

**MINUTES OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL
COMMITTEE, ORISSA HELD ON 19th and 20th JULY 2010**

The meeting of State Level Expert Appraisal Committee, Orissa was held on 19th & 20th July 2010 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.

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| 1. | Prof. Gagan Bihari Nityananda Chainy | - | Chairman |
| 2. | Prof. Swoyam Prakash Rout | - | Member |
| 3. | Dr. Moheshwar Patra | - | Member |
| 4. | Prof. R. C. Mohanty | - | Member |
| 5. | Prof. Kumar Das, | - | Member |
| 6. | Dr. Surendra Nath Das | - | Member |
| 7. | Sri Sasanka Sekhar Patnaik, IFS | - | Member |

The following issues were discussed and decided

1. The minutes of the previous meeting were confirmed by the members.
2. The committee decided to call the project proponents of new pending proposals for presentation of their draft TOR and final EIA report before the committee on 11.8.2010.
3. A total of 9 project proponents were invited for appraisal followed by discussion. Sri Sasanka Pattnaik, IFS did not attend the presentation meeting of final EIA report of 26 MW Captive Power Plant of M/s Emami Paper Mills, Balgopalpur, Balasore due to some personal work. However, he attended presentation meeting of other proposals. The agenda-wise proceedings and deliberations of the meeting of the committee are detailed below.

ITEM NO . 1

PROPOSAL FOR CONSIDERATION OF EC FOR INDUSTRIAL INFRASTRUCTURE PROJECT,-LOGISTIC PARK OF M/S. APPEJAY LOGISTICS PARKS PVT. LTD. AT KHURUNTI, NEAR DUBURI, PO-KHURUNTI, KALINGA NAGAR, DIST-JAJPUR, ODISHA OVER AN AREA OF 15 ACRES.(EC)

The project proponent has withdrawn their application as the built up area is <20,000 Sq. Mt and EC is not required for the proposal. The proponent has intimated to withdraw

the application. After detail deliberation, the SEAC decided to de-list the proposal and return the document to SEIAA, Orissa to close the file.

ITEM NO . 2

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

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 industry is located within the IDCO industrial area. The **TOR issued by SEAC vide letter No. 116 dt. 29.9.09.** Public hearing for the proposal is not required as the captive power plant will be installed within the IDCO industrial estate. Representative of M/s. Min Mec consultants, New Delhi presented the final EIA/EMP report before the SEAC. The following points were discussed in particular and the observations of the SEAC are as follows:

1. As per the fly ash utilization notification of the MoEF, Govt. of India dated 3/11/2009, the coal or lignite based TPPs are required to attend 50-100% ash utilization target in 1-4yrs period. The proponent has proposed 100% utilization without detail break-up. The proponent has intimated private construction and cement companies demanding certain amounts of fly ash for road construction and cement manufacture .The proponent has to furnish detail ash management plan and copy of MoU with cement plants.
2. Ash utilization for road, embankments, over-bridges or similar such civil engineering construction is required to follow guidelines of the Ministry of Road

Transport & Highway, Government of India (and Indian Road Congress specification SP: 58 of 2001 and amendments thereafter). It states, among other restrictions, that clayey soil having plasticity index >8 are required to be treated and stabilized before road is constructed. If the type of soil available is responsive to pozzolanic action with fly ash, strength parameters of the soil would be improved. Clayey soil, when mixed with fly ash, exerts cementing property because of existence of pozzolanic compound. But it needs to be supplemented properly. Moreover, the physical and chemical properties of the ash should be studied properly, particularly for soluble impurities under filling conditions. Similarly, back-stowing of abandoned/excavated mine pits also require sand/OB mixing. Thus, the proponents would specify details of their off-load of bottom ash and fly ash for different purposes and attaining 100% utilization of ash, as a whole within 04years of their operation.

3. Adequate and appropriate area may be indicated for the remaining ash during underutilization within their existing facility and safe management may also be indicated.
4. The NOC for use of ground water (10525m³/day) at Annexure XV renewed by the CGWA in July 2008 for five years is in favor of M/s. Emami Paper Mills is for its paper mills. The proponent has to intimate to the ground water authority it will use 4400 KLD water for the proposed thermal power plant. The Authority also observed that the firm should implement rainwater harvesting measures, conservation practices like reuse and recycle as well as monitoring of ground water levels in and around that area as per hydrological investigation and data be submitted to them for perusal. The proponents also admitted that they have logs of water withdrawal records.

Therefore, it is suggested that –

- a) they should produce the hydrological survey reports on ground water reserves and rainwater recharge attended by them so far;

- b) the proponent should intimate CGWA and relevant State Govt. agencies for withdrawal of water to the extent of their requirement for the proposed TPP.
 - c) They should not confuse amongst sub-surface water level (stated as GW level at 3-7m below ground), shallow aquifers and deep water aquifers. A detailed hydrological survey of ground water reserves of their area and around may be produced to justify the 'safe zone' terminology and ground water recharge extent of the region as required by the CGWA.
5. The permission to draw 5.518 cusecs (mentioned as 5.54 cusecs) of surface water from river Sona, a tributary of Budhabalanga from the Dept of Water Resources, Govt. of Orissa dated 17/06/2006 enclosed as Annexure XIV is categorically mentioned as permission for additional withdrawal for expanding their paper production with no assurance during non-monsoon and lean periods. Conditions 5, 6, 10 and 16 emphasize the above point made. Thus, the unit will amend the NOC for surface water withdrawal from the State Govt which is also valid for the present project.
 6. It is further specified in condition 9 that the Company would record the quantity of water drawn at their own cost. This should be produced for getting an idea on the present position.
 7. The air quality parameters presented mentioned estimation of VOCs. They should specify the methodology used and which compounds were estimated since it is a very wide group of air pollutants. It is predicted that the 24-h average concentration of VOCs is likely to go upto 15.76 – 57.66 $\mu\text{g}/\text{m}^3$ in N downwind side, which is quite high. The parameters taken for such predictions may be specified.
 8. The AAQ model as regards SO_2 , NO_x and SPM dispersion towards NW/NE directions since wind speed and direction parameters used are for a few months only. Since the parent company (M/s. Emami paper Mills) is an existing unit with records of WS/WD through out the year, they can produce possible dispersion of pollutants quantitatively for the whole year.

9. Explanation given to TOR condition 16 regarding possible adoption of FGD device to reduce SO₂ load in the atmosphere has been completely ruled out. On the other hand, they have nowhere specified the total amount of coal, its analysis and possible build-up of pollutants in the local atmosphere over short durations. On the other hand, they have simply stated that there would be no adverse effects on air quality even though their 80m high and 4-5m dia stack would spew 1947.08 kg/hr VOCs, 140kg/hr SO₂ and 100kg/hr NO_x. They should specify the latest containment/treatment measures to reduce the pollution load of ambient air rather than avoiding their responsibilities by simply bypassing the issue.
10. The ETP sludge analyzed by SGS shows at Annexure XXI the presence of 132.86mg/kg Cu, which seems quite erroneous. Thus the quantitative analysis of the consultants or sub-contractors needs third party verification and proper accrediting.

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.

The committee also decided to go for visit of the existing paper mill on 31st July, 2010 to verify the present environmental practice of existing unit.

ITEM NO . 3

PROPOSAL OF NUAGAON IRON & MANGANESE MINES TO INCREASE IRON ORE PRODUCTION UPTO 4,00,000 TPA, MANGANESE ORE PRODUCTION UPTO 25,000 TPA WITH SCREENING PLANT 350 TPH AT – NUAGAON, DIST – SUNDERGARH.

The proposal is for production of Iron ore upto 4,00,000 TPA, Manganese Ore production upto 25,000 TPA with screening plant 350 TPH. The mine lease area is 29.257 ha is predominantly hilly (23.815ha) devoid of vegetation. There is no forest land in mining lease area. Mine working will be opencast semi-mechanized involving drilling and blasting. Water requirement is 100 KLD and source will be ground water and surface water . The iron ore pit going to the depth of 15m from the top. It is proposed to go upto 22m. The drainage is towards Karo nala flowing in the NE at about 100m. There are about 26 mines located in the area.. The mining plan for the proposed production capacity for the year 2009-10 to 2013-14 is approved by IBM vide letter dated 2.03.2010. The life of the mine will be 9 years for iron ore and 28 years for manganese ore. Thus over all life of the mine will be 28 years. The TOR has been duly issued by SEAC to the project proponent vide letter No. **71 dt. 11.9.09**. The public hearing was conducted on

06.05.2010. The owner Shri Prabodh Mohanty was present and representative of M/s. Geomin Consultants Sri Sarangi made a presentation for the EC for production enhancement to 4,00,000 TPA iron ore and 25,000 TPA manganese ore along with a screening facility of 350 TPH

The matter was discussed and the following observations were made:

1. The mines are expected to expand horizontally from 5ha to ~15.935ha and vertically to cover most of the lease area allotted to them. It was clarified that back filling of open pits is not possible as further exploration will be done to check the availability of ores during the conceptual period. The information furnished in the report that the back filling of OB will start from 6th year (Table 10.1, pg.82, EIA report) is not correct. Therefore, it is contemplated that the mine shall go on dumping the OB till foreseen future and the progressive mine closure plan approved by IBM can not be implemented even within the foreseeable future. The proponent has to clarify the same.
2. They mine will generate 7,53,130m³ of total wastes and OB and envisage to dump on their existing dump increasing the height to 20m and create a new dump to a height of 9m, location for which is shown as an extension to the existing dump. There is no plan of plantation around their periphery. The mine shall furnish details of OB dump management and furnish information on back filling open pits and bring back to their original form, as far as possible, as per environmental conservation requirements.
3. The proponent has envisaged to plant around 40,000 plants over an area of ~20ha till the 6th year,(i.e., till the end of present EC period Table at pg.105). There is no top soil excavated in their mining and almost the entire area, except the OB dump is shown as planted under post closure plan. Phase-wise reclamation along with plantation details are to be furnished. The present state of plantation (8,600 plants over 4.3ha land) in the existing mine area is to be clearly shown in the map. The mine shall give details on type of plants, method of plantation and survival rate.
4. Two natural streams flowing close to the lease area. The mine has proposed for garland drain all around the lease-hold area. The proponent has to clarify the

existing conditions like location of drains, effluent management pattern and recharge devices installed during years of operation. The proponent is may provide a storage pond in the low lying area with embankments around for accumulation of rainwater as well as treated overflow from the OB dumps which can be served as their source of water for plantation and sprinkling etc. in addition to ground water recharge.

5. The proponent shall furnish detail specification of the screening unit, detail pollution control measures proposed for the screening unit.
6. **As per table at pg. 112-113, the proponent earmarked Rs.42 lakhs per year to meet CSR activity as per commitments in the Public Hearing . This may be publicized in local news papers so that the local people will be aware of such activities and commitment of the proponent towards their welfare. However, there is no commitment towards employment of local people (para 4), which is one of the important demands in the public hearing findings at pg.121-125. This may be clarified.**
7. The proponent is using ground water to an extent of 20m³/day out of their total requirement of 100m³/day. The proponent shall furnish detail water balance i.e water consumption under different activities, treatment and recharge schedule . Ground water table is shown to seasonally vary from 490-500MSL (Fig.4.3). Since this is located in a cluster of mines, they should conduct hydrological survey of ground water resources by a competent firm and find actual reserves available.
8. The proponent shall furnish detail information regarding use of surface water i.e @80m³/day such as its source and availability . The proponent shall undertake a survey of flow rate of the surface water and other user demands in the area may also be specified so as to justify the present availability to the lessee.
9. The rainwater recharge envisaged shall be rechecked . The GW level is shown to increase at least 10m each monsoon. Infiltration coefficient is shown to be 10% in the area which justifies the topography. But area available for infiltration is severely limited in the locality having about 22 mines in proximity and very little

forest cover left. The proponent may specify how much of rainwater they can hold and recharge practically and what shall be the proportion of recharge compared to their demand. They should also produce permission from competent authorities for withdrawal of surface water.

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. 4

FINAL APPRAISAL FOR CONSIDERATION OF EC FOR 20 MW BIOMASS BASED POWER PROJECT BY M/S. SHALIVAHANA GREEN ENERGY LTD., VILLAGE NIMIDHA & MERAMUNDALI, DIST – DHENKANAL (EC).

The project proponent submitted prescribed Form -1 and pre-feasibility report along with the draft TORs. It's a proposed project for Biomass based power project of 20 MW. **The SEAC observed that the proposal is coming under category-A project as per amended EIA notification, 2009 (i.e. biomass based power project \geq 20 MW will be treated as category 'A') .** After detailed deliberations, the SEAC decided to return the documents to SEIAA and de-list the proposal to close the file. The documents returned to **SEIAA, vide letter No. 369 dt. 20.7.10.**

DAY TWO : 20.7.2010

ITEM NO. 5

FINAL APPRAISAL FOR EC FOR 500 BEDDED HOSPITAL & MEDICAL COLLEGE OF EMPLOYEES STATE INSURANCE CORPORATION, AT MOUZA-JAGANNATH PRASAD, CHANDAKA-43, BHUBANESWAR

The proposal is a 500 bedded Hospital & Medical College of Employees State Insurance Corporation, at Mouza-Jagannath Prasad, Chandaka-43, Bhubaneswar Total plot area is 101605.23 sqm. and built up area – 149844.28 sqm.. The total makeup water requirement is 477 KLD. The water requirement will be met from PHED supply. Around 440 KLD of waste water will be generated which will be treated in a Sewage Treatment Plant (STP). Treated water will be re-used for dual flushing, green belt and landscaping. Total solid waste generation will be 1.12 TPD and biomedical waste generation will be 0.5 TPD . The power requirement is **8600 KVA** .. Bhubaneswar Development Authority has

approved the building plan. . **The Consultant Sri. Manoranjan Nayak, Global Experts C-23, BJB Nagar, Bhubaneswar – 751 014** made the presentation on the proposal.

After detailed deliberations, the SEAC decided to consider environmental clearance for the proposal after getting the following information/documents from the project proponent.

1. Detailed quantification and characterization of different biomedical waste to be generated and its disposal practice.
2. Detailed specification of biological treatment system for waste water to be generated from different sources.
3. Environmental management plan for constructional phase as well as operational phase.
4. Back up calculation of waste water generation and fresh water usage in the proposed project.
5. Necessary clearance from the Competent Authority from (State Govt.) for drawl of requisite quantity of water for the project.
6. Concrete management plans for following should be incorporated in the EMP :
 - i) Dumping of construction material and dug out soil in a safe manner maintaining excellent house keeping during construction phase.
 - ii) Sewage treatment giving all calculations pertaining to capacity efficiency and ultimate disposal of the treated water.
 - iii) Solid waste management plan for bio-degradable and non-biodegradable solid waste (segregation, collection, transportation and disposal etc.)
8. Details of re-charge pit with calculations or estimates of net recharge based on the rainfall of the region and detailed specifications of the pits shall be provided.
9. Conservation of energy through maximizing the use of natural light and air to be explored and implemented. Detailed proposal to this effect shall be submitted.
10. Details on type of plants, method of plantation and survival rate.
11. Detail of CSR activity in the area with proposed budgetary provision.
12. Baseline ambient air quality data of the area.

Item No. 6

FINAL APPRAISAL FOR EC FOR CONSTRUCTION OF BUILDING FOR THE INTERNATIONAL MANAGEMENT INSTITUTE AT GOTHAPATANA, CHANDAKA, BHUBANESWAR

The proposal is for **INTERNATIONAL MANAGEMENT INSTITUTE at Gothapatana, Chandaka, Bhubaneswar** Total plot area is **64280** sq.M and built up area is **40477.82 Sq.M**. The total makeup water requirement is **70 M3/DAY**. The water requirement will be met from ground water. Around 70 KLD of waste water will be generated which will be treated in a Sewage Treatment Plant (STP). Out of which 53.2 KLD is reused and 16.8 KLD will be discharged to municipal sewer. Treated water will be re-used for dual flushing, green belt and landscaping. Total solid waste generation will be 0.513 TPD . The power requirement is **945 KVA**..IDCO has approved the building plan. . **The Consultant Sri. Manoranjan Nayak, Global Experts C-23, BJB Nagar, Bhubaneswar – 751 014** made the presentation on the proposal.

After detailed deliberations, the SEAC decided to consider environmental clearance for the proposal after getting the following information/documents from the project proponent.

1. Detailed specification of biological treatment system for waste water to be generated from different sources.
2. Environmental management plan for constructional phase as well as operational phase.
3. Back up calculation of waste water generation and fresh water usage in the proposed project.
4. Details of ground water potential (no. of borings proposed, level of ground water, available quantity etc.) of the area and proposed volume of withdrawal is to be furnished. Necessary clearance from the Competent Authority from (State Govt.) for drawl of requisite quantity of water for the project should be provided
5. Concrete management plans for following should be incorporated in the EMP :
 - a. Dumping of construction material and dug out soil in a safe manner maintaining excellent house keeping during construction phase.
 - b. Sewage treatment giving all calculations pertaining to capacity efficiency and ultimate disposal of the treated water.

- c. Solid waste management plan for bio-degradable and non-biodegradable solid waste (segregation, collection, transportation and disposal etc.)
- 6. Details of re-charge pit with calculations or estimates of net recharge based on the rainfall of the region and detailed specifications of the pits shall be provided.
- 7. Conservation of energy through maximizing the use of natural light and air to be explored and implemented. Detailed proposal to this effect shall be submitted.
- 8. Details on type of plants, method of plantation and survival rate.
- 9. Detail of CSR activity in the area with proposed budgetary provision.
- 10. Baseline ambient air quality data of the area.
- 11. Copy of IDCO approval letter and letter of Bhubaneswar Development Authority indicating that BDA building plan approval is not required for the IDCO land.
- 12. Land use map of the area

ITEM NO. 7

FINAL APPRAISAL FOR EC FOR CONSTRUCTION OF HOUSING PROJECT “TAMARIND TERRACE” RESIDENTIAL APARTMENT OF M/S. ARYANS INFRASTRUCTURE PVT. LTD AT AT -CHANDRASEKHARPUR, BHUBANESWAR

The proposal is a residential apartment at Chandrasekharpur, Bhubaneswar, Odisha. Total plot area is 1178802.9 sqm, built up area is 184080.6 sqm, and ground coverage area is 65651.2 sqm. The total makeup water requirement is 135 KLD. The water requirement will be met from PHED supply. Around 108 KLD of waste water will be generated which will be treated in a Sewage Treatment Plant (STP). Treated water will be re-used for dual flushing, green belt and landscaping. Total solid waste generation will be 0.8 TPD. The power requirement is 1MVA. Bhubaneswar Development Authority has approved the building plan. **The Consultant Sri. Manoranjan Nayak, Global Experts C-23, BJB Nagar, Bhubaneswar – 751 014** made the presentation on the proposal.

After detailed deliberations, the SEAC decided to consider environmental clearance for the proposal after getting the following information/documents from the project proponent.

- 1. Detailed specification of biological treatment system for waste water to be generated from different sources.
- 2. Environmental management plan for constructional phase as well as operational phase.

3. Back up calculation of waste water generation and fresh water usage in the proposed project.
4. Necessary clearance from the Competent Authority from (State Govt.) for drawl of requisite quantity of water for the project should be provided
5. Concrete management plans for following should be incorporated in the EMP :
 - a. Dumping of construction material and dug out soil in a safe manner maintaining excellent house keeping during construction phase.
 - b. Sewage treatment giving all calculations pertaining to capacity efficiency and ultimate disposal of the treated water.
 - c. Solid waste management plan for bio-degradable and non-biodegradable solid waste (segregation, collection, transportation and disposal etc.)
6. Details of re-charge pit with calculations or estimates of net recharge based on the rainfall of the region and detailed specifications of the pits shall be provided.
7. Conservation of energy through maximizing the use of natural light and air to be explored and implemented. Detailed proposal to this effect shall be submitted.
8. Details on type of plants, method of plantation and survival rate.
9. Detail of CSR activity in the area with proposed budgetary provision.
10. Baseline ambient air quality data of the area.
11. Copy of IDCO approval letter and letter of Bhubaneswar Development Authority indicating that BDA building plan approval is not required for the IDCO land.
12. Land use map of the area

ITEM NO. 8

PROPOSAL OF NATIONAL INSTITUTE OF SCIENCE, EDUCATION AND RESEARCH (NISER), FOR ACADEMIC TOWNSHIP & SPORTS COMPLEX CUM RESIDENTIAL TOWNSHIP AT :JATNI, KHURDA, ODISHA

The proposal is a academic township & sports complex cum residential township at :Jatni, Khurda, odisha. Total plot area is 1178802.9 sqm ,built up area is 184080.6 sqm. and ground coverage area is 65651.2 **sqm**.. The total makeup water requirement is 900 KLD. The water requirement will be met from PHED supply. Around 720 KLD of waste water will be generated which will be treated in a Sewage Treatment Plant (STP). Treated water will be re-used for dual flushing, green belt and landscaping. Total solid waste generation will be 1800 kg/day . The power requirement is **6800 KVA**.. Bhubaneswar Development Authority has approved the building plan. **The Consultant**

Sri. B. Patra CEMC Pvt. Ltd, Saheed Nagar, Bhubaneswar made the presentation of the proposal.

The SEAC recommended for grant of environmental clearance in favour of the project for a period of five years with the following stipulated conditions :

I. GENERAL.

- i). The applicant (Project proponents) will take necessary measures for prevention, control and mitigation of Air Pollution, Water Pollution, Noise Pollution and Land Pollution including solid waste management as mentioned by them in Form-1, Form-1A, and Environment Management Plan (EMP) in compliance with the prescribed statutory norms and standards.
- ii) The applicant will take statutory clearance/approval/permissions from the concerned authorities in respect of his project as and when required.
- iii) The applicants will submit half-yearly compliance report for post-environmental clearance monitoring in respect of the stipulated terms and conditions in the Environmental Clearance to the State Environmental Impact Assessment Authority (SEIAA), Orissa, on 1st June and 1st December of each calendar year.
- iv) The applicants will adopt the prescribed norms, and standards provided in the National Building Code of India, 2005, specially relating to :
 - a) Fire protection and life safety of occupants of the buildings.
 - b) Safety of personnel during construction, operation and demolition of buildings.
 - c) Lighting and natural ventilation of buildings.
 - d) Safety from electrical fire, shock and lightening of the buildings.
 - e) Air-conditions, heating and mechanical ventilation of the buildings
 - f) Acoustics and noise control of the buildings.
 - g) Maintenance and functioning with emissions from generators supplying power to common space / residential in case of power failure along with fuel handling /storage.
 - h) Installation of lifts and escalators in the buildings.
 - i) Water supply, drainage and sanitation including solid waste management.
 - j) Landscaping of surrounding areas of the buildings.

II. CONSTRUCTION PHASE.

- (i) Provision shall be made for the housing of construction labourers within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (ii) A First-Aid Room will be provided in the project site both during construction and operation of the project.
- (iii) All the top soil excavated during construction activities should be stored separately for use in land filling, horticulture/landscape development within the project site.
- (iv) Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and will be disposed off taking the necessary precautions for general safety and health aspects of people only in approved sites with the approval of competent authority.
- (v) Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- (vi) Construction spoils, including bituminous material and other hazardous materials should not be allowed to contaminate watercourses, ground water and dump sites by following safe dumping / disposal practice as per statutory rules and norms with necessary approval of the Orissa Pollution Control Board.
- (vii) The diesel generator sets to be used during construction phase shall be low sulphur diesel type and should conform to Environment (Protection) Rules 1986 prescribed for air and noise emission standards.
- (viii) The diesel required for operating DG sets shall be stored in underground tanks and, if required, clearance from the Chief Controller of Explosives shall be taken.
- (ix) Vehicles used for bringing construction materials to the site should be in good condition and should have a pollution check certificate and conform to statutory air and noise emission standards and should be operated only during non-peak hours of the day.
- (x) Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be taken to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/OPCB.

- (xi) Fly ash bricks should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and as amended on 27th August, 2003. The above condition is applicable as the project site is located within the 100 Km of Thermal Power Stations.
- (xii) Ready mixed concrete would be used in building construction.
- (xiii) Storm water control and its re-use should be as per CGWB and BIS standards for these applications.
- (xiv) Water demand during construction should be optimized by adopting best practices without compromising quality.
- (xv) Permission to draw minimal quantity of ground water shall be obtained from the competent Authority prior to construction/operation of the project.
- (xvi) Separation of grey and black water supplies and collection should be done by the use of dual plumbing line. Grey and black water should be treated separately before recycling/ reuse.
- (xvii) Fixtures for showers, toilet flushing and drinking water should be of low flow type and restricted to requirements by use of aerators, avoiding wastage pressure reducing devices or sensor based controls.
- (xviii) Use of glass may be maximum upto 40% of total outer wall area to reduce the energy consumption and load on air-conditioning. If necessary, high quality double glass with special reflective coating may be used in the windows.
- (xix) Roof should meet the prescribed requirement as per Energy Conservation Building Code by using appropriate thermal insulation material.
- (xx) Opaque wall should meet prescriptive requirements as per Energy Conservation Building Code.
- (xxi) The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipments etc. as per National Building Code of India, 2005 including protection measures from lightening etc.
- (xxii) Regular supervision of the above and other measures for monitoring should be in place all through the construction phase to avoid disturbances and pollution to the surroundings.

III. OPERATION PHASE.

- i) The installation of the Sewage Treatment Plant (STP) should be certified by a competent agency and a report in this regard should be submitted to the SEIAA, Orissa before the project is commissioned for operation. Treated effluent from STP shall be recycled/reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated effluent shall conform to the norms and standards of the Orissa State Pollution Control Board. Necessary measures should be taken to mitigate the odour problem from STP.
- ii) The STP sludge should not be dried nor incinerated within the project site and should be disposed off as per the norms of SPCB, Orissa.
- iii) The project proponent will ensure that under no circumstances, the environment is polluted due to non-functioning / under performance of sewerage disposal system of the project. To achieve this, a stand-by STP with similar capacity should be installed to be put into service during the maintenance /over hauling of the original STP,
- iv) The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry / inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material. Necessary approval / permission may be obtained from the concerned authorities
- v) Diesel power generating sets proposed as source of back-up power for lifts elevators and common area illumination during operation phase should be of enclosed type and conform to Environment Protection (EP) rules 1986. The height of the stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets put together. Low sulphur diesel should be used. The location of the DG sets may be decided in consultation with Orissa State Pollution Control Board. Care may be taken to avoid disposal of smoke /pollutants from DG sets in the residential area.
- vi) Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time, the noise levels measured at the boundary of the sites shall be restricted to the permissible levels to comply with the prevalent regulations.
- vii) Plantation of trees shall be done as per approved layout plan.
- viii) Rain water harvesting for roof run- off and surface run- off, as plan submitted should be implemented. Before recharging the run off, pre-treatment must be done to remove suspended matter, oil, grease and other soluble components as per norms. The bore-well for rainwater recharging should be kept at least 5 mts. above the highest ground water

table. The technology may preferably be adopted from a commercial firm with performance guarantee.

- ix) Weep holes in the compound walls shall be provided to ensure natural drainage of excessive rain water in the project area during the monsoon period after the harvesting operations.
- x) The ground water level and its quality should be monitored regularly in consultation with Central / State Ground Water Authority.
- xi) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided
- xii) A Report on the energy conservation measures conforming to energy conservation norms finalized by the Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submitted to the SEIAA, Orissa in three months time before operation/ habitation.
- xiii) Provisions of solar hot water storage / supplies at the roof top may be made as per statutory norms of CPCB/MoEF/SPCB, Orissa.
- xiv) Energy conservation measures like installation of CFLs/TFLs for lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid toxic contamination. Use of solar panels may be adopted to the maximum extent possible, especially for street lights.
- xv) The building blocks should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation including plantation/ horticulture.
- xvi) The proponent shall furnish detailed information on disposal of E-wastes which includes obsolete personal computers and associated components and dispose the e-wastes as per CPCB / MoEF guidelines. A detailed proposal to this effect shall be submitted to the authority (SEIAA).
- xvii) The funds earmarked for the environment protection measures shall be judiciously utilized. Under no circumstances this funds shall be diverted for other purposes like Annual allocation and maintenance / monitoring etc. and expenditure for this fund should be reported to the SEIAA, Orissa.
- xviii) **The proponent shall setup a dispensary and a central school as part of CSR activity and the local people may be entitled to use those facilities. .**
- xix) **A botanical garden may be developed in the vacant land within the premises by planting native species which also serve the purpose of research activities for the students of the institution.**

- xx) The above mentioned stipulated conditions shall be complied in time-bound manner. Failure to comply with any of the conditions mentioned above may result in cancellation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

ITEM NO .9

PROPOSAL OF M/S GANGPUR UDYOG PRIVATE LIMITED FOR 2,40,000 TPA COAL BENEFICIATION PLANT AT DEULI, SUNDERGARH, ODISHA

The project authorities and their consultant gave a detailed presentation on the salient features of the project. The unit has proposed for **2,40,000 TPA Coal Beneficiation Plant At Deuli, Sundergarh** . The total area acquired for the proposed plant will be 7.67 Ac. The cost of the project will be Rs.57.59 Cr. Total water requirement is 82 KLD.

Considering the information furnished and presentation made by **the consultant Mr. Gangadhar Sahoo, M/S S.S. Environics (India) Pvt Ltd., Bhubaneswar** environmental consultant of the project proponent, the SEAC prescribed the following TORs for undertaking detailed EIA study

1. Profile of the project proponent and his background to establish the financial and entrepreneurial competency to undertake the project may be included.
2. A brief description of the plant, the technology used, the source of coal, the mode of transport of incoming unwashed coal and the outgoing washed coal shall be provided. Specific pollution control and mitigative measures for the entire process shall also be provided.
3. The EIA/EMP report should cover the impacts and management plan for the project specific activities on the environment of the region, and the environmental quality, air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts for the rated capacity taking into account the existing and proposed activities in that area so as to address the related environmental issues in an integrated way.
4. A Study area map of the core zone and 10km area of the buffer showing major industries/mines and other polluting sources shall be provided.
5. Collection of one-season (non-monsoon) primary base-line data on environmental quality, air ,noise, water (surface and groundwater), soil.
6. Detailed water balance should be provided. The break up of water requirement as per different activities in the beneficiation operations vis-à-vis washery should be given separately. Source of water for use in washery, sanction of the competent authority in the State Govt.. and examine if the unit can be zero discharge including recycling and reuse of the wastewater for other uses such as green belt, etc. Periodically discharge of waste water if any shall be made after proper treatment and confirming the prescribed standard.

7. Impact of choice of the selected use of technology and impact on air quality and waste generation (emissions and effluents) shall be provided.
8. Impacts of mineral transportation - the entire sequence of mineral production, transportation, handling, transfer and storage of mineral and waste, if any, and their impacts on air quality should be shown in a flow chart with the specific points where fugitive emissions can arise and the specific pollution control/mitigative measures proposed to be put in place.
9. Details of various facilities to be provided for the personnel involved in mineral transportation in terms of parking, rest areas, canteen, and effluents/pollution load from these activities. Examine whether existing roads are adequate to take care of the additional load of mineral transportation, their impacts.
10. Impacts of Coal Handling Plant (CHP), if any on air and water quality. A flow chart of water use and whether the unit can be made a zero-discharge unit to be provided.
11. Details of green belt development including cost of EMP (capital and recurring) in the project cost to be provided.
12. Submission of sample test analysis of:
 - i) Characteristics of coal to be washed- this includes grade of coal and other
 - ii) Characteristics ash, S and Hg level etc.
 - iii) Characteristics and quantum of washed coal.
 - iv) Characteristics and quantum of coal waste rejects.
13. Management/disposal/Use of coal waste rejects to be provided
14. Copies of MOU/Agreement with linkages for the capacity for which EC has been sought to be provided.
15. Details of run off management to be included.
16. 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.
17. Plantation in at least 33% of the total area and its maintenance upto five years and regular follow up maintenance thereof has to be ensured; accordingly plan has to be submitted with EIA. [Plantation Scheme]. Total area for which afforestation has been proposed – plan stating how much plantation shall be taken up annually has to be submitted. Plantation of local species may be encouraged.
18. 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.

19. Public hearing points likely to be raised and commitment of the project proponent on the same may be included.
20. The EIA report should includes the specified methodology to be adopted for collection and analysis of 12 air quality parameters as per the Central Pollution Control Board Notification No. B-29016/20/90/PCI-L dated 18th November 2009 published in the Gazette of India Part III-Section 4 No 217 Extraordinary. The analytical methods to be followed is specified in the above notification is to be maintain the New National Ambient Air Quality Standards
21. **This Terms of References (TORs) is valid for a period of two years from the date of issue of TORs for submission of the EIA/EMP report after public consultation.(This is in conformity with the MoEF, Govt. of India office memorandum No. J-11013/41/2006-IAII(I) dt. 22.3.10.**

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

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MEMBER, SEAC**

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