

MINUTES OF THE 66TH MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE (SEAC), JHARKHAND HELD ON 29TH 30TH & 31ST JANUARY, 2019

The 66th meeting of State Level Expert Appraisal Committee (SEAC), Jharkhand was held on 29th 30th & 31st January, 2019 under the Chairmanship of Sh. K.P. Bhawsinka in the Conference Room at SEAC, Ranchi.

1. Sri K.P. Bhawsinka - Chairman
2. Dr. B.K. Tewary - Member
3. Dr. R. V. Singh - Member (Present on 29.01.19)
4. Sri Y.K. Singh - Member
5. Sri S.P. Srivastava - Member (Present on 30 & 31.01.19)
6. Sri Om Prakash - Member Secretary

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

Various projects as received from SEIAA after the previous SEAC meeting held on 07th, 08th & 09th January, 2019 and forwarded to SEAC for the technical appraisal, were put up for discussions. Besides, those Projects which were already appraised in SEAC's earlier meetings, where PP's were asked to provide additional information / clarifications, were also considered for examination / scrutiny. The Project proponents replied with required documents. Accordingly, the Project Proponents were asked to make technical presentation for the appraisal of their projects before the committee.

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

A. Discussion on matter related to :

- i. **SEIAA memo no. 338, dated 29.12.18 regarding grant of EC without getting proper clearance from NBWL / SBWL.**

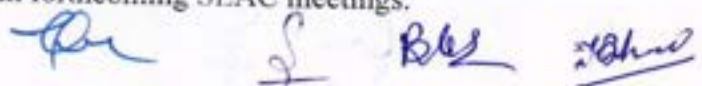
The SEIAA vide its memo no. 338, dated 29.12.18 has sent the list of 40 mining & other projects for examining whether the EC of proposals situated within 10 km of National Park / Sanctuary has been granted after obtaining prior requisite clearance from NBWL / SBWL, as per the rule or not and accordingly, to take action, as per the law.

The MoEF & CC has issued plethora of guidelines/OM for grant of EC of projects within 10 km of Wild Life Sanctuary / National Park viz OM dated - 02.12.09, 20.08.14, 04.09.14, 26.09.14, 01.05.15 etc.

Among these said OMs / Guidelines dated 26.09.14 has been withdrawn by MoEF&CC vide its OM dated 01.05.15 of MoEF&CC, whereby it has directed that procedure for grant of EC of projects located within 10 km of National Park and Sanctuary would be dealt with, in accordance with OM dated 02.12.09.

SEAC observed that the proposals as per the list sent by SEIAA vide its letter dated 29.12.18 should be evaluated in accordance with MoEF&CC OM dated 02.12.09 and should be appraised on case to case basis, in a phased manner, in forthcoming SEAC meetings.

9



ii. **SEIAA letter no. 05, dated 09.01.19 regarding six monthly report submitted by PP.**

The SEIAA vide its letter no. 05 dated 09.01.19 has sent the list of 66 mining & other projects for examining the compliance report of EC conditions submitted by the PP.

The MoEF has issued EIA Notification 2006. The relevants Sec are as under :

10(ii) "It shall be mandatory for the project management to submit half-yearly compliance reports in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year."

(iii) "All such compliance reports submitted by the project management shall be public documents. Copies of the same shall be given to any person on application to the concerned regulatory authority. The latest such compliance report shall also be displayed on the web site of the concerned regulatory authority."

The EC recommended / granted by the SEAC / SEIAA stipulates conditions to be complied with by the PP and submit the periodic compliance report to the Regulatory authority (viz SPCB & Regional Office, MoEF & CC). In view of the above, the SEAC opined that the SEAC is not the competent authority to examine / evaluate / scrutinize the compliance report of EC granted.

Besides SEIAA has handed over 06 files of :

- i. Chalpahar & Patnibona Stone Mine of M/s Bihar Bentonite Supply Com. at Vill. Chalpahar & Patnibona, Taljhari, Sahibganj (9.08 Ha)
- ii. Murkho Stone Mine of M/s Shankar & Com. at Vill. Murko, Taljhari, Sahibganj (1.052 Ha).
- iii. Bara Bana Para & Matiyani Stone Mine of M/s Bihar Bentonite Supply Com. at Vill., Bara Bana Para & Matiyani Taljhari, Sahibganj (9.086 Ha)
- iv. Bara Bana Para Stone Mine of M/s Bihar Bentonite Supply Com. at Vill., Bara Bana Para, Taljhari, Sahibganj (1.42 Ha).
- v. Bara Bana Para Stone Mine of M/s Rahul Metals at Vill., Bara Bana Para, Taljhari, Sahibganj (3.19 Ha).
- vi. Bara Bana Para Stone Mine of M/s Shri Shankar & Com. at Vill., Bara Bana Para, Taljhari, Sahibganj (1.149 Ha).

regarding evaluation of compliance report.

Accordingly, the files of aforesaid 66 projects and the said 06 projects are being remanded back to the SEIAA for needful.

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

The SEIAA has forwarded the files of sand mining projects of (a) Dangawar (b) Ranideva (c) Dewarikala (d) Badepur (e) Birdhwar & Kolhua sand of PP, Sri Upendra Singh, Haidernagar, Palamau for seeking recommendations / comments of SEAC.

On perusal of the files of these projects, it is observed that the said PP Sri Upendra Singh, Haidarnagar, Palamau has filed a writ petition bearing WP(C) no. /2018 before Hon'ble Jharkhand High Court, Ranchi for quashing the DMO, Palamau letter no. 1027, dated 10.08.18, whereby DMO has imposed a penalty to the tune of Rs. 2.24 crores against the said PP.

Since, the matter is subjudiced before the Hon'ble Jharkhand High Court on the said issue, SEAC cannot make any comment in this regard. Legal advice could be taken on the said issue, if they feel so, to execute penal action.

iv. Matter related to 66th MOM of SEIAA dated 22.01.19

SEIAA in its 66th meeting held on 22.01.19 suggested SEAC to constitute the environmental appraisal process particularly giving stress to the following :

1.	The geographical coordinates of the project area as survey of India Topo sheet	Showing all mining plans
2.	Geo- mining parameter of mine, if applicable.	Showing all mining plans
3.	Details of court cases and the compliance status, if any.	Form I
4.	Details of water bodies, impact or drainage, if any.	EIA/EMP
5.	If a joint venture the names and address of the JV partners including there share	Form I
6.	If the project involves diversion of forest land	Form I
7.	If the project involves the National Board of Wild Life and no mining zone	Form I and as per the prevailing MoEF&CC rules/guidelines
8.	If the project falls within 10 km of Eco Sensitive Zone and no mining zone area.	- Do -
9.	If any, Statuary clearance required	- Do -

SEAC opined that the above mentioned environmental issues have been ~~mentioned~~ screened & deliberated during the meetings of SEAC. Further suggestion of SEIAA will be duly taken care of in future process also.

B. Matter referred by SEIAA

1. Stone Mine Project of M/s Radha Krishna Jaiswal at Vill.- Leungdih, Chandil, Saraikela-Kharsawan (23.50 Acre).

EC was issued during the year 2013 based on the draft mining plan. Later the PP submitted the approved mining plan.

All these cases where EC was granted without approved mining plan was scrutinized by SEAC in its 61st meeting held on 24-26.09.18.

[Handwritten signatures]

SEAC observed that there is a difference of production target and as such the committee suggested to submit the DMO Certificate of actual production & till then mine production would be kept in abeyance.

PP has submitted the production status of the mine which is much below the target in approved mining plan. The committee suggested the PP to submit the ~~com-report-and~~ certificate and status from DFO & CO as well as. On submission of the above the aforesaid certificates & reports the SEAC will appraise further.

C. Projects considered for recommendation to SEIAA for consideration of grant of ToR.

1. "Smart City Project" of M/s Ranchi Smart City Corporation Ltd at Vill. Latma, Jaganathpur, Kalyanpur, Kachnartoli, Hatia, Tehsil – Namkum, Dist. Ranchi.

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

Name of the project	"Smart City Project" of M/s Ranchi Smart City Corporation Ltd
Name of applicant	M/s Ranchi Smart City Corporation Ltd
Category of the project	8 (b) Townships and Area Development projects.
Project location	Village : Latma, Jaganathpur, Kalyanpur, Kachnartoli, Hatia Tehsil : Namkum, Dist.: Ranchi. HEC Area, Situated in Southern part of Ranchi City. Latitude : 28° 18' 16.50" N Longitude : 85° 18' 01.44" E.
Total land area	656.30 Acres (265.595 Ha).
Plot area	26,55,952 Sqm.
Proposes FAR area (incl. Institutional, Residential, Commercial, Public / semi Public Mix use component)	46,93,734.54 Sqm
Expected Population	69,270 Persons
Total Water Requirement	18 MLD (The fresh water demand will be obtained from Hatia Dam WTP and Getalsud Dam WTP)
Fresh Water requirement	12 MLD
Proposed STP Capacity	14.4 MLD
Recycled Water	6 MLD
Proposed Parking	2755 ECS
Municipal Wastes (domestic and or commercial wastes)	Construction Phase : Municipal solid waste – 48.75 Kg/day Operation Phase : Municipal solid wastes - 43.09 TPD The solid waste includes paper, card board, plastic cans etc. and

9

[Handwritten signature]

[Handwritten signature]

4

[Handwritten signature]

[Handwritten signature]

	<p>kitchen wastes from houses. Recyclable wastes like card boards and plastic cans will be sold to vendors.</p> <p>Sewage sludge : 750 kg/day of sewage sludge will be generated which will be use as manure for plants and surplus manure will be sold to the farmers.</p> <p>Waste water will also generate from construction activities, cleaning, curing washing etc. which contain suspended materials.</p> <p>Hazardous waste : 0.52 liters/day (of waste oil will be generated and sold to authorised recyclers).</p>
Liquid Effluent	<p>Construction Stage : During the construction stage domestic liquid effluent generation will be approx. 9.275 KLD from labor camp proposed at site.</p> <p>Operation Stage : Effluent will be treated in Sewage Treatment Plant of 14.4 MLD. The total treated water from STP will be reused for flushing, horticulture, HVAC and DG cooling activities.</p>
Total Power requirement	131.16 MW
Nearest Airport / Railway	<p>Birsa Munda Airport – 1.50 KM, NE.</p> <p>Hatia Railway Station : 0.27 KM, NE direction.</p>

DFO, Ranchi vide letter no. 4273, dated - 22.12.18 certified that the distance of Battery Point from notified forest land is 1300 m from project site and not within 10 km from National Park, Bio-Diversity & Sanctuary. The CO, Namkum vide letter no. 29, dated - 07.01.19 has certified the plot of the project site is not recorded as "Jangle Jhari".

The representative of the project proponent along with consultant M/s Ind Tech House Consult have participated in the meeting & presented the case before the SEAC. PP & the Consultant requested to permit the baseline data being generated. The committee discussed the issue which is as per MoEF&CC OM dated 29.08.2017.

PP was asked to submit that specific queries. The proponent satisfactory replied.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 29th and 30th January 2019, the Committee recommends issuing of TOR for consideration of SEIAA for undertaking detailed EIA / EMP study.

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

Specific Conditions :

- I. Two river pan through the projects. PP should submit a study report on the ecology of the system and the impact of the proposed smart city project on the river flow.
- II. A study report on the cumulative impact of the proposed project along with the thickly developed/developing populations around 2 km of the area in terms of pollution traffic & sewage system.

A. Standard Conditions :

[Handwritten signatures and initials]

- I. Examine details of land use as per Master Plan and land use around 10 km radius of the project site Analysis should be made based on latest satellite imagery for land use with raw images. Check on flood plain of any river.
- II. Submit details of environmentally sensitive places, land acquisition status, rehabilitation of communities/villages and present status of such activities.
- III. Examine baseline environmental quality along with projected incremental load due to the project.
- IV. Environmental data to be considered in relation to the project development would be (a) land, (b) groundwater, (c) surface water, (d) air, (e) bio-diversity, (f) noise and vibrations, (g) socio economic and health.
- V. Submit a copy of the contour plan with slopes, drainage pattern of the site and surrounding area. Any obstruction of the same by the project.
- VI. Submit the details of the trees to be felled for the project.
- VII. Submit the present land use and permission required for any conversion such as forest, agriculture etc.
- VIII. Submit roles and responsibility of the developer etc for compliance of environmental regulations under the provisions of EP Act.
- IX. Ground water classification as per the Central Ground Water Authority.
- X. Examine the details of Source of water, water requirement, use of treated waste water and prepare a water balance chart.
- XI. Rain water harvesting proposals should be made with due safeguards for ground water quality Maximize recycling of water and utilization of rain water. Examine details.
- XII. Examine soil characteristics and depth of ground water table for rainwater harvesting.
- XIII. Examine details of solid waste generation treatment and its disposal.
- XIV. Examine and submit details of use of solar energy and alternative source of energy to reduce the fossil energy consumption. Energy conservation and energy efficiency.
- XV. DG sets are likely to be used during construction and operational phase of the project. Emissions from DG sets must be taken into consideration while estimating the impacts on air environment. Examine and submit details.
- XVI. Examine road/rail connectivity to the project site and impact on the traffic due to the proposed project. Present and future traffic and transport facilities for the region should be analysed with measures for preventing traffic congestion and providing faster trouble free system to reach different destinations in the city.
- XVII. A detailed traffic and transportation study should be made for existing and projected passenger and cargo traffic.
- XVIII. Examine the details of transport of materials for construction which should include source and availability.
- XIX. Examine separately the details for construction and operation phases both for Environmental Management Plan and Environmental Monitoring Plan with cost and parameters.
- XX. Submit details of a comprehensive Disaster Management Plan including emergency evacuation during natural and man-made disaster.
- XXI. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- XXII. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

① 

- XXIII. Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "<http://moef.nic.in/Manual/Townships>".
- XXIV. The prescribed TORs would be valid for a period of three years for submission of the EIA / EMP reports, as per the O.M. No. J-11015/109/2013-1A.II(M) , dated 12.01.2017.

2. Pasai To Danre Confluence Sand Mine in Sakari River of M/s JSMDL Ltd at Vill.- Pasai, P.O. - Danre, Tehsil - Poreyahat, Dist. - Godda (5.58 Ha).

This is a Sand Mining Project with an area of 5.58 Ha [Khata No. - 264, Plot No.-389 (P)].

The project was reviewed with respect to proposed Mining Plan, Environmental protection measures proposed to be adopted, proposal for carrying out CSR activities for socio-economic development, development of green belt, due consideration of occupational health, etc. In view of the size of the mine, production rate and the mineral mined and the assurance given by PP that he will give due consideration to environment by maintaining haul roads and water sprinkling on same, carrying out CSR activities for socio-economic development, development of green belt, due consideration of occupational health of persons engaged in mining. The indicated project cost is Rs1.90Crore and a provision of Rs7.65 Lakh has been indicated for Environment management.

The proposed estimated mineable reserve is 1,40,034 cum and annual production capacity as per Form-I has been indicated as 70,017 cum per annum.

DFO, Godda vide letter no. 1984, dated - 06.08.18 certified that project site is not within 4000 m from notified forest and not within 10 km from National Park, Bio-Diversity & Sanctuary. The CO, Poreyahat vide letter no. 661, dated - 21.08.18 has mentioned the plot no. of the project is not recorded as "Jangle Jhari" in the khatian.

The proposal was presented in SEAC on 04-05.12.18 in which requisite informations were sought as under -

- i. *Location of the project with co-ordinate and*
- ii. *Number of sand mining project in the upstream of the river duly verified by the DMO of the concerned district.*

The documents related to the above mentioned discrepancies have been submitted by the PP.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 29th and 30th January 2019, the Committee recommends in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 for issuing of TOR for consideration of SEIAA for undertaking detailed EIA / EMP study as mentioned in **Annexure I**.

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

3. Kabra Kalan Sand Mining Project of M/s JSMDL Ltd at Mouza- Kabra Kalan, Anchal - Haidernagar, Dist.- Palamu (5.66 Ha).

This is a Sand Mining Project with an area of 5.66 Ha [Khata No. - 178, Plot No.- 01 (P)].

5

The project was reviewed with respect to proposed Mining Plan, Environmental protection measures proposed to be adopted, proposal for carrying out CSR activities for socio-economic development, development of green belt, due consideration of occupational health, etc. In view of the size of the mine, production rate and the mineral mined and the assurance given by PP that he will give due consideration to environment by maintaining haul roads and water sprinkling on same, carrying out CSR activities for socio-economic development, development of green belt, due consideration of occupational health of persons engaged in mining. The indicated project cost is Rs 27.05 Lakh and a provision of Rs 14.56 Lakh has been indicated for Environment management.

The proposed estimated mineral resources is 1,69,623 cum and annual production capacity as per Form-I has been indicated as 1,35,698 cum per annum.

DFO, Medininagar vide letter no. 1746, dated - 07.04.18 certified that project site is not within 2000 m from notified forest and not within 10 km from National Park, Bio-Diversity & Sanctuary. The CO, Haidarnagar vide letter no. 464, dated - 15.09.18 has mentioned / certified the project site is not "Jangle Jhari".

The proposal was presented in SEAC on 04-05.12.18 in which requisite informations were sought as under -

- i. Location of the project with co-ordinate and*
- ii. Number of sand mining project in the upstream of the river duly verified by the DMO of the concerned district.*

The documents related to the above mentioned discrepancies have been submitted by the PP.

Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its meetings held during 29th and 30th January 2019, the Committee recommends in the light of Hon'ble NGT, Principal Bench, New Delhi order dated 13.09.18 and MoEF & CC O.M dated 12.12.18 for issuing of TOR for consideration of SEIAA for undertaking detailed EIA / EMP study as mentioned in **Annexure I**.

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

D. Projects considered for recommendation to SEIAA for consideration of grant of EC.

- 1. Proposed Capacity increase of the existing Cement Grinding / Blending unit from 2.1 MTPA to 3.0 MTPA of M/s Dalmia Cement East Ltd. at Vill.- Kanari, Bokaro Industrial Area, Chas, Bokaro.**

The EC for capacity increase of the existing cement grinding / blending unit from 2.1 MTPA to 3.0 MTPA of M/s Dalmia Cement East Ltd was recommended by SEAC in its 62nd meeting held on 08-09.10.18 and finally awarded by SEIAA vide letter no. EC/SEIAA/ 2016-17/1997/2017/295, dated 08.12.2018.

The project proponent has submitted a request that though the EC for expansion has been granted but the process of expansion is not very clearly reflected and as such difficulty would arise in

implementation of the same. Particularly there is no mention of product mix for 3.0 MTPA explicitly in the EC. As such PP requested for correction of EC.

The product mix for 3.0 MTPA contains Portland Slag Cement (PSC) / Portland Composite Cement (PSC) / Portland Pozzolana Cement (PPC) to be mentioned as per the submission of PP in its request letter dated 07.01.19.

Capacity of unit	Product mix	Remarks
3.0 MTPA as per EC granted	Portland Slag Cement (PSC) / Portland Composite Cement (PCC) / Portland Pozzolana Cement (PPC)	Production of products / product mix shall remain capped at 3.0 MTPA maximum on demand of market condition.

Raw Materials

The details relating to major raw materials presently being used and that would be used after capacity expansion from 2.1 MTPA to 3.0 MTPA for this Cement Grinding Plant are presented.

Unit	Capacity (in MTPA)	Product
Existing Project		
Cement Grinding Unit (Vertical Roller Mill 2x170 TPH)	2.1	PSC
Proposed Project		
Capacity increase from 2.1 MTPA to 3.0 MTPA through modifications in the existing cement grinding unit	0.9	PSC / PPC / PCC
Total capacity (Existing + Proposed)	3.0	PSC / PPC / PCC

Raw Materials Requirement (for 30,00,000 TPA PSC)

Sl. No.	Raw Material	Requirement (TPA)	Source	Mode of transport (from source to plant)
i.	Clinker	10,95,000	OCL Rajganjpur / Dala Cement Factory	Rail / Road
ii.	Slag	18,00,000	Adjoining Bokaro Steel Plant/ Usha Martin / Electro steel/Giridih	Rail / Road
iii.	Gypsum	1,05,000	Rajasthan / Paradeep	Rail
iv.	Coal	66,000	Eastern coal field coal mines	Rail / Road

Raw Materials Requirement (for 30,00,000 TPA PPC)

Sl. No.	Raw Material	Requirement (TPA)	Source	Mode of transport (from source to
---------	--------------	-------------------	--------	-----------------------------------

				plant)
i.	Clinker	18,75,000	OCL Rajganjpur / Dala Cement Factory	Rail / Road
ii.	Fly Ash	10,50,000	SAIL, Bokaro, DVC & Electro steel	Rail / Road
iii.	Gypsum	75,000	Rajasthan / Paradeep	Rail
iv.	Coal	60,000	Eastern coal field coal mines	Rail / Road

Raw Materials Requirement (for 30,00,000 TPA PCC)

Sl. No.	Raw Material	Requirement (TPA)	Source	Mode of transport (from source to plant)
i.	Clinker	9,75,000	OCL Rajganjpur / Dala Cement Factory	Rail / Road
ii.	Fly Ash	7,50,000	SAIL, Bokaro, DVC & Electro steel	Rail / Road
iii.	Slag	12,00,000	Adjoining Bokaro Steel Plant/ Usha Martin / Electro steel/Giridih	Rail / Road
iv.	Gypsum	75,000	Rajasthan / Paradeep	Rail / Road
v.	Coal	66,000	Eastern coal field coal mines	Rail / Road

SEAC discussed & recommends to issue the corrected EC specifying the product mix like Portland Slag Cement (PSC) / Portland Composite Cement (PSC) / Portland Pozzolana Cement (PPC).

2. Residential Group Housing Project "Ashiana Sehar" of M/s Ashiana Housing Ltd. at Plot no. 122, 123 & 159, Village – Pardih, Jamshedpur, East Singhbhum.

The salient feature of project is given in table below :

Name of the project	Residential Group Housing Project "Ashiana Sehar" at Village – Pardih, Block – Karndih, Tehsil – Golmuri Cum Jugsalai, Jamshedpur, Dist. - East Singhbhum.	
Name of applicant	Ashiana Housing Limited	
Category of the project	B2 8(a) Building & Construction Projects	
Latitude and Longitude	A	22°50'38.25"N; 86°12'1.34"E
	B	22°50'37.99"N; 86°12'1.68"E
	C	22°50'36.27"N; 86°12'0.98"E
	D	22°50'35.93"N; 86°12'1.80"E
	E	22°50'33.86"N; 86°12'0.69"E
	F	22°50'34.08"N; 86°11'59.78"E
	G	22°50'34.72"N; 86°11'59.27"E

	H	22°50'35.13"N; 86°11'58.93"E
	I	22°50'35.66"N; 86°11'56.68"E
	J	22°50'36.55"N; 86°11'56.66"E
	K	22°50'37.01"N; 86°11'56.86"E
	L	22°50'38.90"N; 86°11'58.72"E
Project location	Jamshedpur, East Singhbhum, Jharkhand Plot No.- 122, 123 & 159	
Total land area	1.43 Ha / 3.54 Acres	
Total plot area	14304.80 Sq.m	
Total built up area	35,486.32 Sq.m.	
New / Expansion / Modernization	New project	
Nearest Airport	Sonari Airport, 4.18 km. SW	
Water requirement	Construction Phase	Operation Phase
	Total water requirement during construction phase is 5 KLD and the water requirement will be met through private tankers.	Total water requirement during operation phase is 211 KLD which includes 130 KLD fresh water and 81 KLD treated water met through municipal supply by Mango Notified Area Committee (MNAC)
Power requirement	Construction Phase	Operation Phase
	During construction phase estimated power requirement will be 75 KW which will be met by Jharkhand State Electricity Board.	During operation phase power requirement is 800 KVA and will be sourced from Jharkhand State Electricity Board.

Built up Area details :

Sl. No.	Description	Unit-wise area (m ²)
1.	FAR Permissible as per By-laws	35,762.01
2.	FAR Achieved	29,181.08
3.	Ground Coverage Permissible (35%)	5,006.86
4.	Ground Coverage Achieved	2,482.82
5.	Green Area	3,809.85

6.	Road Area / Paved Area	4,496.63			
7.	Open Parking Area	3,515.50			
8.	Total Car Parking	272			
9.	Total Scooter Parking	239			
10.	No. of Floors	Half Stilt + 13 Floors			
11.	Height of Building	41.75 m			
	Total Area of Units	2 BHK + 2 Toilet 80 Units	3 BHK + 2 Toilet 135 Units	3 BHK + 2 Toilet 24 Units	239 Units

The project "Ashiana Sehar" was considered for discussion in 65th meeting where is PP was suggested to submit certificates DFO from Jamshedpur & DFO, Wildlife Sanctuary, Dalma as the earlier DFO certificates were not proper.

DFO, Saraikela vide letter no. 41, dated 07.01.19 certified that the notified forest is 450 m from project site. DFO, Jamshedpur vide letter no. 329, dated 23.01.19 certified that the notified forest is 775 m from project site.

DCF and Project Director, Elephant Project, Jamshedpur vide letter no. 100, dated 24.01.19 certified that the distance of Dalma Wild Life Sanctuary 1060 m from proposed project boundary.

Based on the presentation made and information provided, the Committee decided that the proposal for **Residential Group Housing Project "Ashiana Sehar" of M/s Ashiana Housing Ltd. at Plot no. 122, 123 & 159, Village – Pardih, Jamshedpur, East Singhbhum** be recommended for consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as **Annexure II**.

3. Rajhara Open Cast Project of M/s CCL at Vill. Rajhara & Pandwa, Palamu (149.38 Ha).

The Project Proponent (PP) – M/s CCL has presented the background of the project, which is as under :

Rajhara OCP is an existing old coal mining project of Central Coal Fields Ltd. The mine was started in pre independence era and was nationalised in 1973.

The mining area is located in Palamu district of Jharkhand and forms the north western part of Daltonganj coal fields. The latitude and longitude of the project site is 24° 09' 3" N & 24° 10' 11" N and 84°02'27" E & 84° 03' 8" E respectively. The drainage of mine is controlled by North Koelriver flowing in the south of project. The project area is dissected by Sadabahr river a tributary of North Koel. The other near-by tributary of North Koel along the project is Labji. There is no forest patches in Core Zone. However, buffer zone of mining area has several patches of protected Forest like Aparar Khas, Murma, Kokansa, etc.

The nearest railway station is Rajhara station at a distance of 3 km on Gomoh-Dehri on Sone line. Daltonganj town is situated at a distance of 16 km from project site. The project has an adjacent railway siding for coal transport.

The normative capacity of project is 0.3 MTPA & peak capacity is 0.5 MTPA over a project area of 149.38 Ha. Coal production is proposed from two quarries on either side of Sadabahr river. Embankments have been constructed to protect the quarries from inundation and will be further strengthened / constructed particularly on eastern flank of Sadabah, as claimed by the PP.

The balance geological reserve is 4.925 MT of G 9 grade and proposed mine life is 18 years. Mining will be undertaken by opencast method using shovel dumper combination.

The project involves R&R of two villages – Rajhara (part) & Pandwa (part). The R&R policy of CIL will be used for compensation, employment and resettlement of PAPs. The project cost is Rs 11.88 Crores.

Form -I & Pre-Feasibility Report of Rajhara OCP were submitted to SEIAA in September 2014 for EC and the ToR was prescribed on 01.05.2015. The Public Hearing was held on 23.01.2016 and the final EIA & EMP was uploaded online on 05.04.2016. SEAC meeting was held on 06.12.2016 and SEAC sought requisite information / documents. The details of the same were submitted by Project Proponent to SEAC on 31.03.2017. The certificates of DFO and CO were not proper. Accordingly, SEAC was repeatedly requested the PP to submit proper requisite certificates from CO & DFO.

The PP submitted on 27.03.18 the certificates of C.O., Pandwa (letter no. 665 dated 16.12.17) & C.O. Nawa bazar (letter no. 22 dated 09.01.18), whereby certifying that in Pandwa 67.55 acres is free from "Jangle Jhari" & in Nawa bazar 43.95 acres is not "Jangle Jhari" as per "Khatiyani". The SEAC sought vide its letter no. 63 dated 13.04.18 the nature of entire plots of Rajhara OCP from C.O concerned.

SEAC discussed the said project in its 55th meeting (dated 23-25.04.18) and forwarded to SEIAA for needful with the said factual details regarding lack of requisite CO certificates for whole of the project site.

SEIAA vide its decision taken in its 56th meeting (dated 31.05.18) remanded the said issue to SEAC for seeking legal status of site's land from DC, Palamau.

SEAC sought the requisite certificates from CO (as well as DFO) vide its letter no. 108 dated 04.07.18.

The PP submitted on 19.11.18, DC, Palamau letter no. 1461 dated 03.11.18 regarding nature of land, whereby Addl. Collector certifies that out of 368.97 acres, 152.80 acres is free from "Jangle Jhari" and for rest of plots khatiyani is either not available or mutilated.

The SEAC again reminded the PP vide its letter no. 180 dated 10.12.18; letter no. 182 dated 11.12.18 and letter no. 183 dated 11.12.18 to submit DC & PP's "Undertaking" regarding nature of land & compliance of provisions of F(C) Act, 1980 (if found Jangle Jhari), as per the Revenue Deptt., Jharkhand letter no. 4792 dated 04.12.18

The PP submitted on 31.12.18 his requisite "undertaking" and DFO certificates. SEAC again reminded vide letter no. 01 date 01.01.19 & letter no. 09 dated 10.01.19 for submitting the requisite "undertaking" as per Revenue Deptt, Jharkhand.

The PP submitted the DC, Palamau letter no. 128 dated 29.01.19 regarding nature of land. In the said letter dated 29.01.19 the Addl. Collector, Palamau on the basis of CO, Pandwa & Nawabazar letter no. 101 dated 29.01.19 and letter no. 39 dated 29.01.19 certifies that only 50.74 acre is not recorded as Jangle Jhari. For rest of the plots, the Addl. Collector mentioned that the *khatiyans* are not available.

The General Manager, Rajhara Area, Chandwa, Latehar submitted an "Undertaking" that in the event of the proposed area of 149.38 Ha of Rajhara OCP, if any Jangal – Jhari is identified in future, CCL will follow the provisions of Forest (Conservation) Act, 1980 in letter & spirit.

DFO, Medininagar vide letter no. 2125, dated 04.05.18 certified that the distance of reserve forest boundary is 700 m from the project boundary.

The Dy. Director, Palamau Tiger Project, Medininagar vide letter no. 127, dated 30.01.18 certifies that the distance of the project Rajhara OCP from the Tiger project boundary is 25.5 KM as air distance and this project is not within Eco Sensitive Zone.

Based on the presentation made and information provided, the Committee opines that the proposal for **Rajhara Open Cast Project of M/s CCL at Vill. Rajhara & Pandwa, Palamu (149.38 Ha)** be recommended for consideration of SEIAA for grant of **conditional** (for compliance of F (C) Act, if applicable) **EC**. Rest of the various conditions for grant of EC is enclosed as **Annexure III**.

E. Projects for which SEAC has sought clarifications from PP.

1. Simariya Stone Deposit of M/s Pawanputra Stone Works at Vill.-Simariya, Jirwabari, Sahibganj, (6.07 Ha).
2. Pahartoli Sand Mining Project of Sri Anil Kumar Gupta at Vill. Pahartoli, Thana – Basia, Dist.- Gumla (5.66 Ha).
3. Moradih, Loyadih & Polkera Balu Ghat of M/s S.G. Pro Ltd (Sri Ajay Singh) at Vill.- Moradih, Loyadih & Polkera, Tehsil & Dist.- Dhanbad (20.39 Ha).
4. Pandra Bejra Balu Ghat on Barakar River of M/s Mihijam Wine Traders (Prop : Sri Shankar Ghosh) at Vill. Pandra Bejra, Anchal & Dist. – Dhanbad (14.40 Ha).
5. Sand Mining Project at Banai River of M/s Anokha Ram at Vill.-Mahil & Ghaghra, Murhu, Khunti. (6.975 Ha)
6. Barano Sand Deposit of M/s JSMDC Ltd at Vill.-Barano, Hazaribagh (5.241 Ha).
7. Bhenda Sand Mining Project on Jamunia River of Sri Pintu Kumar at Vill.-Bhendra, Anchal - Nawadih, Dist.- Bokaro (9.71 Ha)
8. Khanudih and Dagdho Balu Ghat Sand Mining of Sri Raj Kumar Mahto at Vill. Khanudih & Dagdho, Tehsil- Baghmara, Dist.-Dhanbad (21.04 Ha).

The committee noted that the project proponents (Sl. No. 1 to 8) have not attended the meeting. The committee recommended to defer these proposals to the next meeting.

9. Kusumkiyari Sand Ghat in the river bed of Gobai River of M/s JSMDC Ltd at Vill.- Kusumkyari, Chandankyari, Bokaro (13.00 Ha).

9

2

ky

BBZ

ibshaw

The coordinator of the consultant was not present though the PP appeared. As such this proposal was deliberated in the next meeting.

10. **Jarangdih Sand Mine project in River Bed of Damodar of M/s CCL at Mouza – Jarangdih, Gomia, Bokaro (48.75 hac).**
11. **Swang Sand Mining project in River Bed of Bokaro of M/s CCL at Vill. Hazari, Gomia, Bokaro (34.83 hac).**
12. **Govindpur Sand Mine project in River Bed of Damodar of M/s CCL at Vill. Govindpur, Bermo, Bokaro (35.58 hac).**

Deferred for next meeting (Sl. no. 10-12) as per request of the PP.

13. **Proposed Cement Grinding Unit of 3.0 MTPA capacity of M/s Ultratech Cement Ltd (Unit-Bokaro Cement Works) at Bokaro Industrial Area Development Authority (BIADA), Village- Gorabali, Balidih, Bokaro.**

This project was earlier recommended by SEAC on 22-23.05.17 for TOR, based on provisional land allotment letter from BIADA.

SEIAA rejected the same & sought for final approved land allotment letter.

The PP has not yet submitted the CO certificate regarding class of land (recorded as Jangal – Jhari or not) & DFO certificate regarding distance from Forest / National Park / Sanctuary / Bio-Diversity Park.

PP has not been able to submit the approved land allotment letter of BIADA.

SEAC discussed the issues & sought for submission of above requisite documents.

On submission of the requisite documents this case will be examined further.

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

14. **Balkudra Open Cast Project (1.0 MTPA Normative & 1.3 MTPA Peak) of M/s Central Coalfield Limited at Village- Balkudra, District- Ramgarh, (149.50 Ha).**

Balkudra OC is an existing old coal mining project of Central Coal Fields Ltd. The mine was started by Railway from 1924 in the block.

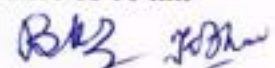
The South Karanpura Coalfield is located in the western part of the Damodar Valley and to the south of North Karanpura Coalfield. The Bhurkunda (SW) block is situated in the south eastern part of the South Karanpura Coalfield and occupies an area 0.60 Sq. km. The Balkudra OC proposed within Bhurkunda (SW) block is under the administrative control of the Barka Sayal Area of CCL. The latitude and longitude of the project site is 23°39'00''N to 23° 41'00'' N and 85°21'00''E to 85°23'00''E respectively. Adjoining block situated to the north and east is Bhurkunda. Sauda-D is situated to the north – west corner of the block. The Damodar River and adjoining major nalas are the prime source of water and these constitute the main drainage system of the area. The Kurse nala flowing westerly joins Nakari nala in the north east of the block.

The nearest railway station is Bhurkunda station at a distance of 4 km on Gomoh-Dehri On Sone line via Barkakana loop line of Eastern railway. Ramgarh town is situated at a distance of 16 km from block.









The normative capacity of project is 1.0 MTPA Normative & 1.3 MTPA Peak over a project area of 149.50 Ha.

The balance geological reserve is Sayal – 2.73 Mte, Upper Balkudra- 5.64 Mte and Lower Balkudra- 3.65 Mte grade and proposed mine life is 07 years. Mining will be undertaken by opencast method using shovel dumper combination. The project cost is Rs 5.80 Crores.

The ToR was granted by SEIAA vide letter no. EC/SEIAA/2016-17/1983/2016/60, dated 12.04.2017 and the final EIA & EMP was submitted by PP to SEIAA. The proposal was forwarded to SEAC by SEIAA on 17.11.2017.

The SEAC discussed the said project on 17-18.01.18 whereby the PP was requested to submit DFO & CO proper certificates.

The PP was reminded vide SEAC letter no. 17 dated 25.01.18 regarding submission of proper CO certificate for whole of the areas and DFO certificate and requested the PP to take necessary action as per Forest (Conservation) Act, 1980, if the proposed land is found to be "Jangle Jhari".

The SEAC reminded vide letter no. 37, dated 20.02.18 for submitting DFO & CO certificate and requested to take action for forest clearance, if the proposed land found to be "Jangle Jhari". The PP submitted on 05.03.18 the same vague / incomplete certificate of DFO & CO. SEAC reminded the PP regarding submission of proper CO & DFO certificate and action taken report under Forest (Conservation) Act vide letter no. 40, dated 09.03.18 & letter no. 115, dated 17.07.18.

The PP submitted on 05.11.18 the CO certificate dated 11.08.17 & dated 05.02.18, DFO old certificate dated 01.08.17 and forest clearance online application (proposal no. FP/JH/MIN/36411 /2018) for diversion of 131.50 ha "Jangle Jhari" falling within the project site.

During the SEAC 64th meeting held on 04.12.18, the committee desired submission of –

- i. DFO proper certificate regarding distance from Notified Forest / National Park / Sanctuary / Eco Sensitive Zone & bio diversity
- ii. Revised Form-I & Pre-Feasibility Report (in the light of changed land status).

The SEAC vide letter no. 10, dated 11.01.19 requested the PP to submit the same in hard copy.

In the present meeting the project was discussed. The DFO certificate dated 01.08.17 is found to be not proper as the distance from RF/PF has not been certified. Besides, the DFO has mentioned in the said certificate dated 01.08.17 that elephants move adjoining the proposed mining site and that route be supposed to be Wildlife corridor.

Thus, the recommendation / approval of Chief Wildlife Warden, Jharkhand would be necessary for the requirement of mitigation plan.

In the revised Form- I submitted by the PP on 25.01.19, the status of land use totalling 149.50 ha, comprises of 18 ha non-forest land and Jangle Jhari land 131.5 ha. Besides, the PP has applied for diversion of Jangle Jhari (deemed forest) land (proposal no. FP/JH/MIN/36411 /2018).

Earlier the TOR was provided on 12. 04.2017, wherein the total project area of 149.50 Ha was shown as non-forest / non -Jangle Jhari land.

19

ey

2

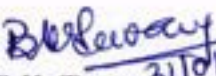
Bdy

20/1/19

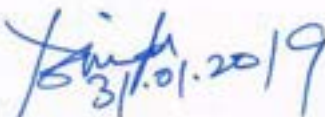
SEAC observes that the ToR provided earlier does not represents the proper appraisal of the forest land as well as the presumed Wildlife Corridor around the project area.

In the above mentioned circumstance the present project file is being forwarded to SEIAA for needful.

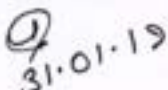
The meeting concluded with thanks to all present.

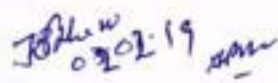

(Dr. B.K. Tewary) 31/01/2019
Member

(Dr. R. V. Singh)
Member


(Y.K. Singh) 31.01.2019
Member


(S.P. Srivastava) 31-01-19
Member


(Om Prakash) 31.01.19
Member Secretary


(K.P. Bhawsinka) 02/01/19
Chairman

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

1. Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.
2. A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
3. All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
4. All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
5. Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
6. Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
7. It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.
8. Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
9. The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
10. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be

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

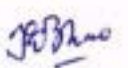
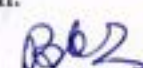
11. Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
12. A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
13. Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
14. Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
15. The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
16. A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
17. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
18. A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled- I fauna found in the study area, the necessary plan alongwith budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
19. Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be considered.

20. Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
21. R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
22. One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
23. Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
24. The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
25. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
26. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
27. Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
28. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the

working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.

29. Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
30. Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.
31. A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
32. Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.
33. Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
34. Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
35. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
36. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
37. Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.

4



38. Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
39. Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
40. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
41. The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
42. A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
43. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
44. Besides the above, the below mentioned general points are also to be followed :-
 - a) Executive Summary of the EIA/EMP Report
 - b) All documents to be properly referenced with index and continuous page numbering.
 - c) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
 - d) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF & CC / NABL accredited laboratories. All the original analysis / testing reports should be available during appraisal of the Project.
 - e) Where the documents provided are in a language other than English, an English translation should be provided.
 - f) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
 - g) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF & CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.
 - h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF & CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.

0

Handwritten initials/signatures

BLK2

Handwritten signature

- i) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.
- j) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.
45. After preparing the draft EIA (as per the generic structure prescribed in Appendix- III of the EIA Notification, 2006) covering the above mentioned issues, the proponent will get the public hearing conducted and take further necessary action for obtaining environmental clearance in accordance with the procedure prescribed under the EIA Notification, 2006.
46. The prescribed TORs would be valid for a period of three years for submission of the EIA / EMP reports, as per the O.M. No. J-11015/109/2013-IA.II(M) , dated 12.01.2017.

9



PART A - GENERAL CONDITIONS**I. Pre- Construction Phase**

- i. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel (kerosene/gas) for cooking, safe drinking water, medical health care, etc. The housing may be in the form of temporary structures to be removed after completion of the project.
- ii. Provision of drinking water, waste water disposal, solid wastes management and primary health facilities shall be ensured for labour force. Proper sanitation facilities shall be provided at the construction site to prevent health related problems. Domestic as well as sanitary wastes from construction camps shall be cleared regularly.
- iii. Adequate safety measures shall be adopted for the construction workers.
- iv. All the labourers to be engaged for construction works shall be screened for health and adequately treated before issue of work permits. The contractor shall ensure periodic health check-up of construction workers.
- v. Fencing of the project boundary before start of construction activities.
- vi. Use of energy efficient construction materials shall be ensured to achieve the desired thermal comfort.
- vii. Use of fly ash based bricks/blocks/tiles/products shall be explored to the maximum extent possible.
- viii. Lay out of proposed buildings and roads within premises etc. shall be made in such a way that it shall cause minimum disturbance to existing flora and fauna. Appropriate green belt shall developed to compensate the habitat loss of tree cutting (if any) from competent authority as per prevailing Act/Rules. The exotic species existing within the existing premises, if any, shall be protected. The greening programme shall include plantation of both exotic and indigenous species.
- ix. Dedicated pedestrian paths shall be provided along the proposed Buildings. Appropriate access shall be provided for physically challenged people in the Pedestrian Paths.
- x. The design of service roads and the entry and exit from the buildings shall conform to the norms & standards prescribed by the State Public Works Department.
- xi. The road system shall have the road cross sections for general traffic, exclusive ways for public mass transport (bus) system, pedestrian paths and ways, utility corridors and green strip.
- xii. Topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site. Balance top soil should be disposed at in planned manner for use elsewhere adequate erosion and sediment control measures to be adopted before ensuing construction activities.
- xiii. Prior permission should be obtained from the competent authority for demolition of the

existing structure, if any. Waste recycling plans including top soil should be developed prior to beginning of demolition and construction activity. The plans should identify wastes to be generated and designate handling, recycling and disposal method to be followed.

- xiv. Disposal of muck including excavated material during construction phase should not create any adverse effects in the neighborhood and the same shall be disposed of taking the necessary precautions for general safety and health aspects.
- xv. The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which should be 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 mitigation 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 conform 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 through 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 Godda) 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

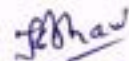
- i. All the conditions laid down in NOC & consent to operate issued by SPCB should be strictly complied with during entire life cycle of the project.
- ii. Monitoring of Ambient Noise Level & Analysis of Ground Water Samples, Monitoring of Stack Emissions from DG Sets & Testing of Untreated & treated 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, Zila Parishad/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.

Q







Standard EC condition**I. Statutory compliance**

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority.
- vi. Solid waste/hazardous waste generated in the mines needs to be addressed in accordance to the Solid Waste Management Rules, 2016 / Hazardous & Other Waste Management Rules, 2016 as amended from time to time.

II. Air quality monitoring and preservation

- i. Continuous ambient air quality monitoring stations as prescribed in the statute be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM10, PM2.5, SO2 and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.
- ii. The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.

9

- iii. Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water / mist sprinkling / rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM10/PM2.5) such as haul road, loading/ unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.
- iv. The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.
- v. Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.
- vi. Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.
- vii. Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.

III. Water quality monitoring and preservation

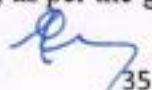
- i. The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.
- ii. The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No. J-20012/1/2006-1A.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
- iii. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.
- iv. Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change / Regional Office.
- v. Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.

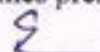
- vi. Catch and or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies.
- vii. Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).
- viii. Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP / STP needs to be provided.
- ix. The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.
- x. The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining Plan/ EIA/EMP report and with due approval of the concerned State/Gol Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.
- xi. The project proponent shall take all precautionary measures to ensure reverian/ riparian ecosystem in and around the coal mine upto a distance of 5 km. A reverian /riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

IV. Noise and Vibration monitoring and prevention

- i. Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs / muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.
- ii. Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.

9

 35





- iii. The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.

V. Mining Plan

- i. Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.
- ii. Mining shall be carried out as per the approved mining plan(including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).
- iii. No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980
- iv. Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.

VI. Land reclamation

- i. Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change (MOEF&CC) from time to time shall be submitted to MOEFCC/Regional Office (RO).
- ii. The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural /forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.
- iii. The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the "during mining" / "post mining" land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.
- iv. Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.
- v. Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-

9

R

36

J

B

N

sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.

- vi. The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

VII. Green Belt

- i. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.
- ii. Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area as soon as possible. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads.

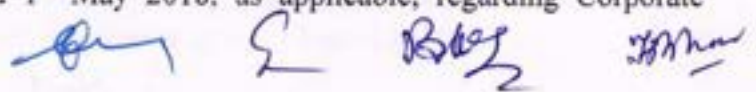
VIII. Public hearing and Human health issues

- i. Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & its RO on six- monthly basis.
- ii. The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any. as amended time to time.
- iii. Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
- iv. Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.
- v. The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.

Q



- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements / deviation / violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and/or shareholders/stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

- vi. The project proponent shall submit the environmental statement for each financial year in Form- V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIAIEMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false / fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvi. 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.
- xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010

9

