.	**Achieved FAR @0.355**	56,579.5 sq.m.
a. b. c d. e	Assembly Building Service Block Parking Block Watch Tower Gate house	46,699.289 sq.m. 2,953.055 sq.m. 6,522.156 sq.m. 243 sq.m. 162 sq.m.
10.	Built up Area	56,579.5 sq.m.
11.	Proposed Open Area @84.35% of Plot area	1,34,560.263 sq.m.

12.	Permissible Green @ 10 % of Plot area	15,952 sq.m.
13.	Proposed Green Area @ 66.76 % of Plot area	1,06,500 sq.m.
14.	Maximum Building Height	38.51 meter
15.	Paved Area	28,060.263 sq.m.
16.	Nearest Airport / Railway	Birsa Munda Airport, approx. 5 Km towards East
17.	Project cost	365 crores

S. No.	FEATURES	DESCRIPTION	DISTANCE & DIRECTION
1.	**Location**	Site-1, H.E.C. Area, Village- Kute, Dhruwa, Ranchi, Jharkhand	
2.	**Connecting road**	Nayasarai Road Ring Road	1 Km towards South 2 Km towards West
3.	**National Highway**	NH-39 NH-75 NH-23	2 Km towards West 8.0 km; NE 3.5 Km towards East 4.5 Km towards North West
4.	**Nearest Railway Station**	Hatia Railway station Piska Railway station	4 km towards South East. 6 Km towards West
5.	**Airport**	Birsa Munda Airport	5 Km towards East

Water requirement :

During construction phase, source of water is private water tanker. It is estimated that water demand during the construction phase may vary from 24 KLD. Water requirement during the operational phase will be met through either Municipal supply (Ranchi Municipal Corporation or Ground water after taking permission from CGWA). The total water requirement for the proposed project has been estimated to be 170 KLD. Total domestic water requirement of the project is estimated as 69 KLD.

Power requirement:

Estimated power load for the project is 4000 kVA. Source of the power will be Jharkhand State Electricity Board. Power back-up will be provided through DG sets in case of power failure. 2 nos DG sets of 2000 kVA each will be provided for power back-up.

Parking facility :

Project proposed 364 number of parking.

Type of parking	Number of parking
Covered Car parking	188

Open Car Parking	154
Ambulance and Security Vehicle	8
Fire Tender Parking	2
Parking for disabled	12
Total Parking	**364**

Solid waste generation and management

It is estimated that maximum solid waste generation would be about 357.36 kg / day and 65.52 kg of sludge (wet basis). Organic waste converter shall be providing to manage the biodegradable waste. Small area will be designated for secondary processing, where the proper segregation of waste will take place before sending it for proper disposal. These solid wastes will be collected separately by putting three types of separate bins at the source of generation. For the biodegradable waste green bins will be provided, for the Non-biodegradable waste White bins and for the domestic hazardous waste black bins will be provided. The E-waste (Discarded computers, copiers, fax machines, electric lamps, cell phones, audio equipment, etc) generated will be managed as per the E-Waste (Management) Rules, 2016. The Hazardous waste (Used Oil, Oil Contaminated Wastes) generated will be managed as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

DFO, Ranchi Division vide letter no. 3242, dated 10.07.19 certified that the distance of notified forest is 1516 m from proposed project site not within 10 km from National Park, Bio-Diversity & Sanctuary, not under the No Mining Zone and proposed project is not situated in any ESZ.

PP and the consultant presented the project and submitted the earlier required documents. They admitted that the large amount of construction work has been before the grant of EC. Thus this is a violation case as per the E (P) Act, 1986 and MoEF&CC notification S.O. 1030 (E), dated 08.03.18as construction work 90% completed without prior EC.

SEAC is concerned to find the violation of E (P) Act PP of a number of projects in the plea of ignorance. There is a need to identify the reason of lapses of not taking prior EC before starting the work. This amounts to repeated violation under E (P) Act.

The proposal was presented in SEAC on 24-26.07.19 in which requisite documents were sought as under -

i. *PP to submit an Undertaking / Affidavit that the work has now been stopped till the EC awarded.*
ii. *The work order / scope of work to the Architect / Contractor as the work was awarded earlier.*
iii. *CO certificate regarding class of land (whether as Jangle Jhari or not).*

The above mentioned documents have been submitted by the PP, except CO certificate regarding class of land (whether recorded as Jangle Jhari or not).

On scrutiny the document eg :

(1) Undertaking : the PP has submitted the undertaking that all activities, as per SEAC direction have been stopped till EC is obtained.

(2) CO certificate regarding the nature of land submitted, wherein this Certificate is provided by Addl. Collector but the class of land in khatiyan and register II for Jungle-Jhari has not been properly addressed.

(3) Geotechnical report for the site is yet to be submitted.

In the work order of the Architect it is observed that is in para 3.2.8, Stage II, column (c) – that the architect has been entrusted to get the approval and clearances from the statutory authorities as required. The contractor has not adhered to the task & directly started the work without prior E.C and thus the embrassing situation to the PP has been made.

To identify the damage to the environment and assessment of the corrective measures as per the MoEF&CC notification S.O. 1030(E) dated 08.03.2018 a site visit was conducted by the SEAC members on 26.07.2019. The observations of site visit is as follows :

(i) The construction work of the Assembly Building have been almost completed.
(ii) The roads, drainage system fire fighting measures have been undertaken.
(iii) Presently the work is stopped.
(iv) Plantation work was in progress.

In the earlier held on 13-14.08.19 meeting the PP & the consultant presented a preliminary result of the evaluations and the storm water drainage system, proposed and sewerage system, safety measures to be adopted parking & other activities. The identification of community development measures were discussed. The consultant has submitted that environmental data has been generated in summer months.

The PP has submitted "Undertaking" vide Executive Engineer, Special Works Division, Building Construction Deptt., Jharkhand letter no. 1099, dated 28.08.2019 that in case the proposed project site is found to be Jungle-Jhari land, then in that case PP would abide by the provisions of Forest (Conservation) Act, 1980 and submit requisite proposal.

The Deputy Commissioner, Ranchi has submitted certificate regarding Jungle-Jhari as per Revenue and Land Reform Department, Govt. of Jharkhand letter no. 4792, dated 04.12.18 that user agency would abide by the provisions of Forest (Conservation) Act, 1980 and submit requisite proposal, if the project site found to be Jungle –Jhari.

Based on the above deliberation, site visit and submission of required documents SEAC recommended for issuance of ToR vide 76th meeting dated 13-14.08.2019. Subsequently, SEIAA, Jharkhand issued ToR on 20.08.2019. PP submitted the EIA report on 26.08.19.

SEAC 77th meeting held on 29-30.08.2019 the presentation of EIA / EMP issued as per ToR and as per MoEF&CC notification S.O. 1030(E) dated 08.03.2018 was put in the agenda. PP and the consultant presented the EIA / EMP as per ToR. The report has been prepared as per the direction of MoEF&CC notification S.O. 1030(E) dated 08.03.2018. The ecological damage assessment was presented :

Ecological Damage Assessment :

Project proponent has completed construction work and next to operational before getting Environmental Clearance under EIA Notification, 2006.

Natural Resources Damage Assessment

Components	Activities	Probable impact	Remark
Land resources	The land was allotted to project proponent by Jharkhand government for the development of assembly building project. Clearing of shrubs and herbs Excavation for laying foundation;	Loss of top soil; land use changes; changes in drainage patterns; soil erosion; & soil contamination.	The top soil is kept at the earmarked places within the project site and stabilized through vegetative means to stop wash off and erosion. No change in land use and effective storm water management system is proposed to ensure no change in drainage patterns.
Water resource	Water drawl of about 24 KLD for construction. Wastewater generation (90 KLD)	Depletion of ground and surface water resources, contamination of ground and surface water	Rainwater recharging with in project site and in study area; Maximum reuse of treated water (STP); reduce the load on ground water by providing treated water to the nearby building construction activities No discharge will be made to any water body.
Waste resource	Waste generation of 357 Kg per day , Excavated soil	Littering of waste Dumping of excavated soil in the open land in vicinity.	All the waste will be managed as per applicable waste management rules and all the excavated soil will be re handled within the project site.
Energy resource (Fuel; Electricity)	Utilization of wood/ coal, diesel and electricity	Deforestation for collecting wood; Impact on flora and fauna	LPG cylinder will be used for cooking and wood and coal will not be used. Ultra low sulphur diesel will be used in DG sets and vehicles.
Air Environment	Excavation Loose construction material Storage Use of DG sets	Particulate matter Emission Fugitive dust emission. Gaseous emission	Suppression of dust and fugitive emission, only PUC certified vehicle will be used.

			All loose construction material will be covered. DG sets will have stack having stack height as per CPCB. DG sets will be used only in case of power failure.
Noise Environment	Increase in traffic frequency and resultant noise. Noise from DG sets	Disturbance to vulnerable groups Disturbance to nearby residents	There will be acoustic enclosure for DG sets; construction activity will be during day time only. Only properly maintained and PUC vehicle will be used. Honking will be discouraged.
Water Environment	Water withdrawal Generation of waste water	Stress on water resources. Discharge of untreated sewage and domestic effluent.	Site is in safe zone as per CGWA; River Subarnarekha River is in vicinity; the water will be supplied by Nagar Nigam; There will be a provision of STP based on MBBR technology so as ensure that water resource are reused within site and ground water is not contaminated.
Land Environment	Excavation of laying down foundation Land loss Vegetation removal	Spillage Top soil deterioration; landuse & drainage pattern change; cutting and filling.	Vacant land with shrubs and herb; no tree cutting proposed – number of tree will be planted at the site; Nonagricultural private land. Green belt development; RWH Proposed to reduce runoff from site as ground water recharge.

Ecology& Biodiversity Environment	Site clearance Clearing of shrubs and herbs	Lossof topography, Loss of vegetation Migration of flora and fauna	Proper levelling and filling The shrubs and herbs found at the project site were of common occurrence and similar type of habitat is abundantly available in the study are therefore no significant impact envisaged, conservation plan is proposed.
Socio-economic Environment	Migration of people Welfare activities Employment facilities Solar lights Environmental sustainability	Increase in infrastructural facilities. Improved employment; .	Positive Impact

The baseline data presented comprised of the pre-monsoon period of May, 2019 and CPCB data compared.

The temporal analysis of air pollution at Ranchi shows it is higher than standard value however it station is location at Albert ekka chowk which is a place of commercial activities. Our monitoring location is situated at less commercial activities place. And our monitoring value is less than standards. Hence PP inferred that this project has been not shown much effect on air environment.

Further, PP & the consultant has shown the different land use maps though analysis of satellite imagery of 2016, 2017, 2018 & 2019 and inferred that there is no major change in land use and land cover. The project site is already in the arena of census city of Ranchi & growing rapidly & anticipates higher floating populations in further rapid growth.

A drainage map showing with 20 mtrs contour interval was presented for the year 2016, 2017, 2018 & 2019 based on satellite imagery analysis and inferred that the nearby lake has been gradually sited, may be partially due to these construction activities also. However, there is a need of continuous monitoring of the status of lake.

Similarly air quality modelling & prediction, water quality, noise level & bio-diversity study presented. There is no endangered species & satellite imagery had shown that core zone tree felling has been negligible.

Water balance scenario, RWH calculation & pits calculation were presented. Soil charactis & details of solid waste generation & treatment strategies. Alternate energy some of strategies for area lighting has been eracted alongwith other energy saving measures existing & modified traffic scenario, EMP budget & disaster management plan submitted.

PP presented the assessment of ecological damage

S.No	Aspects	Capital Cost (Rs in Lakh)	Operational Phase (Rs. In Lakh)	Total cost (Rs in Lakh)
1	Air Environment	12.0	6.0	18.0

2	Ecological Environment	4.6	0.5	5.1
3	Water Environment	37.0	3.5	40.5
4	Land Environment	0.0	0.0	0.0
5	Noise Environment	10.0	6.0	16.0
6	Socio-economic Environment	5	2	10
	Total	68.6	18.0	86.6

Cost proposed on remediation plan and natural and community resource augmentation plan

S. No	Aspects	Amount (Rs in lakh)
1	Ecological Environment	5.0
2	Natural and Community Resources Augmentation Plan	6.5
	Total	11.5

The remediation plan & natural & community augmentation plan prepared by NABET & NABL accredited consultant & with certificates submitted.

SEAC deliberated on the EIA report and special chapter on violation & remediation plan. The committee (SEAC) being a high level technical committee for evaluating the project needs to strike a balance between development on the one side and ecology and environment on the other for making the recommendation with proper reason. As such SEAC feels that a detailed long term study for the damage be continued.

The committee suggested to submit the quantification of soil & depth of excavation so that accurate soil handling could be calculated & since then PP submitted as below :

Quantity of soil excavated during the excavation for construction of Vidhan Sabha is as following :

Earth work excavation	39977	Cum	Depth of excavation
Ordinary rock	9470.2	Cum	2-6 meter
Ordinary or hard rock	6637	Cum	
Earth work filling	67616	Cum	
Total	123700.2	Cum	

The committee further discussed on the natural resource and ecological damage remediation & suggested to revise the same including the soil / land use management & desilting of Dhurwa reservoir.

The budgetary estimate of the above exercise was earlier Rs. 53.5 Lakh. The revised budgetary estimate now has been raised and stands at Rs. 199.10 Lakh. The cost estimate is over and above the EMP budget of Rs. 175 Lakh and CER allocation of Rs. 3.6 Crore is CSR.

SEAC discussed on the above environment management, remediation plan & budgetary estimate keeping this project as public utility building and not a commercial complex.

At this an input from the Hon'ble NGT, Southern Zone, Chennai order of application no. 36 of 2016 (SZ) & application no. 48 of 2016 & the judgement of hon'ble Double Bench justices Dr. P.

Jyothimani and Sri P.S. Rao was discuss. In this judgement though the court had dismissed the application on the point of maintainability but directed the PP to adhere to –

i. Environmental compensation of Rs. 1,00,00,00 (Rupees one crore only) to be deposited in Chennai Rivers Restoration Trust (CRRT).
ii. The imposition of the above environmental compensation is independent of any action that may be taken under section 15 of the Environment (Protection) Act, 1986.

SEAC observations :

1. Since, construction phase is over, budgetary provisions made for Rs. 86.6 lakhs in Table 12-10 on page XII-23 has no relevance for the Ecological/Environment damage assessment.

   A detailed analysis need to be prepared for the true / realistic assessment based on each affected component of project site like quantity of Excavation, Transportation of quantified qty. of raw materials, land use pattern, drainage & discharge pattern happening during all these 3 years of construction.

2. Cost of Remediation measure for "Water Environment" states that DG with acoustic enclosure is Rs 12.25 Lakh Since it is cost of remediation measure, budgetary quotation need to be submitted as the amount needs to be deposited on account of this. Similarly Budgetary quotation for Noise protective equipment to the obtained & submitted.

3. On page XII -23, it is mentioned that road in vicinity of project site are in good condition, still provision of road & street repair of Rs. 5 Lakhs appears redundant and could be utilised for other purpose.

4. In 1.2 Brief description of project, it is mentioned that topography "almost plain" but from contour plan it is not plain.

5. CO, Nagri letter no. 970, dt. 14.08.19, it is mentioned that Dhurwa Dam is located within 500 m distance but in page I-4, it is mentioned that Hatia Reservoir as 3.0 km SW.

6. For proposed Water Conservation Measures, page XII-11 mentions :

   "All concrete structures will be painted with anti-curing agent to save water" since construction work is over, the PP need to submit contractor's approved BoQ for this specified work . In absence of evidence for this, it will be concluded that no such paint has been used in the construction, in spite of being envisaged/planned and water used in curing has been more than an envisaged.

7. For water conservation measures, Page XII-11 mentions that "Ponds should be made using Cement & Sand mortar to avoid water flowing away from the flat surface while curing".

Since construction requiring curing is completed, the PP need to submit documentary evidence from the contractor's contract showing availability of this work in contractor's scope or any evidence substantiating that this pond construction work has been carried out & made use of, during curing activity of constructions work requiring curing, which is now completed. In absence of this, it is concluded that water conservation as envisaged has not been effected.

8. Rain Water Harvesting Pits page XII-12

In calculation of R.W. Harvesting pit, no provision has been kept for free board. Considering free board, the numbers of pits would be increased. Location of recharging pit need to be shown in key Plan.

9. Conclusion & Discussion (Construction phase), page XII - 16

Construction of Silt fences/berms is proposed to minimise soil runoff. The PP to confirm whether these silt fences/berms proposed during construction phases were constructed. If not constructed, it is concluded that soil run off has taken place during construction. During site visit, silt fences / berms were not visible.

10. It is mentioned that disposal of construction debris in approved area shall be stabilized though vegetative means. PP could not indicate location of approved area where such stabilizing activities by vegetative means is being carried out. This was also not visible during site visit of SEAC team.

11. Energy Resource : (Fuel : Electricity)

Remark column states that wood & coal will not be used & Low sulpher diesel will be used PP need to certify the same as construction phase is over.

12. Ecological Environment Status XII-18 Here it is mentioned that:

(c) That proposal is for development of residential & commercial project (needs correction)
(d) Project site is 656.30 acres whereas in description of project at clause 2.1 on page I / II it is stated that it covers an area of 39.4 acres.

13. In reply to specific condition point no. 3 compliance of ToR, wherein nallah river flowing on northern side, it is mentioned on page I-12, that there is no nallah flowing : But on Page XII-20, it is clearly mentioned "Two streams are observed in the core zone namely LAMATA & NATI STREEMS."

14. Table 12.10 Damage Assessment on page XII - 23

Damage assessment on all the six fronts needs breakup calculation, analysis & elaboration

15. Chapter 2.12

While details of construction materials have been identified, these have not been quantified. For remediation, estimate, quantification of these need to be done, based on which material movement/material handling undertaken will be estimated to assess the damage.

16. Use of anti – curing agents which were to be used to reduce the water demand for construction as envisaged in 4.2.1.1 on page IV-4, needs to be substantiated by related item of contract which has been executed in the project in absence of which it will be concluded that more than envisaged water has been used in curing.

17. In arriving at 2384 population in table 2 on page 6/II, provision of visitor in Assembly Complex has been considered as two only. Realistic estimate to be considered & accordingly all infrastructure for the increased population like STP capacity, water requirement for the project would increase consider only.

18. While describing proposed mitigation measures in 4.2.1.1 on page IV-4 the report states that all stacking & loading area will be provided with proper garland drains equipped with baffles to prevent run off from site to enter in to any water body. No such arrangement was visible to the SEAC team during site visit. This has resulted in adverse effect.

19. Under 4.2.1.1 on page IV-4, it is stated that common toilets will be constructed at site during construction phase & waste water would be channellised to septic tanks in order to prevalent waste water to flow off site. Status of this provision is not mentioned and so could not be verified even though major construction is completed.

20. On page IV-13 it is stated that barricading of boundary wall shall be done upto $1/3^{rd}$ of building height & as Building height increases, height of wall shall also be increased upto maximum of 10 m. This could not be ascertained & was also not visible during SEAC Teams site visit.

In absence of proper substantiation of all the above observed lapses in the project, SEAC is of the view that in determination of remediation cost, cost towards the above lapses is being.

As per BOQ :

Assessment of the Ecological Damage Cost :

S. No.	Environment Head	Damage Description	Cost (Crores)
1	Air Pollution	i. Treatment of Respiratory Diseases ii. Loss of Wages due to Absentism	0.59

2	Land Environment	i. Damage to Water Shed Resources ii. Soil Loss due to water erosion iii. Damage due to Muck generated	2.35
3	Water Environment	i. Water Borne Diseases- Diarrhoea ii. Loss of Natural Water Recharge iii. Loss to Ecological Flows iv. On account of observed lapses as mentioned in SEAC observations	0.220 0.20
4	Soil Environment	i. Loss of Excavated Soil	1.60
5	Socio Economic Environment	i. Loss of Crops – Single (Kharip)	0.30
Total			**5.26**

The responsibility must be fixed and action should be initiated against the erring govt. official / consultant / architect by the competent authority under relevant provision of E (P) Act, 1986.

SEAC in view of the EIA report revised remediation plan & budgetary estimates as well as the public interest building construction & utility recommends for issuance of EC with a number of specific condition:

i. SEAC request SEIAA to ensure that the bank guarantee of Rs. 5.26 Crores be submitted to JSPCB account before grant of EC.

Based on the presentation made and information provided, the Committee decided that the proposal for **Proposed Assembly Building (Jharkhand Vidhan Sabha) of M/s Greater Ranchi Development Agency Ltd. (GRDA) at Site 1, HEC area, Vill. : Kute, Dhurwa, Ranchi** be recommended for conditionally consideration of SEIAA for grant of EC. The other various conditions for grant of EC is enclosed herewith as **Annexure - I.**

iv. **Simariya Stone Deposit of M/s Pawanputra Stone Works, Vill. : Simariya, Thana : Jirwabari, Dist. : Sahibganj (6.07 Ha)**

The PP & consultant of the project are absent in the scheduled SEAC meeting for appraisal. They were not appearing since 65th meeting dated 07-09.01.2019, 66th meeting dated 29-31.01.2019, 67th meeting dated 25-27.02.2019, 68th meeting dated 14-15.03.2019, 72nd meeting dated 27-30.05.2019, 73rd meeting dated 12-14.06.2019 & 74th meeting dated 10-12.07.19.

So, the M.S, SEAC vide letter no. 167, dated 05.08.19 has requested to PP for appearance in the next meeting, failing which SEAC would recommend for delisting of the instant project.

PP was asked to submit CO certificate regarding class of land (whether recorded as Jungle Jhari or not) and concerned DFO Wildlife certificate regarding distance of National Park / Sanctuary/ Bio-Diversity / Eco Sensitive Zone.

Once the requisite certificates are submitted to SEAC, it will examine the case.

v. **Kutmu Stone Mine of Sri Basant Kr. Keshri, Vill. : Kutmu, Taluka : Bishrampur, Dist. : Palamau (1.82 Ha).**

(Proposal No. : SIA/JH/MIN/38353/2019)

This is a Stone Mining Project with an area of 1.82 Ha [Khata no. 276, Plot No.- 1152 (P)]. The latitude and longitude of the project site is 24° 17' 33.39" N to 24° 17' 29.04" N and 83° 54' 40.04" E to 83° 54' 46.33" E. The nearest railway station is Sigsigi at a distance of 7.0 km and the nearest highway is 2.0 km and nearest airport is Ranchi at a distance of 180 km . Total water requirement is 5 KLD. Water will be taken from nearby village.

The details of mine capacity as per Approved Mining Plan are

Proved Mineral Reserve	:	5,32,554 tonne
Probable Mineral Reserve	:	94,819 tonne

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

1st Year	:	1,25,017 tonne
2nd Year	:	1,25,339 tonne
3rd Year	:	1,25,698 tonne
4th Year	:	1,25,894 tonne
5th Year	:	1,25,425 tonne

The daily production as per Mine Plan is 419 tonne.

The indicated project cost is Rs 35.00 Lakh and a provision of Rs 6.00 Lakh has been indicated for Environment management and budget for CER is 0.80 Lakh.

Dy. Director, Palamau Tiger Project, North Division, Medininagar vide letter no. 1542, dated 08.07.19 certified that not within 10 km from National Park, Bio-Diversity & Sanctuary and proposed project is not situated in any ESZ.

The CO, Pandu, Palamau vide letter no. 547, dated 24.08.18 has mentioned the plot no. of the project is not recorded as "Jangle Jhari".

DMO, Palamau vide memo no. 686, dated 24.05.19 certified that no other lease is exists within 500 m radius from proposed project site.

PP submitted the challan documents showing the production before 2012, whereas, DMO certificate vide letter no. 670, dated 16.05.19 certified that no production after Hon'ble Supreme Court order dated 27.02.2012 regarding requirement of prior EC. Thus this case does not comes under violation case.

DFO, Medininagar Division vide letter no. 2321, dated 08.07.19 certified that the distance of nearest forest is 140 m from proposed project site and proposed site is not under the No Mining Zone. However, DFO, Daltonganj North (presently Medininagar) vide letter no. 161, dated

14.01.2002 had earlier certified that proposed site is 50 m from forest boundary. Contradictory report from DFO requires clarification.

M.S., SEAC vide letter no. 166, dated 05.08.19 is requested to DFO, Medininagar Division for seek clarification.

DFO, Medininagar Division vide letter no. 3023, dated 20.08.19 certified that the distance of nearest forest is 140 m from proposed project site.

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 **Kutmu Stone Mine of Sri Basant Kr. Keshri, Vill. : Kutmu, Taluka : Bishrampur, Dist. : Palamau (1.82 Ha)** be recommended for consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as **Annexure - II.**

vi. **Murtiya Sand Ghat in the river bed of Gauri River of M/s JSMDC Ltd. at Vill. : Murtiya, Tehsil :Chandwara, Dist. : Koderma (4.31 ha).**

(Proposal No. : SIA/JH/MIN/36024/2019)

This is a Sand Mining Project for having an area of 4.31 Ha [Khata No. 29, Plot No.- 826 (P), 1106 (P)].

The latitude and longitude of the project site is 24° 20' 23.68" N to 24° 20' 22.66" N and 85° 32' 24.08" E to 85° 32' 26.82" E. The nearest railway station is Hirodih at a distance of 07 km and the nearest airport is Gaya at a distance of 90 km. Total water requirement is about 1.45 to 1.67 KLD (Dust suppression : 1 KLD, Domestic use : 0.45 to 0.67 KLD. Drinking water will be supplied from the nearest village Kanti (Murtiya) which is connected to village road (Telaiya dam - Dumardih) at a distance of 400 m.

The proposed estimated total proved reserve is 1,07,750 cum.

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

1st Year	:	73,723 cum
2nd Year	:	58,978.40 cum
3rd Year	:	58,978.40cum
4th Year	:	58,978.40 cum
5th Year	:	58,978.40 cum

The daily production as per Form-I is 1st year 368.61 cum & 2nd to 5th year 294.89 cum.

The indicated project cost is Rs 45.50 Lakh and a provision of Rs 7.65 Lakh has been indicated for Environment management and CSR cost is 0.91 Lakh.

DFO, Wildlife Hazaribagh vide letter no. 506, dated - 9.03.19 certified that the distance of Wildlife Sanctuary Koderma is 12,800 m from project site and not within 10 km from National Park, Bio-Diversity & Sanctuary and proposed project is not situated in any ESZ.

DFO, Koderma Division vide letter no. 1493, dated - 20.04.19 certified that the distance of forest is 500 m from project site.

The CO, Chandwara vide letter no. 155, dated - 02.03.19 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in the Khatiyan & Register II.

DMO, Koderma vide memo no. 581, dated 25.04.19 certified that any other lease is not within 500 m radius from proposed project site.

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 **Murtiya Sand Ghat in the river bed of Gauri River of M/s JSMDC Ltd. at Vill. : Murtiya, Tehsil :Chandwara, Dist. : Koderma (4.31 ha)** be recommended for consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as **Annexure - III.**

vii. **Construction of 500 bedded Government Hospital of Jharkhand State Building Construction Corporation Ltd. at Plot no. 117 to 128, Vill. : Kolghati 1, Anchal : Sadar, Dist. : Hazaribagh.**

(Proposal No. : SIA/JH/NCP/74878/2018)

Project is classified as Category 8(a) as per EIA Notification as the built up area is less than 1,50,000 sq m and development area is less than 50 ha. The latitude and longitude of the project site is 24° 0' 54.01" N to 24° 0' 55.99" N and 85° 21' 44.66" E to 85° 21' 48.62" E.

Salient Features of the project :

S. No.	Block No.	Particulars	Total (m^2)
1.	**-**	**Total plot area**	**101171.45 (25 acres)**
2.	-	Permissible Ground Coverage (@50% of Total Plot area)	50585.72
3.	-	Total Proposed Ground Coverage (@25.06% of Total plot area)	25357.42
4.	**-**	**Proposed Ground Coverage for Hospital Building (@9.066% of Total plot area)**	**9172.75**
5.	-	Permissible FAR @2.5	252928.625
6.	-	Proposed FAR @1.30	131850.11
7.	**B+G+6**	**Proposed FAR for Hospital Building @0.566**	**56293.6**
8.	G+1	Proposed 500 Capacity auditorium	2542.01
9.	S+8	Proposed Type 3 Residence	5591.36
10.	S+5	Proposed Resident Doctors Hostel	3524.28
11.	G+5	Proposed Intern's Hostel	3644.33
12.	G+1	Proposed Type 6 (Dean/MS Residence)	906.5

13	G+6	Proposed Nurse Hostel	4002.05
14.	G+3	Proposed Guest Hostel	1491.34
15.	G+1	Proposed Student Recreational Block	585.19
16	**G+1**	**Proposed ESS &UGT**	**1306.5**
17.	**G**	**Proposed Guard room**	**14.4**
18.	-	**Proposed STP &ETP**	**383**
19.	G+4	Existing Medical College	24794.0
20.	G+8	Existing Girls Hostel	8935.0
21.	G+8	Existing Boys Hostel	8935.0
22.	S+8	Existing Type – 4 (Block 1)	4952.0
23.	S+7	Existing Type – 4 (Block 2)	4333.0
24.	-	**Proposed Basement Parking area for Hospital**	**4780.0**
25.	-	**Total Built Up Area (BUA) for Hospital (7+16+17+18 +24)**	**62775.5**
26.	-	Open Area (Total Plot Area – Ground Coverage)	75814.03
27.	-	Proposed Landscape Area (25.59 % of Open Area)	19403.330
28.		Height of the Hospital Building (m) (G+6)	29.50
29.	-	Project cost	509.14 crores

S. No.	Description	Particulars	Unit
	GENERAL		
1.	Total Plot Area	101171.45	SQM
2.	Ground Coverage of Hospital	9172.75	SQM
3.	Proposed Built Up Area of Hospital component	62775.5	SQM

4.	Building Blocks	Hospital Building, ESS & UGT, Guard room, STP & ETP.	
5.	Max Height of Building up to terrace level	29.50	M
6.	Max No of Floors for hospital building only	S+G+6	NOS
WATER REQUIREMENT FOR HOSPITAL COMPONENT			
7.	Total fresh water requirement	195	KLD
8.	Total sewerage generation	241	KLD
9.	Proposed ETP Capacity	50	KLD
10.	Proposed STP Capacity (SBR Type)	300	KLD
PARKING FOR HOSPITAL COMPONENT			
11	Required Parking for Hospital Building as per Jharkhand Bye Laws	34	ECS
12	Total Proposed parking	137	ECS
GREEN AREA FOR TOTAL PROJECT SITE			
13	Proposed Green Area 19.17 % of total plot area	19403.330	SQM
WASTE GENERATION FOR HOSPITAL COMPONENT			
14	Total Solid waste generated	942.176 kg/day	Kg/day
15	Biomedical Waste	25 % of Total Waste=235.75	Kg/day
POWER FOR HOSPITAL COMPONENT			
16	Total Power Requirement	2921.8	KW
17	DG set backup	1500*2=3000	KVA
RAIN WATER HARVESTING FOR HOSPITAL COMPONENT			
18	Rain water Harvesting Pits (in total plot area)	21	NOS

POPULATION DETAILS FOR HOSPITAL COMPONENT

S. No.	Particulars	No. of beds	PPU/no. of person/m^2	Total Population

1.	Patients	500	1- person per 1 bed	500
2.	Attendant	500	1-person per 1bed	500
3.	Out Patient Department (OPD)			2000
4.	Staff (Doctor+ Nurse + Helper)			500
5.	Visitors (20% of Hospital Population i.e. 500)			100
Total Population				3600

DAILY WATER DEMAND FOR HOSPITAL COMPONENT :

S. No	Description	Area (sq. mtr)	No. of Beds / Occupancy	Rate of water demand for domestic (@lpcd)	Water Requirement for Domestic (KLD)	Rate of water demand for Flushing (@lpcd)	Water Requirement for Flushing (KLD)	Total Water Requirement Domestic + Flushing (KLD)
A.	**Hospital Building**							
1	Patients + Attendant +Staff + visitors		500	300	150	150	75	225
2	Out Patient Department (OPD)		2000	10	20	5	10	30
3	Laundry + Kitchen		500	50	25	0	0	25
Total Domestic Water Requirement								**280.0**
B.	Horticulture	19403.330	3 liter for 1 sq. mtr					58.2 say 58
C.	DG Set	3000 KVA (2*1500 KVA)	0.9*KVA* 8 Hours					21.6
D.	HVAC	430 (TR)	10*Capacity* 12 hours					51.6
Total Water Requirement								**411.2**
								Say 411 KLD

Waste Water Management :

- The STP proposed for the total project is of 550 KLD of SBR technology (developed module wise).

- The ETP proposed for treatment for the effluents will be of capacity 50 KLD.
- The requirement of STP capacity for the Hospital component only is 300 KLD out of 550 KLD.
- The wastewater estimated for the hospital component is 241 KLD which will be treated in STP.
- There will be a provision of separate and dedicated lines of plumbing from OT, Labs and other photogenic sources that are high in COD, which will be diverted to ETP of capacity 50 KLD designed to meet the discharge standards of landscaping and horticulture.

Brief description of Effluent Treatment Plant (ETP) for proposed Hospital (50 KLD)

Effluent Treatment Plant :

The effluent from different laboratories, OT and hospital will be treated in ETP having following units:

- **Primary unit**

  The primary unit consist of screening and equalization tank. The raw hospital/lab. effluent will pass through the bar screen chamber. The Bar Screen has narrow slits that capture the material and further the effluent pass into the equalization tank where prechlorination and aeration will be done.

- **Secondary treatment**

  In secondary treatment i.e. Physico-chemical treatment the effluent from equilisation tank will come into the Reaction tank where Fenton's reagent will be mixed at low pH which work as an high oxidizing chemical and oxidize all the possible bacteria and virus and infectious units. Deep oxidation of bacteria will take place for 10-15 min , after that Neutralization process will be carried out and followed by Polymer dosing for better flocculation and coagulation.
  Tube settler-The effluent will be settled in the tube settler and sludge will be settled down here and supernatant will be collected from the top to intermediate storage tank
  Disinfection unit- The oxylite dosing will be carried out in the intermediate storage tank to disinfect .Rare possible bacteria after deep oxidation in the reaction tank. The process does not generate any carcinogenic chloro-organic compounds.

- **Tertiary treatment-**

  MGF-Multi grade filter will remove the possible particle in the treated effluent which pass through UV system before using for horticulture purpose or public sewerage system (Treated effluent 50 KLD max.).
  Sludge-The ETP sludge will be handled in the Filter press and dispose off as per the provision of Hazardous Solid waste management rules.

Solid Waste Management :

S. No	Category	Kg per capita per day	Waste generated (kg/day)

1	Patient + Attendant	1000 @ 0.5 kg/day	500
2	Staff	500 @ 0.25 kg / day	125
3	Visitor +OPD	2100 @ 0.15 kg /day	315
4	Landscape waste (54992.337 m^2)	13.58 @ 0.2 kg/acres	2.716
Total Solid Waste Generated			**943 kg/day**

Total Bio medical waste is 25% of total solid waste i.e. 235.75 kg/day
Total E-waste generation is 1 % of total solid waste i.e. 7.07 kg/day

1. Municipal Solid waste : Organic wastes shall be collected at site marked and disposed off through authorized recyclers
2. Hazardous waste: Waste oil will be disposed off through authorized recyclers.
3. Biomedical waste: Waste will be disposed off through BMW facility .
4. Construction Waste: will be used on site as filler material for covering open spaces such as internal roads and pavements remaining construction waste if any will be sent to an approved dumping site.

SOLID WASTE GENERATION (Component Wise)

S. No	Waste	Quantity Kg/day	Percentage
1	Biomedical waste	235.75	25
Rest remaining MSW		707.25 kg/day	
2	Bio degradable waste -	353.62	50
3	Non-bio degradable	282.90	40
4	Other inert waste	63.65	9
5	E-waste	07.07	1

Rain Water Harvesting for the Hospital Component :

S.NO.	DESCRIPTION	DETAILS	UNIT
A	**Terraces areas - Volume of runoff**		
1	AREA	25888.59	SQM
		2.588859	HECTARE
2	RAINFALL (One Hour)	25	mm/Hr
3	COEFFICIENT	0.8	
4	**DISCHARGE AS PER RAINFALL INTENSITY (Q)**	**517.77**	**CUM/Hr**
B	**Paved, Road, Parking, Private terrace areas - Volume of runoff**		
1	AREA	60172.54	SQM

		6.017254	HECTARE
2	RAINFALL (One Hour)	25	mm/Hr
3	COEFFICIENT	0.7	
4	**DISCHARGE AS PER RAINFALL INTENSITY (Q)**	**1053.02**	**CUM/Hr**
C	**Landscaped & green areas - volume of runoff**		
1	AREA	12376.84	SQM
		1.237684	HECTARE
2	RAINFALL (One Hour)	25	mm/Hr
3	COEFFICIENT	0.2	
4	**DISCHARGE AS PER RAINFALL INTENSITY (Q)**	**61.88**	**CUM/Hr**
D	**Total for all areas - volume of runoff & Calculation for RWH**		
1	Total Volume of runoff generated from the proposed campus (A+B+C)	**1632.68**	m^3
2	Percolation of Rain Water through harvesting pit 10% of total discharge	**163.27**	m^3
3	Balance Volume of rainwater discharge capacity.	**1469.41**	m^3
4	Size of the Rain Water Harvesting Pit Structure for 60 minute storage (Dia.of Pit-4.5m & effec tive depth-4.5m)	**1469.41**	m^3
5	Volume of a single circular recharge pit	**71.53**	m^3
6	**Hence No. of pits required**	21	*Nos*

Energy Saving Measures :

- Use of local building material to reduce pollution & transportation energy.
- All the pumps shall have minimum efficiency as per ECBC norms
- Energy efficient building envelope-use of fly ash bricks/AAC blocks for external walls
- Insulation to roof.
- Programmable switching arrangement for external lighting to prevent wastage of energy.
- Energy efficient lighting fixture LED lamps to be provided in common areas.
- Adequate solar panels will be installed to conserve energy.
- ECBC norms shall be complied.

DFO, Hazaribagh vide letter no. 1469, dated 28.03.19 certified that the distance of forest is 1500 m from proposed project site.

DFO, Wildlife, Hazaribagh vide letter no. 273, dated 06.02.2019 certified that Hazariabgh Wildlife Sanctuary and Eco Sensitive Zone is within 10 km from proposed project site and National Park / Bio-Diversity not within 10 km. Since the distance of site is less than 10 km from the Wildlife Sanctuary. PP has submitted an application the National Board for Wild Life (Proposal No. : FP / JH / Others/ 4278 / 2019) and submitted the acknowledgment for the receipt of proposal.

The CO, Sadar, Hazaribagh vide letter no. 848, dated 01.06.19 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in the Khatiyan.

The News Paper (Hindustan Times) dated 21.08.2019 reported that the Hazaribagh Medical College & Hospital is operating. As such SEAC entrusted 02 members to visit the site of the project and

submit their report for further action as to whether the Hospital building has been constructed or not without getting prior EC. Member Secretary, SEAC is being requested to inform the concerned PP regarding site visit, date etc.

PP has been asked to submit following requisite documents :

i. Rain Water Harvesting potentiality study.
ii. Zero discharge potentiality.
iii. Bio-medical segregation treatment & disposal plan alongwith cost & time frame.
iv. Hydrological report – Radius of influence & recharge potential.
v. Continuous monitoring study of ground water.
vi. Volatile organic carbon & order control plan – Time, cost & schedule.
vii. Eco Sensitive Zone – Status of the project.

Once the requisite documents and field inspection report are submitted to SEAC, it will examine the case.

Day 2 : August 30, 2019 [Friday]

A. Consideration of Proposals

i. **Nildaha Stone Mine Project of M/s Jamtara Traders at Vill. : Nildaha, Mihijam, Jamtara (5.87 Ha).**

The PP & consultant of the project are absent in the scheduled SEAC meeting for appraisal. They were not appearing since 67th meeting dated 25-27.02.2019, 69th meeting dated 01-03.04.2019, 72nd meeting dated 27-30.05.2019, 73rd meeting dated 12-14.06.19 & 74th meeting dated 10-12.07.19.

So, the M.S, SEAC vide letter no. 168, dated 05.08.19 has requested to PP for appearance in the next meeting, failing which SEAC would recommend for delisting of the instant project.

The PP did not appeared in the present meeting as well as earlier 05 meeting in spite of prior notice sent to him.

Accordingly the project is recommended for delisting, as per provision of MoEF OM no. J-11013/5/2009-IA-II(Part) dated 30.10.2012.

ii. **Chino Stone Mine of Sri Ajay Kr. Agarwal, Vill. : Chino, P.O. : Dumri, Dist. : Giridih (1.07 Ha).**

(Proposal No. : SIA/JH/MIN/38580/2019)

This is a Stone Mining Project with an area of 1.07 Ha [Khata no. : 71, Plot No.- 2018 (P)]. The latitude and longitude of the project site is 24° 00' 51.30" N to 24° 00' 48.39" N and 86° 00' 16.13" E to 86° 00' 12.72" E. The nearest railway station is Parasnath at a distance of 4.40 km and nearest airport is Ranchi at a distance of 106 km . Total water requirement is 3.46 KLD (Drinking & domestic : 0.81 KLD, Afforestation / Green belt : 1.72 KLD, Dust Suppression : 2.21 KLD). Source of water is tube well & dug well.

The details of mine capacity as per Approved Mining Plan are

Proved Mineable Reserve : 4,55,550.48 tonne

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

1st Year	:	88,322.4 tonne
2nd Year	:	61106.4 tonne
3rd Year	:	38,556 tonne
4th Year	:	20,671.2 tonne
5th Year	:	Nil

The daily production as per Form-I is 294.40 tonne.

The indicated project cost is Rs 307.32 Lakh and a provision of Rs 5.51 Lakh has been indicated for Environment management.

DFO, Giridih East Division vide letter no. 1217, dated 28.06.16 certified that the distance of forest is 180 m from proposed project site and not within 10 km from National Park, Bio-Diversity & Sanctuary.

The CO, Dumri, Giridih vide letter no. 433, dated 15.05.19 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in the Khatiyan.

DMO, Giridih vide memo no. 4240, dated 26.12.15 certified that no other lease is exists within 500 m radius from proposed project site.

The project is mentioned in District Survey Report (DSR) of Giridih District.

The proposal was presented in SEAC on 24-26.07.19 in which requisite certificate was sought as under -

> *Since the minimum distance of proposed site from forest is only 180 m (within non-permissible zone as stipulated by SEIAA for new mining) it would be necessary to ascertain whether it is existing or new mine.*
>
> *M.S., SEAC is requested to seek clarification from concerned DMO.*

The above mentioned requisite certificate has been submitted by the DMO vide letter no. 808, dated 20.08.19.

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 **Chino Stone Mine of Sri Ajay Kr. Agarwal, Vill. : Chino, P.O. : Dumri, Dist. : Giridih (1.07 Ha)** be recommended for consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as **Annexure - II.**

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

The PP & consultant of the project are absent in the scheduled SEAC meeting for appraisal. They were not appearing since 66th meeting dated 29-31.01.2019, 67th meeting dated 25-27.02.2019, 68th meeting dated 14-15.03.2019, 69th meeting dated 01-03.04.19, 72nd meeting dated 27-30.05.2019, 73rd meeting dated 12-14.06.2019 & 75th meeting dated 24-26.07.19.

So, the M.S, SEAC vide letter no. 173, dated 09.08.19 has requested to PP for appearance in the next meeting, failing which SEAC would recommend for delisting of the instant project.

The PP did not appeared in the present meeting as well as earlier 07 meeting in spite of prior notice sent to him.

Accordingly the project is recommended for delisting, as per provision of MoEF OM no. J-11013/5/2009-IA-II(Part) dated 30.10.2012.

iv. **Shahpur Stone Mine of M/s Jai Maa Kali Construction & Minerals, Vill. : Shahpur, Thana :Naudiha Bazar, Dist. : Palamau (4.57 ha).**

(Proposal No. : SIA/JH/MIN/38511/2019)

This is a Stone Mining Project with an area of 4.57 Ha (Khata no. : 108, Plot no. : 2337, 2339, 2340, 2344, 2346, 2353, 2355, 2356, 2357, 2358, 2359). The latitude and longitude of the project site is 24° 18' 07.0" N to 24° 18' 11.7" N and 84° 17' 36.9" E to 84° 17' 40.5" E. The nearest railway station is Japla at a distance of 45 km and the nearest highway is 19 km and nearest airport is Ranchi at a distance of 170 km. Total water requirement is 6.5 KLD. Water supply will be met by nearby dug wells and bore wells or private tankers.

The details of mine capacity as per Approved Mining Plan are

Proved Mineable Reserve	:	20,87,615 tonne
Probable Mineable Reserve	:	2,68,418 tonne

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

1st Year	:	4,71,238 tonne
2nd Year	:	4,66,407 tonne
3rd Year	:	4,72,178 tonne
4th Year	:	4,71,520 tonne
5th Year	:	4,74,597 tonne

The daily production as per Mine Plan is 1571 tonne.

The indicated project cost is Rs 79.46 Lakh and a provision of Rs 3.24 Lakh has been indicated for Environment management.

DFO, Medininagar Division vide letter no. 3505, dated 18.07.18 certified that the distance of forest is 400 m from proposed project site and letter no. 1316, dated 26.04.19 certified that proposed project site is not under the no mining zone.

Dy. Director, Palamau Tiger Project, North Division, Medininagar vide letter no. 1064, dated 04.06.2019 certified that National Park / Bio-Diversity / Sanctuary is not within 10 km from proposed project site.

The CO, Naudiha Bazar vide letter no. 196, dated 04.08.18 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in the R.S Khatiyan & Register II.

DMO, Palamau vide memo no. 1232, dated 17.8.19 certified that no other lease is exists within 500 m radius from proposed project site.

The proposal was presented in SEAC on 13-14.08.19 in which requisite documents were sought as under -

i. *All plots not mentioned in the Letter of Intent (LoI), as well as DMO letter LoI be corrected & re-submitted.*
ii. *Revised Form-I & Pre-Feasibility Report.*

The above mentioned requisite documents have been submitted by the PP.

The DC, Palamau, Medininagar (letter no. 1257, dated 27.08.19) requesting Member Secretary, SEAC to incorporate the details of the project in DSR.

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 **Shahpur Stone Mine of M/s Jai Maa Kali Construction & Minerals, Vill. : Shahpur, Thana :Naudiha Bazar, Dist. : Palamau (4.57 ha)** be recommended for consideration of SEIAA for grant of EC, in the light of DC, Palamau aforesaid letter dated 27.08.19. The various conditions for grant of EC is enclosed as **Annexure - II.**

The meeting concluded with thanks to all present.

(Dr. B.K. Tewary)
Member

(Dr. R.N. Singh)
Member

(Y.K. Singh)
Member

(S.P. Srivastava)
Member

(Dr. V.P. Sinha)
Member

(M.S. Bhagwat)
Member

(U.P. Singh)
Member

(Om Prakash)
Member Secretary

(K.P. Bhawsinka)
Chairman

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 neighbourhood 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 mitigative 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. Post Construction / Operation Phase

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.

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.

A. Specific Conditions

1. The Environmental clearance is subject to grant of Mining Lease and will be co-terminus with the mining lease period.
2. As per EIA notification, 2006 Gram Sabha is a major component of EC for this category of project. In all these projects Gram Sabha report has not been submitted. The EC of these cases is being recommended subject to **submission** of the **Gram Sabha consent**.
3. The **mining work** will be open-cast and only **manual method**.
4. The project proponent shall ensure that wherever deployment of labour attracts the Mines Act, the provision thereof shall be strictly followed. Also PP shall ensure that stipulations mentioned in MoEF OM No.- J-13012/12/2013-IA-II(I), dated- 24th December, 2013 and SEIAA, Jharkhand guideline dated 07.05.2013 are adhered to.
5. For the green belt development in the mining area / transport road sides / other land area saplings available in the forest nursery / private nursery should also be considered for the mentioned purpose instead of the Trees / Plants mentioned in the PFR / Presentation copies of the proposed mine.
6. No sand mining activities will be carried out in upstream or downstream within 500 m of railways, road, bridge, water intake, wires & notified aquarium or breeding places.
7. Project Proponent shall appoint a Monitoring Committee to monitor the replenishment study, traffic management, levels of production, River Bank erosion and maintenance of Road etc and shall submit report to SEIAA, JSPCB and DMO after every monsoon i.e. by end of November (30th) of that year. Also after receding of flood / water (after monsoon) a study has to be conducted in mining lease area and list of flora & fauna is to be prepared and submit report to SEIAA, JSPCB and DMO.
8. 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 fauna occurs / is found in the Project area).
9. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna.
10. The project proponent shall prepare the plan of mining in conformity with the mine lease conditions and the Rules prescribed in this regard clearly showing the no work zone in the mine lease i.e. the distance from the bank of river to be left un-worked (Non mining area), distance from the bridges etc. It shall be ensured that no mining shall be carried out during the monsoon season. Due consideration will be given to points raised in Supreme Court judgement and SEIAA guidelines.
11. The project proponent shall undertake adequate safeguard measures during extraction of river bed material and ensure that due to this activity the hydro-geological regime of the surrounding area shall not be affected.
12. The project proponent will provide protective respiratory devices to workers working in dusty areas and they shall also be provided with adequate training and information on safety and health aspects. Periodical medical examination of the workers engaged in the project

vehicle and mine plan. This should be produced before officers of Central Government and State for inspection.

20. For each mining lease site the access should be controlled in a way that vehicles carrying mineral from that area are tracked and accounted for.

21. The State / District Level Environment Committee should use technology like Bar Coding, Information and Communications Technology (ICT), Web based and ICT enabled services, mobile SMS App etc. to account for weight of mineral being taken out of the lease area and the number of trucks moving out with the mineral.

22. There should be regular monitoring of the mining activities in the State to ensure effective compliance of stipulated EC conditions and of the provisions under the Minor Mineral Concessions Rules framed by the State Government.

23. Noise arising out of mining and processing shall be abated and controlled at source to keep within permissible limit.

24. Restricted working hours Sand mining operation has to be carried out between sun rise to sun set.

25. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly.

26. Air Pollution due to dust, exhaust emission or fumes during mining and processing phase should be controlled and kept in permissible limits specified under environmental laws.

27. The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Wheel washing facility should be installed and used.

28. The mining operations are to be done in a system a tic manner so that the operations shall create a major visual impact on the site.

29. Restoration of flora affected by mining should be done immediately. Twice the number of trees destroyed by mining to be planted preferably of indigenous species. Each EC holder should plant and maintain for lease period at least 50 gabion plantation in area near lease and road connecting lease area.

30. No mining lease shall be granted in the forest area without forest clearance in accordance with the provisions of the Forest Conservation Act, 1980 and the rules made thereunder.

31. Protection of turtle and bird habitats shall be ensured.

32. No felling of tree near quarry shall be allowed. For mining lease within10 km of the National Park / Sanctuary or in Eco-Sensitive Zone of the Protected Area, recommendation of Standing Committee of National Board of Wild Life (NBWL) have to be obtained as per the Hon'ble Supreme Court order in I.A. No. 460 of 2004.

33. Spring sources should not be affected due to mining activities. Necessary Protection measures are to be incorporated.

34. Removal, stacking and utilization of top soil in mining are should be ensured. Where top soil cannot be used concurrently, it shall be stored separately for future use keeping in view that the bacterial organism should not die and should be spread nearby area.

35. The EC should stipulate conditions for adequate steps to check soil erosion and control debris flow etc. by constructing engineering structures.

36. Use of oversize material to control erosion and movement of sediments.

37. No overhangs shall be allowed to be formed due to mining and mining shall not be allowed in area where subsidence of rocks is likely to occur due to steep angle of slope.

38. No extraction of sand in land slide prone areas shall be carried out.

39. Controlled clearance of riparian vegetation to be undertaken

40. Site clearance and tidiness is very much needed to have less visual impact of mining.

41. Dumping of waste shall be done in earmarked places as approved in Mining Plan.

42. Rubbish burial shall not be done in the Rivers.

43. The EC holder shall take all possible precautions for the protection of environment and control of pollution.

44. Effluent discharge should be kept to the minimum and it should meet the standards prescribed.

45. Mining activities shall not be done for mine lease where mining can cause danger to site of flood protection works, places of cultural, religious, historical, and archaeological importance.

46. Vehicles used for transportation of sand are to be permitted only with of fitness and PUC Certificates.

47. Junction at take-off point of approach road with main road be properly developed with proper width and geometry required for safe movement of traffic by concession holder at his own cost.

48. Project Proponent shall ensure that the road may not be damaged due to transportation of the mineral; and transport of minerals will be as per IRC Guidelines with respect to complying with traffic congestion and density.

49. No stacking allowed on road side along National Highways.

50. The Project Proponent shall undertake phased restoration, reclamation and rehabilitation of land affected by mining and completes this work before abandonment of mine.

51. Site specific plan with eco-restoration should be in place and implemented.

52. Health and safety of workers should be taken care of.

53. The Project Proponent shall make arrangement for drinking water, first aid facility (along with species specific anti-venom provisioning) in case of emergency for the workers.

54. The Project Proponent shall report monitoring data on replenishment, traffic management, levels of production, River Bank erosion and maintenance of Road etc.

55. Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and records maintained: also, Occupational health check ups for workers having some ailments like BP, diabetes, habitual smokers, etc. shall be undertaken once in six months and necessary

remedial/preventive measures taken accordingly. Recommendations of National Institute for labour for ensuring good occupational environmental for mine workers would also be adopted.

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 shall be valid for the period of lease of the mine, 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 Wastes (Management, Handling and Tran boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/ High Court of 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.