

**MINUTES OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL
COMMITTEE, ORISSA HELD ON 17TH & 18TH AUGUST, 2009**

The meeting of State Level Expert Appraisal Committee, Orissa was held on 17th & 18th August, 2009 in the Conference Hall of Orissa State Pollution Control Board, Bhubaneswar at 11.00 AM. Dr. Gagan Bihari Nityananda Chainy, Chairman, SEAC Orissa chaired the meeting. The following members were present in the meeting.

1.	Dr. Gagan Bihari Nityananda Chainy	-	Chairman
2.	Professor (Dr.) Swoyam Prakash Rout	-	Member
3.	Dr. Harekrishna Nayak,	-	Member
4.	Dr. Moheshwar Patra,	-	Member
5.	Sri Sasanka Sekhar Pattnaik,	-	Member
6.	Dr. Surendra Nath Das,	-	Member
7.	Dr. R.C. Mohanty,	-	Member
8.	Prof. Kumar Das	-	Member
9.	Sri S. Das,	-	Secretary

The following issues were discussed and decided

1. The minutes of previous meeting was confirmed by the members.
2. The committee opined that there are number of mining projects being appraised before the committee for grant of environmental clearance mainly from Keonjhar and Sundargarh Districts of Orissa. It was decided that the committee should visit some of the mining leases in the above districts to verify environmental compliance by the mines..
3. Next meeting of the committee would be held on 4TH September,2009 for finalization of minutes of the meeting held on 17th to 18th August, 2009.

A total of 11 project proponents were invited for presentation of TOR and Environmental clearance proposals followed by discussion. The agenda-wise proceedings and recommendations of the committee are detailed below :

CHAIRMAN, SEAC

SECRETARY, SEAC

ITEM NO. 1**PROPOSAL OF GONUA IRON AND MANGANESE ORE MINES AT/PO – GONUA, BONAI, DIST SUNDARGARH OF SHRI K. C. PRADHAN FOR IRON ORE PRODUCTION OF 50,000 TON/ANNUM.**

The proponent made a presentation on the proposal for consideration of the SEAC. The proposal is for enhancement of production of iron ore from 15,000 TPA up to 50000 TPA. The TOR for this project were specified on 15th October, 07 by the Expert Appraisal Committee of MoEF, Govt. of India. The mine lease area is 12.56 hectare. The Mining lease was granted in favour of Sri K.C. Pradhan over an area of 31.03 Acres or 12.56 Ha and the Lease deed was executed for a period of 20 years with effect from 13.03.1991. The lease area of Gonua Iron Ore mine over 12.56 hectares falls in the village Gonua of district –Sundargarh. Out of the total MI area of 12.56 ha., 12.455 ha. Is considered as forest land as per DLC in 1996. Hence **the state forest Dept. considered this area as DLC forest land . As the area was non-forest waste land as per revenue records prior to 1996, this was challenged in the Honorable Supreme Court and the case was admitted and the lessee was allowed to continue mining operation till the case is finalized.** Mining plan is approved for the production of 50,000 TPA. The public hearing was conducted on 17.6.08. No National Park/Sanctuary is located within 10 km of the mine lease. Mine working will be opencast and semi-mechanized involving drilling and blasting. Water requirement for the project is estimated at 25 m³/day. Source of water is Kakarapani nalla. The mine has not obtained permission for drawing ground water from concerned authority. The mine working will not intersect groundwater table. Waste generation will be 351220m³. The mine has earmarked 1.45 ha as OB dump area (conceptual period). The issue raised during public hearing were also presented and discussed during the meeting.

CHAIRMAN, SEAC

SECRETARY, SEAC

During the discussions, the following points emerged :

1. The mine proposes to draw 1,000m³/yr water from a nearby perennial river. Since it is already in operation since 1993, present withdrawal quantity has not been mentioned. It is not clear whether the proposed requirement is over and above the present withdrawal quantity. A number of other mines depend on this waterbody and quantity of drawal annually also has not been specified. They should replenish a part of it to the ground for recharging through shallow storage device. Copy of permission for drawing of water has to be furnished.
2. The mine should conduct leachability study of the OB to find soluble components, particularly with respect to heavy metals like Fe, Mn and others. They should undertake to treat the rainwater runoff from dumps following usual practices.
3. The OB dump is proposed to have only one break corridor with two numbers of 20m high dumps, one above the other. This is too unstable to manage environmentally though might have been approved by IBM. The slope and heights may be reframed for better stability and management.
4. An Environment cell with adequate manpower and budget may be provided for better monitoring and management. [Cost of EIA/ EMP should not include routine operational expenses like maintenance of vehicles, garland drain etc.](#)
5. [As usual, only one monitoring station in the core zone, though theoretically acceptable, will be practically not acceptable. The cost and effort can be minimized even with logical placement of samplers at different locations during alternate weeks for better monitoring of ambient air quality.](#)
6. Most stations in the buffer zone may also be monitored near existing/ new units in the locality. Since natural forests in the locality are scarce, the stations should concentrate on habitations nearby at a proper height etc. following normal methodology.
7. Since, this is an operating mines, existing environmental compliance has to be given in detail with photograph/ videograph. This should include plantation activity and OB management practice Followed.

8. Impact prediction modeling has not been done to know the anticipated environmental impact due to proposed production enhancement. The mine has to do the impact prediction modeling and based on prediction modeling, proposed mitigation measures may be incorporated in EMP.
9. CSR activities already carried out in the area have not been incorporated in the report.

The SEAC decided to defer the proposal till satisfactory compliance to the aforesaid observations are made by the project proponent.

ITEM NO. 2

PROPOSAL OF KHANDABANDH IRON ORE MINES OF M/S. SHREE METALIKS LTD. FOR IRON ORE PRODUCTION OF 7.02,048 TPA AT – KHANDABANDH, PO – JALAHARI, DIST – KEONJHAR.

The proponent made a presentation on the proposal for consideration of the SEAC. The proposal is for production of 702048 TPA iron ore. The TOR for this project were prescribed on Dt. 25.6.08 by the Expert Appraisal Committee of MoEF, Govt. of India. The mining lease covers an area of 35.774 ha. Entire lease area, comes under Baitarani Reserve Forest. The mining lease was initially granted to M/s.TISCO Ltd. But after relinquishing the lease to the State Govt., it is granted in favour of M/s. Sree Metaliks Ltd., for a period of 30 years from date of execution of the mine. The mine has applied for forest diversion proposal, which is under process. Mining plan is approved for the production of 7.02,048 TPA iron ore. The public hearing was conducted 18.2.09. No National Park/Sanctuary is located within 10 km of the mine lease. Mine working will be opencast and mechanized involving drilling and blasting. Water requirement for the project is estimated as 150m³/day. The source of water is Suna River. The mine has applied for permission for drawing to Water Resource Dept. Govt. of Orissa There is no mine drainage water from the mine. The mine pit water from quarry during rainy season

CHAIRMAN, SEAC

SECRETARY, SEAC

will be pumped to storm water drain followed by settling tank before discharge to nearby nalla. Domestic effluent will be discharged to soak pit via septic tank. Waste generation will be 88463m³ during plan period. The mine has earmarked 2.309 ha as OB dump area (Plan period). The mine has proposed garland drain, check dams and retaining wall to prevent wash out of loose material from dump area. Dump slope will be stabilized by putting vegetation. The issue raised during public hearing were also presented and discussed during the meeting.

During the discussions, the following points emerged.

1. The shallow water samples collected from open wells and analysis result presented for ground water are not acceptable. They should collect water from bore wells and ensure to present the LATEST ground water table depth from an authentic source like State or CGWA. They should also ensure mining activities do not touch actual round water table. A mere distance of 0.65 to 2.0 m as specified in their plan is not acceptable environmentally.
2. Methodology followed for CO estimation in ambient air is not in accordance with CPCB guidelines.
3. Water requirements are as high as 54,750 m³/yr, with no plan for even rainwater recharge though annual rainfall in the area amounts to 1647 mm as per their report.
4. **Putting up photovoltaic charged barbed wire fencing may be dangerous to the wild animals. The required details may be finalized in consultation with the State Wild-life officials & their views on the same furnished. Fencing should be beyond the safety zone around the mining area.**
5. Leachability studies on OB material & managing rainwater runoffs to be done.
6. The proposal shows inflated figures under environmental protection measures whereas money to be spent is actually under normal operational requirements. Showing 25% of environmental cost towards noise pollution monitoring/management and similar other figures are not justified. Detail cost break-up may be furnished.

7. The bio-data of the experts who were engaged in data collection on flora and fauna of the study area, as incorporated in the report, are incorrect. This has to be rechecked and correct information may be incorporated.
8. A perennial nallah (Suna nallah) is flowing near the mining lease area. The report is silent about the proposed measures to avoid risk to nala during mining activities
9. **In the main report it has been mentioned that 5 ha vegetated area will be maintained for wild life protection area but during presentation it was mentioned as 1.2 hector only. This has to be clarified.**

The proposal may be considered for environmental clearance **provided the response of the project proponent to the aforesaid observations is to the satisfaction of the SEAC.**

ITEM NO. 3

PROPOSAL OF GROUP HOUSING “THE COSMOPOLIS” OF M/S. ASSOTECH BEL INFRASTRUCTURE PVT. LTD AT DUMDUMA, BHUBANESWAR, ORISSA.

The proponent made a presentation on the proposal for consideration of the SEAC. The proposed development is a Building Project having multiple floors. The project consists of 690 apartments. There will be four towers and each tower with G + 16 floors shall amount to a total of 522 apartments while one tower would be service apartment of G + 16 = 168 apartments with other amenities. Total Plot Area is Ac.36138.371 Sq. m. Total built up area is 79,378.59 m². Green belt Landscaping and open space area is 85% of the total project area. The building is completely residential in nature. Bhubaneswar Development Authority has approved the building plan. However, the proponent has not furnished copy of the approved building plan. The total water requirement during construction phase is 50 -100 KLD and during operational phase it is 542 KLD. Source of water will be Ground water during construction phase. The water requirement will be met from Municipal supply and ground water during operational phase. Around 347 KLD

CHAIRMAN, SEAC

SECRETARY, SEAC

of waste water will be generated which will be treated in Sewage Treatment Plant (STP) of capacity 420 KLD. Treated water will be re-used for dual flushing, green belt and landscaping. Part of the treated water will be discharged to the nearby drain. Total solid waste generation will be 57.06 MT/month. The power requirement is 4 MVA. Total cost of the project is Rs.150 crores.

SEAC decided to consider the environmental clearance of the project after getting clarification and compliance on the following points from the project proponent.

1. **The proponent should furnish detail proposal on plantation activity.**
2. **Total water requirement is huge and to be met from Public Health Engineering Departments Govt. of Orissa only (NO GROUND WATER DRAW) as clarified by the proponent. They are to produce agreement with the concerned authority to ensure this source.**
3. **Sewage treatment plant capacity is just sufficient to meet peak requirements. Bio-polluted water generated at a rate of 140m³/day is the flow from flushing and is getting mixed up with ordinary waste water. These should be separated and treated separately. No emergency or standby arrangements has been specified for storing or treatment of effluent in case STP fails even for a limited period.**
4. **The water requirement of the proposed swimming pool is shown as 10,000L as a one-time requirement with no loss or drains and recharging during the whole life time of the facilities, say 30 years. This is totally unacceptable and a realistic figure may be presented or THE SWIMMING POOL PROPOSAL SHOULD BE ALTOGETHER SCRAPPED.**
5. **The distance specified from the periphery of Chandka reserve forest and Nandan Kanan Zoological park are put as 15kms which is unrealistic. This is important in view of nearly 800 vehicles will be moving in and the same number moving out of the complex as revealed from parking space proposed.**

6. The proponents propose to collect and handover municipal solid waste generated including bio-undegradable wastes to BMC – they should produce MOU to this effect especially when BMC is barred from dumping such wastes and develop an incinerator as directed by the Hon'ble Orissa High Court recently.
7. The chimney height and monitoring schedule of gaseous pollutants for their three big diesel generators are unrealistic as per law. It should be revised and included accordingly.
8. They do not propose to use solar or any other form of non-renewable energy at present on the plea that high-rise buildings will not allow sunlight to penetrate. This is totally unrealistic. The solar panels can be put on roof tops inside the apartments with storage devices and separate lines drawn to feed at least the street lights or meet hot water requirements for domestic consumption.
9. Copy of the plan approved by the BDA has to be submitted.

ITEM NO. 4

PROPOSAL OF KHANDABANDH IRON ORE MINE OF M/S. DEEPAK STEEL & POWER LTD. FOR IRON ORE PRODUCTION OF 0.70 MILLION TON/ANNUM AT/PO – KHANDABANDH, DIST – KEONJHAR

The proponent made a presentation on the proposal for consideration of the SEAC. The proposal is for production of iron ore of 0.7 MTPA. The TOR for this project were prescribed on dtd. 18.7.08 by the Expert Appraisal Committee of MoEF, Govt. of India.

The mine over an area of 38.687 ha. Is of forest land. Mining lease was initially granted in favour of M/s.TISCO Ltd. After surrender of the lease by the earstwhile Lessee, the State Govt. has decided to grant this area in favour of Deepak Steel and Power Ltd., for a period of 25 years from the date of execution of lease. The mine has applied for forest clearance. Mining plan is approved for the production quantity applied for environmental clearance. The public hearing was conducted on 18th February 2009. No National Park/Sanctuary is located within 10 km of the mine lease area. Mine

working will be opencast semi-mechanized involving drilling and blasting. Water requirement for the project is estimated to be 150 m³/day. The source of water is Suna River. The proponent has not submitted copy of permission for drawal of water from concerned authority. The mine working will not intersect groundwater table. Waste generation will be 98836m³ during plan period The mine has earmarked 1.318 ha as OB dump area (Plan period). The mine has proposed garland drain, check dams and retaining wall to prevent wash out of loose material from dump area. Dump slope will be stabilized by putting vegetation. The issue raised during public hearing were also presented and discussed during the meeting.

During the discussions, the following points emerged.

1. The shallow water samples collected from open wells and analysis result presented for ground water are not acceptable. They should collect water from bore wells and ensure to present the LATEST ground water table depth from authentic source like State Authority or CGWA. They should also ensure that mining activities do not touch actual ground water table. A mere distance of 0.65 to 2.0 m as specified in their plan is not acceptable from environmental point of view..
2. Methodology followed for CO estimation in ambient air is not in accordance with CPCB guidelines.
3. Water requirements are as high as 54,750 m³/yr. There is no plan for rainwater recharge though annual rainfall in the area amounts to 1647 mm as per the report.
4. **Putting up photovoltaic charged barbed wire fencing may be dangerous to the wild animals. The required details may be finalized in consultation with the State Wild-life officials & their views on the same furnished. Fencing should be beyond the safety zone around the mining area.**
5. Leachability studies on OB material & managing rainwater runoffs to be done.

6. The proposal shows inflated figures under environmental protection measures where actually money to be spent is under normal operational requirements. Showing 25% of environmental cost towards noise pollution monitoring/management and similar other figures are not justified. Detail cost break-up may be furnished.
7. The bio-data of the experts who were authorized to collect flora and fauna base data of the study area as incorporated in the report is not correct. This has to be rechecked and correct information may be incorporated.
8. A perennial nallah (Suna nallah) is flowing near the mining lease area. The report is silent about the proposed measures to avoid risk to nala during mining activities due to effluent discharges.

The proposal may be considered for environmental clearance **provided the response of the project proponent to the aforesaid observations is to the satisfaction of the SEAC.**

ITEM NO. 5

PROPOSAL OF TURPI MINOR IRRIGATION PROJECT AT TURPI, PO – KARTAPONDA, DIST – KALAHANDI LOCALLY NAME AS KJ IN BHAWANIPATNA BLOCK OF KALAHANDI DISTRICT

The Executive Engineer of the project made a presentation on the proposal for consideration of SEAC.

Turpi Minor Irrigation Project is a Reservoir scheme Project which is going to be constructed across the Khalan nalla near the village Turpi in Bhawanipatna Block of Kalahandi District .The Project is situated around 30 km away from the District Head Quarter & it is around 3km away from the near by village Turpi. This area is coming under the drought prone area of Kalahandi District for which the farmers are facing a lot of loss in cultivation every year due to non availability of any irrigation facilities to this area(Either by Major, Medium or Minor Irrigation project). In order to quest the irrigation requirement of the farmers of this area construction of this Project is much more essential. 117.43 Acres of Private land has already been acquired for the construction of this Project (Both for Head works & Canal system) & there will not be any type of

CHAIRMAN, SEAC

SECRETARY, SEAC

disturbance by the land owners during the construction. A diversion proposal for acquisition of 6.08ha of Forest land(1.46ha Reserve Forest & 4.62ha of village forest) has already been initiated since January 2006 & it is still pending due to non availability of Environmental Clearance. There will not be any type of displacement to the inhabitants as it is situated far away from the habitation. The inhabitants of this area are much more anxious for this Project as this area will be green soon after its construction. This Project will provide assured irrigation to 809ha of land during khariff & 200ha of land during Rabi. The farmers of Turpi, Chheliamal, Padiagaon & Themera will be benefited by this Project. There is also possibility of Pisciculture in this Project .The living as well as financial standard of the inhabitants of this area will be increased soon after the construction of this Project.

During discussion, the SEAC observed the following :

1. The presentation did not cover essential information like base-line data, flora/ fauna under proposed forest land of 6.08 ha, phase-wise details of excavation program to be followed associated with environmental control measures etc.
2. The form-I has not been filled up properly and pre-feasibility report has not been submitted. The project proponent is advised to consult a professional consultant for the above purpose.

The SEAC decided to consider the proposal after resubmission of the above documents.

ITEM NO. 6

PROPOSAL OF 26 MW CAPTIVE THERMAL POWER PLANT INSIDE THE EXISTING WASTE PAPER BASED PAPER MILL OF M/S. EMAMI PAPER MILLS AT – BALGOPALPUR, DIST – BALASORE

The proposal was considered by the SEAC 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. For this purpose, the proponent had submitted information in the prescribed format (Form-I) along-with feasibility report.

CHAIRMAN, SEAC

SECRETARY, SEAC

M/s. Emami Paper Mill Ltd is a waste paper based paper mill manufacturing printing and writing (P & W) paper. The industry has existing captive power plant of capacity 20 MW (1 x 15 MW + 1 x 5 MW). It has proposed for installation of another 26 MW captive power plant within the existing premises of the paper mill for captive use of existing paper mill as well as for future expansion of the mill.

Coal requirement for the project is 600 TPD. The proponent shall also use part of the Effluent Treatment Plant (ETP) sludge of paper mill as fuel. However, quantity of the same has not been mentioned. Water requirement is 4000 m³/day. Source of water is Sona river and/or ground water. The industry has obtained permission from Central Ground Water Authority for drawl of 10,525 m³/day of ground water and at the same time it has obtained permission for drawl of water of 5.54 cusec from Sona river from Water Resources Department, Govt. of Orissa. The proponent has not given detailed land requirement and land use break up for the proposed power plant. Total cost of project is Rs. 136 crores.

The industry is located within the IDCO industrial area. The proponent during presentation requested for exemption of public hearing as per the provisions of EIA Notification, 2006. However, the proponent has not furnished detailed certificate from IDCO regarding the proposed project located within the IDCO industrial area.

Considering the information furnished and presentation made, the SEAC prescribed the following TORs for undertaking detailed EIA study.

1. Compliance status of the stipulated conditions of Environmental Clearance for the existing project shall be provided.

CHAIRMAN, SEAC

SECRETARY, SEAC

2. Land earmarked for bottom ash and fly ash disposal may be specified. Measures for controlling environmental damages, if any, due to storage of dry bottom ash or fly ash before disposal of 100% for use in ancillary industries may be spelt out.
3. Project site details should be depicted in the topo sheet showing plant site, ash pond area etc.
4. The study area should cover a buffer zone of 10 km radius around the proposed site.
5. Land use of the study area as well as the project area shall be given.
6. Location of National Parks, Sanctuaries, Biosphere Reserves, wildlife corridors, Tiger/Elephant reserves (existing as well as proposed), and existence of rare and endangered flora and fauna if any, within 10 km of the project site 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 under the Wildlife (Protection) Act, 1972 and copy may be furnished.
7. Land requirement for the project to be optimized. Item-wise break up of land requirement and its availability to be furnished as per the norms prescribed by Central Electricity Authority (CEA).
8. Topography of the area should be given clearly indicating whether the site requires any filling. If so, details of filling, quantity of fill material required, its source, transportation etc. should be given.
9. Impact of the project on the existing drainage pattern of the area and the surroundings to be studied.
10. Information regarding surface hydrology and water regime and its impact may be furnished.
11. One season (non-monsoon) site-specific meteorological data shall be provided.
12. One complete season AAQ data (except monsoon) to be given along with the dates of monitoring. The parameters to be covered shall include SPM, RSPM, SO₂ NO_x and Ozone (ground level). The location of the

monitoring stations should be so decided so as to take into consideration the pre-dominant downwind direction, population zone and sensitive receptors including reserved forests. There should be at least one monitoring station in the upwind direction. The procedure followed and equipments employed for the above studies should be specified and as per MoEF notified norms.

13. Impact of the project on the AAQ of the area, details of the model used and the input data used for modeling should also be provided. The air quality contours may be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any. The wind roses should also be shown on this map. Height of chimney shall be taken into account while drawing wind rose diagrams. The wind speed and wind direction at the chimney height determines dispersal pattern of the emissions released at that height. Also details of flue gas treatment to reduce/remove trace polluting gases like SO₂, NO_x etc. along with reducing temperature should also be indicated.
14. Details of fugitive emission from Coal Handling Plant (CHP), ash handling and ash disposal area and its control system may be specified..
15. Fuel analysis to be provided (sulphur, ash and toxic heavy metals like mercury content) with grade of coal. Details of auxiliary fuel, if any including its source, quantity, quality, storage etc should also be given.
16. Adequate space shall be earmarked for installation of Flue Gas Desulphurisation (FGD) system in future, if required. This should also include for management and disposal of solid waste to be generated from FGD system. Details of the proposed flue gas management system may also be provided.
17. Quantity of fuel required, its source and transportation may be provided. A confirmed fuel linkage should also be provided. A detailed energy use pattern in different unit operations may be provided.
18. Source of water and its availability and commitment regarding availability of requisite quantity of water from the competent authority may be provided.

19. Details of rainwater harvesting and how it will be used in the plant shall be provided.
20. The feasibility of zero discharge may be examined. In case of any proposed discharge, its quantity, quality and point of discharge, users downstream etc. should be provided.
21. Water conservation measures proposed in different units of operation of the project should also be given with detailed water audit. Quantity of water requirement for the project should be optimized.
22. Detail run-off management of coal stockyard and ash disposal area to be specified.
23. Details of water balance taking into account reuse and re-circulation of effluents may be provided.
24. Details of green belt i.e. land with not less than 1600 trees per ha giving details of species, width of plantation, planning schedule etc. should be furnished
25. Detailed plan of ash utilization / management may be furnished.
26. Details of evacuation of ash may be provided.
27. Details regarding ash pond impermeability and whether it would be lined, if so, details of the lining etc. may be provided for the storage period.
28. Impact on occupational health and remedial measures thereof in the project may be studied
29. Details of flora and fauna duly authenticated should be provided. In case of any scheduled fauna, conservation plan should be provided.
30. Socio economic impact due to project activity to be assessed and based on the study, developmental activity proposed to be undertaken by the project proponent to be specified. As far as possible, quantitative dimensions are to be given. Study should include Corporate Social Responsibility (CSR) and it should be carried out as the entry point activity as trust building measures.
31. Impact of the project on local infrastructure of the area such as road network and whether any additional infrastructure would need to be

constructed and the agency responsible for the same with time frame should be provided.

32. EMP to mitigate the adverse impacts due to the project along with item wise cost of its implementation may be provided. This should not include the routine maintenance or monitoring jobs otherwise essential for the mine operation may not be included in this statement.
33. Risk assessment 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 or unforeseen fugitive emission taking place. Based on the same, proposed safeguard measures should be provided. Measures to guard against fire hazards should also be provided. Onsite and off-site Disaster Management plan to be prepared and should be included in the EMP.
34. The quantity of paper mill sludge to be used as fuel to supplement indigenous coal is to be specified along with its batch analysis results to include harmful organic and toxic components.
35. The proposed 100% utilization of fly ash is unrealistic. No space or safety measures have been specified for separation and storage of bottom and fly ash. Adequate silo space may be provided for collection of dry fly ash and concrete MOUs with end-use firms in quantitative off-load amounts may be produced.
36. The model of air pollutant (SO_x, NO_x, CO) dispersal presented by the consultant seems to be unrealistic in view of the wind rose presented and coal/sludge combustion. No consideration has been made to the Volatile Organic Compounds (VOC) toxins to be emitted through paper mill sludge burning in their proposal. This has to be specified.
37. The firm proposes to use 1600m³/day of water with no practical ground water recharge and no rainwater harvesting plan. This is unrealistic from environment sustainability point of view and these modern measures may be incorporated to recharge a sizeable fraction of the water consumed and effluent generated for treatment. A detail proposal has to be incorporated in the report.

The SEAC also recommended that public hearing may be exempted as per section 7(III) (b) of EIA Notification, 2006 subject to receipt of copy of certificate of IDCO for the proponent on the basis of total project area being located within the industrial estate. If the proponent fails to produce the same, public hearing shall be conducted as per EIA Notification 2006.

ITEM NO. 7.

PROPOSAL FOR KESHARI ROLLING MILLS PRIVATE LIMITED FOR RE-ROLLING MILLS FOR PRODUCTION CAPACITY 72000 TPA AT – KALUNGA, DIST – SUNDARGARH

The project proponent submitted prescribed Form -1 and pre-feasibility report along with the draft TOR. It is a proposal for installation of a rolling mill of capacity 72000 MT/Annum on Plot No. S3-122, Industrial Estate, Kalunga, Dist - Sundargarh. The applicant aided by the consultant presented the salient features of the project and the draft Terms of Reference for undertaking detailed EIA study. The SEAC observed that the proposed location of the project is within the industrial estate. After detailed deliberation, the SEAC recommended that public hearing may be exempted as per section 7(III) (b) of EIA notification, 2006 and also recommended inclusion of the following points in the TOR during the preparation of EIA/EMP.

1. Location of national parks and reserve forests within 10 km. radius should specifically be mentioned.
2. A list of industries containing name and category with production capacity within 10 km radius should be incorporated.
3. List of raw materials required and their sources should be included.
4. Site-specific meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall should be collected for one season other than monsoon as per standard guidelines.

CHAIRMAN, SEAC

SECRETARY, SEAC

5. Data on air emissions, wastewater generation and solid waste management for the existing plant should be incorporated.
6. Ambient air quality at 6 locations within the study area of 10 km. aerial coverage from project site with one AAQMS in downwind direction should be carried out.
7. Ground level concentration of pollutants from the stack emission based on site-specific meteorological features shall be determined..
8. Air quality modeling for particulate matter and other gaseous emissions from the shop floor needs to be done. Air Pollution Control System (APCS) for the control of emissions from the Induction Furnace to be specified.
9. Impact of the transport of the raw materials and end products on the surrounding environment should be assessed and provided.
10. An action plan to control and monitor secondary fugitive emissions from all the sources as per CPCB guidelines should be included.
11. Permission for the drawl of water from concerned authority and water balance data including quantity of effluent generated, recycled, reused and discharged is to be provided. Methods adopted/ to be adopted for the effluent treatment, if any with water conservation should be included.
12. Ground water monitoring, minimum at 8 locations and near solid waste dump zone should be made. Geological features and geo-hydrological status of the study area are also essential. The present ecological status (terrestrial and aquatic) of the proposed plant is also vital. This should be provided.
13. Action plan for solid / hazardous waste generation, storage, utilization and disposal particularly Slag from IF, dust from APCS etc. shall be prepared and provided.
14. Risk assessment and damage control needs to be addressed. Onsite and off-site disaster management plan shall be prepared and included in the EMP.
15. Occupational health impact and remedial measures thereof of the project may be studied.
16. Green belt development plan in 33 % area and a scheme for rainwater harvesting have to be put in place.

17. Socio economic impact due to project activity to be assessed and based on the study, developmental activity proposed to be undertaken by the project proponent to be specified. As far as possible quantitative dimension to be given. Study should include Corporate Social Responsibility (CSR) and it should be carried out as the entry point activity as trust building measures
18. Detailed Environment management Plant (EMP) with specific reference to air pollution control system, water management, monitoring frequency, responsibility and time bound implementation plan shall be prepared and submitted..
19. EMP should include the concept of waste-minimisation, recycle / reuse / recover techniques, Energy conservation, and natural resource conservation.
20. EMP should include a clear map for plantation/green belt.
21. Due to heat generated in the reheating furnace and rolling operations, a lot of heat and water vapour will be generated in the workshop floor. Adoption of adequate measures should be spelt out instead of rotating the workers every hour as proposed. It is not going to solve the health hazards. International norms as regards this problem like provision of sufficient exhaust and incoming vents as well as use of protection gears like heat-proof clothes, goggles, gloves, shoes etc. should be adopted.
22. The proposed 10h shift for workers is not allowed as per law and not desirable. This is not suitable to create a healthy environmental condition for the workers. Alternatively, if the operations are to continue non-stop over 20 hrs, a 5h schedule may be worked out with four shifts and 1hour exchange among workers.
23. The proponent has agreed to use only furnace oil of low sulfur content and eliminate use of pulverized coal or producer gas as mentioned in the proposal. Otherwise, the EIA/EMP may be prepared keeping these aspects in view in addition to storage, emissions, wastes etc. associated with fuel oil.
24. Approximate composition and quantity of the solid and liquid effluents to be generated in addition to emissions in the process along with proposed control measures may be specified keeping the prescribed industrial standards in view.

ITEM NO. 8**PROPOSAL OF BADIBAHAL GRAPHITE MINES OVER AN LEASE HOLD AREA OF 24.915 HA AT – BADIBAHAL, LANJIGARH IN KALAHANDI DISTRICT.**

The proposal was considered by the SEAC 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. For this purpose, the proponent had submitted information in the prescribed format (Form-I) along with feasibility report. The consultant made a presentation on the proposal before SEAC.

The proposal is for production of 1000 TPA graphite. The mine lease area is 24.915 ha. There is no forest land in mining lease area. It was observed that the documents submitted by the proponent along with the application lacked requisite details. Data provided seem to be inadequate, insufficient and based on doubtful secondary sources. Even analysis of air, water, soil and other environmental parameters were outsourced to some other agency. While both consulting and outsourced firms do not have recognition from credible certifying bodies, the consultant could not clarify most important issues raised during the presentation. In addition, the essential data presented with respect to geology, topography, ground water depth, area proposed to be under plantation etc. were not clear. The Proponent was also not present to clarify any of these issues. Moreover, the documents submitted were inadequate to justify the claims made.

The SEAC also observed the following :

1. The graphite mine is already in operation and 1,000 TPA production is envisaged till 2011. According to the presentation, no additional land would be necessary for OB dumps even though >8ha of additional virgin land would be broken out of 24.9 ha total ML area. The justification provided is that the additional OB to be generated will be used for backfilling. It was not clarified how can it take place while the entire open pit mine will be in operation, instead of taking up mining in different phases

CHAIRMAN, SEAC

SECRETARY, SEAC

2. The data on SPM and RSPM showed erroneous results. For example, the nearest station (Goten village, 1km away) and elsewhere in buffer zone showed higher SPM and RSPM values than the core zone, which is improbable. ~50% of the SPM was in the form of RSPM even in the core zone. Graphite dusts being inert and soft would lodge in the respiratory tract and lungs, which might cause serious health problems to workers and inhabitants alike.
3. The source of higher NO_x levels presented could not be clarified since heavy machineries were not involved in the operation.

In view of the above shortcomings, the SEAC decided to reject the proposal in its present form. The proponent should resubmit in a thoroughly modified form as mentioned above for further consideration.

ITEM NO. 9

PROPOSAL FOR M/S. VISHAL FERRO ALLOYS (P) LTD FOR INDUCTION FURNACE (8 T CAPACITY), ARC FURNACE (3 MVA CAPACITY) RE-ROLLING MILL AT – BALANDA, KALUNGA, DIST – SUNDARGARH .

The proposal was considered by the SEAC 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. For this purpose, the proponent had submitted information in the prescribed format (Form-I) along with feasibility report. The consultant made a presentation on the proposal before SEAC.

The proposal is for installation of 2.5 MVA Arc furnace, 1x8 Ton induction furnace and rolling mill at Balanda, Kulunga in the district of Sundargarh. It was observed that the documents submitted by the proponent alongwith the application lacked requisite details. Data provided seem to be inadequate, insufficient and based on doubtful secondary sources. Even analysis of air, water, soil and other environmental parameters were outsourced to some other agency. While both consulting and outsourced firms do not have recognition from credible certifying bodies, the consultant could not clarify most important issues raised during the presentation. In addition, the essential data presented

CHAIRMAN, SEAC

SECRETARY, SEAC

with respect to geology, topography, ground water depth, area proposed to be under plantation etc. were not clear. The Proponent was also not present to clarify any of these issues. Moreover, the documents submitted were inadequate to justify the claims made. The presentation made and the documents submitted also lacked consistency.

The SEAC also observed the following :

1. The issue of reuse of slag or its safe disposal needs clarification.
2. What are the emissions other than SPM from the arc and induction furnaces and other processing units envisaged and what control measures are to be adopted are to be specified.
3. The amount of Cr(VI) and Zn(II) in surface water samples analyzed could not be justified nor details on collection or analysis could be furnished on the plea of outsourced data.
4. The color of water was characterized by some absurd numbers, which could not be explained.
5. There was no plan for recycling or treatment of the process water.
6. Further uptake of the solid waste likely to be generated was not presented

In view of the above shortcomings, the SEAC decided to reject the proposal in its present form. The proponent should resubmit in a thoroughly modified form as mentioned above for further consideration.

ITEM NO. 10

PROPOSAL OF M/S. DALATA IRON & MANGANESE ORE MINE FOR PRODUCTION OF IRON ORE 2,50,000 TPA OVER AN AREA OF 22.165 HA. AT – DALTA, BONAI DIST – SUNDARGARH

The proposal was considered by the SEAC 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. For this purpose, the

CHAIRMAN, SEAC

SECRETARY, SEAC

proponent had submitted information in the prescribed format (Form-I) along with feasibility report. The consultant made a presentation on the proposal before SEAC.

The proposal is for production of iron ore 2,50,000 TPA. The mine lease area is 22.165 ha.. It was observed that the documents submitted by the proponent alongwith the application lacked requisite details. Data provided seem to be inadequate, insufficient and based on doubtful secondary sources. Even analysis of air, water, soil and other environmental parameters were outsourced to some other agency. While both consulting and outsourced firms do not have recognition from credible certifying bodies, the consultant could not clarify most important issues raised during the presentation. In addition, the essential data presented with respect to geology, topography, ground water depth, area proposed to be under plantation etc. were not clear. The Proponent was also not present to clarify any of these issues. Moreover, the documents submitted were inadequate to justify the claims made. The presentation made and the documents submitted also lacked consistency.

The SEAC also observed the following.

1. The form of ore to be mined and their grades has to be clarified.
2. Ground water depth and depth of mine was not presented.
3. The year of data related to drainage pattern acquired from ORSAC could not be clarified, especially since land use and drainage pattern changes often in mining areas.
4. The relief map showed stated relative heights of land as high, moderately high etc. instead of contours showing numbers.
5. Although the wind flow pattern showed wind flow directed towards south-west, all the AAQ stations were located in the leeward side. No clarification was presented since it was also outsourced.

6. The soil analysis showed 15-18% K, which is surprising in a mining area. No clarification on the issue was offered

In view of the above shortcomings, the SEAC decided to reject the proposal in its present form. The proponent should resubmit in a thoroughly modified form as mentioned above for further consideration.

ITEM NO. 11

PROPOSAL OF M/S. SOLEBANDH GRAPHITE MINE FOR PRODUCTION OF GRAPHITE ORE 1097 TPA OVER AN AREA OF 25.961 HA. AT – SOLEBANDH, DIST – BOLANGIR

The proposal was considered by the SEAC 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. For this purpose, the proponent had submitted information in the prescribed format (Form-I) along with feasibility report. The consultant made a presentation on the proposal before SEAC.

The proposal is for production of graphite ore of 1097 TPA. The mine lease area is 25.961 ha. which is non forest land. It was observed that the documents submitted by the proponent alongwith the application lacked requisite details. Data provided seem to be inadequate, insufficient and based on doubtful secondary sources. Even analysis of air, water, soil and other environmental parameters were outsourced to some other agency. While both consulting and outsourced firms do not have recognition from credible certifying bodies, the consultant could not clarify most important issues raised during the presentation. In addition, the essential data presented with respect to geology, topography, ground water depth, area proposed to be under plantation etc. were not clear. The Proponent was also not present to clarify any of these issues. Moreover, the

CHAIRMAN, SEAC

SECRETARY, SEAC

documents submitted were inadequate to justify the claims made. The presentation made and the documents submitted also lacked consistency.

The SEAC also observed the following

1. The mine is in operation since 1996. So it should have some base-line environmental data of its own other than fresh data as required for preparing TOR. No data was shown to at least justify the present state of environment.
2. The mine closure plan could not be presented as approved by IBM in view of their long operational period. This should be concurrent with further mining in the same region,

In view of the above shortcomings, the SEAC decided to reject the proposal in its present form. The proponent should resubmit in a thoroughly modified form as mentioned above for further consideration.

**(DR. GAGAN BIHARI NITYANANDA CHAINY)
CHAIRMAN, SEAC**

**(DR. SWOYAM PRAKASH ROUT)
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