

**MINUTES OF THE MEETING OF STATE LEVEL EXPERT APPRAISAL
COMMITTEE, ORISSA HELD ON 11th AND 12th AUGUST 2010**

The meeting of State Level Expert Appraisal Committee, Orissa was held on 11th and 12th August 2010 in the conference hall of Orissa State Pollution Control Board, Bhubaneswar at 11.00 AM. Sri Sasanka Sekhar Patnaik, IFS Member, SEAC Orissa chaired the meeting. The following members were present in the meeting.

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| 1. Sri Sasanka Sekhar Patnaik, | - | Member |
| 2. Prof. Swyam Prakash Rout | - | Member |
| 3. Dr. Moheshwar Patra | - | Member |
| 4. Prof. R. C. Mohanty | - | Member |
| 5. Dr. Surendra Nath Das | - | Member |

The following issues were discussed and decided

1. The minutes of the previous meeting were confirmed by the members.
2. Inspection report of M/s Emami Paper Mills, Balgopalpur, Balasore was finalized.
3. The agenda-wise proceedings and deliberations of the meeting of the committee are detailed below.

ITEM – 1

PROPOSAL OF JAJANG IRON ORE MINES OF M/S T.B. LAL & COMPANY FOR EXPANSION OF PRODUCTION CAPACITY OF IRON ORE FROM 36450 TPA TO 120000 TPA OVER AN AREA 22.690 HA AT JAJANGA, KEONJHAR

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. The project proponent had submitted information in the prescribed format (Form-I) along with pre-feasibility report.. The proposal is for production of iron ore from 36450 TPA to 120000 TPA over an area 22.690 ha. The mine working will be opencast semi-mechanized. Original lease was allotted on 11.10.1961 in the name of Mr. S. Lal over an area of 39.898 ha. for 30 years, i.e, upto 11.10.1991. Surface right was granted over an area of 39.898 ha. vide letter no. 1330 dt. 11.6.1966. On 11.1.1985 it was inherited by Mr. T. B. Lal. On 31.5.1991 the lease was transferred to M/s. T. B. Lal & Co. with a partnership between Mr. T.B. Lal & Mr. H. V. Lal. Letter issued by Collector & District Magistrate vide letter No. 3868(2)/Mines, dated 9.12.1993 to M/s. T. B. Lal & Co. after

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withdrawing the surface right of remaining area over 17.208 hectares which is acquired by the railway department for Banspani-Jakhapura a railway line. 1st Renewal of mining lease over an area of 22.690 ha. was done on 17.1.1996 with effect from 11.10.1991 for 20 years i.e upto 10.10.2011. Partnership deed made on 11th October, 2008 between Mrs. Kailash Lal and Mr. H. V. Lal. The water requirement is 10 KLD. The source of water is from nearby Dalko Nala. The consultant Sri Rajesh Kanungo, M/s SUN Consultancy Pvt Ltd. Bhubaneswar of the project proponent made presentation on the proposal

The committee decided to consider TOR for undertaking detailed EIA study after receipt of following clarification/documents from the proponent.

- The original lease allotted on 11.10.1961 in favor of Mr. S. Lal; was later handed over to his brother Mr. H.V.Lal; again a joint holding company was informed in 10/2008 Mr. T.B.Lal and Mrs. Kailash Lal. So the relevant legal documents related to inheritance, handing over and joint hold etc. should be deposited so as to be sure that the present applicant for productivity expansion on the same leasehold is the legal owner of the company. The ML has since been renewed for 20years with validity up to 10/2011
- The mine was closed since 2009 by an order of the Dy. Dir. Mines, Joda (Keonjhar) and has been inoperative since then. A copy of the same letter may be deposited to verify the exact cause of closure and action, if any following the closure notice.
- Out of the total leasehold area of 39.998 ha for which surface rights were granted on 11.6.1966 with lease validity till 10/91, 17.208ha of land was withdrawn by the Govt. in 1993 for laying of railway lines. Thus their leasehold area has been divided into two unequal segments. Supportive documents in this regard may be submitted.

The committee also suggested that the following observations shall be included in the ToR while issuing same to the proponent for EIA study.

1. The proponent has to furnish IBM approved Mine Plan and Progressive Mine Closure Plan at the time of submitting EIA/EMP..
2. The proponent shall furnish relevant documents of private land acquired within the granted leasehold area;.
3. The mine was in operation for quite some time and there are a number of mines like Rungta Mines, SC Mines etc. in its immediate vicinity, the baseline data should include the present environmental scenario existing on the ground including land cover/ land use details and what environmental correction measures the mine has taken so far including OB dump management, plantation, effluent treatment and maintenance of closed mines, roads etc.

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4. The mine has three different working pits and would be expanding those vertically and horizontally leaving very little unused space till all the proven reserves are lifted and possibly beyond during the conceptual period. It is not clear as to where the mine has planned to backfill at least 70% of their OB generated till then starting from 6th year till 13th year as per present life of the mine.
5. The mine has claimed no top soil in the area, which is improbable. The mine has to clarify, how do they plan to undertake plantation directly on barren land and OB dumps without top soil.
6. The analysis 3,649m³ of sub-grade ore after the cutoff has not been included. The stacking place, future use or value addition for marketing etc. are not clear. The proponent has to clarify the same.
7. The mine is drawing and presently propose to draw 10KLD water from a natural perennial nala flowing beside their ML area for which a valid permission from the Competent Authorities is to be obtained. The scope for rainwater recharge may also be explored.

ITEM NO .2

PROPOSAL OF M/S. SIRKAGUTTA IRON ORE MINES OF M/S PRAKASH INDUSTRIES LTD. FOR PRODUCTION OF IRON ORE OF CAPACITY 1MTPA OVER AN AREA 19.532 HA AT SIRKAGUTA, KEONJHAR

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. The project proponent had submitted information in the prescribed format (Form-I) along with pre-feasibility report.. The proposal is for production of iron ore of capacity 1 MTPA over an area 19.532 ha. Prospecting license was granted by the department of Steel & Mines, Govt. of Orissa, vide letter No. 12326/SM.II(A) SM.47/99 dt. 15.12.2003. Mining lease was granted by the Deptt. of Steel & Mines, Govt. of Orissa, vide letter No. 47/SM.III(A) SM-40/2205 dt. 7.1.10. Out of total lease hold area, 3.8332 ha is forest area. The mine working will be opencast semi-mechanized.. The water requirement is 60 KLD. The source of water is ground water. Considering the information furnished and presentation made by **the consultant Sri Rajesh Kanungo, M/s SUN Consultancy Pvt Ltd. Bhubaneswar** 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. Duly attested & certified Mining Plan approved by concerned authority may be submitted along with the copy of the current lease deed in the name of the proponent. Present status of mining lease may be given.

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3. The EIA study area shall encompass 10 km radius from the mine lease boundary as buffer zone.
4. Collection of one season (non-monsoon) primary baseline data on ambient air quality, water quality, noise level, soil and flora and fauna and site-specific meteorological data should also be collected. The location of the monitoring stations should be justified.
5. Air quality modeling should be carried out for prediction of impact of the project and the existing mines in the vicinity on the air quality of the area focusing more in the villages within 3 kms from the mine. It should also take into account the impact of movement of vehicles for transportation and handling of minerals, OB including mining activity through volume source modeling. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction and speed may also be indicated on the map. The modeling should take into consideration the existing mines in the study area as regards their polluting potential rather the existing level. Since the consultant is already working in the area for other proponents, the baseline data and air sampling stations proposed in the buffer zone are likely to overlap. This would make the EIA estimation erratic. The present core zone may have additional air sampling stations at different heights since the wind speed/direction is likely to be different and thus prediction modeling would be erratic.
6. **There are 5.836ha of private tribal land acquired within the ML area; proper land acquisition documents may be furnished. There are also 3.8332ha of village forest land (*kisam: gramya jungle*) within the ML area; clearance from Forest Dept. may be furnished or processed simultaneously.**
7. **They claim to have no top soil in the area, which is improbable. In any case, how do they plan to undertake plantation directly on barren land and OB dumps without top soil.**
8. **As per details submitted, as they go deep, the stripping ratio of usable deposits to overburden decreases, which implies that the grade becomes lower, which is improbable in a shallow occurrence and not found elsewhere in the area. It needs further clarification.**
9. **While working with pits by expanding vertically up to 36m and horizontally covering majority of ML area till all the proven reserves are lifted and possibly beyond during the conceptual period, the mine has to clarify how can backfilling be executed. It is not clear as to where do they plan to backfill their OB generated till the end of 5yrs, the present life of the mine.**
10. Availability of requisite quantity of surface, sub-surface and ground water and their source to be furnished along with water balance. Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the project should be provided.
11. Details of water bodies and drainage pattern of the ML area may be specified.
12. Progressive reclamation plan, post-mining land use, progressive mine closure and greenbelt development plan should be prepared in tabular form and be submitted. Milestones for the above activities may be specified in the table.

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13. 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 mine lease 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 thereof, may be furnished.
14. A detailed biological study of the core zone and buffer zone (10 km radius of the mining lease area) should be carried out. Details of flora and fauna duly authenticated separately for core and buffer zones should be furnished based on field survey indicating the schedule of the fauna present. In case of any schedule-I fauna found in the study area, necessary plan for their conservation should be prepared in consultation with the State Forest & Wildlife Department and details may be furnished. Necessary cost details for executing the conservation measures should be furnished and incorporated as part of the project cost.
15. Occupational health impact and remedial measures thereof for the project may be studied.
16. Baseline data for health status survey for all the employees including labourers and the residents of the nearby villages within 5 km distance may be carried out. Welfare of mine workers is the prime responsibility of the project proponent. Various activities such as regular health check up, first-aid, shelter for rest and meals, drinking water etc. are to be taken up at the project cost. Nearby mine owners may form a society and a common fund for the welfare of mineworkers may be created. Besides various Govt. schemes and other sources may be explored. This aspect has to be covered in the EMP.
17. Socio-economic impact due to project activity may be assessed and based on the study, developmental activity proposed to be undertaken by the project proponent to be specified and 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. Points raised/likely to be raised during public hearing and commitment of the project proponent on the same may be included.
19. The depth of the ground water table in the area vis-a-vis minable depth of the bodies may be clarified with either primary or authentic secondary data in the EIA report. Rainwater harvesting and treatment system for pumped out quarry water if any may be submitted.
20. Management of OB dumps and other solid wastes generated during mining may be addressed through incorporation of a concrete plan for the same. Proper care should be taken for treating the effluents along with rainwater harvesting and wash offs from OB dumps to adequately recharge the ground water resources.
21. Colored maps depicting land use/change of the region showing sensitive / fragile features and detailed lay-out of the site clearly showing green-belt (existing & planned) should be furnished.
22. Satellite imagery of the location of mine should be submitted with demarcation of other proposed/in-operation mines in nearby area. Location is also to be shown in Tehsil map procured from the Revenue Department. This should be used as baseline information to compare the impact of mining in the area in future.

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23. Risk assessment and disaster management plan should be given.
24. EMP taking into account the pre- and post-project environment impacts may be included.
25. Any litigation/ court case pending against the proposal should also be included.
26. 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
27. **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).**

ITEM NO .3

PROPOSAL OF M/S KAVITA AGRAWAL FOR PRODUCTION OF MANGANESE ORE 36000 TPA OVER AN AREA 47.486 HA AT KUSUMDIHI , SUNDERGARH

The proponent intimated that their concerned senior technical officer dealing with the project was not available for the presentation and requested to defer the case to next meeting. The committee decided to defer the case as per request of the proponent..

ITEM NO - 4

FINAL APPRAISAL OF GENPACT, DLF IT PARK INFOCITY IT SPECIAL ECONOMIC ZONE (SEZ) CHANDAKA I/E, BHUBANESWAR (EC)

The proponent could not attend the meeting. The committee decided to give a final reminder to the proponent to intimate their willingness for the project within 30 days from the date of issue of letter. The proposal will be de-listed for closure of the file if no communication is received from the proponent within the stipulated time...

ITEM NO - 5

TECHNICAL DISCUSSION FOR FINAL APPRAISAL OF PROJECT OF AMRI BHUBANESWAR – A MULTI SPECIALTY HOSPITAL AT , KHANDAGIRI, BHUBANESWAR

The proponents with some of their Technical Experts presented the clarifications sought by the Committee earlier while considering EC for the above proposal.

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The technical expert present could not clarify on the following points:

1. The following are not clarified related to Effluent Treatment Plant(ETP)
 - a) Why are the effluents released from laboratories only are proposed to be treated separately since the dressings and other operations on the bed may also be contaminated with human blood, cells etc. which also need similar treatment.
 - b) The bio-medical and general effluents are apparently being treated in the same aeration pond and subsequent treatment processes, which is highly objectionable.
 - c) Such bio materials need stringent microbial treatment before mixing up with other effluents; arrangements shown are not clear on these aspects.
 - d) Arrangements for mechanical/automatic periodic cleaning/lifting of ETP sludge are essential, which has not been provided for.
 - e) It was suggested by the Committee during their initial presentation that a standby ETP of similar capacity may be provided to take care of continuous treatments during servicing/ failures, which has not been done.
 - f) There is no agreement for the disposal of solid wastes, especially medical wastes, with the Municipal Corporation. Use of sludge from ETP is also not clear.

2. The issue of having insufficient space for plantation also could not be clarified to the Committees' satisfaction. The proponents' contention of having adequate space in the unused area was not satisfactory. The front buildings with boundary wall are too close to the approach road, common to many users. There may be some space for only one row of plants. It was suggested, however, to consult a professional horticulture/plantation expert for ethical garden development in the area.

The committee decided to take decision on the proposal after receipt of above information/clarification from the proponent.

DAY TWO : DT. 12.8.2010

ITEM NO - 6

FINAL APPRAISAL FOR CONSIDERATION OF EC FOR 2X 27 MW CAPTIVE POWER PLANT OF M/S OCL INDIA LTD. RAJGANPUR, SUNDERGARH

M/s. OCL India Ltd is operating with 2.9 MTPA cement plant and 4.0 MTPA clinker plant. The proposal is for 2X27 MW power plant to meet the captive requirement for the above cement plant. Originally the proposal was submitted for "2 X 27 MW CPP

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& 200 TPH Coal Beneficiation Plant” at MoEF, Delhi with duly filled-in Form-1 & Pre Feasibility Report vide letter no. RGCF:86207 / 2, dated 6th December 2007. TOR Presentation held on 13th March 2008 before Expert Appraisal Committee (EAC) of Thermal Power & Coal Mine Projects of MoEF. TOR issued vide letter no. J-13012/27/2008-IA.II(T), dated 15th April 2008. Public Hearing Conducted on 29th May 2009 at Gopabandhu High School, Rajgangpur. The Public Hearing Findings are very much satisfactory. EC Presentation held on 11th Jan 2010 in 62nd meeting of EAC of Thermal Power & Coal Mine Projects of MoEF. Subsequently the proposal was reconsidered in the 65th meeting of EAC of thermal power and coal mine projects held during February 12-13, 2010. During this reconsideration, EAC of Thermal Power & Coal Mine Projects of MoEF decided to return the file (2X27 MW Captive Power Plant only) to State Level Environmental Impact Assessment Authority (SEIAA) for appraisal as it is a ‘B’ category project (< 500 MW) and coal washery to go separately to the Coal Sector (as applicable). EAC also informed that the TORs issued and the public hearing conducted by the project proponent however may remain valid. Accordingly, such decision of EAC in form of “Minutes of Meeting” was circulated in the MoEF website on 26th Feb’10. OCL has withdrawn 200 TPH Coal Beneficiation Proposal from MoEF, Delhi vide letter no. Nil, dated 9th April 2010 because of delay in allotment of Coal Block in favour of OCL and subsequently searching for a better and Environment friendly Technology for establishment of coal washery in future at pit head. MoEF forwarded the file of “2X27 MW CPP” to SEIAA for onward appraisal for Environmental Clearance vide letter no. J-13012/27/08-IA-II(T).

The proposal of 2x27 MW CPP was presented before the SEAC by their full-time Director with the help of their supporting Managers and Consultants Sri **Gangadhar Sahoo** , of **M/s S.S. Environics (India) Pvt Ltd Patrapada Bhubaneswar**. The following issues were discussed and observations were made:

1. The issue of raw material was not very clear. The proponent has intimated that the coal will be used as raw material in absence or shortfall of coal washery wastes to supplement and a coal block (Radhikapur) in the Mahanadi Coal Fields has been jointly allocated to them along with two others for the purpose. The Committee was of the opinion that if the main raw material is likely to change, then the whole process of EIA/EMP shall have to be reframed since emissions, raw material handling, combustion parameters etc. would be completely different. So the proponents may submit authentic documents on the assured source, supplies and analysis of feed materials for use in the CFBC boilers may be submitted.

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2. The analysis report of the coal waste feed for CPP enclosed and presented had several anomalies including ash, sulphur and Hg contents. While Hg was shown to be present in rejects, it was absent or not detectable in the coal itself which needs clarification .
3. They propose to use bottom ash to supplement the raw mix (as a substitute to clay) for clinker production based on their own R&D and past experience in some commercial plant. The Committee was not convinced as to the extent and analysis of bottom ash going to be generated in the CPP using coal wastes as proposed vis-à-vis the specific requirements of the commercial cement-clinker production. The proponent may produce authentic documents to prove the extent and quality of bottom ash permissible for use as raw feed to clinker as per ISI specifications of their commercial product.
4. The water allocation letter enclosed and produced in the meeting was not really entitlement of withdrawal from Sankh river in favor of the proponents; this may be produced after resolving pending issues with the State Agencies. A realistic estimate of actual flow in Sankh river through flow analysis and other existing users including residents upstream/downstream of the river may be produced.
5. The project proposes to use only one stack of adequate (100m) height connecting emissions from two ESP units of two combustion chambers/boilers. The draught speed and dispersion are likely to be affected. So it was suggested to consult their plant suppliers to modify the same without affecting performance.
6. In order to justify the present State of environment in the existing industry stack emission monitoring should be carried out through manual (for SPM/RSPM) and automatic monitors (for SO₂, NO_x, CO₂, CO, Temperature etc) and submitted to SEIAA.
7. Indoor monitoring of certain air pollutants like SPM/RSPM in the residential places, at least inside the campus may be undertaken in view of the combined effects of cement, refractory and power plants in the same campus. The present records of SPM and RSPM in absence of extension to the cement plant and CPP are higher than permitted level. The proponents have indicated that new measures taken after the March-May 2008 monitoring have been taken and situation has improved. The Committee was very critical of the past records of the industry and so wanted to have a look at the present state of dust in air environment, which may be produced fro their existing records as a functional industry.
8. Air cooled condensers may not be able to recover waste heat. It was suggested to recover waste heat from most possible places to conserve energy and save environment.
9. Technical details of maintaining positive O₂ balance in the combustion chambers to reduce emissions was not spelt out clearly. Similarly, having negligible NO_x emission due to suitable combustion temperature also does not convince the Committee. A realistic estimate of NO_x emission may be given.

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10. The ETP design does not include mechanical or automatic sludge removal including a stand-by in case of maintenance/sludge removal or failure. Mere additional pump as a standby is quite inadequate and improper to address this apprehension.
11. A letter of Jan Chetna Manch, a NGO legally formed a part of the Public Hearing though sent afterwards. The apprehensions/accusations raised regarding three serious issues, viz. use of non-industrial land for industrial purposes, area being subjudice and polluting the nearby natural nala and plants are not properly addressed. Proper records refuting or solving the issues raised may be produced.
12. Air pollution monitoring at Kansbahal, at a greater distance from the plant formed a part of the EIA report of 2008. There is no such records in the immediate vicinity (say 0.5 – 1.0km distance) of the plant in the favorable side of predominating wind pattern, which would bring out the level of various pollutants after dispersion before getting too much diluted. Many settlements are located in the distance stated, which may be produced.
13. It is stated that they will be using total amount of fly ash generated in their cement mix at Rajgangur. But it was not clear as to the total amount of clinker produced at present along with amount being used out of it for grinding and mixing for cement production in their Kapilas works and finally the residual clinker processed for final products in Rajgangpur itself. The type of cement and amount of fly ash to be generated should be kept in mind.
14. The total cost towards environment protection is shown as Rs.23,905 lakhs with break-up of Rs.850 lakhs for air pollution, Rs.160 lakhs for water pollution etc. Since there are no break-ups, it could not be ensured whether these amounts are being used for installing regular monitoring/arrest devices like ETP, on-line monitors for trace gases etc. The amount should be realistically spent for abating pollutants generated rather than for routine monitoring or arresting devices. So a broad break-up under each head may be furnished for examination.
15. The proponents have stated that they have just installed some rainwater harvesting devices in their residential area as test cases and propose to expend the system. It should be ensured that the roof-top and wash-offs/storm water generated in the campus may be used for ground water recharging after suitable treatment for water conservation and arresting polluted effluents draining into the near by water body.
16. The committee felt that since the cement and refractory units of OCL, Rajgangpur has been in operation since long, the CSR activities carried out by the industry in nearby settlements may be indicated furnishing details of activities and funds spent against each.

The committee decided to take decision on the proposal after receipt of above information/clarification from the proponent.

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ITEM NO -7

EXPANSION OF SURGUTURIA IRON ORE MINE OF M/S NAARAAYANI SONS (P) LTD. AT VILLAGE – SURGUTURIA (BHOLBEDA), TEHSIL- BARBIL, DISTRICT KEONJHAR, ORISSA OVER AN ML AREA OF 41.517 HA.

The proponent requested to give two month time to comply the required documents related to mine lease as sought in the SEAC meeting held on 8th and 8th April, 2010. The SEAC decided to consider the request of the mine and take decision on the proposal after receipt of the required documents related to mine lease from the proponent..

**(SRI SASANKA SEKHAR PATNAIK)
MEMBER, SEAC**

**(PROF. SWOYAM PRAKASH ROUT)
MEMBER, SEAC**

**(DR. SURENDRA NATH DAS)
MEMBER, SEAC**

**(DR. MOHESHWAR PATRA)
MEMBER, SEAC**

**(PROF. R. C. MOHANTY)
MEMBER, SEAC**

**(SRI S. DAS)
SECRETARY, SEAC**

SECRETARY, SEAC