

RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LTD. VIDYUT BHAWAN, JANPATH, JYOTI NAGAR, JAIPUR – 302 005. TELE FAX NO. (0141-2744927) FAX NO. (0141-2740633)

Email: fuel.rvun@gmail.com

No.RVUN/Dy.CE (PPC&F)/ F. /D. 1673

Dated: 27/07/12

The Director,
Ministry of Environment & Forests,
Paryavaran Bhavan, CGO Complex,
Lodhi Road,
New Delhi.

Sub: Modification in Environmental Clearance granted for Parsa East & Kanta Basan opencast mine (10MTPA) and Pit Head Coal Washery (10MTPA) of M/s Rajasthan Rajya Vidyut Utpadan Nigam Limited.

Dear Madam,

Ministry of Coal, GoI has allotted Parsa East and Kanta Basan Coal Blocks to Rajasthan Rajya Vidyut Utpadan Nigam Ltd.(RVUNL) vide letter No: 13016/74/206-CA-I dated 25.06.2007 for developing captive opencast mine for power generation at Linked power plants - Kalisindh (2 X 600MW) and Chhabra (2 X 250MW) in Rajasthan.

Ministry of Environment and Forests has granted environmental clearance for Parsa East & Kanta Basan opencast mine (10 MTPA) and a Pit Head Washery (10 MTPA) vide letter no. J-11015/03/2008-IA.II(M) dated 21.12.11 stipulating specific and general conditions and environmental safeguards. As the coal mine area involves forest land, forestry clearance (stage-II) was also granted vide letter no. 8-31/2010-FC dated 15.03.12. Subsequently, the Chhattisgarh Environmental Conservation Board granted "Consent to Establish" for the project vide letter no. 1574/TS/CECB/2012 dated 22.06.12.

Coal production from the block is expected to commence from September/October 2012. A 10 MTPA washery based on jig washing technology has been envisaged. The washery will have three identical modules of 3.33 MTPA each. Major components of the washery are imported. Construction of washery has already started and is expected to be commissioned by August 2013.

The linked power plants of RVUNL are likely to be commissioned in Dec,2012. These plants have to use washed coal. To match with the requirement of the power plants, it has now been decided to set up an interim washery of 2MTPA capacity based on barrel washing technology to ensure coal feed to the power plants of requisite quality. Since, Plant and Machinery for the proposed interim washery are indigenously available as such the washery can be commissioned within 3 to 4 months time matching with the coal production from the mine. The Interim Washery system would be phased out on commissioning of the main Jig washery sometimes in the last quarter of 2013.

Accordingly, a proposal for modification in Environmental Clearance granted for the project under reference is enclosed herewith for your kind consideration and grant of permission for setting up an Interim Washery based on barrel washing technology for an interim period till the main Jig washery is commissioned.

Thanking you,

Encl: As above

Sincerely yours;

(R.K.Gaur)

Dy. Chief Engineer (PPC&F)

RVUN, Jaipur

Proposal for modification in Environment Clearance letter conditions for Interim Washery at Parsa East & Kanta Basan Coal Blocks

Parsa East and Kanta Basan Coal Blocks have been allotted by the Ministry of Coal, Government of India, to the Rajasthan Rajya Vidyut Utpadan Nigam Itd (RVUNL) vide letter No: 13016/74/206-CA-I dated 25.06.2007 for developing captive opencast mine for power generation at Linked power plants - Kalisindh (2 X 600MW) and Chhabra (2 X 250MW) in Rajasthan.

The Ministry of Environment and Forests has granted environmental clearance for the opencast Parsa East & Kanta Basan Coal mine (10 MTPA) using surface miner and a Pit Head Washery (10 MTPA) vide letter no. J-11015/03/2008-IA.II(M) dated 21st December 2011 stipulating specific and general conditions and environmental safeguards. As the lease area involves forest land, forestry clearance (stage-II) was also granted vide letter no. 8-31/2010-FC dated 15th March 2012. Subsequently, the Chhattisgarh Environmental Conservation Board granted "Consent to Establish" for the project vide letter no. 1574/TS/CECB/2012 dated 22nd June 2012.

Coal production from the block will commence from September / October 2012. The average grade of coal from the block is "F". Initially Seam IV will be worked which is a better coal seam. A 10 MTPA washery based on jig washing technology has been envisaged. The washery will have three identical modules of 3.33 MTPA each. Major components of the washery are imported. Construction of washery has already started and is expected to be commissioned by August 2013.

The linked power plants of RVUNL are likely to be commissioned in December 2012. These plants have to use washed coal. To match with the requirement of the power plants, it has now been decided to set up an interim washery of 2MTPA (400 TPH assuming 5000 working hours in a year) capacity based on barrel washing technology to ensure coal feed to the power plants of requisite quality. Plant and Machinery for the proposed interim washery are indigenously available as such the washery can be commissioned within 3 to 4 months time matching with the coal production from the mine. **The Interim Washery system would be phased out on commissioning of the main Jig washery sometimes in the last quarter of 2013**.

The following details are enclosed herewith for your kind consideration and grant of permission to set up a small barrel washing system based washery for an interim period of 8 to 10 months only:

1. Justification for setting up Interim Washery

- a) Coal production from the block will commence from October 2012. The linked power plants will be commissioned in December 2012. Therefore, clean coal supply is to start sometimes in October 2012. The main coal washery based on Jig washing technology is scheduled to be commissioned in August 2013.
- b) Barrel washing system is among the simplest coal washing method with minimum additional equipment and the least gestation period.
- Erection and commissioning of Barrel Washing system can be achieved in 3 to 4 months.
- d) As per the commissioning schedule of the linked power plants, the requirement of coal is 2MTPA during 2012-13 which matches with the first year's coal production from the mine.
- A lay-out plan and process flow sheet of interim washery are enclosed at Annexure I and Annexure-II.

3. Process description of the interim washery.

Coal from mine will be crushed to 50mm size through crushers and then the raw coal of size 0-50mm will be first dry-screened at - 25mm and oversized of 25-50mm will be fed to Barrel Washer for washing. The fines of size - 25mm consists of nearly 30% ash and hence is directly conveyed to clean coal product.

Barrel will be producing 2 products viz., clean coal and coal rejects after washing. The rejects will be first de-watered and then conveyed to Reject Bin, whereas clean coal will after de-watered will be conveyed to clean coal bin along with -25mm screened fines for loading and dispatching. The rejects will be unloaded to Rejects stock.

The overflow water from Barrel Tank will be fed to a small Thickener and its underflow slurry fines will be recovered through Hydro-Cyclone and HF Screen and fed to clean coal conveyor.

The circuit comprises of close loop water cycle and no effluent discharge outside plant will take place.

4. Pollution Control Measures for the proposed interim washery

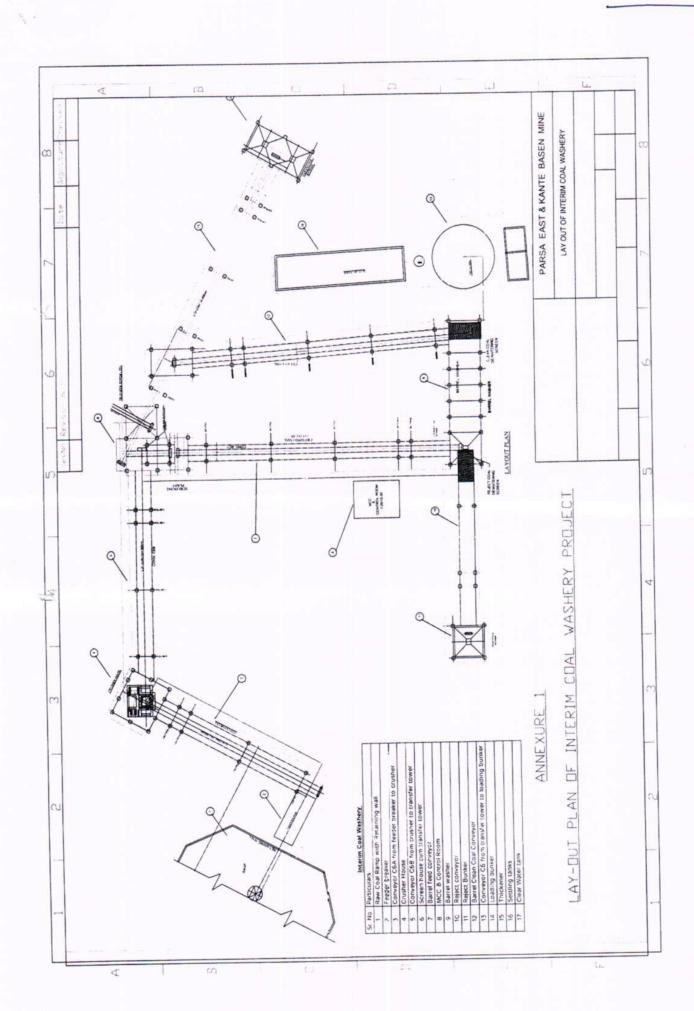
The source of emissions from the coal processing plant with coal washery unit will be particulate matter. These emissions are also fugitive emissions arising during the transportation of coal, unloading of coal, conveying and coal storage. Adequate dust suppression measures for control of dust during loading and unloading of coal into conveyors are proposed.

There is no change in the environmental management plan submitted to MoEF based on which environmental clearance to the project was granted. The pollution control measures specific to the washery component are explained below:

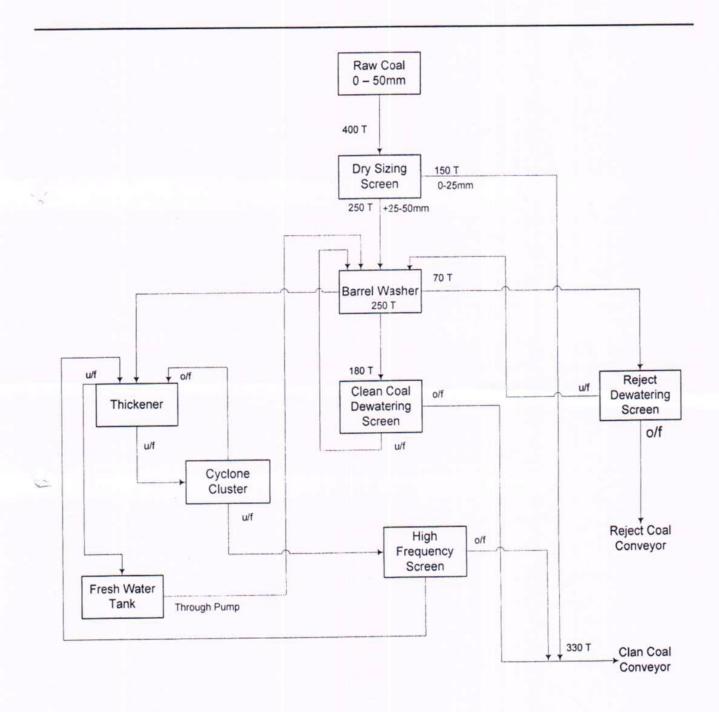
- (i) The washery will adopt close water circuit. (Annexure -III)
- (ii) For recovery of water from the slurry, it is proposed to provide hydro- cyclones, high frequency screen and a thickener. The recovered water will be reused in the washing process. Four emergency slime ponds are also proposed. These measures will ensure zero effluent discharge.
- (iii) Crusher and screening area in CHP will be provided with dry fog/mist type dust suppression system.
- (iv) All transfer points will be provided with dust suppression system.
- (v) Coal from the CHP to the washery will be transported by covered belt conveyors.
- (vi) Haul and surface road will be regularly sprayed with water.
- (vii) Rain guns will be installed in coal stock yards.
- (viii) Green belt will be developed using local plant species.
- (ix) Good maintenance of CHP area will be ensured.

5. Phasing out plan for the interim washery

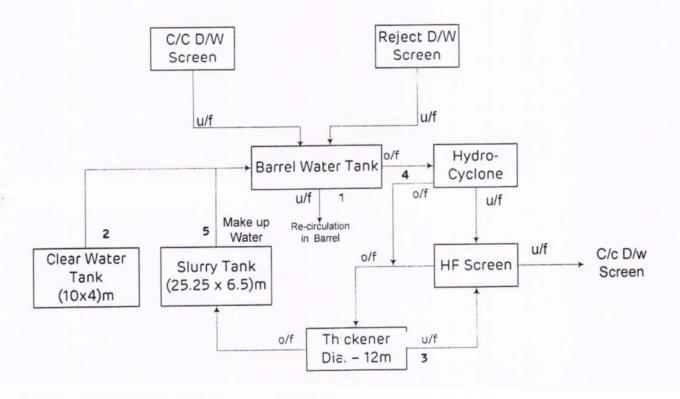
The proposed Barrel Washery has been designed keeping in mind the raw coal production of 2 MTPA from the mine during 2012-13. The interim washery will be decommissioned on commissioning of the main washery say in 8 to 10 months.



PROCESS Flow Sheet of Barrel Washing Circuit for interim Washery



WATER FLOW DIAGRAM OF INTERIM WASHERY



Deployment of Pumps

- 1. Barrel underflow pump (90 Kw, 10/8)
- 2. Monoblock Pump (6/6, 11 Kw)
- 3. Thickener underflow Pump (4/3, 11 Kw)
- 4. Barrel Tank Overflow Pump (4/3, 11 Kw)
- 5. Make up water pump for Barrel (4/3, 11Kw)

RAJASTHAN RAJYA VIDYUT UTPADAN NIGAM LTD.

Extracts from the Minutes of the 210th Meeting of the Board of Directors of the Company held on *Thursday*, the 26th July, 2012 at 12.00 Noon in the Board Room, Vidyut Bhawan, Jyoti Nagar, Jaipur.

Item No.8:

To consider amendment in the earlier approval of the Board for revised Mining Plan & Mine Closure Plan. (15 MTPA) in respect of Parsa East & Kente Basan coal blocks.

A proposal to consider amendment in the earlier approval of the Board for revised Mining Plan & Mine Closure Plan. (15MTPA) in respect of Parsa East & Kente Basan coal blocks, was placed before the Board.

It was apprised that -

- Ministry of Coal vide letter No.13016/74/2006-CA-I dated 19/25.06.2007 allocated 'Parsa East & Kante Basan' coal blocks in Chhatisgarh State to Rajasthan Rajya Vidyut Utpadan Nigam Ltd. under Government Dispensation Route to meet the coal requirements of 1200MW Kalisindh & 500 MW Chhabra Thermal Power Projects being developed in State Sector.
- Subsequently Coal Mining & Delivery Agreement (CMDA) was executed between RVUN & M/s PKCL (JV Company) on dated 16.07.08 for undertaking the work of mining and arranging for transportation and delivery of coal to RVUN's Thermal Power Stations.
- The Mining Plan for 10 MTPA in respect of 'Parsa East & Kanta Basan' coal blocks prepared by Mr. Kumar Rajesh Singh (Recognized Qualified Person) authorized by PKCL as per Guideline of Ministry of Coal was submitted to MoC which was approved by the MoC vide letter No. F.13016/74/2006-CA-I dated 16.07.09 for mining of 10 MTPA coal.
- The Mine Closure Plan for 10 MTPA was also prepared by Mr. Kumar Rajesh Singh and submitted to Ministry of Coal on 16.09.11 as per guidelines issued by Ministry of Coal vide its circular no. 55011-01-2009-CPAM dated 27.08.09.
- While conveying approval of Mining Plan of these coal blocks vide letter dated 16.07.09, it was suggested by MoC to RVUN that considering large mineable coal reserves, the mining can be planned for higher production of 15 MTPA as against 10 MTPA and directed RVUN to meet coal requirement of new projects (2x660 MW Suratgarh and 2x660 MW Chhabra Super Critical projects) already intimated by RVUN vide letter dated 15.05.09 to Ministry of Coal. Accordingly, RVUN vide the dated 29.12.11 requested MoC for assigning 'Parsa East & Kanta Basan' coal blocks to 2x660 MW Suratgarh and 2x660 MW Chhabra Super Critical

property also.

- In pursuance to above, Ministry of Coal, Govt. of India vide letter dated 03.02.12 accorded 'In Principle' approval to allow the use of coal from the 'Parsa East & Kanta Basan' coal blocks for Suratgarh (Units#7&8) and Chhabra (Units# 5&6) Super Critical Power Projects subject to submission of revised mining plan within two months.
- The Whole Time Directors of RVUN on dated 16.02.12 approved authorization of Mr. Kumar Rajesh Singh as the Recognised Qualified Person (RQP) for preparation of Mining Plan & Mine Closure Plan for 15 MTPA for 'Parsa East & Kanta Basan' coal blocks as requested by M/s PKCL vide their letter dated 14.02.12. WTD's also approved the revised Mine Closure Plan for 10 MTPA duly incorporating suggestion of Standing Committee of MoC communicated vide letter dated 16.01.12.
- Pursuant to above, RVUN vide letter dated 16.02.12 submitted Mining Plan & Mine Closure Plan for 15 MTPA as prepared by Mr. Kumar Rajesh Singh as the Recognised Qualified Person (RQP) to Ministry of Coal of RVUN.
- Further, Board of Directors in its 201st meeting held on 22.02.12 considered and ratified the decision taken by the Whole Time Directors of RVUN regarding nomination of Mr. Kumar Rajesh Singh as the Recognised Qualified Person (RQP) duly authorised by M/s PKCL vide their letter dated 14.02.12 to prepare revised Mine Closure Plan for 10 MTPA and Mining Plan & Mine Closure Plan for 15 MTPA in respect of 'Parsa East & Kanta Basan' coal blocks as per directions of the MoC. The copy of the Board resolution was furnished to MoC vide this office letter dated 23.02.12.
- The presentation for revised Mining Plan & Mine Closure Plan (15 MTPA) for 'Parsa East & Kanta Basan' coal blocks was delivered on 03.04.12 to the Members of the Standing Committee of MoC under MMDR Act, 1957.
- The Standing Committee of MoC vide letter 01.05.12 made certain observations and directed to submit the revised Mining Plan & Mine Closure Plan for 15 MTPA incorporating the suggestion and observations. Copy of MoC letter was placed before the Board.
- M/s PKCL vide letter dated 14.05.12 furnished a point-wise reply of the observations communicated vide MoC aforesaid letter dated 01.05.12 alongwith vide this office letter dated 22.05.12 with approval of Whole Time Directors. (as placed before the Board)

Further, MoC vide letter 10.07.12 has again made certain observations and directed to submit the "resolution of Board of Director of RVUN regarding approval of revised Mining Plan & Mine Closure Plan for 15 MTPA after incorporating the suggestion and observations of the Standing Committee of MoC". Copy of letter was placed before the Board.

It was thus submitted that in view of above, the Board of Directors of RVUN may kindly consider and modify the approval accorded in its 201st meeting held on 22.02.12 by inserting the phrase "duly incorporating suggestions of Standing Committee of MoC" for the revised Mining Plan & Mine Closure Plan for 15 MTPA capacity in respect of 'Parsa East & Kanta Basan' coal blocks allocated by Ministry of Coal, Govt. of India to RVUN in June, 2007. Thus the modified approval of Board of Directors of RVUN shall now read as:

"The Board accorded its approval for the revised Mining Plan & Mine Closure Plan for 15 MTPA duly incorporating suggestions of Standing Committee for submission to the Ministry of Coal, Govt. of India".

The Board considered the matter and after deliberations, accorded its approval for modification in its earlier decision in the matter (*Item No.4 of 201*st *Board Meeting held on 22.02.2012*) as proposed above and the amended decision shall read as under:

"The Board accorded its approval for the revised Mining Plan & Mine Closure Plan for 15 MTPA duly incorporating suggestions of Standing Committee for submission to the Ministry of Coal, Govt. of India".

CERTIFIED TRUE COPY

SGVS Subrahmanyam Company Secretary

Rajasthan Rajya Vidyut Utpadan Migam Limited
Vidyut Bhawan, Janpath

Jaiour (Rajasthan)