

## भारत कोकिंग कोल लिमिटेड

(कोल इंडिया लिमिटेड का एक अंग)

### वाशरी निर्माण विभाग

पंजीकृत कार्यालय : कोयला भवन, कोयला नगर

धनबाद - 826005

CIN : U101JH1972GOI000918

दूरभाष/ फेक्स: 0326-2230201



## BHARAT COKING COAL LIMITED

(A subsidiary of Coal India Limited)

A Mini Ratna Company

### WASHERIES CONSTRUCTION DIVISION

Regd. Off. : Koyla Bhawan (Level - VI),  
Koyla Nagar,

DHANBAD - 826005

CIN : U101JH1972GOI000918

Telephone no. / Fax: 0326-2230201

Email ID : cgmwccp@bccl.gov.in

सन्दर्भ सं : BCCL/WCD/27(1)/14/1163 - 68 (H)

दिनांक : 06.12.2014

To  
The Director (S),  
Ministry of Environment & Forest,  
Govt. of India,  
Eastern Region Office,  
A/3, Chandrasekharapur,  
Bhubneswar - 751023



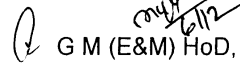
Sub : Six monthly Report for the period from 1<sup>st</sup> April '14 to 30<sup>th</sup> September, 2014  
on Compliance to Environment Clearance from MoEF Gol for  
5.0 Mtpa Patherdih NLW Coal Washery

Dear Sir,

Enclosed herewith please find the Six Monthly Report on Compliance to Environment Clearance from MoEF, Gol for 5.0 Mtpa Patherdih NLW Coal Washery for your kind perusal & further needful action please

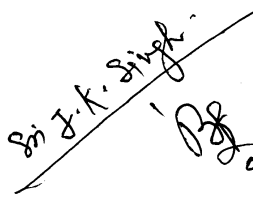
Encl : A.S.

Yours faithfully,

  
G M (E&M) HoD, WCD

Copy :

1. Dr. Sunita Aulock, Director, 1A Monitor Cell, Paryavaran Bhawan, CGO Complex, New Delhi - 110003
2. GM(Ws), WCD, Koyla Bhawan, Dhanbad
3. GM(Env.), BCCL, Dhanbad
4. Office Copy
5. Master File

  
S. J. K. Singh  
9/12/14

**Six Monthly Report from 1<sup>st</sup> Oct,2013 to 31<sup>st</sup> March,2014 on Compliance to Environment Clearance from MoEF, Gol for 5.0 Mtpa Patherdih NLW Washery.**

Present Status of Patherdih NLW Coal Washery : **CONSTRUCTION OF THE WASHERY has been started**

Ref. : 1. EC vide J-11015/240/2010-IA.II(M) dated 25.01.2012 of MoEF, New Delhi

**C. SPECIFIC CONDITIONS**

Sl. no.	Conditions	Compliance Status
i.	The capacity of the washery shall not exceed 6.5 MTPA without prior environment clearance from this Ministry.	Patherdih NLW coal washery has not come in operation so far. Whenever it comes in operation, it will not exceed 6.5 Mtpa without prior NoC from MoEF.
ii.	Transport of raw coal from the identified mines of the company, washed coal from the washery to the steel plants in Durgapur, Bhilai and Bokaro and middlings to TPPs and coal rejects to FBC based TPP shall be by rail mode only from the railway siding located within the premises.	All transport of washed coals shall be made <b>only through Rail Mode.</b>
iii.	The entire rejects from the washery shall be fully utilized in an FBC based TPP for which open tender for operation of the FBC based TPP has been called by the proponent. The FBC based TPPs shall be preferably located in or near Jharia coalfields. The Company shall enter into a long-term MOU for utilization of the coal rejects from the washery within 3 months and also for utilization of fly ash generated from the FBC based TPP with a suitable company.	AS WASHERY HAS NOT COME IN OPERATION, SO REJECTS ARE NOT BEING GENERATED. However, BCCL has signed LONG TERM MoU with three firms who shall lift the generated rejects for use in their FBC based TPPs.
iv.	As the washery is located in Jharia Coalfields, which forms a part of the Critically Polluted Area of Dhanbad, the company shall implement the mitigative measures outlined in the Environmental Action Plan for CPA-Dhanbad applicable to the project, which would be in conformity with the Environmental Action Plan prepared for Dhanbad Area to keep the levels of air quality parameters well within limits. The proponent shall implement mitigative measures such as providing water sprinkling arrangements at various transfer points and loading/unloading points, regular maintenance of vehicles used for coal transportation, periodic and regular checking of vehicles for source emission, main approach roads used for transportation of raw coal to be black topped, monitoring for particulate matter (PM <sub>10</sub> and PM <sub>2.5</sub> ) and maintenance of records thereof, bag filter at suitable locations of the washery, wind shelters/wind breaks in coal stockyards (raw coal, clean coal and coal rejects), providing 3-tier green belt with native species.	<ul style="list-style-type: none"> <li>• This unit will act as per guidelines of Environmental Action Plan for CPA- Dhanbad &amp; will take all mitigative measures to keep air quality parameters well within limit.</li> <li>• The unit will also arrange sufficient sprinkling arrangements on roads &amp; all coal transfer points when it comes in operation.</li> <li>• Regular maintenance of vehicles will be done to keep minimum source emissions.</li> <li>• Three tier green belt, with native species, is being developed..</li> </ul>

Q

v.	The proponent shall implement a plan to regularly dredge River Damodar 0.5 km upstream and 1km length downstream of the washery free of sludge, coal fines and silt which has accumulated in the river over a period of time and dispose the wastes in an environmentally friendly manner, in consultation with the Jharkhand State Pollution Control Board.	As this unit is nearly 3.5 KM away from Damodar River and no any effluent/drainage from this unit will meet to Damodar River. Therefore no any sludge, deposit of coal fines & silt will be caused by this washery. So dredging of river Damodar by Patherdih NLW Washery is not called for.
vi.	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 raw coal, washed coal and coal wastes do not catch fire.	The unit will stack Raw coal, Washed Coal & rejects at earmarked sites within stockyards fitted with wind breakers/ shields and adequate measures will be taken to ensure that stored Raw coal, W/coal & rejects do not catch fire.
vii.	Hoppers of the coal crushing unit and washery unit shall be fitted with high efficiency bag filters and 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.	The unit will install high efficiency Bag Filters & mist water sprinkling system at all crushing & coal transfer points to control fugitive emissions.
viii.	All approach roads shall be black topped and all internal roads shall be black topped or concreted. The roads shall be regularly cleaned with mechanical sweepers. A 3-tier avenue plantation using local species shall be developed along the main roads, and approach roads to the washery.	<ul style="list-style-type: none"> <li>• Once the unit come in operation, it will arrange black topping of all approach roads &amp; internal roads and will be cleared regularly.</li> <li>• A 3-tier avenue plantation using local species will be developed along the main roads and all approach road to the washery.</li> </ul>
ix.	The proponent shall maintain proper records of the ash content of raw (ROM) coal, clean coal and coal rejects of every consignment received and washed and the same shall be uploaded along with quantum of raw coal obtained and washed and dispatched every month on the company's website every month.	Maintaining of monthly performance report (in which all the incoming coals and all the outgoing coals are recorded destination wise) is part of the company's policy. This will be also uploaded on the company's website.
x.	Water for the coal washery shall be met from mine water from BCCL mines. No groundwater shall be used for the washery plant operations. Any additional water requirement envisaged shall be obtained by recycle/ reuse to the maximum extent and from rain water harvesting measures. Pressure Filter and Thickener shall be installed in the washery for water recovery and reuse.	Water requirement for washery will be met from the nearest mines of BCCL. Additional water requirement will be obtained by recycle/ reuse and from Rain Water Harvesting measures.

xi.	The Washery unit shall be a zero- discharge facility and no wastewater shall be discharged from the washery into the drains / natural water courses. The Washery shall be provided with a garland drain to carry / recycle the effluent generated from the washery operations and coal fines collected shall be recovered from the slurry and concentrated and also sold for users. The wastewater from the washery shall be free of coal dust and particles and recycled from development and maintenance of green belt and in the plant operations.	<ul style="list-style-type: none"> <li>• As per plan, Washery will operate on <b>ZERO-DISCHARGE BASIS</b> and no waste water will be discharged from this unit into the drains / natural water courses.</li> <li>• The washery will be provided with a garland drain. The coal fines will be settled in ponds. The settled coal particles will be recovered &amp; marketed.</li> </ul>
xii.	A separate storm water drain to carry storm water from the washery for discharge outside the premises to nallahs / streams shall be established. The storm water drains shall be regularly deslited.	This unit will establish a separate storm water drain to carry storm water from the washery for discharge outside the premises to nallahs / streams. The storm water drains will be deslited regularly.
xiii.	Industrial wastewater (workshop and wastewater from the washery) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 <sup>th</sup> May 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed for treatment of workshop effluents.	<ul style="list-style-type: none"> <li>• The unit will collect &amp; treat properly the Industrial waste water (Workshop and waste water from washery) as per prescribed standards before discharge.</li> <li>• Oil and grease trap will be installed for treatment of workshop effluents, if any.</li> </ul>
xiv.	Green belt shall be developed using local species all along the periphery of the site, along the areas such as the crushing unit and stockyard, transfer and loading points.	Development of GREEN BELT using local species shall be taken up all along the periphery of the site, along the areas such as crushing units, stockyard, transfer and loading points.
xv.	Socio-economic and welfare measures for the local communities shall be implemented under CSR with an outlay of Rs.2 crores and Rs.5/Te of coal as recurring expenditure. The village wise activities undertaken and proposed and expenditure thereon shall be displayed on the company website every year. A Monitoring Cell shall be established for monitoring activities undertaken under CSR.	<ul style="list-style-type: none"> <li>• As per Company's policy, the amount for recurring expenditure against CSR is calculated on the basis of per tonne of coal production. Whenever the washery comes in operation, CSR activities will be undertaken. Expenditure thereon will also be displayed on the company's website.</li> <li>• As per Company's policy, a Monitoring Cell of the company already exists for monitoring activities undertaken under CSR.</li> </ul>

Q

xvi.	Levels of heavy metals such as mercury in raw coal, washed coal and rejects shall be analysed twice in a year and records maintained thereof and furnished as part of the Compliance Report to the MOEF RO Bhubaneswar.	<ul style="list-style-type: none"> <li>• Levels of heavy metals such as mercury in raw coal, washed coal and rejects will be analyzed twice in a year &amp; its record will be maintained properly.</li> <li>• The same will also be furnished to the MOEF RO Bhubaneswar as part of the Compliance Report.</li> </ul>
xvii.	<p>Corporate Environment Responsibility :</p> <p>e) The Company shall have a well laid down Environment Policy approved by the Board of Directors.</p> <p>f) The Environment Policy shall prescribe for standard operating process / procedures to bring into focus any infringements / deviation / violation of the environmental or forest norms / conditions.</p> <p>g) The hierarchical system and administrative order of the Company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.</p> <p>h) To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large.</p>	<ul style="list-style-type: none"> <li>• This company have already a well laid down Environment Policy duly approved by its Board of Directors.</li> <li>• An Environment department at BCCL H.Q. looks after the infringements / deviation / violation of Environment &amp; forest norms, environmental issues, compliances etc. for all the units running in BCCL.</li> </ul>

**D. General Conditions :**

i.	No change in technology and scope of working of the washery shall be made without prior approval of the Ministry of Environment and Forest.	This washery will not change its technology without prior permission from MoEF.
ii.	Four ambient air monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> and NO <sub>x</sub> . 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. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr in PM <sub>10</sub> and PM <sub>2.5</sub> etc. shall be carried out at least once in six months.	<ul style="list-style-type: none"> <li>• Once the washery comes in operation, four ambient air quality monitoring stations will be established in the core zone as well as in buffer zone for monitoring PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> &amp; NO<sub>x</sub> and will follow the guidelines of State Pollution Control Board.</li> <li>• Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr in PM<sub>10</sub> and PM<sub>2.5</sub> etc. shall be carried out at least once in six months.</li> </ul>

iii.	Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board and data got analysed through a laboratory recognized under EP Rules, 1986.	Monitoring of Environmental quality parameters will be carried out through establishment of adequate nos. & type of pollution monitoring & analysis equipment in consultation of State Pollution Control Board & the data will be got analysed through a laboratory recognized under EP Rules, 1986.
iv.	Data on ambient air quality (PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> and NO <sub>x</sub> ) and heavy metal such as Hg, As, Ni, Cr, etc.) and other monitoring data shall be regularly submitted to the Ministry Including its Regional Office at Bhubaneshwar and to the State Pollution Control Board and the Central Pollution Control Board once in six months. Random Verification of samples through analysis from independent laboratories recognized under the EP Rules, 1986 shall be furnished as part of the compliance report.	<ul style="list-style-type: none"> <li>• Data on ambient air quality and heavy metals will be sent regularly to MoEF, its Regional Office, Bhubaneshwar, SPCB &amp; CPCB once in six months.</li> <li>• Random Verification of samples through analysis from independent laboratories recognized under the EP Rules, 1986 will also be furnished as part of the compliance report.</li> </ul>
v.	Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, of HEMM, etc. shall be provided with ear plugs/muffs.	This unit will make adequate arrangements to control noise levels below 85 dBA. Ear plugs / muffs will be provided to Workers depending upon operational requirement.
vi.	Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects. Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed.	<ul style="list-style-type: none"> <li>• As per Safety policy of the Company, necessary protective respiratory devices are provided to the workmen working in dusty conditions.</li> <li>• As per Company's Policy, periodic PME of all the workmen are arranged by the company and corrective measures are taken accordingly.</li> </ul>
vii.	A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will directly to the Head of the company.	A separate Environment Management Cell already exists in this company.
viii.	The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year wise expenditure shall be reported to this Ministry and its Regional Office Bhubaneshwar.	As per Company's Policy, the funds earmarked for environmental protection measures are kept in a separate head. Procedure of reporting year wise expenditure to MoEF & Regional Office, Bhubaneshwar is already in place.

Q

ix.	The project authorities shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and may also be seen at the website of the ministry of Environment & Forest at <a href="http://envfor.nic.in">http://envfor.nic.in</a>	This unit has already advertised the NoC in local newspaper for wide circulation on dated 01.03.2012 in local daily newspapers Parbhat Khabar and Dainik Jagran.
x.	A copy of the environmental clearance letter shall be marked to concerned Panchayat / Zilla Parishad / Municipal Corporation or Urban Local Body / local NGO, if any, from whom any suggestion / representation has been received while processing the proposal. A copy of the clearance letter shall also be displayed on the company's website.	<ul style="list-style-type: none"> <li>• The copy of Environmental Clearance has already been made available to District Collector, local Zila Parishad, Ward Councilor, Municipal Corporation.</li> <li>• A copy of the Environmental Clearance has also been displayed on the Company's website</li> </ul>
xi.	A copy of the clearance letter shall be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industry Centre and Collector's Office / Tehsildar's Office for 30 days.	The clearance letter has already been forwarded to Jharkhand Pollution Control Board, Regional Office, District Industry Centre and Collector's Office for doing the needful.
xii.	The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated EC conditions shall be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in public domain. The monitoring data of environmental quality parameters (air, water, noise and soil) and critical pollutants such as PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> and NO <sub>x</sub> (ambient and stack if any) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mines office and in corporate office and on the company's website.	<ul style="list-style-type: none"> <li>• The clearance letter has already been uploaded on the company's website. Compliance status will also be uploaded on website of company.</li> <li>• After coming up of the washery into existence, the Environment Quality report (Air, water, noise &amp; soil) will be displayed on the Company's website.</li> </ul>
xiii.	The project proponent shall submit six monthly reports on the status of compliance of the stipulated conditions (both in hard copy and in e-mail) to the respective Regional Office of the MoEF, the respective Zonal offices of CPCB and the SPCB.	This unit will submit six monthly report regularly to concerned Regional Office of MoEF & respective Zonal office of CPCB & the SPCB.
xiv.	The Regional Office of this Ministry located Bhubanshwar shall monitor compliance of the stipulated conditions. The project authorities shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data /information/ monitoring reports.	This washery will extend all the necessary help to the office of Regional office by furnishing the requisite data / reports etc.

xv.	<p>The environmental statement for each financial year ending 31st March in Form-V is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be uploaded on the company's website along with the status of compliance of EC conditions and shall be sent to the respective Regional Offices of the MOEF by E-mail.</p>	<ul style="list-style-type: none"> <li>• The washery will regularly submit Environmental statement for each financial year ending 31<sup>st</sup> March in the prescribed format (form-V.)</li> <li>• The same will also be uploaded on the company's website along with the status of compliance of EC conditions and will be sent to the respective Regional Office of the MOEF by E-mail.</li> </ul>
-----	--	---

↓