

MINUTES OF THE 63RD MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE (SEAC), JHARKHAND HELD ON 05TH & 06TH NOVEMBER, 2018

The 63rd meeting of State Level Expert Appraisal Committee (SEAC), Jharkhand was held on 05th & 06th November, 2018 under the Chairmanship of Sh. K.P. Bhawsinka in the Conference Room at SEAC, Ranchi.

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

Sri Mohan Sriram Bhagwat, Member, SEAC could not attend the meeting due to personal reason. Various projects as received by SEIAA after the previous SEAC meeting held on 08th & 09th October, 2018 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. Projects considered for recommendation to SEIAA for consideration of grant of ToR.

1. **Proposed Expansion of Forgings from Existing capacity - Auto Components 3000 TPA, Engineering Items 600 TPA, Export items (Auto Components + Engineering items) 754000 Nos./yr to Proposed capacity - Various Forgings 60000 TPA, for Ramkrishna Forgings Limited – Plant1, at Plot M5 & M6, Phase- VI, Adityapur Industrial Area, Gamharia, Dist. Saraikela-Kharsawan, Jharkhand.**

Ramkrishna Forgings Limited, Plant-1 is located at Plot M5 & M6, Phase- VI, Adityapur Industrial Area, Gamharia, Dist. Saraikela-Kharsawan, Jharkhand. Its geographical co-ordinates are Latitude 22°48' 12.67"N and Longitude 86° 07' 11.35"E. The area falls under Adityapur Industrial Area, Gamaria. The road is hard and at a higher level suitable for heavy vehicular traffic. Transport is available for easy movement of personnel, raw material, machinery and finished goods in the area. There is no difficulty in getting the required power and water at the proposed location. The project site is flanked by various other industries in the industrial area. The total plant area is 1.91 Ha, around 0.04 Ha shall be covered under greenbelt and plantation in the project area.

Saraikela - Kharsawan district is one of the most industrialized zones in India. It is one of the twenty-four districts of Jharkhand state in India. Ramkrishna Forgings Limited was incorporated under the companies Act, 1956 on 11th November, 1981 as a Private Limited Company and

subsequently converted in to a Limited Company w.e.f., May 25th, 1995. The company is having its registered office at 72, Shakespeare Sarani, Kolkata- 700017.

The project site is located in the Adityapur Industrial Area of the Gamharia village under the district of Saraikela- Kharsawan. The most important river in the area is River Kharkai and Swarnrekha which is at a distance of around 2.5 Km and 3.70 Km with respect to the project site. Jamshedpur is located about 6.0 Km distance in the north-east direction w.r.t. the project site.

The site is well connected by Road and Railway. Gamharia Railway station is located about 1.75 km from the project site and Adityapur – Gamharia – Saraikela road is at a distance of about 200 meters. The nearest important Airport is Sonari Airport, Jamshedpur, which is situated at about 4.6 km distance in from the project site. The project site has good connectivity with sea port of Kolkata, Haldia and Paradip.

Latitude & Longitude of four corner of Project Site	A - 22°48'14.79"N; 86°07'10.16"E
	B - 22°48'12.86"N; 86°07'13.75"E
	C - 22°48'08.07"N; 86°07'09.81"E
	D - 22°48'09.65"N; 86°07'06.86"E

Raw Materials

The details relating to major raw materials presently being used and that would be used after capacity expansion 71500 TPA for this Forgings plant are presented.

Raw materials	Grade of Raw Material	Weight in TPA
Billets and Rounds of Various grades of Steel	Mix Grade Alloy Steel	71,500
Consumables		
For Process & Heat Treatment	Furnace Oil	5150.0 KL/year
	Diesel Oil	250.0 KL/year
	Oil for Quenching	10.0 KL/year

Project Cost

Total cost of the project after expansion is envisaged as Rs. 89.03 crore, including Rs.2.54 crores as the cost of additional equipments and upgradation. The company proposes a budget of Rs. 90 Lakhs on the CSR activities, which is more than 1.0 % of the total project cost (89.03 Crores) as per MoEF & CC OM dated 01.05.2018. This fund shall be utilized over a period of 5 years

Salient Features of the Forgings

All the working sheds and the shot blasting shed are existing. Entrance gate, RCC approach and internal roads have been constructed along with the storm water and garland drains. No new infrastructure development is required. The process involves the following steps.

1. Cutting of steel billets/ rounds to sized blocks.
2. Heating of blocks in induction heaters.
3. Forging in Hammers/Up-setters.
4. Heat treatment & Shot blasting.

The solid waste generated as scrap and cuttings etc. to the tune of 11500 TPA will be sold to supplier or other industries for reuse/recycle.

Water Requirement

Total water requirement for the project is estimated to be 150 KLD. Water requirement for the present and the additional utilization will be obtained from Ground water through bore wells within the premises. The application for permission from CGWA for entire quantity of 150 KLD water from ground water source has been already submitted.

Power Requirement

Total 8.2 MW power will be required for the project at final stage which will be sourced from JUSCO. Due permission for the same has already been obtained from JUSCO.

The project authorities along with their consultant M/s Visiontek Consultancy Services Pvt. Ltd. gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Terms of Reference for preparation of EIA / EMP report.

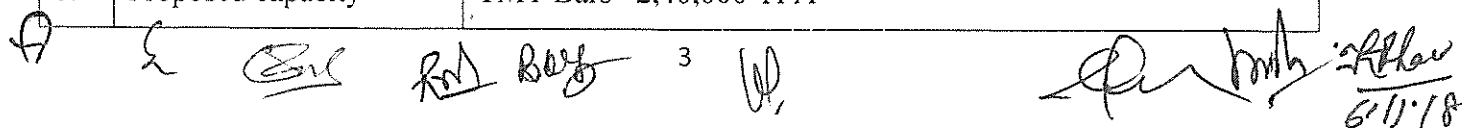
Based on the information contained in the documents submitted and the presentation made before the State Level Expert Appraisal Committee (SEAC) during its Meetings held during 05th and 06th November, 2018 the Committee recommends issuing of TOR for consideration of SEIAA for undertaking detailed EIA / EMP study **Annexure I**.

2. Modification cum Expansion of existing Re-Rolling Mill of M/s Saluja Steel & Power (P) Ltd at Mouza – Mohanpur, Dist. - Giridih.

The proposal was considered by the committee to determine the “Terms of Reference (TOR)” for undertaking detailed EIA study for the purpose of obtaining environmental clearance in accordance with the provisions of the EIA Notification, 2006 and amendments thereafter. For this purpose the project proponent has submitted the prescribed Form – I & PFR the proposed project falls under item 3(b) (Secondary metallurgical processing industry) as per EIA notification, 2006.

Salient features:

1.	Name of the project	Modification–cum–Expansion of existing Re-Rolling AT Mouza Mohanpur, PS-Mahtodih, District Giridih(JHK)
2.	Name of the promoters	M/s Saluja Steel & Power (P) Ltd
3.	Area of Plant	5.68 acres
4.	Khata No. & Plot No.	Khata no. 34, 1, 40, 73, 38, 65, 45, 5, 48, 29, 43, 61 & 109 Plot no. 586, 588, 52, 55, 29, 30, 53, 47, 51, 578, 37, 40, 593, 39, 38, 50, 595, 594 & 603
5.	Latitude/longitude	<ul style="list-style-type: none"> Lat: 24° 08' 37.98" N Long: 86° 20' 21.88" E Lat: 24° 08' 31.83" N Long: 86° 20' 39.46" E Lat: 24° 08' 23.40" N Long: 86° 20' 37.62" E Lat: 24° 08' 28.09" N Long: 86° 20' 27.43" E
6.	Proposed capacity	TMT Bars –2,40,000 TPA



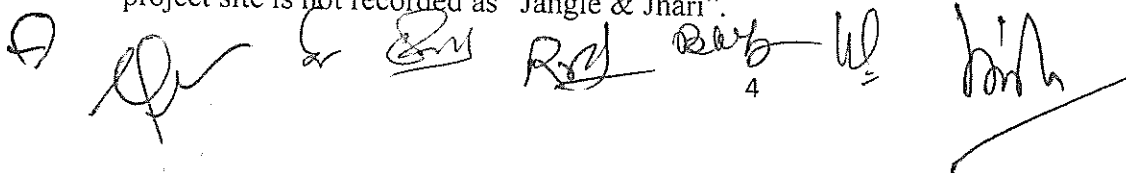
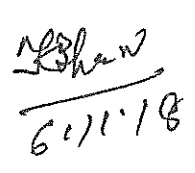
7.	Existing Capacity	TMT Bars – 90 TPD (27,000 TPA)
8.	Cost of Project	18 Crs
9.	Plant & Equipment	<ul style="list-style-type: none"> • Re-Rolling Mill(TMT Mill) – 1x90 TPD (27,000 tons per annum operating)-existing • Induction Furnace – 4x20 t(4 cell standby) New • Matching Concast facilities for Billets manufacturing- Two Line-New Cap-2,40,000t per annum billets-new • Re-Rolling Mill(TMT Mill): 1x400 TPD-modification in existing TMT mill and - modification 1x400 tpd new Re-Rolling mill Capacity after expansion 240,000 tons per annum MS Bar-new
10.	Fuel used	Electricity Power supplied by DBC
11.	Water Sources	Ground water Bore well
12.	Water required per day	30 KLD tentative (exact figure shall be delineated during EIA finalization)
13.	Emission from Stack	Limited to 100 mg/Nm ³
14.	Slag generation	37,540 TPA
15.	No of working days in a year	300 days
16.	Chimney Heights	30 m de-dusting stack
17.	Nearest Railway station	Giridih – 6 kms

The proposal was presented in SEAC on 29-30.01.18 in which further informations were sought as under -

- I. Revised Form-I
- II. Compliance of CTO conditions & present status.
- III. Details of land use pattern.
- IV. CO certificate regarding CO certificate regarding class of land (whether recorded as Jangal Jhari or not)
- V. DFO Certificate regarding distance from notified forest / National Park / Sanctuary/ Eco Sensitive Zone / Bio-Diversity Area.
- VI. Details of production of materials.

The documents related to the discrepancies in the above mentioned papers have been submitted and found to be satisfactory.

DFO, Giridih East vide letter no. 1479, dated - 25.06.18 certified that project site is not within 1649.25 m from notified forest and not within 10 km from National Park, Bio-Diversity & Sanctuary. The CO, Giridih vide letter no. 2813, dated - 04.10.18 has mentioned / certified the project site is not recorded as "Jangle & Jhari".

The project authorities along with their consultant M/s Pollution & Ecology Control Services gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Terms of Reference for preparation of EIA / EMP report.

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 05th and 06th November, 2018 the Committee recommends issuing of TORs for consideration of SEIAA for undertaking detailed EIA / EMP study **Annexure I**.

3. Installation of 10 MW CPP based on WHRB & AFBC based technology integrating with existing 2x100 tpd DRi kiln of M/s Saluja Steel & Power (P) Ltd at Mouza – Mohanpur, Dist. – Giridih.

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

Salient Feature :

1.	Name of the Project	Installation of 10 MW CPP based on WHRB & AFBC based technology integrating with existing 2x100 tpd DRi kiln
2.	Name of the promoters	M/s Saluja Steel & Power (P) Ltd
3.	Area of plant	9.06 Acres
4.	Khata No. & Plot No.	Khata no. 135, 61, 130, 16, 17, 20, 19, 18, 67, 5 Plot no. 548, 552, 571, 532, 535, 537, 565, 564, 562, 556, 555, 557, 554, 563, 560, 85, 230, 231, 49 & 232
5.	Latitude Longitude	24°8'37.10"N 86°20'21.32"E. 24°8'36.39"N 86°20'25.96"E. 24°8'26.56"N 86°20'27.07"E. 24°8'29.13"N 86°20'13.75"E.
6.	Proposed capacity	Installation of 1x10 MW
7.	Existing capacity	2x100 tpd DRI kiln operating
8.	Cost of project	46 Crore
9.	Plant load factor	80%
10.	Auxiliary Power Consumption	10%
11.	a) WHRB Boiler on 2x100 TPD Kiln flue gases b) AFBC Boiler based on coal, coal fines & dolo char	2x11 = 22 TPH 1x30 = 30 TPH
12.	T.G. Set	1x10 MW
13.	Condensate Cooling System	Air cooled condenser
14.	Boiler Steam Pressure & Temp.	67kg/cm ² (a) 490+/-5°C
15.	Fuel used	a. Coal E & F Grade – 40% b. Coal Fines – 20% c. Dolochar – 40%

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16.	Mixed fuel required for generation of 01 unit	1.52 kg/unit
17.	Mixed fuel required / year	a. Coal – 152.50 MT b. Dolo Char – 152.50 MT c. Fines – 75.00 MT
18.	Annual mixed fuel requirement without margin	45,600 MT
19.	Water source	Bore wells
20.	Water required /day	160 m ³
21.	Emission from stack	Limited to 100 mg/Nm ³
22.	Ash generation / day (AFBC)	58 MT
23.	Ash generation / day (WHRB)	52 MT
24.	Cumulative Ash Generation from 08 MW CCP	110 MT
25.	Ash utilization	Brick making & rest for land filling.
26.	Nos. of working days in a year	WHRB – 300 days AFBC – 330 days
27.	RCC Chimney height	52 m
28.	Nearest Railway Station / Airport along with distance in KMS	Giridih Railway Station – 6.0 KM (maximum) Ranchi Airport – 200 KM

The proposal was presented in SEAC on 29-30.01.18 in which further informations were sought as under -

- I. Revised Form-I
- II. Compliance of CTO conditions & present status.
- III. Details of land use pattern.
- IV. CO certificate regarding CO certificate regarding class of land (whether recorded as Jangal Jhari or not)
- V. DFO Certificate regarding distance from notified forest / National Park / Sanctuary/ Eco Sensitive Zone / Bio-Diversity Area.
- VI. Details of production of materials.

The documents related to the discrepancies in the above mentioned papers have been submitted and found to be satisfactory.

DFO, Giridih East vide letter no. 1477, dated - 25.06.18 certified that project site is not within 1912.49 m from notified forest and not within 10 km from National Park, Bio-Diversity & Sanctuary. The CO, Giridih vide letter no. 2812, dated - 04.10.18 has mentioned / certified the project site is not "Jangle & Jhari".

The project authorities along with their consultant M/s Pollution & Ecology Control Services gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Terms of Reference for preparation of EIA / EMP report.

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 05th and 06th November, 2018 the Committee recommends issuing of TORs for consideration of SEIAA for undertaking detailed EIA / EMP study **Annexure II.**

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

1. Expansion cum Modernization of M/s Mongia Steel Ltd at Vill.- Burhiadih, Dist. - Giridih.

The ToR was granted by SEIAA vide letter no. EC/SEIAA/2014-15/569/2014/900, dated 01.05.2015 and the final EIA & EMP was submitted on 20.04.2018 by PP to SEIAA. The proposal was forwarded to SEAC by SEIAA on 20.04.2018.

M/s Mongia Steel Limited located at (Khata no. 57, 53, 58, 50, 41 & 45 and Plot no. 1373, 1374, 1403 to 1407, 1409 to 1411, 1429, 1430, 1444, 1446 to 1450 and 1452) Budhiadih, Tundi Road, Giridih has setup 2 nos of Induction furnaces of 6 t capacity each. Out of these two one is stand by unit. This unit comes under Induction furnace division. Similarly there is Re-rolling division also. Induction furnace is producing MS Billet which is getting processed to TMT Bars. The Mongia Steel Limited was setup in the year 1996. The project was setup at land owned by company. The initial setup was made for Induction furnace and later on TMT Mill was added. The old name of M/s Mongia Steel Ltd. was Mongia Hi-tech (P) Ltd. The installed capacity of Induction furnace of M/s Mongia Steel Ltd. is to produce M.S. Ingot of 50 TPD and TMT Bars in Re-rolling Division is having production capacity of 10 MT/Day. This is an existing unit in the area of 31.29 acres of land. For proposed expansion & modernization, No additional land requirement & Raw water will be sourced from existing ground water sources within premise. As per estimate, water to the tune of 35 KLD (25 KLD existing) will be required. The estimated power requirement for the proposed expansion project is 15.0 MVA (existing 4 MVA), which will be sourced from DVC. Plant site lies in Lat: 24° 09' 29.5" N Long: 86° 19' 51.8" E. Giridih is the nearest railway station from the proposed plant site on, which is around 3.5 km from the proposed site. The indicated project cost is Rs 9.69 Crore.

Accordingly Mongia Steel Limited is seeking Environmental Clearance for the followings:-

Induction furnace (SMS)	-	2 x 15 T
There will be 2 cell stand by		
Billet caster	-	1 x 2 strand (300 tpd)
TMT Mill	-	240 tpd
Strip Mill	-	60 tpd pipes & shutter strips.
Producer Gas Plant	-	As per requirement

The project authorities along with their consultant M/s Pollution and Ecology Control Services, Ranchi gave a detailed presentation on the EIA / EMP Report.

Green belt development plan was suggested to the proponent who agreed to plants the local variety of species in the site as well as article the area surrounding.

During the public hearing, the queries were related to dust pollution in the road, the proponent agreed to spray water on the road regularly and plant local tree species.

The proposal was presented in SEAC on 17-18.05.18 in which further informations were sought as under -

- CO certificate regarding class of land (whether recorded as Jangal Jhari or not).*
- DFO Certificate regarding distance from notified forest / National Park / Sanctuary/ Eco Sensitive Zone / Bio-Diversity Area.*

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The documents related to the above mentioned discrepancies have been submitted and found to be satisfactory.

DFO, Giridih East vide letter no. 1434, dated - 18.06.18 certified that project site is not within 2699.34 m from notified forest and not within 10 km from National Park, Bio-Diversity & Sanctuary. The CO, Giridih vide memo no. 2622, dated - 10.09.18 has mentioned / certified that plot nos. of the project site is not recorded as "Jangle Jhari".

Based on the presentation made and information provided, the Committee decided that the proposal for **Expansion cum Modernization of M/s Mongia Steel Ltd at Vill.- Burhiadih, Dist. - Giridih** be recommended for consideration of SEIAA for grant of EC. The various conditions for grant of EC is enclosed as **Annexure -III**.

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

1. **Kusumkiyari Sand Ghat in the river bed of Gobai River of M/s JSMDCLtd at Vill.- Kusumkiyari, P.O. & P.S. - Chandankyari, Dist. - Bokaro (13.00 Ha).**

This is a Sand Mining Project with an area of 13.00 Ha [Khata No. 234, Plot No.- 01 (P) & 2021]. As per Form-I, the PP is seeking EC. It is B2 Category of Project - as per MoEF & CC Notification dated 15.01.2016.

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 26.05 Lakh and a provision of Rs 7.05 Lakh has been indicated for Environment management.

The proposed estimated mineral resources is 58,680 cum and annual production capacity as per Form-I has been indicated as 39,197 cum per annum.

PP has submitted certificates from CO (Letter No.- 792, dated- 25/08/2018), DFO (Letter dated- 09/07/2018) and DMO (Memo No.- 2461, dated- 15/09/2018).

PP was asked to submit additional information :

- (i) The CO, Chandankyari vide letter no. 792, dated - 25.08.18 has not signed on first page, needs correction.
- (ii) 1 KM area is not properly demarcated properly. Based on all corner points the 1 KM radius be demarcated.
- (iii) DFO certificate to be rectified.
- (iv) Resource evaluation should have been done on cross sectional basis as the thickness of the sand deposit varies from section to section. All cross section should be prepared and submitted so that inter face of silt & clay at the bottom be demarcated.
- (v) A copy of DSR of the district along with demarcation of this site be represented.

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- (vi) Coordinate at curved point between BP-4 & BP – 5 is missing. Rock out-crop or no sand zone in the river should be shown in plan especially when there is bed level difference of more than 2 m in the river stretch being considered. The cross section shall be clearly shown indicating various existing level & thicknesses of various layers.
- (vii) The EC application is for sand ghat along with stockyard. But in Form-I area of stockyard & location not mentioned. This is to be corrected.
- (viii) EIA should include impact of stockyard & transportation on environment.

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

2. Kabra Kalan Sand Mining Project of M/s JSMDCLtd 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)]. As per Form-I, the PP is seeking EC. It is B2 Category of Project - as per MoEF & CC Notification dated 15.01.2016.

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.

PP has submitted certificates from CO (Letter No.- 464, dated- 15/09/2018), DFO (Letter No.- 1746, dated- 07/04/2018) and DMO (Memo No.- 890, dated- 19/07/2018).

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 committee deliberated this proposal. In this case also DSR of the district was not available except for a slide showing the representation of the sand ghat area.

PP was asked to submit addition information -

- (i) In absence of DSR of the site in the SEAC office & with the consultant this presentation was deferred for next meeting. The EC application is for sand ghat along with stockyard. But in Form-I area of stockyard & location not mentioned. This is to be corrected.
- (ii) EIA should include impact of stockyard & transportation on environment.

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

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3. Pasai To Danre Confluence Sand Mine in Sakari River of M/s JSMDCLtd 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)]. As per Form-I, the PP is seeking EC. It is B2 Category of Project - as per MoEF & CC Notification dated 15.01.2016.

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 1.90 Crore and a provision of Rs 7.65 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.

PP has submitted certificates from CO (Letter No.- 661, dated- 21/08/2018), DFO (Letter No.- 1984, dated- 06/08/2018) and DMO (Memo No.- 2303, dated- 10/08/2018).

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 "Jangle Jhari".

The proposal was presented by the proponent & the consultant.

PP was asked to submit addition information -

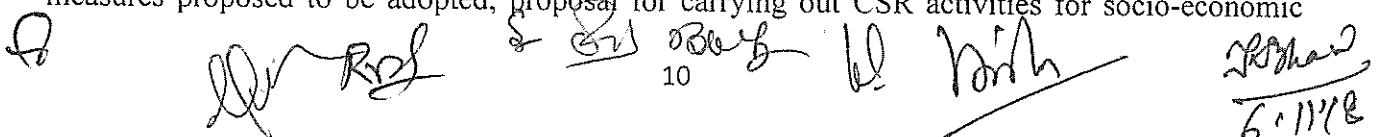
- (i) In absence of DSR of the site in the SEAC office & with the consultant this presentation was deferred for next meeting. The EC application is for sand ghat along with stockyard. But in Form-I area of stockyard & location not mentioned. This is to be corrected.
- (ii) EIA should include impact of stockyard & transportation on environment.
- (iii) A letter be submitted clarifying the position of proposed mining whether by mechanised / semi mechanised / manual method as the presentation was made for semi mechanised method.

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

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

This is a Sand Mining Project with an area of 5.241 Ha [Plot No.- 01 (P)]. As per Form-I, the PP is seeking EC. It is B2 Category of Project - as per MoEF & CC Notification dated 15.01.2016.

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

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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 64.92 Lakh and a provision of Rs 3.46 Lakh has been indicated for Environment management.

The proposed estimated mineable reserve is 79,239 cum and annual production capacity as per Form-I has been indicated as 79,239 cum per annum.

PP has submitted certificates from CO (Letter No.- 229, dated- 11/09/2018), DFO (Letter No.- 3777, dated- 10/07/2018) and DMO (Memo No.- 1620, dated- 04/08/2018).

DFO, Hazaribagh vide letter no. 3777, dated - 10.07.18 certified that project site is not within 255 m from notified forest and not within 10 km from National Park, Bio-Diversity & Sanctuary. The CO, Chalkusha vide letter no. 229, dated - 11.09.18 has mentioned the plot no. of the project site is River.

The representation of the consultant of environment and RQP was made by a FAA and technical assistant which is not permitted as per QCI norms. However, presentation was allowed provisional.

Based on the presentation by the above representations the following observation of the committee –

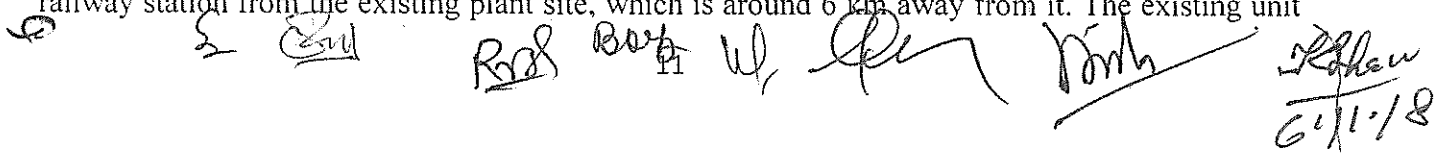
- i. Progressive closure of mine plan was not properly explained for sand mining.
- ii. DSR of this project was not available neither with the proponent no with SEAC.
- iii. In absence of DSR of the site in the SEAC office & with the consultant this presentation was deferred for next meeting. The EC application is for sand ghat along with stockyard. But in Form-I area of stockyard & location not mentioned. This is to be corrected.
- iv. EIA should include impact of stockyard & transportation on environment.

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

5. Regularisation cum Expansion of M/s Santpuria Alloys (P) Ltd at Vill.- Manjhladih, Tehsil - Gadisrirampur, Dist. - Giridih.

The ToR was granted by SEIAA vide letter no. EC/SEIAA/2014-15/570/2014/901, dated 01.05.2015 and the final EIA & EMP was submitted on 24.10.2018 by PP to SEIAA for unit of the capacity of (96x2) 192 tpd of expanded sponge iron combining 1st & 2nd units. The proposal was forwarded to SEAC by SEIAA on 24.10.2018.

Santpuria Alloys (P) Ltd. (SAPL), located at Khata No. 86, 51, 44, 64, 01, 23, 41, 19, 03, 22 & 10, Plot Nos. 243, 244, 245, 288, 283, 236, 237, 239, 240, 274, 278, 285, 286, 287, 282 & 17, Manjhladih, Gadi Srirampur, Giridih, has set up a 96 x 2 TPD Sponge Iron plant. Plant at Lat: 24° 07' 47.0" N Long: 86° 21' 15.0" E. Giridih is about 6 km, Tundi is about 26 km, Govindpur is about 45 km and Dhanbad is about 60 km form the existing plant site. Giridih is the nearest railway station from the existing plant site, which is around 6 km away from it. The existing unit



plant has not been properly reflected in the ToR issued / public hearing minutes & all other accepted documents except Form-I. As such this issue can not be inducted through the EIA / EMP report for clearance by the consultant.

The CTO document issued by JSPCB ref. no. JSPCB/HO/RNC/CTO- 188/835/2018/685 dt. 05.04.2018 is specific condition no. 24 says that -

- (i) The occupier shall install and start operationalization of AFBC/CFBC boiler by 30.06.2009 and its compliance report / progress report shall be submitted by 1st week of Sept ' 2018 and
- (ii) the occupier shall dispose the coal char fully & its records should be maintained & submitted to the Board quarterly.


In the undertaking letter dated 06.11.2018 the proponent has submitted the EIA/EMP report with 10 MW power plant based on the above as per suggestion of JSPCB.


But this should have been enrooted through inclusion in TOR before submitting the EIA/EMP report.

In view of this, the committee observed that clubbing of this proposed power plant with the existing sponge iron plant for the propose of EIA/EMP report is not logical & hence not acceptable.

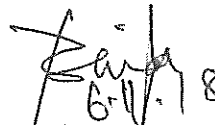
9 In view of this, the committee observed that a fresh proposal of ToR modification for expansion of existing sponge iron plant along with 10 MW power plant based on JSPCB suggestion as above be submitted. Recommendation of credible action by SEAC has not been intimated.


The meeting concluded with thanks to all present.

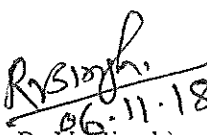

(Dr. B.K. Tewary)
Member

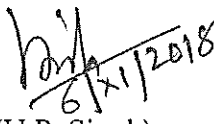

(S.P. Srivastava)
Member

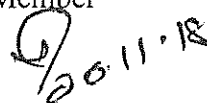

(R. N. Singh)
Member



(Y.K. Singh)
Member


(Dr. V.P. Sinha)
Member


(Dr. R. V. Singh)
Member


(U.P. Singh)
Member


(Om Prakash)
Member Secretary


(K.P. Bhawsinka)
Chairman

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

A. Standard Terms of Reference

1. Executive Summary

2. Introduction

- i. Details of the EIA Consultant including NABET accreditation.
- ii. Information about the project proponent
- iii. Importance and benefits of the project

3. Project Description

- i. Cost of project and time of completion.
- ii. Products with capacities for the proposed project.
- iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
- iv. List of raw materials required and their source along with mode of transportation.
- v. Other chemicals and materials required with quantities and storage capacities
- vi. Details of Emission, effluents, hazardous waste generation and their management.
- vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
- viii. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided
- ix. Hazard identification and details of proposed safety systems.
- x. Expansion/modernization proposals:
 - a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing / existing operation of the project from SPCB shall be attached with the EIA-EMP report.
 - b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification, 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4. Site Details

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

- ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)
- iii. Details w.r.t. option analysis for selection of site
- iv. Co-ordinates (lat-long) of all four corners of the site. .
- v. Google map-Earth downloaded of the project site.
- vi. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
- vii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
- viii. Landuse break-up of total land of the project site (identified and acquired), government/private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)
- ix. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
- x. Geological features and Geo-hydrological status of the study area shall be included.
- xi. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)
- xii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- xiii. R&R details in respect of land in line with state Government policy

5. Forest and wildlife related issues (if applicable):

- i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)
- ii. Landuse map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha)
- iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
- iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon
- v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area
- vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.

6. Environmental Status

- i. Determination of atmospheric inversion level at the project site and site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
- ii. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
- iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with - min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
- iv. Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
- v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.
- vi. Ground water monitoring at minimum at 8 locations shall be included.
- vii. Noise levels monitoring at 8 locations within the study area.
- viii. Soil Characteristic as per CPCB guidelines.
- ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
- x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule- I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
- xi. Socio-economic status of the study area.

7. Impact and Environment Management Plan

- i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- ii. Water Quality modelling - in case of discharge in water body
- iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor- cum-rail transport shall be examined.
- iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.
- v. Details of stack emission and action plan for control of emissions to meet standards.
- vi. Measures for fugitive emission control.

- vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle / reuse / recover techniques, Energy conservation, and natural resource conservation.
- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
- ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
- x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
- xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
- xii. Action plan for post-project environmental monitoring shall be submitted.
- xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

8. Occupational health

- i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers
- ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.
- iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,
- iv. Annual report of health status of workers with special reference to Occupational Health and Safety.

9. Corporate Environment Policy

- i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
- ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
- iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.

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

A . Standard Terms of Reference

1. The proposed project shall be given a unique name in consonance with the name submitted to other Government Departments etc. for its better identification and reference.
2. Vision document specifying prospective long term plan of the project shall be formulated and submitted.
3. Latest compliance report duly certified by the Regional Office of MoEF & CC for the conditions stipulated in the environmental and CRZ clearances of the previous phase(s) for the expansion projects shall be submitted.
4. The project proponent needs to identify minimum three potential sites based on environmental, ecological and economic considerations, and choose one appropriate site having minimum impacts on ecology and environment. A detailed comparison of the sites in this regard shall be submitted.
5. Executive summary of the project indicating relevant details along with recent photographs of the proposed site (s) shall be provided. Response to the issues raised during Public Hearing and the written representations (if any), along with a time bound Action Plan and budgetary allocations to address the same, shall be provided in a tabular form, against each action proposed.
6. Harnessing solar power within the premises of the plant particularly at available roof tops and other available areas shall be formulated and for expansion projects, status of implementation shall also be submitted.
7. The geographical coordinates (WGS 84) of the proposed site (plant boundary), including location of ash pond along with topo sheet (1:50,000 scale) and IRS satellite map of the area, shall be submitted. Elevation of plant site and ash pond with respect to HFL of water body/nallah/River and high tide level from the sea shall be specified, if the site is located in proximity to them.
8. Layout plan indicating break-up of plant area, ash pond, green belt, infrastructure, roads etc. shall be provided.
9. Land requirement for the project shall be optimized and in any case not more than what has been specified by CEA from time to time. Item wise break up of land requirement shall be provided.
10. Present land use (including land class/kism) as per the revenue records and State Govt. records of the proposed site shall be furnished. Information on land to be acquired including coal transportation system, laying of pipeline, ROW, transmission lines etc. shall be specifically submitted. Status of land acquisition and litigation, if any, should be provided.
11. If the project involves forest land, details of application, including date of application, area applied for, and application registration number, for diversion under FCA and its status should be provided along with copies of relevant documents.

12. The land acquisition and R&R scheme with a time bound Action Plan should be formulated and addressed in the EIA report.
13. Satellite imagery and authenticated topo sheet indicating drainage, cropping pattern, water bodies (wetland, river system, stream, nallahs, ponds etc.), location of nearest habitations (villages), creeks, mangroves, rivers, reservoirs etc. in the study area shall be provided.
14. Location of any National Park, Sanctuary, Elephant/Tiger Reserve (existing as well as proposed), migratory routes / wildlife corridor, if any, within 10 km of the project site shall be specified and marked on the map duly authenticated by the Chief Wildlife Warden of the State or an officer authorized by him.
15. Topography of the study area supported by toposheet on 1:50,000 scale of Survey of India, along with a large scale map preferably of 1:25,000 scale and the specific information whether the site requires any filling shall be provided. In that case, details of filling, quantity of required fill material; its source, transportation etc. shall be submitted.
16. A detailed study on land use pattern in the study area shall be carried out including identification of common property resources (such as grazing and community land, water resources etc.) available and Action Plan for its protection and management shall be formulated. If acquisition of grazing land is involved, it shall be ensured that an equal area of grazing land be acquired and developed and detailed plan submitted.
17. A mineralogical map of the proposed site (including soil type) and information (if available) that the site is not located on potentially mineable mineral deposit shall be submitted.
18. Details of fly ash utilization plan as per the latest fly ash Utilization Notification of GOI along with firm agreements / MoU with contracting parties including other usages etc. shall be submitted. The plan shall also include disposal method / mechanism of bottom ash.
19. The water requirement shall be optimized (by adopting measures such as dry fly ash and dry bottom ash disposal system, air cooled condenser, concept of zero discharge) and in any case not more than that stipulated by CEA from time to time, to be submitted along with details of source of water and water balance diagram. Details of water balance calculated shall take into account reuse and re-circulation of effluents.
20. Water body/Nallah (if any) passing across the site should not be disturbed as far as possible. In case any Nallah / drain is proposed to be diverted, it shall be ensured that the diversion does not disturb the natural drainage pattern of the area. Details of proposed diversion shall be furnished duly approved by the concerned Department of the Stat.
21. It shall also be ensured that a minimum of 500 m distance of plant boundary is kept from the HFL of river system / streams etc. and the boundary of site should also be located 500 m away from railway track and National Highways.
22. Hydro-geological study of the area shall be carried out through an institute/ organization of repute to assess the impact on ground and surface water regimes. Specific mitigation measures shall be spelt out and time bound Action Plan for its implementation shall be submitted.

23. Detailed Studies on the impacts of the ecology including fisheries of the River/Estuary/Sea due to the proposed withdrawal of water / discharge of treated wastewater into the River/Sea etc shall be carried out and submitted along with the EIA Report. In case of requirement of marine impact assessment study, the location of intake and outfall shall be clearly specified along with depth of water drawl and discharge into open sea.
24. Source of water and its sustainability even in lean season shall be provided along with details of ecological impacts arising out of withdrawal of water and taking into account inter-state shares (if any). Information on other competing sources downstream of the proposed project and commitment regarding availability of requisite quantity of water from the Competent Authority shall be provided along with letter / document stating firm allocation of water.
25. Detailed plan for rainwater harvesting and its proposed utilization in the plant shall be furnished.
26. Feasibility of near zero discharge concept shall be critically examined and its details submitted.
27. Optimization of Cycles of Concentration (COC) along with other water conservation measures in the project shall be specified.
28. Plan for recirculation of ash pond water and its implementation shall be submitted.
29. Detailed plan for conducting monitoring of water quality regularly with proper maintenance of records shall be formulated. Detail of methodology and identification of monitoring points (between the plant and drainage in the direction of flow of surface / ground water) shall be submitted. It shall be ensured that parameter to be monitored also include heavy metals. A provision for long-term monitoring of ground water table using Piezometer shall be incorporated in EIA, particularly from the study area.
30. Socio-economic study of the study area comprising of 10 km from the plant site shall be carried out through a reputed institute / agency which shall consist of detail assessment of the impact on livelihood of the local communities.
31. Action Plan for identification of local employable youth for training in skills, relevant to the project, for eventual employment in the project itself shall be formulated and numbers specified during construction & operation phases of the Project.
32. If the area has tribal population it shall be ensured that the rights of tribals are well protected. The project proponent shall accordingly identify tribal issues under various provisions of the law of the land.
33. A detailed CSR plan along with activities wise break up of financial commitment shall be prepared. CSR component shall be identified considering need based assessment study and Public Hearing issues. Sustainable income generating measures which can help in upliftment of affected section of society, which is consistent with the traditional skills of the people shall be identified. Separate budget for community development activities and income generating programmes shall be specified.

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34. While formulating CSR schemes it shall be ensured that an in-built monitoring mechanism for the schemes identified are in place and mechanism for conducting annual social audit from the nearest government institute of repute in the region shall be prepared. The project proponent shall also provide Action Plan for the status of implementation of the scheme from time to time and dovetail the same with any Govt. scheme(s). CSR details done in the past should be clearly spelt out in case of expansion projects.
35. R&R plan, as applicable, shall be formulated wherein mechanism for protecting the rights and livelihood of the people in the region who are likely to be impacted, is taken into consideration. R&R plan shall be formulated after a detailed census of population based on socio economic surveys who were dependant on land falling in the project, as well as, population who were dependant on land not owned by them.
36. Assessment of occupational health and endemic diseases of environmental origin in the study area shall be carried out and Action Plan to mitigate the same shall be prepared.
37. Occupational health and safety measures for the workers including identification of work related health hazards shall be formulated. The company shall engage full time qualified doctors who are trained in occupational health. Health monitoring of the workers shall be conducted at periodic intervals and health records maintained. Awareness programme for workers due to likely adverse impact on their health due to working in non-conductive environment shall be carried out and precautionary measures like use of personal equipments etc. shall be provided. Review of impact of various health measures undertaken at intervals of two to three years shall be conducted with an excellent follow up plan of action wherever required.
38. One complete season site specific meteorological and AAQ data (except monsoon season) as per latest MoEF & CC Notification shall be collected and the dates of monitoring shall be recorded. The parameters to be covered for AAQ shall include PM10, PM2.5, SO2, NOx, CO and Hg. The location of the monitoring stations should be so decided so as to take into consideration the upwind direction, pre-dominant downwind direction, other dominant directions, habitation and sensitive receptors. There should be at least one monitoring station each in the upwind and in the pre - dominant downwind direction at a location where maximum ground level concentration is likely to occur.
39. In case of expansion project, air quality monitoring data of 104 observations a year for relevant parameters at air quality monitoring stations as identified/stipulated shall be submitted to assess for compliance of AAQ Standards (annual average as well as 24 hrs).
40. A list of industries existing and proposed in the study area shall be furnished.
41. Cumulative impacts of all sources of emissions including handling and transportation of existing and proposed projects on the environment of the area shall be assessed in detail. Details of the Model used and the input data used for modeling shall also be provided. The air quality contours should be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any. The windrose and isopleths should also be shown on the location map. The cumulative study should also include impacts on water, soil and socio-economics.

42. Radio activity and heavy metal contents of coal to be sourced shall be examined and submitted along with laboratory reports.
43. Fuel analysis shall be provided. Details of auxiliary fuel, if any, including its quantity, quality, storage etc should also be furnished.
44. Quantity of fuel required, its source and characteristics and documentary evidence to substantiate confirmed fuel linkage shall be furnished. The Ministry's Notification dated 02.01.2014 regarding ash content in coal shall be complied. For the expansion projects, the compliance of the existing units to the said Notification shall also be submitted.
45. Details of transportation of fuel from the source (including port handling) to the proposed plant and its impact on ambient AAQ shall be suitably assessed and submitted. If transportation entails a long distance it shall be ensured that rail transportation to the site shall be first assessed. Wagon loading at source shall preferably be through silo/conveyor belt.
46. For proposals based on imported coal, inland transportation and port handling and rail movement shall be examined and details furnished. The approval of the Port and Rail Authorities shall be submitted.
47. Details regarding infrastructure facilities such as sanitation, fuel, restrooms, medical facilities, safety during construction phase etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase should be adequately catered for and details furnished.
48. EMP to mitigate the adverse impacts due to the project along with item - wise cost of its implementation in a time bound manner shall be specified.
49. A Disaster Management Plan (DMP) along with risk assessment study including fire and explosion issues due to storage and use of fuel should be carried out. It should take into account the maximum inventory of storage at site at any point of time. The risk contours should be plotted on the plant layout map clearly showing which of the proposed activities would be affected in case of an accident taking place. Based on the same, proposed safeguard measures should be provided. Measures to guard against fire hazards should also be invariably provided. Mock drills shall be suitably carried out from time to time to check the efficiency of the plans drawn.
50. The DMP so formulated shall include measures against likely Fires/Tsunami/Cyclones/Storm Surges/ Earthquakes etc, as applicable. It shall be ensured that DMP consists of both On-site and Off-site plans, complete with details of containing likely disaster and shall specifically mention personnel identified for the task. Smaller version of the plan for different possible disasters shall be prepared both in English and local languages and circulated widely.
51. Detailed scheme for raising green belt of native species of appropriate width (50 to 100 m) and consisting of at least 3 tiers around plant boundary with tree density of 2000 to 2500 trees per ha with a good survival rate of around 80% shall be submitted. Photographic evidence must be created and submitted periodically including NRSA reports in case of expansion projects. A shrub layer beneath tree layer would serve as an effective sieve for

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dust and sink for CO2 and other gaseous pollutants and hence a stratified green belt should be developed.

52. Over and above the green belt, as carbon sink, plan for additional plantation shall be drawn by identifying blocks of degraded forests, in close consultation with the District Forests Department. In pursuance to this the project proponent shall formulate time bound Action Plans along with financial allocation and shall submit status of implementation to the Ministry every six months.

53. Corporate Environment Policy

- a. Does the company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
 - b. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
 - c. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions. Details of this system may be given.
 - d. Does the company has compliance management system in place wherein compliance status along with compliances / violations of environmental norms are reported to the CMD and the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.
 - e. All the above details should be adequately brought out in the EIA report and in the presentation to the Committee
54. Details of litigation pending or otherwise with respect to project in any Court, Tribunal etc. shall invariably be furnished.
55. Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the F.R for securing the TOR) should be brought to the attention of SEIAA, Jharkhand with reasons for such changes and permission should be sought, as the TOR may also have to be altered.

56. 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.

[Handwritten signatures and initials]

Standard EC Conditions

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. (incase 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, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF) as amended from time to time; S.O. 3305 (E) dated 7th December 2015(Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iii. The project proponent shall install system carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM25 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)

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- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality / fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six- monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources.
- vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after *briquetting*/ agglomeration.
- ix. The project proponent shall use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- x. The project proponent shall provide covered sheds for raw materials like scrap and sponge iron, lump ore, coke, coal, etc.
- xi. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.
- xii. Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (applicable to IF / EAF) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.

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- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. Adhere to 'Zero Liquid Discharge'.
- v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vi. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.
- vii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off
- viii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- ix. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB (A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

- i. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.
- ii. Practice hot charging of slabs and billets/blooms as far as possible.
- iii. Ensure installation of regenerative type burners on all reheating furnaces.
- iv. Provide solar power generation on rooftops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- v. Provide the project proponent for LED lights in their offices and residential areas.

VI. Waste management

- i. Used refractories shall be recycled as far as possible.
- ii. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces

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- iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- iv. The waste oil, grease and other hazardous waste shall be disposed of as per the
- v. Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
- vi. Kitchen waste shall be composted or converted to biogas for further use. *(to be decided on case to case basis depending on type and size of plant)*

VII. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

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.
- 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 report 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

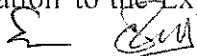
kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry / Regional Office along with the Six Monthly Compliance Report.

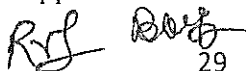
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the plants shall be implemented.
- vii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

X. Miscellaneous

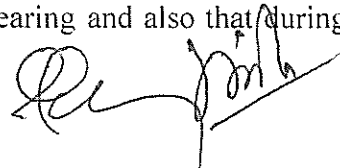
- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language 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, NOx (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 proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- 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 EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

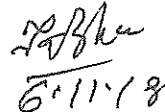
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- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false / fabricated data may result 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 Transboundary 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. 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.

XI . Other Conditions:

1. The Authority reserves the right to add any new condition or modify the above conditions or to revoke the clearance if conditions stipulated above are not implemented to the satisfaction of Authority or for that matter for any other Administrative reason.
2. In view of MoEF & CC O.M. No.- 22-27/2015-IA-III, dated- 12.04.2016 The Environmental Clearance accorded shall be valid for a period of Seven (07) years. The PP shall not increase production rate and make modifications in process during the validity of Environmental Clearance.
3. In case of any deviation or alteration in the project proposed from those submitted to SEIAA, Jharkhand for clearance, a fresh reference should be made to SEIAA to assess the adequacy of the conditions imposed and to incorporate any new conditions if required.

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