

Annexure-2

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY
CHHATTISGARH
Government of India
Ministry of Environment and Forests

1-Tilak Nagar,
Shiv Mandir Chowk,
Main Road Avanti Vihar,
Raipur (C.G.)
E-mail: seiaaccg@gmail.com
Website - www.seiaacg.org
Raipur, Date 23/8/2010

No. 309/SEIAA-CG/EC/Coal Washery/RGH/10
To,

M/S Sarda Energy & Minerals Limited,,
Industrial Growth Centre, Phase - 1,
Siltara,
District - Raipur (C.G.) 493 111

Sub: - Proposed Coal Washery project throughput coal 0.96 MTPA of M/S Sarda Energy & Minerals Limited at Village-Bajarmuda, Dholnara, Tehsil - Gharghoda (Tamnar), District- Raigarh (C.G.) - Environment Clearance Regarding.

Ref: - 1- Terms of Reference (TOR) for preparing draft EIA report for Environment Clearance issued by SEAC, Chhattisgarh vide letter no. 93/SEAC-CG/EC/Coal Washery/RGH/08 dated 10/06/2009.
2- Your letter no. SEML/ENV/R/260, dated 26/05/2008 and subsequent correspondence ending dated 23/04/2010.

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The undersigned is directed to refer to your communication dated 26/05/2008, 25/07/2008, 04/09/2008, 05/09/2008, 24/04/2009, 30/01/2010 and 23/04/2010 regarding the subject mentioned above.

It is noted that the proposal is for grant of environmental clearance for Coal Washery project throughput coal 0.96 MTPA at Village-Bajarmuda, Dholnara, Tehsil - Gharghoda, District- Raigarh (C.G.) on 03/02/10. ToR was issued by State Level Expert Appraisal Committee Chhattisgarh vide letter no. 93 dated 10/06/2009. The public hearing was held on 23/10/2009 for proposed project. Public hearing documents were received on 25/11/2009 from CECB. The project proponent has submitted Final EIA Report along with the issues discussed in public hearing, copy of video CD of public hearing proceedings, copy of final layout plan and copy of project feasibility report.

No national park and sanctuary are present in the study area. The Silot Reserve Forest is at 2 km distance in the North direction, Tolge East Reserved Forest is at 7.5 km distance in the South-East direction, Kelo River is at 5 km in the east direction. Proposed coal washery would be constructed inside the existing captive coal mine-pit head. Proposed project is a pit head coal washery. Final rejects would not be transported outside the mine and would be utilised for backfilling of mine and filling of low lying dumping area. Middlings would be utilised for the power

All

generation. Total land requirement is 10.12 ha. The proposed cost - Rs. 30.00 Crores.

The total water requirement sourced from captive Karwahi coal mine pits as well as Kelo River. The wastewater generated from coal washery would be recycled 100% in the plant, for development of green belt and dust suppression etc. No wastewater would be discharged outside the washery premises. The washery is a wet washery. As an air pollution control measures, dust suppression at transfer points by water sprayings, thick Green belt around the premises. Industry would provide instruments with inbuilt noise control measures. Use of acoustic enclosures to control noise levels below 90 dB(A). Use ear plugs or ear muffs wherever required. Industry would take adequate measures for recycling and reuse of treated effluent. Zero discharge concept would be adopted. Industry also provide rainwater harvesting arrangements within the plant premises. Dust suppression by water spraying. High raised wall around the washery. Middling would be utilized for generation of power, final rejects would be used for road formation and leveling of low lying areas as well as back fill of Karwahi Mine.

The State Level Expert Appraisal Committee, Chhattisgarh considered the project in the 51st and 54th meeting held on 27/03/2010 and 24/04/2010 respectively. Project proponent made the presentation before SEAC, Chhattisgarh in 54th meeting of SEAC, Chhattisgarh on 24/04/2010. Based on the consideration of the documents submitted, the presentation made and discussion held in 54th meeting of SEAC, Chhattisgarh on 24/04/2010, the State Level Expert Appraisal Committee, Chhattisgarh recommended for grant of Environmental Clearance as per the provisions of Environmental Impact Assessment Notification, 2006 and the subsequent amendments.

The proposal and recommendation of State Level Expert Appraisal Committee, Chhattisgarh was considered in the 15th meeting of SEIAA, Chhattisgarh held on 30/06/2010. The SEIAA Chhattisgarh perused the information/affidavit submitted by project proponent. After detailed deliberations, the SEIAA, Chhattisgarh decided to accept the recommendations of SEAC, Chhattisgarh. Accordingly, SEIAA, Chhattisgarh hereby accords Environmental Clearance subject to strict compliance of the terms and conditions mentioned below: -

- (i) Industry shall submit commitment regarding that the annual throughput capacity of the coal washery shall not exceed 0.96 MTPA, total budgetary allocation of Rs. 15.00 lacs per annum (minimum) shall be earmarked for CSR activities and the industry shall use first mine water whatever is available for coal washery and only short fall will be drawn for Karwahi coal mine pits & Kello river.
- (ii) Project proponent shall provide adequate facility for proper treatment of industrial and domestic effluent. Project proponent shall provide effluent treatment plant before commissioning of the plant. Treated/un-treated effluent collection pond shall be lined suitably to prevent seepage in to ground for avoiding ground water contamination. All the effluent treatment system shall be kept in good running condition all the time and failure (if any), shall be immediately rectified without delay otherwise similar alternate arrangement shall be made. Project proponent shall ensure the treated effluent quality within standard prescribed by Ministry of Environment & Forests, Government of India.
- (iii) Any liquid effluent what so ever generated from industrial activities shall not be discharged into the river or any surface water bodies under any

circumstances, and it shall be reused wholly in the process/plantation. All the industrial effluent generated shall be re-circulated/reused after proper treatment. The un-treated/treated domestic effluent shall not be discharge into the river or any surface water bodies. The treated domestic effluent shall be used for plantation purpose after proper disinfection. Industry shall make proper arrangements of suitable drains/pipe networks to ensure adequate flow for utilization of treated effluent inside the premises. The concept of zero discharge shall be maintained all the time except during monsoon. Arrangements shall be made that effluents and storm water do not get mixed.

- (iv) Project proponent shall provide adequate measuring arrangements for the measurement of water utilized in different categories and effluent generated before commissioning of the plant.
- (v) Project proponent shall provide adequate air pollution control arrangements at all point and non point sources for the control of emissions from processes/operations and for the control of emissions during the handling & transportation of raw materials/rejects etc. shall be installed before commissioning of the plant and maintained in proper order during operation. Project proponent shall install suitable & effective air pollution control equipments at all transfer points, junction points etc., also. All the conveying system, transfer point, junction point etc. shall be covered. The particulate emissions from all the point sources shall no exceed to 50mg/Nm³.
- (vi) In case of transportation of minerals/ rejects by road, the industry shall maintain fugitive dust emissions to the minimum level in the areas of road transportation routs to ensure compliance National Ambient Air Quality Standards prescribed including black topping/asphalting/concreting and maintenance with requisite water sprinkling arrangements. Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.
- (vii) All air pollution control systems shall be kept in good running conditions all the time and failure (if any), shall be immediately rectified without delay otherwise similar alternate arrangement shall be made. In the event of any failure of any pollution control system adopted by the industry, the respective production unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- (viii) Adequate number of permanent ambient air quality monitoring stations (not less than four) in the core zone as well as buffer zone for SPM, RPM, CO, NO_x and SO₂ shall be set-up in the down wind direction as well as where maximum ground level concentrations are anticipated in consultation with the Chhattisgarh Environment Conservation Board. Monitoring net-work shall be designed taking into account the environmentally and ecologically sensitive targets, land use pattern, location of the stacks, meteorological conditions and topographic features including existing ambient air quality data. The data so collected shall be properly analyzed and submitted to the Chhattisgarh Environment Conservation Board, Raipur, Regional Office, Chhattisgarh Environment Conservation Board, Raigarh, SEIAA, Chhattisgarh and Regional Office, Ministry of Environment & Forests, Government of India, Bhopal in every six months.
- (ix) Project proponent shall install separate electric metering arrangements with time totalizer for the running of pollution control devices. These

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arrangements shall be made in such a fashion that any non-functioning of pollution control device/devices shall immediately stop the electric supply to the fuel supply system and shall remain tripped till the pollution control device/devices are made functional again/rectified to achieve the desired efficiency.

- (x) 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 minerals do not catch fire.
- (xi) Project proponent shall take effective steps for safe disposal of solid wastes and sludge. Project proponent shall obtain authorization from Board for management and handling of hazardous materials as per Hazardous wastes (Management, Handling and Trans boundary Movement) Rules, 2008 (if required).
- (xii) All the internal roads shall be made pucca before commissioning of the plant. The project proponent shall adopt good house keeping practices. The road shall be regularly cleaned with mechanical sweepers. Avenue plantation developed along the roads. Facilities for parking of trucks carrying coal waste rejects shall be created within the unit.
- (xiii) Project proponent shall take proper action to control the noise pollution. Project proponent shall install appropriate noise barriers /control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation to control the noise. Earplugs/ear muffs etc. shall be provided to the employee working in the high noise areas. The noise level shall not exceed the limits 75 dB (A) during the day-time and 70 dB (A) during the night-time within the factory premises. Project proponent shall take adequate measures for control of noise level below 85 dB (A) in the work environment. Workers engaged in noisy areas shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including rotating them to non-noisy/ less noisy areas.
- (xiv) Project proponent shall provide appropriate arrangements to avoid air pollution, water pollution, noise pollution etc. during construction phase and during transportation of plants/machineries/equipments/construction materials etc. to the propose site. For controlling fugitive dust during transportation and construction works, regular sprinkling of water in village roads and other vulnerable areas of the plant shall also be ensured. The emission from vehicles engaged for transportation of plants/machineries/equipments/construction materials etc. to the site shall be ensured within prescribed vehicle emission norms. First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
- (xv) The construction of effluent treatment plant and installation of air pollution control equipments shall be taken up simultaneously with other civil/mechanical works at the propose site. The progress of the activities related to the project shall be submitted periodically to Chhattisgarh Environment Conservation Board, Raipur, Regional Office, Chhattisgarh Environment Conservation Board, Raigarh, SEIAA, Chhattisgarh and Regional Office, Ministry of Environment & Forests, Government of India, Bhopal.
- (xvi) Project proponent shall provide adequate number of influent and effluent quality monitoring stations/points in consultation with Chhattisgarh

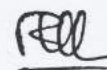
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Environment Conservation Board. Regular monitoring shall be carried out for relevant parameters. Regular monitoring of surface and ground water quality including heavy metals (Hg, Cr, As, Pb) shall be undertaken and the project area to ascertain the change in the water quality, if any, due to leaching of contaminants from disposal area/project area. Result and data collected shall be analyzed to ascertain the status of water quality and findings shall be submitted. Continuous monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and constructing new piezometers at suitable locations at the proponent's cost in and around project area in consultation with Regional Director, CGWB, Central Region, Bhopal.

- (xvii) Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in fuel yard, especially during summer season. Copy of the these measures with full details along with location plant layout shall be submitted to Chhattisgarh Environment Conservation Board, Raipur, Regional Office, Chhattisgarh Environment Conservation Board, Raigarh, SEIAA, Chhattisgarh and Regional Office, Ministry of Environment & Forests, Government of India, Bhopal.
- (xviii) At-least 33% of the project land area shall be developed all along the boundary of the plant premises for green belt/plantation. As far as possible maximum area of open spaces shall be utilized for plantation purposes. Project proponent shall abide by the decisions taken by Ministry of Environment and Forests, Government of India/Central Government/ Central Pollution Control Board from time to time in this regard.
- (xix) Project proponent shall provide garland drains with appropriate check dams all along the fuel, dust / washery rejects dump areas etc. to avoid any possibility of erosion (wearing away) during rain. Garland drain (size, gradient & length) and sump capacity shall be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the project site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains. Project proponent shall provide adequate collection and treatment arrangement for proper management of storm water. The surface run-off shall be de-silted through a series of check dams and drains.
- (xx) The project proponent shall also comply with all the environment protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding village like community development programme, educational programmes drinking water supply and health care etc. Project proponent shall adopted the code of practice for coal washeries issued by Central Pollution Control Board.
- (xci) Project proponent shall adopt rainwater-harvesting technique in the project area and residential area for recharge of ground water. The rainwater-harvesting technique shall be incorporated right from the design stage of all structures. Project proponent shall develop rainwater-harvesting structures to harvest the rainwater for utilization in the lean season as well as to recharge the ground water table. A detailed scheme for rainwater harvesting to recharge the ground water aquifer shall be prepared in consultation with Central Ground Water Authority/State Ground Water Board. A copy of the same shall be submitted within three months to the Chhattisgarh

Environment Conservation Board, Raipur, Regional Office, Chhattisgarh
Environment Conservation Board, Raigarh, SEIAA, Chhattisgarh and
Regional Office, Ministry of Environment & Forests, Government of India,
Bhopal. No ground water shall be used for any purpose.

- (xxii) Project proponent shall establish an environmental management cell to carryout function relating to environmental management under the supervision of senior executive who would directly report to the head of organization. A full-fledged laboratory with qualified technical/scientific staffs to monitor the influent, effluent, ground water, surface water, soil, stack emission and ambient air quality etc. shall be provided.
- (xxiii) The issuance of this environmental clearance does not convey any property rights in either real or personal property, or any exclusive privileges, nor does not authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State or Local laws or regulations.
- (xxiv) SEIAA, Chhattisgarh reserves the right to amend/cancel any of the conditions and add new conditions and make further stringent the emission/effluent limit as and when deemed necessary in the interest of environmental protection, change in the project profile or non-satisfactory implementation of the stipulated conditions etc.
- (xxv) To ensure the generation of employment in the local areas, recruitment shall be done by inviting applications first from the local residents of the Chhattisgarh State. In case of non-availability of suitable candidates for certain post in the first attempt, the project proponent may call the applications as second call not only from local residents of the Chhattisgarh State but also from other State.
- (xxvi) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crutch etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (xxvii) Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the factories Act and records shall be maintained properly for at-least 30-40 years.
- (xxviii) The project proponent shall also comply with all the environmental protection measures and safe guards recommended in the EIA/EMP report.
- (xxix) The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Chhattisgarh Environment Conservation Board and may also seen at Website of the Ministry of Environment and Forests at www.envfor.nic.in and website of SEIAA, Chhattisgarh at www.seiaacg.org.
- (xxx) Adequate funds shall be allocated for undertaking CSR activities (community welfare, environmental development activities apart from committed plantation) and in any case it shall not be less than Rs. 15 lakh per year with 10% annual increase in subsequent years. Project authority must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc. Details of activities



shall also be submitted to Chhattisgarh Environment Conservation Board, Raipur, Regional Office, Chhattisgarh Environment Conservation Board, Raipur, SEIAA, Chhattisgarh and Regional Office, Ministry of Environment & Forests, Government of India, Bhopal. The funds earmarked for the environment protection measures shall not be diverted for other purpose and year-wise expenditure should be reported to the Chhattisgarh Environment Conservation Board, Raipur, Regional Office, Chhattisgarh Environment Conservation Board, Raipur, SEIAA, Chhattisgarh and Regional Office, Ministry of Environment & Forests, Government of India, Bhopal. Local laboures shall be given employment during construction and subsequently absorbed in the plant.

- (xxxix) Half yearly report on the status of implementation of the stipulated conditions, monitoring data along with statistical interpretation and environment safeguards shall be submitted to the Chhattisgarh Environment Conservation Board, Raipur, Regional Office, Chhattisgarh Environment Conservation Board, Raigarh, SEIAA, Chhattisgarh and Regional Office, Ministry of Environment & Forests, Government of India, Bhopal.
- (xxxii) Regional Office of the Ministry of Environment and Forests at Bhopal would monitor the implementation of the stipulated conditions. A complete set of documents including Environment Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring.
- (xxxiii) Full cooperation shall be extended to the Scientists/Officers from the SEIAA, Chhattisgarh, Ministry of Environment & Forests, Government of India/Regional Office, Ministry of Environment & Forests, Government of India, Bhopal/the CPCB/the Chhattisgarh Environment Conservation Board, who would be monitoring the compliance of environment status.
- (xxxiv) The environment clearance accorded shall be valid for a period of 5 years to start of production / operations by the coal washery.
- (xxxv) In case of any deviation or alteration in the proposed project from those submitted to this SEIAA, Chhattisgarh for clearance, a fresh reference should be made to the SEIAA, Chhattisgarh to assess the adequacy of the condition(s) imposed and to add additional environment protection measures required, if any. No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests, Government of India/SEIAA, Chhattisgarh.
- (xxxvi) The project authorities must strictly adhere to the stipulations made by the Chhattisgarh Environment Conservation Board (CECB) and the State Government.
- (xxxvii) The project authorities shall inform the Regional Office, Ministry of Environment & Forests, Government of India, Bhopal and SEIAA, Chhattisgarh date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.
- (xxxviii) The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) act, 1986 and rules there under, Hazardous Wastes (Management, Handling and Trans Boundary Movement) Rules, 2008 and its amendments, the Public Liability Insurance Act, 1991 and its amendments.

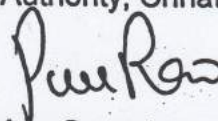


(xxxix) The above conditions will be enforced inter-alia, under the provisions of the water (Prevention & Control of Pollution) Act. 1974, the Air (Prevention & Control of Pollution) Act. 1981 the environment (Protection) Act. 1986 and the public liability insurance Act, 1991 along with their amendments and Rules. The proponent shall ensure to provide for the costs incurred for taking up remedial measures in case of soil contamination, contamination of groundwater and surface water, and occupational and other diseases due to the mining operations.

(xi) Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.

Please acknowledge the receipt of this letter.

For & on behalf of
State Level Environment Impact
Assessment Authority, Chhattisgarh



Member Secretary
State EIA Authority, Chhattisgarh
Raipur (C.G.)

Endt. No. /SEIAA-CG/EC/Coal Washery/ RGH/10 Raipur, Date / /2010

Copy to:-

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi- 110 001.
2. The Principal Secretary, Department of Environment, Mantralaya Chhattisgarh, Raipur-492 001.
3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi- 110 066.
4. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, Delhi - 100 032.
5. The Chairman, Chhattisgarh Environment Conservation Board, 1-Tilak Nagar, Shiv Mandir Chowk, Main Road Avanti Vihar, Raipur (C.G.).
6. District Collector, District - Raigarh, Chhattisgarh.
7. Director, Ministry of Environment & Forests, Government of India, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi.
8. The Chief Conservator of Forests (C) Regional Office (WZ), Ministry of Environment & Forests, Kendriya Paryavaran Bhawan, Link Road No.-3, E-5, Arera Colony, Bhopal.

Member Secretary
State EIA Authority, Chhattisgarh
Raipur (C.G.)

