

No. J-11015/435/2013-IA-II(M)

Government of India
Ministry of Environment, Forest & Climate Change
Impact Assessment Division

Indira Paryavaran Bhavan, Vayu Wing, 3rd Floor, Aliganj, Jor Bagh Road, New Delhi-110 003

Dated: 31st October, 2019

To,

The Chief General Manager (CP&P)
M/s Mahanadi Coalfields Limited
PO - JagrutiVihar, Burla,
Sambalpur-768 020 (Odisha) E-mail: cgmenvt2014@gmail.com

Sub: Basundhara Coal Washery of 10 MTPA in an area of 43.9 ha of M/s Mahanadi Coalfields Ltd., located in villages Balinga, Bankibahal & Kusharain, Tehsil Himgir District Sundargarh (Odisha) - Environmental Clearance – reg.

Sir,

This has reference to your online proposal No. IA/OR/CMIN/20520/2013 dated $21^{\rm st}$ September, 2016 on the above mentioned subject.

- 2. The Ministry of Environment, Forest and Climate Change has considered the proposal for grant of environmental clearance to Coal Washery of 10 MTPA in an area of 43.9 ha of M/s Mahanadi Coalfields Ltd., located in villages Balinga, Bankibahal & Kusharain, Tehsil Himgir District Sundargarh (Odisha).
- 3. The proposal was considered by the sectoral Expert Appraisal Committee (EAC) in its meetings held in the Ministry on 27th December, 2016, 27-28 February, 2017 and 13-14 December, 2018. The details of the project, as per the documents submitted by the project proponent, and also as informed during the meeting, are reported to be as under:-
 - (i) The proposal was accorded TOR vide letter No.J-11015/435/2013-IA.II(M) dated 30th September, 2014, followed by amendment in TOR on 29th February, 2016.
 - (ii) The latitude and longitude of the project site are 22°01′02″N to 22°03′03″ N and 83°43′28″ E to 83°45′35″ E respectively.
 - (iii) Basundhara Washery will be located partly in the mine leasehold of Kulda OCP in Basundhara area of IB-Valley Coalfield in District Sundergarh (Odisha)
 - (iv) Washery will be based on closed water circuit and Zero Effluent Discharge system. Rain water will also be utilised in the plant. In

- case of emergency underflow from thickener shall be treated in 03 Nos. of slime ponds of size $75m \times 20m \times 3.5 m$ (each) and treated effluent shall be reused.
- (v) Total raw coal requirement of 10MTPA for the proposed washery will be met from Kulda OC Project of 10 MTPA of Basundhara area, for which EC was granted vide letter No. J/11015/10/95-IA.II(M) dated 24th December, 2002.
- (vi) The raw coal ash content of Kulda OCP is in the range of 43.8+4%). This ash content is proposed to be reduced to 33.5+ 0.5%) after washing in Basundhara Washery.
- (vii) Basundhara Washery has been proposed to be set up on BOM basis for beneficiation of raw coal (non-coking coal of ash content ranging between 39.8% to 47.8%) of KuldaOCP.
- (viii) Joint Venture: No joint venture.
- (ix) Coal Linkage :Linked to Kulda Opencast Project (10MTPA).
- (x) Employment generated / to be generated: Washery will be constructed on BOM concept, hence employment will be generated by BOM operator.
- (xi) Benefits of the project: The beneficiation/washing of coal will lead to improvement in performance of power plant, reduction in particulate emission, reduction in load on Railway Network and reduction in handling and transportation cost of coal and solid waste.
- (xii) Land usage of the total project area of 43.90 ha includes forest land of 29.41 ha, Government non-forest land 4.33 ha and tenancy land as 10.16 ha, with the acquisition details as under:-
 - Out of 29.41 ha of forest land, 8.52 ha has already been diverted for infrastructure of Kulda OCP vide FC No.8-176/1997-FC dated 8th August, 2007, which is proposed to be re-diverted for Basundhara Washery.
 - Stage-1 for diversion of 29.41 ha of forest land(20.89 ha fresh forest land and 8.52 ha of forest land for re-diversion out of already diverted forest area of 227.89 ha for Kulda OCP of Mahandai Coalfields Ltd.) in Sundargarh Forest Division of Sundargarh Division, Odisha for construction of Basundhara Coal Washery (10 MTPA) by M/s Mahanadi Coalfields Limited is granted by Ministry on 11th March, 2019.
 - Total 4.33 ha of Government non-forest land required for the washery and associated activities, 3.49 ha has already been acquired by the project proponent, and acquisition of the remaining 0.84 ha is in the //process.

- Out of total 10.16 ha of tenancy land required for the washery and associated activities, 2.21 ha has been acquired by the project proponent and 1.13 ha has been acquired by Railway for Clean Coal Silo Area.
- (xiii) The coal grade is G12.
- (xiv) The total estimated water requirement is 2222 KLPD.
- (xv) The seasonal data for ambient air quality has been documented and all results at all stations are within prescribed limits.
- (xvi) The life of Washery is 18 years for computation of economics.
- (xvii) Total make up water requirement of the washery is 145 m^3 /hr @ 0.085 m^3 /tonne of raw coal feed.
- (xviii) Green belt (15 m wide) in and around the washery site including around the conveyor, vacant places shall be developed to control dust emission.
- (xix) Dry Fog System shall be provided at all strategic coal transfer points, enclosures for conveyors etc.
- (xx) Existing Land use pattern

SI. No	Description of structure	Total Land (ha)	Type of land (ha)		
			Forest	Govt	Tenancy
1	Washery	19.32	18.07	0.54	0.71
2	Reject Storage Site	2.71		1.53	1.18
3	Reject conveying corridor	0.85	0.53	0.32	
4	Clean coal Conv. corridor	21.02	10.81	1.94	8.27
	Total	43.90	29.41	4.33	10.16

- (xxi) Transportation: By covered conveyor belts (for Raw coal, Washed coal & Reject).
- (xxii) There is no R & R involved. There are no PAFs.
- (xxiii) Total capital cost of the project is Rs. 334.72 crore.
- (xxiv) Basundhara River is at a distance of 0.5 km from the project site. Garland drain shall be constructed along the boundary of the washery on the river side to collect the surface runoff and treated runoff water

that shall be reused in the washing operation.

- (xxv) Mining plan was approved on 14thDecember, 2008. Mine closure plan is an integral part of mining plan.
- (xxvi) There are no court cases/violation pending with the project proponent.
- (xxvii) Public Hearing was held on 27th July, 2016 in Tehsil Hemgir, District Sundergarh (Odisha). During the public hearing, the issues related to environmental problems at project affected villages due to Basundhara Washery were raised.
- 4. The sectoral Expert Appraisal Committee, in its meeting held on 13-14 December, 2018, has recommended the project for grant of environmental clearance. Based on recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance to the Basundhara Washery of 10 MTPA capacity in an area of 43.90 ha. of M/s Mahanadi Coalfields Limited located in villages Balinga, Bankibahal & Kusharain, Tehsil Hemgir, District-Sundargarh (Odisha), under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars theretoand certain other conditions, in addition to the standard conditions for coal washery as specified at Annexure-XVII of this Ministry's OM No. 22-34/2018-IA.III dated 9th August, 2018, as under:-
 - (i) Permission for ground water withdrawal shall be obtained from Central Ground Water Authority (CGWA), if applicable.
 - (ii) Total fresh water requirement shall not exceed 2222 cum/day, proposed to be met from mine sump water of abandoned quarry of Basundhara (East) OC mine. No surface or ground water shall be used in coal washery operation.
 - (iii) Study shall be carried for sustenance of water supply to cater to projected demand of the proposed washery from the abandoned mine(s) throughout planned life of the washery.
 - (iv) Impact of proposed project/activity on hydrological regime of the area shall be assessed and report be submitted.
 - (v) Ash content below 34% should be maintained in washed coal to be transported beyond 500 km for use in thermal power plants.
 - (vi) The washing technology so chosen should conform to 'Zero Liquid Discharge'.
 - (vii) Continuous monitoring of occupational safety and other health hazards,, and the corrective actions need to be ensured.

- (viii) The project proponent shall reduce the time line for implementation of the action plan for carrying out incomplete/partially complete activities contained in mine closure of Basundhara (East) coal mine.
- (ix) For proper baseline air quality assessment, adequate monitoring stations in the downwind areas based on wind rose pattern of the area, shall be set up for collection of air quality data and air quality modeling.
- (x) Disposal of washery rejects shall be in accordance with the extant policy and guidelines, and environment friendly.
- (xi) Thick green belt of adequate width to be provided around the washery to mitigate/check the dust pollution. A 3-tier avenue plantation should also be developed along vacant areas, storage yards, loading/transfer points, and also along internal roads/main approach roads.
- 4.1 The grant of environmental clearance is further subject to compliance of generic conditions applicable for open cast mines and coal washery as under:

(a) Statutory compliance:

- (i) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- (ii) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- (iii) The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (incase of the presence of schedule-I species in the study area.
- (iv) The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- (v) The project proponent shall obtain the necessary permission from the Central Ground Water Authority.
- (vi) Solid waste/hazardous waste generated in the washery needs to addressed in accordance to the Solid Waste Management Rules, 2016 / Hazardous & Other Waste Management Rules, 2016.



(vii) Coal beneficiation practices shall be carried out under strict adherence to provisions of the Factories Act, 1957 and subordinate legislations made there under.

(b) Air quality monitoring and preservation

- (i) Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely particulates, SO₂ and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive receptors in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc. carried out at least once in six months.
- (ii) Continuous ambient air quality monitoring stations as prescribed in the statue be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM_{10} , $PM_{2.5}$, SO_2 and NO_x . Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.
- (iii) Transportation of coal by road shall be carried out by covered trucks/conveyors. The transportation of clean coal and rejects shall be by rail with wagon loading through silo. Effective measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulates such as roads, belt conveyors, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled at source. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.
- (iv) All approach roads shall be black topped and internal roads shall be concreted. The roads shall be regularly cleaned. Coal transportation shall be carried out by covered trucks.
- (v) Covered trucks shall be engaged for mineral transportation outside the washery upto the railway siding, shall be optimally loaded to avoid spillage en-route. Trucks shall be adequately maintained and emissions shall be below notified limits.
- (vi) Facilities for parking of trucks carrying raw material from linked mine shall be created within the unit.



- (vii) Vehicular emissions shall be kept under control and regularly monitored. The vehicles having 'PUC' certificate from authorized pollution testing centres shall be deployed for washery operations.
- (viii) Hoppers of the coal crushing unit and other washery units shall be fitted with high efficiency bag filters/mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads.
- (ix) The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site (s) within stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored mineral does not catch fire.
- (x) The temporary reject sites should appropriate planned and designed to avoid air and water pollution from such sites.

(c) Water quality monitoring and preservation

- (i) The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.
- (ii) The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No. J-20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for compliance.
- (iii) Industrial waste water shall be properly collected and treated so as to conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time.
- (iv) The project proponent shall not alter major water channels around the site. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the washery. The embankment constructed along the river/nallah boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side stabilised with plantation so as to withstand the peak water pressure preventing any chance of inundation.
- (v) Heavy metal content in raw coal and washed coal shall be analysed once in a year and records maintained thereof.
- (vi) The rejects should preferably be utilized in FBC power plant or disposed off through sale for its gainful utilization. If the coal washery rejects are

to be disposed off, it should be done in a safe and sustainable manner with adequate compaction and post closure arrangement to avoid water pollution due to leachate from rejects and surface run of from reject dumping sites.

- (vii) An Integrated Surface Water Management Plan for the washery area up to its buffer zone considering the presence of any river/rivulet/pond/lake etc. with impact of coal washing activities on it, shall be prepared, submitted to MoEFCC and implemented.
- (viii) Waste Water shall be effectively treated and recycled completely either for washery operations or maintenance of green belt around the plant.
- (ix) Rainwater harvesting in the washery premises shall be implemented for conservation and augmentation of ground water resources in consultation with Central Ground Water Board.
- (x) No ground water shall be used for coal washing unless otherwise permitted in writing by competent authority (CGWA) or MoEFCC. The make-up water requirement of washery should not exceed 1.5 m3/tonne of raw coal.
- (xi) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.
- (xii) Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.
- (xiii) The project proponent shall take all precautionary measures to ensure riverine/ riparian ecosystem in and around the coal mine up to a distance of 5 km. A riverine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government

(d) Noise and Vibration monitoring and prevention

(i) The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.



(ii) Adequate measures shall be taken for control of noise levels as per noise pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.

(e) Coal beneficiation

- (i) Coal stacking plan shall be prepared separately for raw coal, clean coal, middling and rejects.
- (ii) Efforts should be made to reduce energy consumption by conservation, efficiency improvements and use of renewable energy.

(f) Green Belt

- (i) Three tier greenbelt comprising of a mix of native species, of minimum 30 m width shall be developed all along the washery area to check fugitive dust emissions and to render aesthetic to neighbouring stakeholders. A 3-tier green belt comprising of a mix of native species or tree species with thick leaves shall be developed along vacant areas, storage yards, loading/transfer points and also along internal roads/main approach roads.
- (ii) The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

(g) Public hearing and Human health issues

- (i) Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry &its RO on six-monthly basis.
- (ii) The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.



- (iii) Personnel (including outsoured employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
- (iv) Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.
- (v) The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/57/2014-IA.II (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

(h) Corporate Environment Responsibility

- (i) The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- (ii) The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- (iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- (iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- (v) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

(i) Miscellaneous

- (i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- (ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- (iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- (iv) The project proponent shall monitor the criteria pollutants level namely; PM_{10} , SO_2 , NOx (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- (v) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- (vi) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- (vii) The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
- (viii) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- (ix) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- (x) No change in coal beneficiation process and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC) with such conditions mentioned therein.

- No change in the maximum quantum of raw material feed per annum against the approved washery capacity shall be made.
- (xi) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- (xii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- (xiii) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- (xiv) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- (xv) The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- 5. The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during presentation to the EAC. All the commitments made on the issues raised during public hearing shall also be implemented in letter and spirit.
- 6. The proponent shall obtain all necessary clearances/approvals that may be required before the start of the project. The Ministry or any other competent authority may stipulate any further condition for environmental protection. The Ministry or any other competent authority may stipulate any further condition for environmental protection.
- 7. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- 8. The coal company/project proponent shall be liable to pay the compensation against the illegal mining, if any, and as raised by the respective State Governments at any point of time, in terms of the orders dated 2nd August, 2017 of Hon'ble Supreme Court in WP (Civil) No.114/2014 in the matter of 'Common Cause Vs Union of India & others.

- 9. The concerned State Government shall ensure no mining operations to commence till the entire compensation for illegal mining, if any, is paid by the project proponent through their respective Department of Mining & Geology, in strict compliance of the judgment of Hon'ble Supreme Court.
- 10. This environmental clearance shall not be operational till such time the project proponent complies with the above said judgment of Hon'ble Supreme Court, as applicable, and other statutory requirements.

(Dr. R.B. Lal)
Additional Director / Scientist E

Copy to:

- 1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
- 2. The Additional Principal Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, A-31, Chandershekharpur, Bhubaneswar- 751023 (Odisha).
- 3. The Secretary, Department of Environment & Forests, Government of Orissa, Secretariat, Bhubaneswar (Odisha).
- 4. The Member Secretary, CPCB, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32.
- 5. The Member Secretary, Central Ground Water Authority, Ministry of Water Resources, River Development & Ganga Rejuvenation, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi.
- 6. The Member Secretary, Orissa State Pollution Control Board, Parivesh Bhawan, A/118, Nilkanthanagar, Unit VIII, Bhubaneshwar 751012 (Odisha).
- 7. The Advisor, Coal India Limited, SCOPE Minar, Core-I, 4th Floor, VikasMarg, Laxminagar, New Delhi.
- 8. The District Collector, Jharsuguda, Government of Odisha.
- 9. Monitoring File
- 10. Guard File
- 11. Record File
- 12. Parivesh Portal

(Dr. R.B. Lal) Additional Director / Scientist `E'