PART- A MINUTES OF THE 25 th MEETING OF STATE LEVEL EXPERT APPRAISAL COMMITTEE (SEAC), JHARKHAND HELD FROM 12th to 15th JANUARY 2015

The 25th meeting of State Level Expert Appraisal Committee (SEAC), Jharkhand was held from 12th to 15th January 2015 under the Chairmanship of Sh. A.K. Saxena in the Conference Room at 170 C, Ashok Nagar, Ranchi. The following members were present:

1. Sh. A.K. Saxena - Chairman
2. Sh. S.B.S Chauhan - Member
3. Er. S.K. Singh - Member
4. Dr. R.P. Singh Sangu - Member
5. Prof(Dr) Shatrunjay Kumar Singh - Member
6. Shri R.N. Kashyap - Secretary

Various projects which were received by SEIAA after the previous SEAC meeting held from 15th to 18th December 2014 and forwarded to SEAC for their technical appraisal came up for discussions. Also those Projects which were appraised in SEAC's earlier meetings in which PP's were asked to provide additional informations / clarifications were also considered for examination / scrutiny where the Project proponents had submitted replies. Accordingly, the Project proponents were asked to make technical presentation for the appraisal of their project before the committee.

The following salient observations made during the Presentation (Project Wise) in brief deserve serious consideration.

A. Matters referred by SEIAA vide letter no.- 628, dated 24/12/2014

1. Aharichuan Stone Deposit of M/S Adibasi Stone Co-operative Society at Vill.- Aharichuan, P.S.- Gopikandar, Dist. - Dumka, Jharkhand. (1.497 Ha)

Member Secretary, SEIAA has sought clarification vide letter no. 628, dated – 24.12.2014 regarding the area of contiguous patch / cluster of mines as mentioned by DMO vide his note number 2080 dated 11.12.13 The PP has submitted a revised certificate from DMO vide letter no. 3011, dated 29.12.2014 (in line with MoEF notification dated 7th October 2014). which states that there are other mines within 500 m and the sum total area of these mines is less than 5 Ha.

Considering the above, the committee recommends to SEIAA for grant of EC.

2. Stone Quarry of M/S Savita Stone at Vill.- Domchanch, Tehsil- Domchanch, Dist.- Koderma, Jharkhand. (1.66 Ha)

Member Secretary, SEIAA has sought clarification vide letter no. 628, dated – 24.12.2014 regarding certificate from DFO certifying the minimum distance of forest from the project site which was not attached. In this regard SEAC has revisited the file and found that the PP has obtained information through RTI from the concerned officer. PP had informed during presentation that the RTI certificate was sought by the PP due to non issue of certificate by DFO for which he had applied on 29.11.2013. The Information Officer cum ACF has informed vide letter no.- 1367, dated- 21.06.14 that the distance of mine plot no 5688 (P) is 290 m and plot no 10938 (P) is contiguous / adjacent to plot no 5688 (P). In view of this, the project was recommended for grant of EC.

As observed in SEIAA file it is found that a letter has been received from Shri Sunil Kumar Mehta dated 16.10.2014 (not referred to SEAC) stating that the project is adjoining to forest and the information provided by CO / DFO may be got rechecked. SEIAA may take decision on the matter.

3.' Stone Quarry of M/S Savita Stone at Vill.- Domchanch, Tehsil- Domchanch, Dist.- Koderma, Jharkhand. (0.62 Ha)

Member Secretary, SEIAA has sought clarification vide letter no. 628, dated – 24.12.2014 regarding certificate from DFO certifying the minimum distance of forest from the project site which was not attached. In this regard SEAC has revisited the file and found that the PP has obtained information through RTI from the concerned officer. PP had informed during presentation that the RTI certificate was sought by the PP due to non issue of certificate by DFO for which he had applied on 29.11.2013. The Information Officer cum ACF has informed vide letter no.- 1367, dated- 21.06.14that the distance of mine plot no 5688 (P) is 290 m from the forest. Based on the above information, SEAC had recommended for grant of EC.

As observed in SEIAA file it is found that a letter has been received from Shri Sunil Kumar Mehta dated 16.10.2014 (not referred to SEAC) stating that the project is adjoining to forest and the information provided by CO / DFO may be got rechecked. SEIAA may take decision on the matter.

The matter was discussed and it was decided that the case be recommended for grant of EC.

B. Matters referred by SEIAA vide letter no.- 632, dated 31/12/2014 and MOM of SEIAA's 27th meeting held on 11/12/2014

1. Hazardous Waste Management Facility of M/S Adityapur Auto Cluster

The project is very important for the development of the State. Since a new Airport is also planned in Jamshedpur SEAC feels that it is essential to obtain NOC from AAI. The matter is pending with PP since February 2014.

2.' Brick Clay Mining for M/S Bihar Bricks Product at Vill.- Kharasti, P.O.- Karuduba, Dist.-East Singhbhum, Jharkhand (1.234 Ha).

Member Secretary, SEIAA has sought clarification vide letter no. 632, dated – 24.12.2014 regarding certificate from DFO certifying the minimum distance of forest from the project site. During the presentation made in September, 2014 the PP indicated that this project was a case of renewal. PP has confirmed the same vide letter dated 18.11.2014. Since this is a case of renewal and the distance of the mine from forest is 88 m against stipulation of 50 m. Based on the above information, SEAC had recommended for grant of EC.

The matter was discussed and it was decided that the case be recommended for grant of EC.

3.' Brick Clay Mining for M/S Priya Bricks at Vill–Kashida, P.O.- Ghatsila, Dist.- East Singhbhum, Jharkhand (2.01 Ha).

Member Secretary, SEIAA has sought clarification vide letter no. 632, dated – 24.12.2014 regarding certificate from DFO certifying the minimum distance of forest from the project site. During the presentation made in September, 2014 the PP indicated vide letter dated 18.11.2014 that this project was a case of renewal that some additional Plot no. 70, 73 to 75 & 81 were mentioned in the original application for which renewal is not applicable. PP has written that he will apply separately for getting EC in respect of plot no.- 70, 73 to 75 & 81 which are mentioned in the mining permit (renewal) are to be considered only for grant of EC. Since this is

a case of renewal and the distance of the mine from forest is 90 m against stipulation of 50 m. Based on the above information, SEAC recommends for grant of EC for Plot no.- 35 A, 35 B, 71 & 71/1032 only.

The matter was discussed and it was decided that the case be recommended for grant of EC.

4. **Stone Boulder Mining for M/s Gupta Minerals at Vill.- Haridih, Thana-Ghatsila,Dist.- East Singhbhum, Jharkhand (0.64 Ha).**

It was decided that Dr. M.C. Mahata, Member, SEAC will a visit to site and based on his observation SEAC will forward its views in the Part 'B' of the minutes.

5. **Betla Graphite , Quartz & Felspar Mine of M/S Parijat Mining Industries (India) Pvt. Ltd at Village- Betla, Dist.- Latehar, Jharkhand (7.216 Ha).**

SEIAA in its MOM of 27th meeting has recorded

Quote "***SEIAA finds that all these projects are related to major minerals and the area involved is more that 5.0 ha. As per the GoI guidelines ToRs have to be prescribed before considering issuing the EC.***

SEAC needs to revisit its recommendations". Unquote

SEAC has revisited the file and the following points are brought to the attention of SEIAA **which remained unnoticed by SEIAA.**

I. The file has been transferred from MoEF to SEIAA office on dated 29/04/2013.
II. ToR was recommended in 6th meeting of SEAC held on 17th & 18th June, 2013.
III. SEIAA issued ToR to the PP vide letter no.- 106, dated - 14/08/2013.
IV. SEIAA had written to the Principal Secretary, Department of Forests & Environment, Govt. of Jharkhand for initiating credible action against the proponent for violation of the EP Act vide letter no.- 279, dated 21.02.2014 (Available in separate file)
V. JSPCB has issued letter no.- 2217, dated 27/08/2014 to CJM, Latehar for credible action.

The above documents are available in the file and point related to ToR has been highlighted in the buff sheet also.

As recommended earlier by SEAC, EC may be issued by SEIAA.

6. **Chirodih Bauxite Mine of Sri Madan Mohan Prasad Singh at Village- Chirodih, Taluka- Bishunpur, Dist.- Gumla, Jharkhand (31.417 Ha).**

SEIAA in its MOM of 27th meeting has recorded

Quote "***SEIAA finds that all these projects are related to major minerals and the area involved is more that 5.0 ha. As per the GoI guidelines ToRs have to be prescribed before considering issuing the EC.***

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SEAC has revisited the file and the following points are brought to the attention of SEIAA **which remained unnoticed by SEIAA.**

I. The file has been transferred from MoEF to SEIAA office on dated 29/04/2013.
II. ToR was recommended in 6th meeting of SEAC held on 17th & 18th June, 2013.
III. SEIAA issued ToR to the letter no.- 107, dated - 14/08/2013.
VI. SEIAA had written to the Principal Secretary, Department of Forests & Environment, Govt. of Jharkhand for initiating credible action against the proponent for violation of the EP Act vide letter no.- 279, dated 21.02.2014 (Available in separate file).
IV. JSPCB had issued letter no.- 2376, dated 15/09/2014 to CJM, Gumla for credible action.

The above documents are available in the file and point related to ToR has been highlighted in the buff sheet also.

As recommended earlier by SEAC, EC may be issued by SEIAA.

7. Narma Bauxite Mine of Sri Madan Mohan Prasad Singh at Village- Narma, Taluka- Bishunpur, Dist.- Gumla, Jharkhand (21.00 Ha).

SEIAA in its MOM of 27th meeting has recorded

Quote "***SEIAA finds that all these projects are related to major minerals and the area involved is more that 5.0 ha. As per the GoI guidelines ToRs have to be prescribed before considering issuing the EC.***

SEAC needs to revisit its recommendations". Unquote

SEAC has revisited the file and the following points are brought to the attention of SEIAA **which remained unnoticed by SEIAA**.

I. The file has been transferred from MoEF to SEIAA office on dated 29/04/2013.
II. ToR was recommended in 7th meeting of SEAC held on 16th to 18th July, 2013.
III. SEIAA issued ToR to the letter no.- 183, dated - 26/11/2013.
VII. SEIAA had written to the Principal Secretary, Department of Forests & Environment, Govt. of Jharkhand for initiating credible action against the proponent for violation of the EP Act vide letter no.- 279, dated 21.02.2014 (Available in separate file).
IV. JSPCB had issued letter no.- 2377, dated 15/09/2014 to CJM, Gumla for credible action.

The above documents are available in the file and point related to ToR has been highlighted in the buff sheet also.

As recommended earlier by SEAC, EC may be issued by SEIAA.

8. Iron Ore Beneficiation Washing / processing of M/S Shree Balaji Industrial Engineering Limited at Village- Basti Road, P.O- Barajamda, Dist.- West Singhbhum, Jharkhand.

As mentioned in the minutes of SEIAA, SEAC has revisited the file. The following points are brought to the attention of SEIAA.

I. The industry was established during 2005-06.
II. NOC was issued by JSPCB vide letter no.- N-173, dated- 09.03.2005.
III. This unit (400 tpd Sponge Iron) was established before the 2006 notification (14th September, 2006) came into force and was not required to obtain EC as per 1994 notification.
IV. As per MoEF circulars [F.No. J-11013/41/2006-IA-II(I), dated 21st November, 2006 & F.No. J-11013/41/2006-IA-II(I) (part), dated 15th January, 2008] such units were not required to take EC if established before the EIA notification dated 14th September 2006 and had obtained NOC prior to 14.09.2006.
V. Since this units are going for modernisation / expansion and are covered under the 2006 notification. They have applied for issue of EC.

The above considerations were taken in to before recommendations were made to SEIAA for issue of ToR's. It is further recommended that the PP be allowed to get the monitoring started from 1st March 2015.

9. LPG Bottling Plant of M/S Hindustan Petroleum Corporation Limited at Adityapur Industrial Area, Large Sector, Village- Gamharia, P.O- Gamharia, Dist.- East Singhbhum, Jharkhand.

As mentioned in the minutes of SEIAA, SEAC has revisited the file. The following points are brought to the attention of SEIAA.

I. The industry was established during 29th March, 2000.
II. Emission Consent Order was issued by BSPCB vide letter no.- J-3811, dated 05.09.2000
III. Discharge Consent Order was issued by BSPCB vide letter no.- J-3819, dated 06.09.2000
IV. This unit was established before the 2006 notification (14th September, 2006) came into force and was not required to obtain EC as per 1994 notification.
V. As per MoEF circulars [F.No. J-11013/41/2006-IA-II(I), dated 21st November, 2006 & F.No. J-11013/41/2006-IA-II(I) (part), dated 15th January, 2008] such units were not required to take EC if established before the EIA notification dated 14th September 2006 and had obtained NOC prior to 14.09.2006.
VI. Since this units are going for expansion and are covered under the 2006 notification. They have applied for issue of EC.

The above considerations were taken in to before recommendations were made to SEIAA.

10. Cluster Mines Datebera Stone Deposit of M/S Veer Birsa Minerals at Village- Datebera, P.S- Ghatsila, Dist.- East Singhbhum, Jharkhnad (3.03 Ha) + (2.02) = 5.05 Ha. & Cluster Mines Juri Pahari Stone Mine (2.83 Ha) & Sonaposh and Datebera Stone Mine (7.40 Ha).

As mentioned in the minutes of SEIAA, SEAC revisited the files. It is observed that DMO has issued a certificates separately for Cluster Mines of Datebera Stone Deposit of M/S Veer Birsa Minerals at Village- Datebera, P.S- Ghatsila, Dist.- East Singhbhum, Jharkhnad (3.03 Ha) + (2.02) = 5.05 Ha and Cluster Mines of Juri Pahari Stone Mine (2.83 Ha) & Sonaposh and Datebera Stone Mine (7.40 Ha) Based on the certificates and the presentation made, ToRs were recommended for two separate individual EIA/EMP reports. Further, these two clusters are 700 m apart as per google map. The above considerations were taken in to before recommendations were made to SEIAA for issue of ToR's.

C. Matters referred by SEIAA vide letter no.- 633, dated 31/12/2014 and MOM of SEIAA's 28th meeting held on 30/12/2014

1. OSD Coke Private LTD. (Unit 2), BIADA, Kandra Industrial Area, Bhitia, District Dhanbad, Jharkhand.

Kindly refer Annexure I

2. OSD Coke Private LTD.(Unit 1), Village Amjhore, P.O. Baliapur, District Dhanbad, Jharkhand.

Kindly refer Annexure II

3. Stone Boulder Mining of M/s Shaping Mines & Minerals Pvt. Ltd at Vill- Bhulkuli, P.O- Saraikela Kharsawan, Dist.-Saraikela, Jharkhand (1.68 Ha).

As suggested Dr. M.C. Mahata, Member, SEAC will a visit to site and based on same SEAC will forward its views in the Part B of the minutes.

D. Projects recommended to SEIAA for consideration of issue of TOR.

4. Ramkrishna Forgings ltd at Village – Bholadih, Tehsil- kolebira, Dist.- Saraikela Kharsawan, Jharkhand.

Ramkrishna Forgings Ltd at present operates Forging Plant of capacity 29100 TPA with matching finishing line, at Plant – V, Village: Bholadih, Kolebira, Dist. Saraikela - Kharsawan,

Jharkhand. For the proposed expansion (Existing: 24.75 Acres) no additional land is required. Latitude and longitude of the project site is 22° 47' 50" N and 86° 01' 34" E respectively. No Forest land is involved. No national park/wild life sanctuary/ecologically sensitive area located within 10 km radius of the project site. The total cost of the project is Rs. 594.72 Crores.
The power requirement is 20MW and water requirement 495m³/day (95m³/day existing 400m³/day proposed)
The status of existing and proposed expansion units are as given below:

Existing Units:

Plant/Unit	Item of manufacture	Existing Capacity per Annum
Forging unit with machining and finishing – Press line installed: 1x12500 T + 1 x 4500 T and 1 x 3150 T	Front Axle Beam	14500 TPA
	Crank Shaft	7800 TPA
	Stub Axle	5300 TPA
	Connectjng Rod/ Steering Arm	1500 TPA
	Total: Forgings –	**29100 TPA**

Proposed Units

Plant Facilities - addition	Product - addition	Capacity - addition per Annum
Forging unit with machining and finishing – Press line addition: 1x12500 T and 1 x 6300 T	**Machinery & Forgings**	**50900 TPA**
Matching Propane based SQF Heat Treatment and Machining Line		

Final Capacity

Product Name	Wt. in TPA
Various Forged, Machined & Finished components (FA Beam Crank Shaft Forged Stub Axles Connecting Rod IADB Knuckle Optimized Knuckle Crank Shaft)	80000 TPA
Total	**80000 TPA**

The project authorities along with their consultant M/s. Visiontek Consultancy Services Pvt. Ltd., Bhubneswar 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.

Environment Clearance was not required for the existing unit as the capacity of the plant was below 30000 TPA (threshold capacity of secondary metallurgical units as per S.O. 3067, dated 01.12.2009, GOI). NOC (CTE) and CTO of the existing unit was obtained from JSPCB vide letter no. G-294, dated 21.01.14 and G-2056, dated 6.6.14 respectively.

A site visit was undertaken by Sri R. N. Kashyap, Secretary SEAC and Sri S.K. Singh, Member SEAC on 27.12.2014 and submitted their report (**Copy enclosed**)

Based on the information contained in the documents submitted, the presentation made before the State Level Expert Appraisal Committee (SEAC) during its Meetings held during 15th to 18th December 2014 & 12th to 15th January 2015 the above mentioned site visit report the Committee recommends issuing of TORs for consideration of SEIAA for undertaking detailed EIA / EMP study based on baseline data for the months of March to May 2015.

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

1 Executive summary of the project.

2 Photographs of the existing and proposed plant area.

3 A certified report of the status of compliance of the conditions stipulated in the environmental clearance and Consent to Operate for the existing units of the project from JSPCB.

4 That the proponent shall dispose hazarders wastes in the manner as Specified under respective rules – of Hazarders waste management under Environmental protection Act, 1986

5 In case of storage of Hazardous wastes inside factory premises- the unit shall create secured land fill or pucca storage pit of proper size and shape before sending it to authorized recycler or to secured land fill-outside the factory premises.

6 That the proponent shall construct Effluent Treatment plant for coolant recovery. The recovered coolant shall be utilized as far as possible or to be sold to authorized / registered recycler.

7 The effluent generated form painting section and phospheting section shall be treated to the prescribed limit of central pollution control board and shall be utilized properly or shall be kept in close circuit.

8 The proponent shall maintain a good housekeeping by regular cleaning and wetting of ground.

9 Recent monitoring report which shall include data on AAQ, stack emission data, water quality, solid waste etc. shall be submitted.

10 The proponent shall obtains /OHSAS 18001 Certification within three years.

11 That the occupier shall abide by applicable provisions of the water (prevention & control of pollution) Act – 1974, The Air (prevention & control of pollution) Act, 1981, the

Environment (protection) Act, 1986 and Rules there under and also other related Pollution Control Acts.

12 Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, compliance to the notice(s).

13 A site location map on Indian map of 1:10, 00,000 scale followed by 1:50,000/1:25,000 scale on an A3/A2 sheet with at least next 10 Kms of terrains i.e. circle of 10 kms and further 10 kms on A3/A2 sheets with proper longitude/latitude/heights with min. 100/200 m. contours should be included. 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site.

14 Present land use should be prepared based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quick bird, Ikonos, IRS P-6 pan sharpened etc. for the 10Km radius area from proposed site. The same should be used for land used/land-cover mapping of the area.

15 Details and classification of total land (identified and acquired) should be included. Necessary documents indicating acquisition of land should be included.

16 Coordinates of the plant site with topo sheet co-ordinates should also be included.

17 A list of industries within 10 km radius of the plant area.

18 Residential colony should be located in upwind direction.

19 Action plan for the green belt development plan in 33 % area should be included. The species selected should be able to thrive on low nutrient soil. They should be able to adapt to local conditions and should be resistant to drought and extreme temperatures. PP should take up this activity immediately (since land has already been procured) and the details of plantation done should be given in EIA Report. The details of plantation already done should be given.

20 Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife corridors, Tiger/Elephant reserves (existing as well as proposed), if any, within 10 km of the project should be clearly indicated. Necessary clearance, if any, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above should be obtained from the State Wildlife Department/ Chief Wildlife Warden under the Wildlife (Protection) Act, 1972 and copy furnished.

21 A detailed biological study for the study area [core zone and buffer zone (10 km radius of the periphery of the project) shall be carried out. Details of flora and fauna, duly authenticated, separately for core and buffer zone should be furnished based on 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 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.

22 At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on Public Hearing proceedings and item-wise details along with time bound action plan should be included. Socio-economic development activities need to be elaborated upon.

23 Total capital cost and recurring cost/annum for environmental pollution control measures should also be included.

24 Any litigation pending against the project and / or any direction / order passed by any Court of Law against the project, if so, details thereof.

Process Related:

25 A line diagram / flow sheet for the process including existing units and EMP shall be submitted. Also details of technology may be included. EIA/EMP report should cover impacts due to existing and proposed units and mitigation g sanc

26 Project site layout plan showing raw materials and other storage plans, bore well or water storage, aquifers (within 1 km.) green areas, water bodies and rivers/drainage passing through the project site should be included.

27 List of raw material required and source along with mode of transportation should be included. All the trucks for raw material and finished product transportation must be "Environmentally Compliant".

28 Mass balance for the raw material and products should be included.

29 Studies for slurry, sludge material and solid waste generated should also be included, if the raw materials used has trace elements and a management plan. Manufacturing process details for all the process units should be included.

30 Possibility of installation of WHRB will be explored and details included.

31 Energy balance data for all the components should be incorporated.

Air Environment

32 Site-specific micro-meteorological data like temperature, relative humidity, hourly wind speed and direction, rainfall etc.

33 Ambient air quality at monitoring should be carried out adequately as per NAAQS 2009. Ambient air quality monitoring along with cumulative impact should be included for the day (24 hrs) for maximum GLC along with following:

i. Emissions (g/second) with and without the air pollution control measures.

ii. Meteorological inputs (wind speed, m/s), wind direction, ambient air temperature, cloud cover, relative humidity & mixing height using SODAR on hourly basis.

iii. Model input options for terrain, plume rise, deposition etc.

iv. Print-out of model input and output on hourly and daily average basis.

v. A graph of daily averaged concentration (MGLC scenario) with downwind distance at every 500 m interval covering the exact location of GLC.

vi. Details of air pollution control methods used with percentage efficiency that are used for emission rate estimation with respect to each pollutant.

vii. Applicable air quality standards as per LULC covered in the study area and % contribution of the proposed plant to the applicable Air quality standard. In case of expansion project, the contribution should be inclusive of both existing and expanded capacity.

viii. No. I-VII are to be repeated for fugitive emissions and any other source type relevant and used for industry.

ix. Graphs of monthly average daily concentration with down-wind distance.

x. Specify when and where the ambient air quality standards are exceeded either due to the proposed plant alone or when the plant contribution is added to the background air quality.

34 Fugitive dust protection or dust reduction technology for workers within 30 m of the plant active areas.

35 Determination of atmospheric inversion level at the project site and assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features.

36 Air pollution control measures during charging of raw materials and during operation of the furnace shall be detailed.

37 Air Quality Impact Predication based on CPCB/MoEF approved model(s) shall be presented.

38 Impact of the transport of the raw materials and end products on the surrounding environment should be assessed and provided.

39 An action plan to control and monitor secondary fugitive emissions from all the sources as per the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008.

Water Environment

40 Presence of aquifer/aquifers within 1 km of the project boundaries and management plan for recharging the aquifer should be included.

41 If surface water is used from river, rainfall, discharge rate, quantity, drainage and distance from project site should also be included.

42 Ground water analysis at 8 locations with bore well data, litho-logs, drawdown and recovery tests to quantify the area and volume of aquifer and its management.

43 'Permission' for the drawl of water should be obtained from concerned authorities. Water balance data must be provided.

44 Action plan for rainwater harvesting measures should be prepared and the same should be got duly approved from Ground Water Directorate, Government of Jharkhand / Central Ground Water Board / Authority .

45 Surface water quality at 8 locations must be ascertained.

46 If the site is within 10 km radius of any major river, Flood Hazard Zonation Mapping is required at 1:5000 to 1;10,000 scale indicating the peak and lean river discharge as well as flood occurrence frequency.

47 Pre-treatment of raw water, treatment plant for waste water should be described in detail. Design specifications may be included.

48 Total water requirement in expansion project is 495 KLD along with the existing water requirement of 95 KLD. As per project report the source of water supply will be ground water. In such case. NOC is required from Central Ground water Board for withdrawal of Ground Water.

Solid Waste Management

1 Action plan for solid/hazardous waste generation, storage, utilization and disposal particularly char/slag/tailings from all the sources should also be included.

2 Identification and details of land to be used for all type of char/slag/tailings disposal in the secured land fill as per CPCB guidelines should be included.

3 End use of solid waste/slag and its composition should be covered.

4 That the proponent shall use all solid wastes generated during sizing, cutting, forgings etc. as resource of raw material.

5 Toxicity should be assessed following standard leaching procedures particularly the Toxicity Characteristic Leachate Procedure (TCLP) test for the slag.

Safety and Health

49 Risk/Disaster Management needs to be provided.

50 Occupational Health:

a) Details of existing Occupational & Safety Hazards. What are the exposure levels of above mentioned 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,

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

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

d) Plan and fund allocation to ensure the occupational health & safety of all contract and sub-contract workers.

e) In forging and Machining operation – the unit shall maintained noise level within permissible limit i.e. 70dB (A). Regular maintenance of equipments shall be required in reducing noise level.

f) That the proponent shall adopt clean technology in forging operation to minimise Air, Water and noise Pollution.

51 Corporate Environment Policy

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

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

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

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

52 Public hearing.

The following general points should be noted:

I. Properly indexed, page numbered.

II. Period/date of data collection should be clearly indicated. (non-monsoon)

III. Authenticated English translation of all material in Regional languages should be provided.

IV. The letter/application for environmental clearance should quote the SEIAA, Jharkhand file No. and also attach a copy of the letter.

V. Site related monitoring shall be carried out for 3 months in one season (non monsoon).

VI. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report

VII. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.1I (I) dated 4th August, 2009, which are available on the website of this Ministry should also be followed.

VIII. The consultants involved in the preparation of EIA / EMP report after accreditation with Quality Council of India (QCI) / National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA /EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc.

It was decided that 'TORs' prescribed by the State level Environment Impact Assessment Authority (SEIAA) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation should be provided. The final EIA report shall be submitted to the SEIAA for obtaining environmental clearance.

The TORs prescribed shall be valid for a period of two years for submission of the EIA/EMP Report as per OM F No. J11013/41/2006-IA-II(I) part dated 22nd August 2014.

5.' Magnetite Iron Ore Beneficiation Plant of M/s Radhika Enterprises at Mouza- Hiramili, P.O.-Chandil, Tehsil- Chandil, District- Sariakela-Kharsawan, Jharkhand.

M/s Radhika Enterprises at Proposed Magnetite Iron Ore Beneficiation Plant having 24,000 TPA at Mouza- Hiramili, P.O.-Chandil, Tehsil- Chandil, District- Sariakela- Kharsawan, Jharkhand. The latitude and longitude of the project site is 22° 58' 10.17" N and 86°01'46.74" E respectively. No Forest land is involved. No national park/wild life sanctuary/ecologically sensitive area located within 10 km radius of the project site. The cost of the project is Rs. 98.75 Lakhs. The power requirement has been indicated as 223 kw and water requirement as 78 to 80 KLD i.e. m^3/day. Land required for the project is 2 acres
The status of proposed units are as given below:-

Proposed Units

S.	Plant details	Capacity

No.		
1.	Magnetite Iron Ore Beneficiation	24,000 TPA

The project authorities along with their consultant M/s Envirotech East Pvt. Ltd., Kolkata 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 17 to 20 November 2014, 15 to 18 December 2014 & 12 to 15 January 2015 the Committee recommends issuing of TORs for consideration of SEIAA for undertaking detailed EIA / EMP study.

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

11. Executive summary of the project.
12. Photographs of the proposed plant area.
13. A site location map on Indian map of 1:10, 00,000 scale followed by 1:50,000/1:25,000 scale on an A3/A2 sheet with at least next 10 Kms of terrains i.e. circle of 10 kms and further 10 kms on A3/A2 sheets with proper longitude/latitude/heights with min. 100/200 m. contours should be included. 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site.
14. Present land use should be prepared based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quick bird, Ikonos, IRS P-6 pan sharpened etc. for the 10Km radius area from proposed site. The same should be used for land used/land-cover mapping of the area.
15. Details and classification of total land (identified and acquired) should be included. Necessary documents indicating acquisition of land should be included.
16. Coordinates of the plant site with topo sheet co-ordinates should also be included.
17. A list of industries within 10 km radius of the plant area.
18. Residential colony should be located in upwind direction.
19. Action plan for the green belt development plan in 33 % area should be included. The species selected should be able to thrive on low nutrient soil. They should be able to adapt to local conditions and should be resistant to drought and extreme temperatures. PP should take up this activity immediately (since land has already been procured) and the details of plantation done should be given in EIA Report. The details of plantation already done should be given.
20. Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife corridors, Tiger/Elephant reserves (existing as well as proposed), if any, within 10 km of the project should be clearly indicated. Necessary clearance, if any, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above should be obtained from the State Wildlife Department/ Chief Wildlife Warden under the Wildlife (Protection) Act, 1972 and copy furnished.
21. A detailed biological study for the study area [core zone and buffer zone (10 km radius of the periphery of the project) shall be carried out. Details of flora and fauna, duly authenticated,

separately for core and buffer zone should be furnished based on 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 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.

22. At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on Public Hearing proceedings and item-wise details along with time bound action plan should be included. Socio-economic development activities need to be elaborated upon.
23. Total capital cost and recurring cost/annum for environmental pollution control measures should also be included.
24. Any litigation pending against the project and / or any direction / order passed by any Court of Law against the project, if so, details thereof.

Process Related:

25. A line diagram / flow sheet for the process including existing units and EMP shall be submitted. Also details of technology may be included.
26. Project site layout plan showing raw materials and other storage plans, bore well or water storage, aquifers (within 1 km.) green areas, water bodies and rivers/drainage passing through the project site should be included.
27. List of raw material required and source along with mode of transportation should be included. All the trucks for raw material and finished product transportation must be "Environmentally Compliant".
28. Mass balance for the raw material and products should be included.
29. Studies for slurry, sludge material / tailings and solid waste generated should also be included, if the raw materials used has trace elements and a management plan. Manufacturing process details for all the process units should be included.
30. Energy balance data for all the components should be incorporated.

Air Environment

31. Site-specific micro-meteorological data like temperature, relative humidity, hourly wind speed and direction, rainfall etc.
32. Ambient air quality at monitoring should be carried out adequately as per NAAQS 2009. Ambient air quality monitoring along with cumulative impact should be included for the day (24 hrs) for maximum GLC along with following:
    i. Emissions (g/second) with and without the air pollution control measures.
    ii. Meteorological inputs (wind speed, m/s), wind direction, ambient air temperature, cloud cover, relative humidity & mixing height using SODAR on hourly basis.
    iii. Model input options for terrain, plume rise, deposition etc.
    iv. Print-out of model input and output on hourly and daily average basis.
    v. A graph of daily averaged concentration (MGLC scenario) with downwind distance at every 500 m interval covering the exact location of GLC.
    vi. Details of air pollution control methods used with percentage efficiency that are used for emission rate estimation with respect to each pollutant.

vii. Applicable air quality standards as per LULC covered in the study area and % contribution of the proposed plant to the applicable Air quality standard. In case of expansion project, the contribution should be inclusive of both existing and expanded capacity.

viii. No. I-VII are to be repeated for fugitive emissions and any other source type relevant and used for industry.

ix. Graphs of monthly average daily concentration with down-wind distance.

x. Specify when and where the ambient air quality standards are exceeded either due to the proposed plant alone or when the plant contribution is added to the background air quality.

33. Fugitive dust protection or dust reduction technology for workers within 30 m of the plant active areas.

34. Determination of atmospheric inversion level at the project site and assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features.

35. Air pollution control measures during charging of raw materials and during operation of the furnace shall be detailed.

36. Air Quality Impact Predication based on CPCB/MoEF approved model(s) shall be presented.

37. Impact of the transport of the raw materials and end products on the surrounding environment should be assessed and provided.

38. An action plan to control and monitor secondary fugitive emissions from all the sources as per the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008.

Water Environment

39. Presence of aquifer/aquifers within 1 km of the project boundaries and management plan for recharging the aquifer should be included.

40. If surface water is used from river, rainfall, discharge rate, quantity, drainage and distance from project site should also be included.

41. Ground water analysis at 8 locations with bore well data, litho-logs, drawdown and recovery tests to quantify the area and volume of aquifer and its management.

42. 'Permission' for the drawl of water should be obtained from concerned authorities. Water balance data must be provided.

43. Action plan for rainwater harvesting measures should be prepared and the same should be got duly approved from Ground Water Directorate, Government of Jharkhand / Central Ground Water Board / Authority .

44. Surface water quality at 8 locations must be ascertained.

45. If the site is within 10 km radius of any major river, Flood Hazard Zonation Mapping is required at 1:5000 to 1;10,000 scale indicating the peak and lean river discharge as well as flood occurrence frequency.

46. Pre-treatment of raw water, treatment plant for waste water should be described in detail. Design specifications may be included.

Solid Waste Management

47. Action plan for solid/hazardous waste generation, storage, utilization and disposal particularly sludge/tailings from all the sources should also be included.

48. Identification and details of land to be used for all type of solid waste tailings disposal in the secured land fill as per CPCB guidelines should be included.
49. End use of solid waste/tailings and its composition should be covered.
50. Toxicity should be assessed following standard leaching procedures particularly the Toxicity Characteristic Leachate Procedure (TCLP) test for the slag.
51. Proposed treatment of runoff from the tailings pond if any, should be provided. The water collected has to be analysed and reused in the plant.

Safety and Health

52. Risk assessment and disaster management plan should inter-alia include breach of tailing pond, if any, pipeline failure and over flow from the tailing pond etc., if any, proposed in the project.
53. Details regarding expected Occupational & Safety Hazards. Protective measures for Occupational Safety & Health hazards so that such exposure can be kept within permissible exposure level so as to protect health of workers. Health of the workers with special reference to Occupational Health. Plan of exposure specific health status evaluation of workers; pre placement and periodical health status of workers; plan of evaluation of health of workers by pre designed format, chest x ray, Audiometry, Spirometry Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations and plan of monthly and yearly report of the health status of workers with special reference to Occupational Health and Safety.
54. Biological as well as health impact of fines and other dust generated in the plant should be studied. The proposed mitigation measures with EMP should also be provided.
55. Other issues
    a. Impact on local transport infrastructure due to the project should be evaluated. Projected increase in truck traffic as a result of the project in the present road network (including those outside the project area) and whether it is capable of handling the increased load should be estimated. Arrangement for improving the infrastructure, if contemplated including action to be taken by other agencies such as State Government, if any, should be covered.
    b. Measures of socio economic influence to the local community proposed to be provided by project proponent. As far as possible, quantitative dimension should be given.
    c. Detailed environmental management plan to mitigate the environmental impacts due to the project should be prepared and furnished.
    d. The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage clearly showing the land features of the adjoining area.
56. Corporate Environment Policy
    i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
    ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms/ conditions? If so, it may be detailed in the EIA.
    iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
    iv. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.
57. Public hearing.

The following general points should be noted:

i. Properly indexed, page numbered.
ii. Period/date of data collection should be clearly indicated. (non-monsoon)
iii. Authenticated English translation of all material in Regional languages should be provided.
iv. The letter/application for environmental clearance should quote the SEIAA, Jharkhand file No. and also attach a copy of the letter.
v. Site related monitoring shall be carried out for 3 months in one season (non monsoon).
vi. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report
vii. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.1I (I) dated 4th August, 2009, which are available on the website of this Ministry should also be followed.
viii. The consultants involved in the preparation of EIA / EMP report after accreditation with Quality Council of India (QCI) / National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA /EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc.

It was decided that 'TORs' prescribed by the State level Environment Impact Assessment Authority (SEIAA) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation should be provided. The final EIA report shall be submitted to the SEIAA for obtaining environmental clearance.

The TORs prescribed shall be valid for a period of two years for submission of the EIA/EMP Report as per OM F No. J11013/41/2006-IA-II(I) part dated 22nd August 2014.

MOM in respect of all other projects discussed during the 25th meeting of SEAC will be forwarded as Part 'B' once the MOM are signed by all members and Chairman.

The next meeting shall be held from 16th to 18th February, 2015
The meeting concluded with thanks to all present.

(S.B.S Chauhan)
Member

(Er S K Singh)
Member

(Dr. R.P. Singh Sangu)
Member

(Prof (Dr) Shatrunjay Singh)
Member

(R.N. Kashyap)
Secretary

(A K Saxena)
Chairman

Annexure I

SEIAA had made the following observations in respect of OSD Coke (Unit 2)

1. ***SEIAA observed that EIA / EMP Reports generally did not meet the compliance of the TOR's as prescribed particularly w.r.t. Sl. No 6, 7 13, 15-25, 28-33, 35, 37-42.***
2. ***Environmental Quality Data should be rechecked / redone providing the methodology & instruments used, observations, results of analysis and the detection limits etc.***
3. ***Modelling input & output data is also required providing how the predicting levels arrived.***
4. ***Action Plans with Design parameters to control various environmental parameters are also required.***

and desired that the project proponents re-submit the EIA / EMP Reports strictly adhering to the compliance of the TOR's as prescribed.

SEAC had gone through the above observations during the presentations and there after only recommended to SEIAA for grant of EC in its 24th meeting held in December 2014. SEIAA has now desired SEAC's views on the basis of above points (1 to 4).

The same (in respect of points 1, 2 & 3) are given in the table below. Regarding point 2 - list of instruments used is given alongwith the amendment to EIA Report.

Regarding point no 4 replies mentioned against TOR points 28, 31, 33, 35, 37, 39, 40 and 41 cover and include the action plan with design to control various environmental parameters. Action plans with design parameters to control various environmental parameters are also discussed on pages 54 to 58.

TOR Point	As mentioned in Addendum to EIA Report	Views of SEAC
TOR 6: A site location map on Indian map of 1:10, 00,000 scale followed by 1:50,00011:25,000 scaie on an A3/A2 sheet with at least next 10 Kms of terrains i.e. circle of 10 kms and further 10 kms on A3/A2 sheets with proper longitude/latitude/heights with min. 100/200 m. contours should be included 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposai site.	The desired information as per TOR is given in Figures at page no. Page – 3. 4. Maps in A3 size are attached separately.	Details provided were found to be OK.

TOR 7: Present land use should be prepared based on satellite imagery. High-resolution satellite image data having 1m-Sm spatial resolution like quickbird, Ikonos, IRS P-O pan sharpened etc. for the 10 Km radius area from proposed site. The same should be used for land used/land-cover mapping of the area	The desired information as per TOR is given in Pages - 5, 6, 7	Details provided were found to be OK.
TOR 13 : Quantification and Characterization of solid /hazardous waste & its action plan for management should be included	The desired information as per TOR is given in Pages – 8,9	Details provided were found to be O K.
TOR 15: Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall is necessary.	Data was rechecked in May 2014 and the same is given on Pages – 10, 11	Redone as per comments of SEIAA and found to be OK
TOR 16: Ambient air quality at 8 locations within the study area of 10 km., aerial coverage from project site with one AAQMS in downwind direction should be carried out.	Data was rechecked in May 2014 and the same is given on Pages – 12, 13, 14	Redone as per comments of SEIAA and found to be OK
TOR 17: The suspended particulate matter present in the ambient air must be analyzed for the presence of poly-aromatic hydrocarbons (PAH), i.e. Benzene soluble fraction. Chemical characterization of RSPM and incorporating of RSPM data.	Data was rechecked in May 2014 and the same is given on Page – 14	Redone as per comments of SEIAA and found to be OK
TOR 19: Ambient air quality as per National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 should be included.	The desired information as per TOR is covered under reply to TOR point no 16 (Pages – 12, 13, 14)	Details provided were found to be O K.

TOR 20: Air Quality Impact Predication Modeling based on ISCST-3 or the latest models	The desired information as per TOR is given on Pages – 15-25	Details of modeling, input & output provided as per comments of SEIAA.
TOR 21: Impact of the transport of the raw materials and end products on the surrounding environment should be assessed and provided	The desired information as per TOR is given on Pages – 25 - 26	Details provided were found to be OK.
TOR 22: An action plan to control and monitor secondary fugitive emissions from all the sources as per the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008	The desired information as per TOR is given on Pages - 26,27	Details provided were found to be OK.
TOR 23: Presence of aquifer/aquifers within 1 km of the project boundaries and management plan for recharging the aquifer should be included	The desired information as per TOR is given on Pages - 27-30	Details provided were found to be OK.
TOR 24: Source of surface/ground water level, site (GPS), cation, anion (Ion Chromatograph), metal trace element (as above) chemical analysis for water to be used. If surface water is used from river, rainfall, discharge rate, quantity, drainage and distance from project site should also be included	Data was rechecked in May 2014 and the same is given on Pages - 31,32	Redone as per comments of SEIAA and found to be OK (in line with Class C of IS 2296 – 1982)
TOR 25: Ground water analysis with bore well data, litho-logs, drawdown and recovery tests to quantify the area and volume of aquifer and its management	Data was rechecked in May 2014 and the same is given on Pages 33,34	Redone as per comments of SEIAA and found to be OK

TOR 28: Action plan for rainwater harvesting measures	The desired information as per TOR is covered under reply to TOR point no 23 (Pages – 27 to 30)	Details provided were found to be OK.
TOR 29: Surface water quality of nearby River (60 m upstream and downstream) and other surface drains at eight locations must be ascertained	The desired information as per TOR is covered under reply to TOR point no 23 (Pages – 31, 32)	Details provided were found to be OK.
TOR 30: Flood Hazard Zonation Mapping is required at 1:5000 to 1;10,000 scale indicating the peak and lean river discharge as well as flood occurrence frequency	The Plant area does not fall under flood prone area.	Details provided were found to be OK.
TOR 31: Pretreatment of raw water, treatment plant for waste water should be described in detail. Design specifications may be included	The desired information as per TOR is given on Pages – 35 to 37	Details provided were found to be OK.
TOR 32: Ground water monitoring minimum at 8 locations and near solid waste dump zone, Geological features and Geo-hydrological status of the study area are essential as also. Ecological status (Terrestrial and Aquatic) is vital.	The desired information as per TOR is covered under reply to TOR point no 25 (Pages – 33, 34)	Details provided were found to be OK.
TOR 33: Action plan for solid/hazardous waste generation, storage, utilization and disposal particularly slag from all the sources should also be included	The desired information as per TOR is covered under reply to TOR point no 13 (Pages – 8, 9)	Details provided were found to be OK.
TOR 35: End use of solid waste and its composition should be covered. Toxic metal content in the waste material and its composition should also be incorporated particularly of slag.	The desired information as per TOR is given in Pages – 37 to 40	Details provided were found to be OK.

TOR 37: Action plan for the green belt development plan in 33 % area should be included.	The desired information as per TOR is given in Pages – 40 to 42	Details provided were found to be OK.
TOR 38: Detailed description of the flora and fauna (terrestrial and aquatic) should be given with special reference to rare, endemic and endangered species	The desired information as per TOR is given in Pages - 43 to 45	Details provided were found to be OK.
TOR 39: Disaster Management Plan including risk assessment and damage control needs to be addressed and included	The desired information as per TOR is given in Pages – 46,47	Details provided were found to be OK.
TOR Point No. 40: Occupational health	The desired information as per TOR is given in Pages – 47 to 52.	Details provided were found to be OK.
TOR Point No. 41: At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on locals need and item-wise details along with time bound action plan should be included. Socio-economic development activities need to be elaborated upon	The desired information as per TOR is given in Pages – 52, 53	Details provided were found to be OK.
TOR Point No. 42: Total capital cost and recurring cost/annum for environmental pollution control measures should also be included	The desired information as per TOR is given in Page - 54	Details provided were found to be OK.

It may be noted that the above observations of SEAC were reflected in the minutes of meeting held on and the same need to be perused by SEIAA before asking for comments of SEAC.

Annexure II

SEIAA had made the following observations in respect of OSD Coke (Unit 1)

1. ***SEIAA observed that EIA / EMP Reports generally did not meet the compliance of the TOR's as prescribed particularly w.r.t. Sl. No 7, 8, 10, 12-26, 36, 38-43.***
2. ***Environmental Quality Data should be rechecked / redone providing the methodology & instruments used, observations, results of analysis and the detection limits etc.***
3. ***Modelling input & output data is also required providing how the predicting levels arrived.***
4. ***Action Plans with Design parameters to control various environmental parameters are also required.***

and desired that the project proponents re-submit the EIA / EMP Reports strictly adhering to the compliance of the TOR's as prescribed.

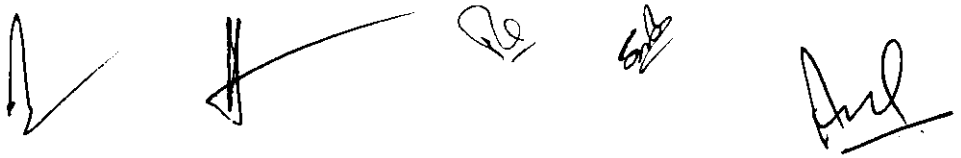
SEAC had gone through the above observations and recommended to SEIAA for grant of EC in its MOM of 24th meeting held in December 2014. SEIAA has now desired SEAC's views on the basis of above points (1 to 4).

The same (in respect of points 1, 2 & 3) are given in the table below. Regarding point 2 list of instruments used is given alongwith the amendment to EIA Report.

Regarding point no 4 replies mentioned against TOR points 29, 32, 34, 36, 38, 40, 41, 42 and 43 cover and include the action plan with design to control various environmental parameters. Action plans with design parameters to control various environmental parameters are also discussed on pages 67 to 78.

TOR Point	As mentioned in Addendum to EIA Report	Views of SEAC

TOR 7 - A site location map on Indian map of 1:10, 00,000 scale followed by 1:50,000 / 1:25,000 scale on an A3/A2 sheet with at least next 10 Kms of terrains i.e. circle of 10 kms and further 10 kms on A3/A2 sheets with proper longitude/latitude/heights with min. 100/200 m. contours should be included. 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site.	The desired information as per TOR is given in Figures at page no. Page – 3 to 7. Maps in A3 size are attached separately.	Details provided were found to be OK.
TOR 8 - Present land use should be prepared based on satellite imagery. High-resolution satellite image data having 1m-Sm spatial resolution like quickbird, Ikonos, IRS P-O pan sharpened etc. for the 10 Km radius area from proposed site. The same should be used for land used/land-cover mapping of the area	The desired information as per TOR is given in Pages – 8 and 9	Details provided were found to be OK.
TOR 10:A list of industries within 10 KM of the plant area	The desired information as per TOR is given in Pages – 10	Details provided were found to be O K.
TOR 12: Project site layout plan showing raw materials and other storage plans, bore well or water storage, aquifers (within 1 km.) dumping, waste disposal, green areas, water bodies, rivers/drainage passing through the project site should be included	The desired information as per TOR is given in Pages – 11	Details provided were found to be O K.



TOR 13: List of raw material required and source along with mode of transportation should be included. All the trucks for raw material and finishedproduct transportation must be Environmentally Compliant	The desired information as per TOR is given in Pages – 12	Details provided were found to be O K.
TOR 14: Quantification & Characterization of solid /hazardous waste & its action plan for management should be included	The desired information as per TOR is given in Pages – 13 and 14	Details provided were found to be O K.
TOR 15: Mass balance for the raw material and products should be included.	The desired information as per TOR is given in Pages – 15	Details provided were found to be O K.
TOR 16: Site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall is necessary.	Data was rechecked in May 2014 and the same is given on Pages – 15, 16, 17	Redone as per comments of SEIAA and found to be OK
TOR 17: Ambient air quality at 8 locations within the study area of 10 km., aerial coverage from project site with one AAQMS in downwind direction should be carried out.	Data was rechecked in May 2014 and the same is given on Page – 18, 19 & 20	Redone as per comments of SEIAA and found to be OK

TOR 18: The suspended particulate matter present in the ambient air must be analyzed for the presence of poly-aromatic hydrocarbons (PAH), i.e. Benzene soluble fraction. Chemical characterization of RSPM & incorporating of RSPM data	The desired information as per TOR is given in Pages – 20 & 21	Details provided were found to be OK.
TOR 19: Determination of atmospheric inversion level at the project site and assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features.	The desired information as per TOR is given in Pages – 21 & 22	Details provided were found to be OK.
TOR 20: Ambient air quality as per National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 should be included.	The desired information as per TOR is covered under reply to TOR point no 17 (Pages – 18, 19, 20)	Details satisfactory in both the reports and presentation
TOR 21: Air Quality Impact Predication Modeling based on ISCST-3 or the latest models	The desired information as per TOR is given in Pages – 22 to 31	Details of modeling, input, output provided have been provided as per comments of SEIAA.
TOR 22: Impact of the transport of the raw materials and end products on the surrounding environment should be assessed and provided.	The desired information as per TOR is given in Pages – 32-33	Details provided were found to be OK.
TOR 23: An action plan to control and monitor secondary fugitive emissions from all the sources as per the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008.	The desired information as per TOR is given in Pages – 33-34	Details provided were found to be OK.

TOR 24: Presence of aquifer/aquifers within 1 km of the project boundaries and management plan for recharging the aquifer should be included.	The desired information as per TOR is given in Pages – 34 to 43	Details provided were found to be OK.
TOR 25: Source of surface/ground water level, site (GPS), cation, anion (Ion Chromatograph), metal trace element (as above) chemical analysis for water to be used. If surface water is used from river, rainfall, discharge rate, quantity, drainage and distance from project site should also be included.	The desired information as per TOR is given in Pages – 43 to 45	Details provided were found to be OK.
TOR 26: Ground water analysis with bore well data, litho-logs, drawdown and recovery tests to quantify the area and volume of aquifer and its management.	The desired information as per TOR is covered under reply to TOR point no 24 & 25 (Pages – 34 to 45)	Details satisfactory in both the reports and presentation
TOR 29: Action plan for rainwater harvesting measures.	The desired information as per TOR is covered under reply to TOR point no 24 & 25 (Pages – 34 to 45)	Details satisfactory in both the reports and presentation
TOR 30: Surface water quality of nearby River (60 m upstream and downstream) and other surface drains at eight locations must be ascertained.	Data was rechecked in May 2014 and the same is given on Pages – 45 to 47	Redone as per comments of SEIAA and found to be OK (in line with Class C of IS 2296 – 1982)
TOR 31: If the site is within 10 km radius of any major river, Flood Hazard Zonation Mapping is required at 1:5000 to 1;10,000 scale indicating the peak and lean river discharge as well as flood occurrence frequency.	The Plant area does not fall under flood prone area.	Details provided were found to be OK.

TOR 32: Pretreatment of raw water, treatment plant for waste water should be described in detail. Design specifications may be included.	The desired information as per TOR is given in Pages - 48 to 49	Details provided were found to be OK.
TOR 33: Ground water monitoring minimum at 8 locations and near solid waste dump zone, Geological features and Geo-hydrological status of the study area are essential as also. Ecological status (Terrestrial and Aquatic) is vital	The desired information as per TOR is covered under reply to TOR point no 24 & 25 (Pages – 34 to 45) and page nos. 49, 50, 51, 52	Details provided were found to be OK.
TOR 34: Action plan for solid/hazardous waste generation, storage, utilization and disposal particularly slag from all the sources should also be included	The desired information as per TOR is covered under reply to TOR point no 14 (Pages – 13 & 14)	Details provided were found to be OK.
TOR 36: End use of solid waste and its composition should be covered. Toxic metal content in the waste material and its composition should also be incorporated particularly of slag.	The desired information as per TOR is covered under reply to TOR point no 14 (Pages – 13 & 14)	Details provided were found to be OK.
TOR. 38: Action plan for the green belt development plan in 33 % area should be included.	The desired information as per TOR is given in Pages – 52 & 53	Details provided were found to be OK.

TOR 39: Detailed description of the flora and fauna (terrestrial and aquatic) should be given with special reference to rare, endemic and endangered species.	The desired information as per TOR is given in Pages - 53 to 56	Details provided were found to be OK.
TOR Point No. 40: Disaster Management Plan including risk assessment and damage control needs to be addressed and included.	The desired information as per TOR is given in Pages – 57 to 59	Details provided were found to be OK.
TOR 41: : Occupational health a) Details of existing Occupational & Safety Hazards. What are the exposure levels of above mentioned 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, b) 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 abovementioned parameters as per age, sex, duration of exposure and department wise. c) Annual report of heath status of workers with special reference to Occupational Health and Safety.	The desired information as per TOR is given in Pages – 59 to 63.	Details provided were found to be OK.
TOR 42: At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details	The desired information as per TOR is given in Pages – 64 & 65	Details provided were found to be OK.

TOR 43: Corporate Environment Policy i) 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. ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA. iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions. Details of this system may be given. iv. Does the company has system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.	The desired information as per TOR is given in Pages – 65 & 66	Details provided were found to be OK.

Inspection Report

(Date of Inspection) 27/12/2014
RAMKRISHNA FORGINGS LIMITED
Village- Bholadih, P.O – Kolebira, Dist. Saraikela – Kharsawan, Jharkhand

Ramkrishna Forgings limited has applied for Environmental Clearance to SEIAA for its expansion of Forgings from 29100 TPA to 80,000 TPA. The unit falls in the category of 3(a) of EIA Notification 2006 – which is for metallurgical Jndustries (ferrous & non ferrous). The unit involved mainly Forgings of ferrous metal-which comes in the category of non toxic secondary metallurgical industry. There is no melting is required in forging as the metal is heated only up to temperature at which it could be re-shaped with pressure and force. It is mainly a combination of Engineering – Cutting, Smithy, pressing, Turning – Machining & heat – treatment. The input materials are of various type of steel ingots/billets/Round etc. Coolant, Tools & Dies and other items are variable requirements for plant operation Propane gas which is clean fuel - used in sealed quench furnace (SQF) for heat-treatment. The main activities involved in forging of ferrous metal are- cutting & sizing of input material – Electrical heating(no melting)- Pressing – Trimming – Machining(Turning, Milling & Drilling)- Heat treatment – shot blasting – inspection – Stacking and finally dispatch.

The proposed expansion site is located in village Bholadih, P.O – Kolebira, Dist. Saraikela – Kharsawan in the state of Jharkhand. The Proposed expansion will be established in the factory premises of existing unit. The existing Industrial sheds will be fully utilized for expansion project. In Expansion project as per requirement additional machines will be installed in the existing sheds. The expansion of project will take place within existing land area of 24.75 Acres. However in expansion project – painting work have been also proposed as per market demand. There is no interlinked project of expansion part. After expansion of the project the Forging capacity will increase from 29100 TPA to 80,000 TPA and in this case no extra land is required for expansion project. The revised capacity of plant will be 80,000 TPA. This includes various type of forged, semi finished components for Automobile and other Engineering parts.

The legal status of existing unit of Ramkrishna Forgings limited (Plant – v) are as follows:-

1. No objection certificate (consent to established) under section 25 8 26 of the water (prevention and control of pollution) Act, 1974 and under section 21 of the Air (prevention and control of pollution) Act, 1981 has been issued by Jharkhand State Pollution Control Board vide its letter no. G-294 dated 21-01-2014

Received through mail on dated 05.01.2015

2. After establishment of unit "consent to operate" (CTO) has been issued to unit under section 25/26 of the water (prevention and control of pollution) Act, 1974 and under section 21 of the Air (prevention and control of pollution) Act, 1981 for the period up to 30-09-2014. As informed by the Management of RKFL – "Consent to operate"– application has been submitted to JSPCB for further renewal of consent order – Which is under consideration with JSPCB.
3. M/S Ramkrishna Forgings Ltd – has been granted provisional authorization to operate a facility for collection ,reception, treatment storage, transport and disposal of hazardous waste in the premises stipulated- At-Bholadih, P.O – Kolebira, Dist. Saraikela – Kharsawan- vide its letter no – 1845 dated 7/7/2014
4. Rainwater Harvesting Scheme of Ramkrishan Forgings Ltd at Bholadih, P.O – Kolebira, Dist- Saraikela, Kharsawan has been already approved by the Director, Ground water Directorate, Govt. of Jharkhand, Ranchi vide its letter no:-GWD 295/Ranchi dated 17/8/2013. This Rain water harvesting scheme covers all 4 existing Industrial sheds of RKFL.
5. Looking to site visit and nature of Industry and based on subsequent discussion with Sakti Prasad Senapati (VP.CHR) and Shri Rahul kumar Bagaria (GM) of RKFL- TOR may be issued to RKFL for its expansion project with following specific conditions.

Specific conditions for TOR

1. That the proponent shall dispose hazarders wastes in the manner as Specified under respective rules – of Hazarders waste management under Environmental protection Act, 1986
2. In case of storage of Hazardous wastes inside factory premises- the unit shall create secured land fill or pucca storage pit of proper size and shape before sending it to authorized recycler or to secured land fill-outside the factory premises.
3. That the proponent shall construct Effluent Treatment plant for coolant recovery. The recovered coolant shall be utilized as far as possible or to be sold to authorized /registered recycler.
4. The effluent generated form painting section and phospheting section shall be treated to the prescribed limit of central pollution control board and shall be utilized properly or shall be kept in close circuit.
5. The proponent shall maintain a good housekeeping by regular cleaning and wetting of ground.

6. That the proponent shall use fly ash or fly ash bricks in civil construction work in expansion project.
7. That the proponent shall use all solid wastes generated during sizing, cutting, forgings etc. as resource of raw material.
8. The proponent shall obtains /OHSAS 18001 Certification within three years.
9. That the proponent shall adopt clean technology in forging operation to minimise Air, Water and noise Pollution.
10. The occupier shall grow greenery in the periphery and other available spaces inside the factory premises and shall continue enhancing its plant density and biodiversity. The green belt area must be 33% of factory premises.
11. That the occupier shall abide by applicable provisions of the water (prevention & control of pollution) Act – 1974, The Air (prevention & control of pollution) Act, 1981, the Environment (protection) Act, 1986 and Rules there under and also other related Pollution Control Acts.
12. The road inside the factory premises- shall be of minimum brick paved and shall be maintained properly.
13. The ambient Air quality- inside the factory premises shall be as per norms of Center Pollution Control Board/JSPCB.
14. Total water requirement in expansion project is 495 KLD along with the existing water requirement of 95 KLD. As per project report the source of water supply will be ground water. In such case. NOC is required from Central Ground water Board for withdrawal of Ground Water.
15. In forging and Machining operation – the unit shall maintained noise level within permissible limit i.e. 70dB (A). Regular maintenance of equipments shall be required in reducing noise level.

R.N. Kashyap
Secretary
SEAC

S.K Singh
Member
SEAC

JHARKHAND STATE POLLUTION CONTROL BOARD

REGIONAL OFFICE-CUM-LABORATORY

FORM-2/See Rule 3 (C) and 5 (s)

FORM FOR GRANT OF AUTHORIZATION NOC OCUPIER OR OPERATOR HANDLING HAZARDOUS WASTES.

Ref. No. - *Dated:-*

1. M/s Ramkrishna Forgings Ltd. hereby granted provisional authorization to operate a facility for collection, reception, treatment storage, transport and disposal of hazardous waste on the premises stipulated At- **Bholadih, P.O.- Kolabira, Dist- Saraikela Kharsawan**
2. The authorization granted to operate a facility for collection, treatment storage and disposal of hazardous wastes.
3. The authorization shall be in force for a period of **5 years** with effect from date **06-02-2014**
4. The authorization in subject to the conditions stated below and such conditions as may be specified in the Rules for the time being force under the Environment (Protection) Act, 1986.

(i) The authorization shall comply with the provisions of the Environment (P) Act, 1986 and the Rules made there under.

(ii) The authorization or its renewal shall be produced for inspection at the request of an office authorized by the State Pollution Control Board.

(iii) The person authorized shall not rent, sell, transfer or otherwise transport the hazardous waste(s) without obtaining prior permission of the State Pollution Control Board.

(iv) Any unauthorized change in personnel, equipment as working conditions as mentioned in the application by the person authorized shall constitute a break of his authorization.

(v) It is the duty of authorized person to take prior permission of the State Pollution Control Board to close down the facility.

(vi) An application for the renewal of an authorization shall be made as laid down in Sl. No. 5 (6) (II) of Hazardous waste (Management & Handling) Rules, 1989.

(vii) The quantities with categories and names of Hazardous wastes generated shall be submitted within one month.

(viii) Hazardous Wastes shall be kept in secured landfill.

(ix) The unit shall maintain records of collection, Reception, Treatment Storage & Disposal of HCW in form-3 and submit annual return in form-4 as per the rules.

This is being issued as per direction of competent authority contained in letter no-3117, dated- 10.07.2004.

To,

M/s Ramkrishna Forgings Ltd,
At- Bholadih, P.O.- Kolabira,
Dist- Saraikela Kharsawan.

Regional Officer
Jamshedpur.