PRE-FEASIBILTY REPORT

OF

NEW RAJRAPPA COAL WASHERY

Area (in Ha)	Capacity (in MTPA)
16.03 Ha	3

Village: Koihara, Gaurabera, Block: Chitarpur
District: Ramgarh, Jharkhand

(Rajrappa Area)
Central Coalfields Limited
(Sep-2021)

Table of Contents

Enclosure:

Chapter 1

Executive Summary

1.1 Summary

1	Coking coal is a scarce commodity in India. Demand of coking coal is rapidly growing with capacity expansion of existing steel plants & addition of Greenfield projects in India. In view of self-reliance and reduction in import of coking coal by GoI, CCL intends to set up a coking coal washery with raw coal linkage from Rajrappa RCE OC. Subsequently; the conceptual report of the proposed New Rajrappa Washery has been approved by CCL Board in the 498th board meeting held on 02.02.2021.
2	Proposed New Rajrappa Washery is a coking coal washery of 3 MTY capacity at Rajrappa, Ramgarh with raw coal linkage from Rajrappa RCE OCP. The total mineable reserve within Rajrappa RCE OC has been estimated at about 78.4 Mt (as on 01.04.2020). The assured raw coal throughput of the New Rajrappa Washery will be 3.0 MTPA for a life of 18 years after commissioning. The construction period is 24 months including trial run, PGT & commissioning
3	A three-product coking coal washery producing clean coal, washed coal (power) & rejects has been conceptualized. Clean coal at 18% ash for supply to steel plants for metallurgical purpose and washed coal (power) at 34% ash to thermal power stations have been considered.
4	For setting up of proposed washery, an area of about 16.03 Ha in the villages Koihara and Gaurabera of Ramgarh District, Jharkhand has been identified. It is connected to a blacktop Road from Ramgarh (20 KM) in West and Bokaro (60 Km) in east via Chitarpur & Gola Blocks. The Barkakana-Muri section of South Eastern Railway station lies about Mael Station (6 km) south of washery. Nearest airport is at Ranchi which is situated at a distance of approximately 75 KM.
5	The proposed New Rajrappa washery is adjacent to existing Rajrappa washery, which is located in the Ramgarh Block-I, Block II & Block-IV of south-eastern part of Ramgarh Coalfield, Ramgarh & Bokaro District, Jharkhand State. The area is bounded by latitudes 23° 37´40" N to 23° 37´52" N and longitudes 85° 40' 47" E to 85° 41´17" E. The block is covered in Survey of India toposheet no. 73E/10.
6	Rajrappa washery lies between the Hazaribagh Plateau and Damodar Valley. The central position of the Rajrappa area is gently undulating with paddy fields, depressions and occasional sandstone ridges and mounds. The area has dense forest and in certain portion it is hilly and rugged. The washery lies 300-350m above sea level. River Damodar and River Bhairvi flow across the Rajrappa area and form the main drainage of the area.
7	Out of the 16.03 Ha, 15.85 Ha is Forestland for which Stage-II clearance has been granted vide F. No. 8-105/2003-FC Dated: 15.03.2007 for 510.82 Ha. The application for change in land use has been submitted to Divisional Forest Officer Ramgarh on 12.04.2021.

<table>
<tr><td>8</td><td>The quantity of water required for operation & maintenance of the proposed washery is about 1590 KL/Day. Source of water for operation of plant is proposed to be Section-I sump of Rajrappa OCP for initial three years. Subsequently, the mine discharge of Block-II OCP will be assessed & used for fulfilling the requirement of makeup water of proposed New Rajrappa Washery. However, if the makeup water is not available from the above two sources, water from Bhairvi river will be drawn to meet the make up water demand of the proposed washery after obtaining due permission.</td></tr>
<tr><td>9</td><td>The requirement of power is about 9.5 MVA for operation & maintenance of the proposed washery .The source of power during construction and operation of the washery is the existing 33 kV/6.6 kV electrical sub-station of Rajrappa OC which is at a distance of about 1.8 km from proposed washery site.</td></tr>
<tr><td>10</td><td>The balance of product from the washery is given below:
<table>
<tr><th>Product</th><th>Weight %</th><th>Ash %</th><th>Quantity (MT)</th></tr>
<tr><td>Washed coal/clean coal</td><td>69.9</td><td>18.0</td><td>2.10</td></tr>
<tr><td>Washed coal (power)</td><td>13.6</td><td>34.0</td><td>0.40</td></tr>
<tr><td>Rejects</td><td>16.5</td><td>47.7</td><td>0.50</td></tr>
<tr><td>Total</td><td>100.0</td><td>25.1</td><td>3.00</td></tr>
</table></td></tr>
<tr><td>11</td><td>Clean coal and washed coal (power) will be stored in covered ground storage of 14,500 t and 6,000 t capacity respectively at washery end. Clean coal and washed coal (power) will be conveyed by two separate belt conveyors from their respective covered storage facilities to existing Rajrappa Railway Siding for onward loading into Railway wagons through Hoppers (500 t capacity each) and Rapid Loading System (RLS) (@ 5,500 tph) for dispatch to customers specified by CCL. The existing Railway siding is at an aerial distance of about 1 km from the proposed washery site. Separate covered storage facilities within the washery premises, loading conveyors and loading into Railway wagons by Rapid Loading System at Railway siding are in the scope of WO for dispatch of clean coal and washed coal (power) to customers specified by CCL.</td></tr>
<tr><td>12</td><td>Rejects from washery building will be conveyed by belt conveyor to Reject hopper for transportation to Temporary Reject Storage Site within the washery premises prior to sale/disposal of rejects. Rejects will be disposed or sold by CCL through MoU/e-auction route in line with prevailing MoEF&CC guidelines.</td></tr>
<tr><td>13</td><td>The capital investment of the washery is envisaged at Rs. 480 Crores as per the approved conceptual report. The profit per tonne of raw coal is expected to be Rs. 1625.95.</td></tr>
<tr><td>14</td><td>It is proposed to set up the washery on Build-Own-Operate (BOO) concept. The proposed manpower for the project has been estimated as 220 which includes manpower of CCL for liaison & monitoring works</td></tr>
<tr><td>15</td><td>Pre-feasibility report of New Rajrappa Washery is being prepared and submitted based on the approved Conceptual Report & Integrated Bid Document in an area of 16.03 Ha for making an application in Form I for issuance of Fresh ToR.</td></tr>
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Chapter 2

Project Background

2.1 Identification of the project & project proponent

The project under consideration, i.e. New Rajrappa Washery is administratively under Rajrappa Area of CCL headed by General Manager, Rajrappa Area. The proposed New Rajrappa washery is adjacent to existing Rajrappa washery, which is located in the Ramgarh Block-I, Block II & Block-IV of South-Eastern part of Ramgarh Coalfield, Ramgarh & Bokaro District, Jharkhand State. For setting up of proposed washery, an area of about 16.03 Ha in the villages Koihara and Gaurabera of Ramgarh District, Jharkhand has been identified

The mailing address of the Project Officer is given below:

Office of the Project Officer
Rajrappa Washery Project,
Central Coalfields Limited
At + PO Rajrappa Project
Jharkhand,
Ranchi-829150

2.2 Brief description & nature of the Project

New Rajrappa Washery is a proposed project administratively under Rajrappa Area of Central Coalfields Limited. The Conceptual Report of the project for a rated capacity of 3 MTPA was by the CIL Board in the 498th meeting held on 02.02.2021 in Build-Own-Operate (BOO) mode, at an estimated capital investment of Rs. 480 Crores. The copy of approval is enclosed at **Enclosure-I.**

This pre-feasibility report of New Rajrappa Washery is being prepared for the rated capacity of 3 MTPA in an area of 16.03 Ha for applying in Form-I for issuance of ToR as per EIA Notification 2006.

2.3 Need for the project & it's important to country and region

Benefits at national level-

Central Coalfields Limited is facing increasing demand of coal because of increased demand from industry and steel sector. In general the quality of Indian ROM coal contains high ash contents; which causes nos. of operational losses, health hazards and environmental degradation. To overcome this issues coal beneficiation is a remedial action. Hence, there is a need for setting up a coal washery to upgrade this coal to make it more suitable for industrial use. Production of coal from this washery will help to bridge the gap of demand and supply of coking coal in India.

Benefits at regional level-

The project will create employment opportunities both for skilled and semi- skilled persons in the area. The proposed washery project will also bring about enhanced socio-economic benefits to local population due to expenditure on CSR activities. Business opportunity in Secondary & Tertiary sectors will increase.

2.4 Demand – Supply Gap:

Coking coal is a scarce commodity in India. Demand of coking coal is rapidly growing with capacity expansion of existing steel plants & addition of Greenfield projects in India. In view of self-reliance and reduction in import of coking coal, it is intended to set up a coking coal washery at Rajrappa in Ramgarh Coalfield, Rajrappa area, Dist. Ramgarh with raw coal linkage from Rajrappa RCE opencast.

2.5 Import vs. Indigenous Production:

Addition of coal production from the proposed washery will help to a certain degree to meet the growing demand of coking coal in the country. The country is looking to reduce import of coal to zero in next years as part of "Aatma Nirbhar Bharat" Mission.

2.6 Export Possibility:

No export of the coal is envisaged from the proposed washery.

2.7 Domestic/Export Market:

The proposed project is proposed to meet the requirement of coking coal requirement of existing steel plants & other Greenfield projects in India which requires coking coal.

2.8 Employment Generation:

The project will create employment opportunities both for skilled, semi- skilled and unskilled labour both during construction and operational phases of the project in the area. The local areas will be benefited by way of generation of employment opportunities, increased demand for local products and services. There will be an overall improvement in the income level of the local people.

New Rajrappa Washery will be a major source of direct and indirect employment for nearby villagers in buffer zone. It is expected to generate 220 direct employments.

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Chapter 3

Project Description

3.1 Type of Project including interlinked projects:

Proposed New Rajrappa Washery is a coking coal washery of 3 MTY capacity at Rajrappa, Ramgarh with raw coal linkage from Rajrappa RCE OCP. The total mineable reserve within Rajrappa RCE OC has been estimated at about 78.4 Mt (as on 01.04.2020). The assured raw coal throughput of the New Rajrappa Washery will be 3.0 MTPA for a life of 18 years after commissioning. The construction period is 24 months including trial run, PGT & commissioning.

3.2 Location of the project:

The proposed New Rajrappa washery is adjacent to existing Rajrappa washery, which is located in the Ramgarh Block-I, Block II & Block-IV of south-eastern part of Ramgarh Coalfield, Ramgarh & Bokaro District, Jharkhand State. The area is bounded by latitudes 23° 37´40" N to 23° 37´52" N and longitudes 85° 40' 47" E to 85° 41´17" E. The block is covered in Survey of India toposheet no. 73E/10. The toposheet & location map showing the project is submitted at **Enclosure-II** & **Enclosure-III.**

New Rajrappa Washery lies between the Hazaribagh Plateau and Damodar Valley. The central position of the Rajrappa area is gently undulating with paddy fields, depressions and occasional sandstone ridges and mounds. The area has dense forest and in certain portion it is hilly and rugged. The washery lie 300-350m above sea level. River Damodar and River Bhairvi flow across the Rajrappa area and form the main drainage of the area.

It is connected to a blacktop Road from Ramgarh (20 KM) in West and Bokaro (60 Km) in east via Chitarpur & Gola Blocks. The Barkakana-Muri section of South Eastern Railway station lies about Mael Station (6 km) south of washery. Nearest airport is at Ranchi, which is situated at a distance of approximately 75 KM.

3.3 Details of alternate site considered:

Earlier, the project was proposed in an area of 22.42 Ha, which was submitted to MoEF&CC for issuance of ToR under EIA-2006. The proposal was returned and acting on the direction of Expert Appraisal Committee (EAC), MoEF&CC, a fresh committee was formed to review the suitability of proposed land/explore the possibility of an alternate site for construction of New Rajrappa Washery from environmental perspective.

The committee searched for alternate sites in non-forest land only with minimum 15 Ha land so that proposed new Rajrappa Washery can be installed in this alternate site. The committee members examined six sites and after detailed deliberation, opined that the earlier proposed site for construction of New Rajrappa Washery is the only viable and suitable site in comparison to Sites 1-5. In line with the observations of EAC, MoEF&CC, New Delhi, the committee also proposed that the area of the site may be reduced to 16.03 Ha from earlier proposed area of 22.42 Ha by removing the dense forest area and to maintain it as a natural green belt. The committee report is enclosed as **Enclosure-IV**.

3.4 Size & magnitude of operation:

Proposed New Rajrappa Washery is a coking coal washery of 3 MTY capacity. The balance of product from the washery is given below:

Product	Weight %	Ash %	Quantity (MT)
Washed coal/clean coal	69.9	18.0	2.10
Washed coal (power)	13.6	34.0	0.40
Rejects	16.5	47.7	0.50
Total	**100.0**	**25.1**	**3.00**

3.5 Project Description with Project details:

The washing process has been selected keeping in view the qualitative requirement of steel plants. It has been envisaged to crush entire coal down to (-) 13mm. Treatment of 13 - 0.5 mm coal in two stage HM cyclone and beneficiation of - 0.5mm size fraction by froth flotation have been envisaged.

The process consists of crushing of as received coal (-1000mm) down to (-) 13mm in three stages, treatment of 13-0.5mm in two-stage heavy media cyclone and beneficiation of -0.5mm in flotation cell. The Process Flow Sheet is enclosed at **Enclosure-V** and briefly described below:

RAW COAL SECTION:

i. Supply of RoM coal (-1000 mm) from Rajrappa RCE OC to washery premises by road.
ii. Receiving of RoM coal in the receiving hopper at washery premises.
iii. Feeding -1000mm coal from receiving hopper to primary twin shaft sizer by apron feeder.
iv. Crushing of -1000mm size coal down to 200mm size in primary twin shaft sizer.
v. Feeding -200mm crushed coal by belt conveyor to secondary twin shaft sizer.
vi. Crushing of -200mm size coal down to 50mm size in secondary twin shaft sizer.
vii. Screening of -50 mm size fraction in vibrating screen at 13mm aperture to produce two size fractions viz. 50-13 mm and -13 mm.
viii. Crushing of 50-13mm size coal down to 13mm size in impact crusher and mixing with -13mm size fraction.
ix. Storage of entire -13 mm size fraction in a 4500 t stack tube (ground storage) with reclamation arrangement.

WASHING SECTION:

i. Conveying of -13mm coal from raw coal storage to washery building and conveying the same to coal tank.
ii. Desliming of -13mm coal from coal tank in desliming screens to produce two size fractions viz. 13-0.5 mm & -0.5 mm.
iii. Washing of 13-0.5 mm size fraction in Primary HM cyclones to produce clean coal (i.e. overflow of Primary HM cyclone) & sinks (i.e. underflow of Primary HM cyclones).
iv. Washing sinks from Primary HM Cyclones in Secondary HM cyclones to produce washed coal (power) (i.e. overflow of secondary HM cyclone) & rejects (i.e. underflow of Secondary HM cyclones).
v. Dewatering of clean coal from Primary HM cyclones in sieve bend-cum-drain & rinse screens followed by further dewatering in centrifuges.
vi. Dewatering of washed coal (power) in sieve bend-cum-drain & rinse screens followed by further dewatering in centrifuges.

vii. Dewatering of rejects from Secondary HM cyclones in D&R screen.
viii. Recovery of media by magnetic separators.
ix. Thickening of entire -0.5 mm slurry generated in process along with effluents from various dewatering equipment in radial thickener.
x. Beneficiation of -0.5 mm coal (underflow of thickener) by froth flotation to produce clean coal (i.e. concentrate) and tailings (i.e. middlings).
xi. Dewatering of concentrate (clean coal) from froth flotation in Horizontal Travelling Vacuum Belt Filter.
xii. Dewatering of tailings (middlings) from froth flotation in High Frequency screen.
xiii. Recycling of clarified water (i.e. overflow of thickener) for plant re-use.
xiv. Conveying of dewatered 13-0.5 mm clean coal from Primary HM cyclones along with -0.5 mm dewatered fine clean coal from froth flotation and stocking of clean coal in covered clean coal storage (14,500 t).
xv. Conveying of dewatered 13-0.5 mm washed coal (power) from Secondary HM cyclones and stocking the same in separate washed coal (power) storage (6,000 t).
xvi. Conveying of rejects from washery building by belt conveyor to Reject hopper for transportation to Temporary Reject Storage Site within the washery premises prior to sale/disposal of rejects.
xvii. Reclamation of clean coal and washed coal (power) from their respective covered storage and conveying the same by belt conveyors to the existing Rajrappa Railway Siding at an aerial distance of about 1 km from the proposed washery site. Clean coal and washed coal (power) will be loaded into Railway wagons through separate Hoppers (500 t capacity each) and separate Rapid Loading Systems (5500 tph each) for onward dispatch to consumers.

3.6 Raw material required along with estimated quantity, likely source, marketing area of final product/s, mode of transport of raw material and finished product:

Run of mine [ROM] coal taken from Rajrappa OCP will be the only raw material requirement for proposed washery. Annual requirement of proposed washery envisages quantity of coal to the tune of 3 MTPA.The linkage of raw coal feed to the proposed New Rajrappa washery is from Rajrappa RCE opencast. RoM coal (-1000 mm) will be supplied by CCL to the proposed washery by internal road.

Clean coal and washed coal (power) from their respective covered storage facilities will be reclaimed and conveyed through 2 nos. of belt conveyors to the existing Rajrappa Railway siding at an aerial distance of about 1 km from the proposed washery site. Clean coal and washed coal (power) will be loaded into Railway wagons through separate Hoppers (500 t capacity each) and separate Rapid Loading Systems (5500 tph each) for onward dispatch to consumers.

Based on the technology selected, the likely average quantity of rejects to be produced from the washery has been estimated as about 0.50 Mty in case of clean coal ash @ 18%. The rejects will be conveyed to Temporary Reject Storage Site earmarked in the washery site prior to sale/disposal of rejects. The average gross calorific value of the rejects from New Rajrappa washery is expected to fall under G12 Grade (3700-4000 kcal/kg), which will be disposed or sold by CCL through MoU/e-auction route in line with prevailing guidelines. The copy of policy for handling & disposal of washery rejects is enclosed at **Enclosure-VI.**

3.7 Resource optimization recycling and reuse envisaged in the project:

The process of the proposed washery is based on closed water circuit system. All the water fed into the system will be collected after use and re-circulated after treatment in various units and no effluent will be allowed to escape into the natural drainage system.

Provision of slime ponds for re-handling coal slurry in case of emergency and re-circulation of clarified water has been envisaged. Provision of dust suppression/ extraction system at dust generating points by proper arrangement of water spraying/ extraction system and settling ponds for settling of storm/incidental water has also been envisaged.

3.8 Availability of water its source, Energy power requirement and source:

Source of power during construction of the proposed washery is the existing 33kV/6.6 kV electrical sub-station of Rajrappa OC, which is at a distance of about 1.8 km from proposed washery site. The requirement of power is about 9.5 MVA for operation & maintenance of the proposed washery. The source of power during operation will be the same as that during construction.

The quantity of water required for operation & maintenance of the proposed washery is approximately 1590 KL/Day. Source of water for operation of plant is proposed to be Section-I sump of Rajrappa OCP for initial three years. Subsequently, the mine discharge of Block-II OCP will be assessed & used for fulfilling the requirement of makeup water of proposed New Rajrappa Washery. However, if the makeup water is not available from the above two sources, water from Bhairvi river will be drawn to meet the make up water demand of the proposed washery after obtaining due permission.

3.9 Quantitates of waste to be generated and scheme for management/disposal:

The process of the proposed washery is based on closed water circuit system. All the water fed into the system will be collected after use and re-circulated after treatment in various units and no effluent will be allowed to escape into the natural drainage system. No effluent will be discharged from the premises; hence there will not be any chance of contamination of water bodies due to proposed installation.

Based on the technology selected, the likely average quantity of rejects to be produced from the washery has been estimated as about 0.50 Mty in case of clean coal ash @ 18%. The rejects will be conveyed to Temporary Reject Storage Site earmarked in the washery site prior to sale/disposal of rejects.

The average gross calorific value of the rejects from New Rajrappa washery is expected to fall under G12 Grade (3700-4000 kcal/kg), which will be disposed or sold by CCL through MoU/e-auction route in line with prevailing MoEF&CC guidelines.

3.10 Schematic representations of the feasibility drawing which give information of EIA purpose:

The Process Flow Sheet is enclosed at **Enclosure-V.**

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Chapter 4

Site Analysis

4.1 Connectivity of the site:

It is connected to a blacktop Road from Ramgarh (20 KM) in West and Bokaro (60 Km) in east via Chitarpur & Gola Blocks. The Barkakana-Muri section of South Eastern Railway station lies about Mael Station (6 km) south of washery. Nearest airport is at Ranchi, which is situated at a distance of approximately 75 KM.

4.2 Land Form, Land Use & Land Ownership:

For setting up of proposed washery, an area of about 16.03 Ha in the villages Koihara and Gaurabera of Ramgarh District, Jharkhand has been identified. Out of 16.03 Ha, 15.85 Ha is part Forest land for which Stage-II clearance has been granted to Rajrapa OCP vide F. No. 8-105/2003-FC Dated: 15.03.2007 for 510.82 Ha. The component wise breakup is given below:

SN	Component	Forest Land (Ha.)	Non-Forest Land (Ha.)
1	Coal washery	15.85	0.18

The application for change in land use has been submitted to Divisional Forest Officer Ramgarh on 12.04.2021. The copy of Stage-II FC Letter & copy of application for change in land use is enclosed at **Enclosure-VII.**

The land has been acquired under the CBA Act 1957 vide the following SO No:

a. SO No: 3894 Dated: 29.12.1962 &
b. SO No: 1311 Dated: 24.04.1978

4.3 Topography:

Rajrappa washery lies between the Hazaribagh Plateau and Damodar Valley. The central position of the Rajrappa area is gently undulating with paddy fields, depressions and occasional sandstone ridges and mounds. The area has dense forest and in certain portion it is hilly and rugged. The washery lies 300-350m above sea level. River Damodar and River Bhairvi flow across the Rajrappa area and form the main drainage of the area.

4.4 Existing Land Use Pattern

For setting up of proposed washery, an area of about 16.03 Ha in the villages Koihara and Gaurabera of Ramgarh District, Jharkhand has been identified. Out of 16.03 Ha, 15.85 Ha is Forest land for which Stage-II clearance has been granted vide F. No. 8-105/2003-FC Dated: 15.03.2007 for 510.82 Ha. The component wise breakup is given below:

SN	Component	Forest Land (Ha.)	Non-Forest Land (Ha.)
1	Coal washery	15.85	0.18

4.5 Existing Infrastructure:

Proposed New Rajrappa Washery is situated under the administrative control of Rajrappa Area. There is no residential colony being proposed in the project as the project is proposed to be operated on Build-Own-Operate (BOO) concept. Hence, the residential facilities for the manpower will be arranged by Washery Operator (WO). However, the available welfare facilities may be extended by CCL on payment basis.

4.6 Soil Classification:

Three types of soils are found in the district including Hill and forest soils of steep slopes and high-dissected region, red yellow and light grey soil & pale yellow, yellow and pinkish deep soil.

4.7 Climate Data from secondary sources:

The climate of the area is tropical. The temperature varies from maximum 45^{O} C to minimum 5^{O} C. The maximum temperature rises during April to June and the minimum is recorded during December to January. The monsoon period extends from July to September when maximum rainfall takes place. The average rainfall is of the order of 1200 mm, most of which is during the monsoon.

The average monthly rainfall during monsoon period is about 275 mm in this area. The average humidity recorded varies from 40% to 96%. The annual average wind speed is 3.1 km/h. The wind speed is high during the period April to July. The direction of wind is generally from either North West or South West during the period November to May and from Northeast or Southeast between June to October. Sometimes the area is affected by storms also, which blows even upto a speed of 110 km/h.

4.8 Social Infrastructure available:

As per Corporate Social Responsibility policy of Coal India, community facilities (Education, Water Supply, Health Care, Social Empowerment, Infrastructure for villages etc.) are being provided in nearby areas and the same will be extended due to the addition of this project.

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Chapter 5

Project Planning

5.1 Planning Concept:

Proposed New Rajrappa Washery is a coking coal washery of 3 MTY capacity at Rajrappa, Ramgarh with raw coal linkage from Rajrappa RCE OCP. The total mineable reserve within Rajrappa RCE OC has been estimated at about 78.4 Mt (as on 01.04.2020). The assured raw coal throughput of the New Rajrappa Washery will be 3.0 MTPA for a life of 18 years after commissioning. The construction period is 24 months including trial run, PGT & commissioning.

5.2 Population Projection:

Major habitation nearby is colony of CCL. The additional manpower required for the project will be sourced by the New Rajrappa Washery operator from the local areas to the extent possible; hence a small inflow of people from outside of this region is expected.

5.3 Land Use Planning:

For setting up of proposed washery, an area of about 16.03 Ha in the villages Koihara and Gaurabera of Ramgarh District, Jharkhand has been identified. The proposed land use is given below:

SN	Component	Area in Ha
1	Main Plant & allied Infrastructure	7.80
2	Stockpile & Loading Bunker	1.60
3	Reject Dumping Area	2.50
4	Slurry Pond	0.85
5	Green Belt	3.28
Total		**16.03**

It is proposed to develop green belt over 3.28 Ha as per the tentative land use plan.

5.4 Assessment of Infrastructure Demand:

No residential infrastructure is proposed. Industrial infrastructure is proposed for washery.

5.5 Amenities/Facilities:

The washery is proposed to be operated on Build-Own-Operate (BOO) concept. Hence, the residential facilities for the manpower will be arranged by Washery Operator (WO). However, the available welfare facilities may be extended by CCL on payment basis.

Facilities like canteen, rest room etc. will be provided in the proposed plant as basic facilities to workers by Washery Operator. No other additional facilities are proposed.

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Chapter 6

Proposed Infrastructure

6.1 Industrial Area:

The proposed washery is located within the project boundary of Rajrappa OCP. The tentative land use is given below:

SN	Component	Area in Ha
1	Main Plant & allied Infrastructure	7.80
2	Stockpile & Loading Bunker	1.60
3	Reject Dumping Area	2.50
4	Slurry Pond	0.85
5	Green Belt	3.28
Total		**16.03**

6.2 Residential Area:

Nil

6.3 Green Belt:

It is proposed to develop green belt over 3.28 Ha as per the tentative land use plan. The area of 6.39 Ha, as reduced from the earlier proposed area of 22.42 Ha, will also be maintained as a natural green belt outside the project boundary.

6.4 Social Infrastructure:

As per Corporate Social Responsibility policy of Coal India, community facilities (Education, Water Supply, Health Care, Social Empowerment, Infrastructure for villages etc.) are being provided in nearby areas and the same will be extended due to the addition of this project.

6.5 Connectivity:

It is connected to a blacktop Road from Ramgarh (20 KM) in West and Bokaro (60 Km) in east via Chitarpur & Gola Blocks. The Barkakana-Muri section of South Eastern Railway station lies about Mael Station (6 km) south of washery. Nearest airport is at Ranchi, which is situated at a distance of approximately 75 KM.

6.6 Drinking Water Management:

The quantity of water required for operation & maintenance of the proposed washery is about 1590 KLD. Source of water for operation of plant is proposed to be Section-I sump of Rajrappa OCP for initial three years. Subsequently, the mine discharge of Block-II OCP will be assessed & used for fulfilling the requirement of makeup water of proposed New Rajrappa Washery. However, if the makeup water is not available from the above two sources, water from Bhairvi river will be drawn to meet the make up water demand of the proposed washery after obtaining due permission.

6.7 Sewerage System:

There is no residential colony being proposed in the project, however official buildings will have its domestic effluent from toilet blocks will be collected through well designed sewer network and sent to Septic tanks followed by soak pits. No effluent will be left out after Soak pits.

6.8 Industrial Waste Management:

The process of the proposed washery is based on closed water circuit system. All the water fed into the system will be collected after use and re-circulated after treatment in various units and no effluent will be allowed to escape into the natural drainage system. No effluent will be discharged from the premises; hence there will not be any chance of contamination of water bodies due to proposed installation.

Other hazardous wastes generated during the operation of the proposed washery and their mode of handling & disposal will be as shown in the table below:

SN	Hazardous Waste	Mode of disposal
1	Used Oil	Will be disposed off to authorized recyclers in accordance with Hazardous Waste Management Rules
2	Used Battery	Will be disposed off to authorized recyclers in accordance with Battery Waste Management Rules
3	Tailings	All tailings to be sold to institutionalized customers.

6.9 Solid Waste Management:

Based on the technology selected, the likely average quantity of rejects to be produced from the washery has been estimated as about 0.50 Mty in case of clean coal ash @ 18%. The rejects will be conveyed to Temporary Reject Storage Site earmarked in the washery site prior to sale/disposal of rejects.

The average gross calorific value of the rejects from New Rajrappa washery is expected to fall under G12 Grade (3700-4000 kcal/kg), which will be disposed or sold by CCL through MoU/e-auction route in line with prevailing MoEF&CC guidelines. Provision of slime ponds for re-handling coal slurry in case of emergency and recirculation of clarified water has been envisaged. Provision of dust suppression/ extraction system at dust generating points by proper arrangement of water spraying/ extraction system and settling ponds for settling of storm/incidental water has also been envisaged.

6.10 Power Requirement & supply/sources:

Source of power during construction of the proposed washery is the existing 33kV/6.6 kV electrical sub-station of Rajrappa OC, which is at a distance of about 1.8 km from proposed washery site. The requirement of power is about 9.5 MVA for operation & maintenance of the proposed washery. The source of power during operation will be the same as that during construction.

*****

Chapter 7

Rehabilitation & Resettlement

7.1 R & R Plan:

No rehabilitation and resettlement is required as there are no habitations in the Project site.

*****

Chapter 8

Project Schedule & Cost Estimates

8.1 Likely date of start of construction:

The 3.0 MTY washery on BOO basis is expected to be completed within 24 months period comprising various activities such as planning, design & engineering, selection of equipment/ machinery, procurement, erection of P&M and structural associated with civil works including trial-run, commissioning, performance guarantee tests etc.

8.2 Estimated project cost, Economic basis & viability of project:

The broad initial capital investment for setting up of New Rajrappa washery has been considered as Rs. 480 Crores.

The following points have been considered for calculation of profit:

a) Notified selling price of raw coal of CCL for Washery Grade-III including Royalty (along with contribution to District Mineral Foundation (DMF) and National Mineral Exploration Trust (NMET)), and weighted Surface Transportation Cost.

b) Desired selling price of clean coal at 18% ash and washed coal (power) at 34% ash & Selling price of reject is taken as ₹ 886/t which is as per Price Notification of non-coking coal of equivalent G12 grade based on GCV.

The profit per tonne of raw coal for Clean Coal @ 18% ash has been worked out and given in Table below:

2	Particular	Clean Coal @ 18% ash
1	Raw coal input, Mty	3.00
2	Balance of Products	
	a) Washed/Clean coal Yield	69.90%
	b) Washed coal (power)Yield	13.60%
	c) Rejects	16.50%
3	Raw coal cost, Rs/t	3316.99
4	Operating Cost, Rs/t	410
5	Total cost, Rs/t (3+4)	3726.99
6	a) Selling price of washed coal (power) at 34% ash (Rs/t)	3741.00
	b) Less: Credit for washedcoal (power) (Rs/t)	508.78
	c) Selling price of rejects (Rs/t)	886.00
	d) Less: Credit for reject (Rs/t)	146.19
	e) Cost of production/t of rawcoal input (Rs/t)	3072.02
	f) Cost of production/t of clean coal output (Rs/t)	4394.88
7	a) Negotiated selling price of clean coal at 18% ash (Rs/t)	6721.00
8	Profit per tonne of clean coaloutput (Rs)	2326.12
9	Profit per tonne of raw coalinput (Rs)	1625.95
10	Annual profit for 3.0 Mty feed(Rs Lakhs)	48778.65

*****

Chapter 9

Analysis of Proposal

9.1 Financial & social Benefit of the project

Central Coalfields Limited is facing increasing demand of coal because of increased demand from industry and steel sector. In general the quality of Indian ROM coal contains high ash contents; which causes nos. of operational losses, health hazards and environmental degradation. To overcome this issues coal beneficiation is a remedial action. Hence, there is a need for setting up a coal washery to upgrade this coal to make it more suitable for industrial use. Production of coal from this washery will help to bridge the gap of demand and supply of coking coal in India.

The project will create employment opportunities both for skilled, semi- skilled and unskilled labour both during construction and operational phases of the project in the area. The local areas will be benefited by way of generation of employment opportunities, increased demand for local products and services. There will be an overall improvement in the income level of the local people.

New Rajrappa Washery will be a major source of direct and indirect employment for nearby villagers in buffer zone. It is expected to generate 220 direct employments.

*****

Enclosures

Enclosure-I

CENTRAL COALFIELDS LIMITED
DARBHANGA HOUSE, RANCHI

Sub: Forwarding Minutes of the 498th(No. 02nd of 2021) Meeting of the Board of Directors held on 02.02.2021

Extract from the minutes of the above meeting, in respect of following item, is appended below:

Item No. 498.4(3): Proposal Seeking approval of Conceptual Report, Integrated Bid document prepared by CMPDIL and for publication of global open e-tender for setting up of 3.0 MTY New Rajrappa Coking Coal Washery on BOO concept on e-tender procurement portal of CIL, i.e. www.coalindiatenders.nic.in.

A PPT presentation was made by Washery Construction Department, CCL along with team CMPDIL on the subject proposal. The salient features of the Conceptual report were presented as below:

i) Annual capacity: -3.0 MTY
ii) Raw coal Linkage: - Rajrappa RCE OC
iii) Life of the washery after commissioning (in years): - 18 years
iv) Quality of raw coal feed (average): - 25.1 (adb) Grade- WIII
v) Balance of Products: -

Product	Wt%	Ash%	Qty. (Mty)
Clean coal	69.9	18.0	2.10
Washed Coal Power	13.6	34.0	0.40
Reject	16.5	47.7	0.50
Total	100.0	25.1	3.00

vi) Broad initial capital investment (Rs. in Crores): - 480.00
vii) Operating Cost per tonne of raw coal (Rs.): - 410.00
viii) Profit per tonne of raw coal (Rs.)- 1625.95 at ₹ 6500.00 per tonne of washed coking coal(ad-hoc price) at 19% ash and 3650.00 per tonne of washed power coal at 34% ash content.
ix) Construction Period: - 24 months.

After detailed deliberations, the Board approved the following in respect of the subject proposal as brought out in the agenda note:

1. Conceptual Report & Integrated Bid Document for setting up of 3.0 MTY New Rajrappa Coking Coal Washery on BOO concept as prepared and submitted by CMPDI with freedom of selection of technology [based on Jig/ Heavy Media Separation (Bath/ Drum/ Cyclone or combination thereof) including Flotation or Spiral technology etc. for fine coal recovery].

Contd..P/2

2. Publication of global e-tender/e-publishing of Integrated Bid Document on Coal India e-tender portal (www.coalindiatenders.nic.in) for the work of Setting up of 3.0 MTY New Rajrappa Coking Coal Washery on Build- Own-Operate (BOO) concept with freedom of selection of technology [based on Jig/ Heavy Media Separation (Bath/Drum/Cyclone or combination thereof) including Flotation or Spiral technology etc. for fine coal recovery].

Submitted for immediate necessary action to ensure compliances of the directives of the Board. ATR, may please be submitted within 08 days, so that it can be placed before the Board at least 07 days in advance of the next Board Meeting.

Company Secretary

D(T/P&P)

GM(WC)/HOD

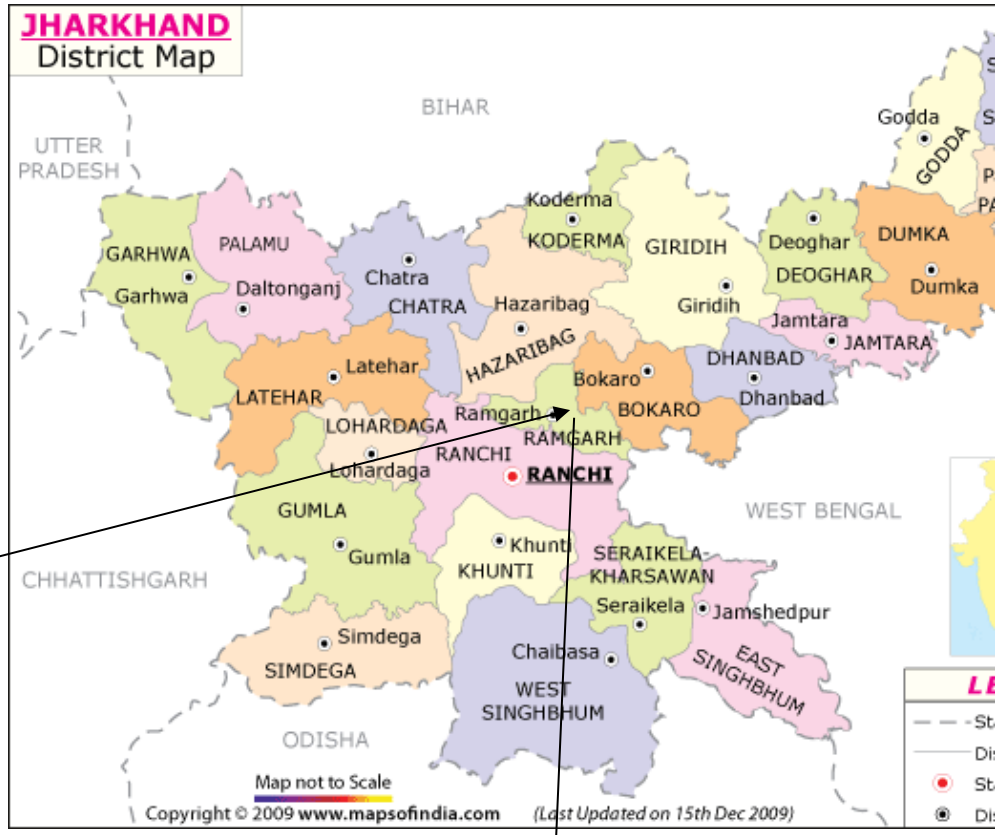
Ref No. CS/BM/498/2021/52 **Date: 22.02.2021**

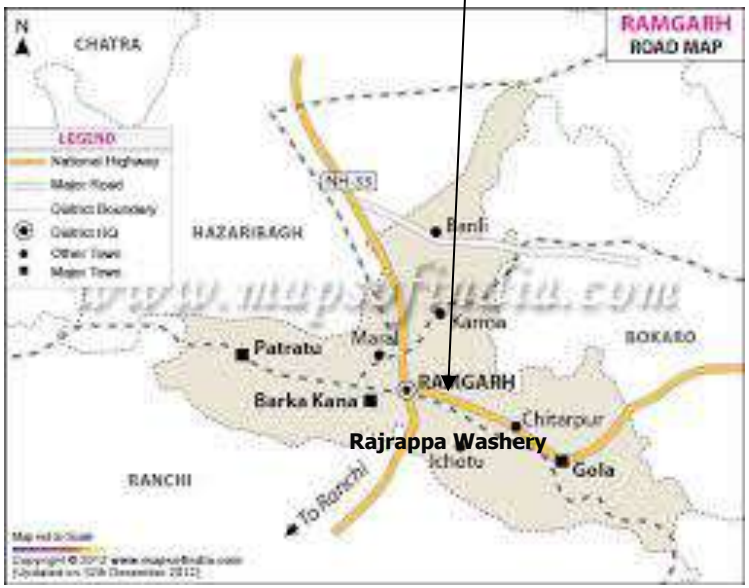
Enclosure-II


Core and Buffer Zone of Rajrappa Washery
Rajrappa Washery
2 km Buffer Zone
5 km Buffer Zone
10 km Buffer Zone
PROTECTED FOREST
DAMODAR R.

Enclosure-III

1. Ranchi -60 km
2. Ramgarh -20 km
3. Nearest Rly. Stn.-Mael at 6 km
4. Airport – At Ranchi





Enclosure-IV

COMMITTEE REPORT

On the advice of Expert Appraisal Committee (EAC), MoEF&CC, a fresh committee was formed to review the suitability of proposed land/explore the possibility of an alternate site for construction of New Rajrappa Washery from environmental perspective by Director Technical (P&P), CCL vide No. DTPP/CCL/2021/162 dated 14/15.06.21. The committee consisted of following members:

1. Sri Alok Kumar, GM(Rajrappa), CCL
2. Sri Alok Kumar Tripathi, CM(Env.), CCL HQ.
3. Sri Shankar Kr. Jha, Sr. Manager, (LP&R), CCL HQ.
4. Sri Shyamal Ghosh, CM(Washery), CCL HQ.
5. Sri Kameshwar Singh, PO/Nodal Officer(New Rajrappa Washery)

The committee searched for alternate sites in non-forest land only with minimum 15 Ha land so that proposed new Rajrappa Washery can be installed in this alternate site.

Committee members from CCL HQ visited Rajrappa Area on 18.06.2021 and inspected five numbers of alternate sites on non-forest land as well as the earlier proposed land for new Rajrappa Washery. The committee members examined all the sites and the findings of the committee are attached as Annex A in a tabulated format.

The committee, after detailed deliberation, is of the opinion that the earlier proposed site for construction of New Rajrappa Washery is the only viable and suitable site in comparison to Sites 1-5. In line with the observations of EAC, MoEF&CC, New Delhi, the committee also proposes that the area of the proposed site may be reduced to 16.03 Ha from earlier proposed area of 22.42 Ha by removing the dense forest area and to maintain it as a natural green belt.

Enclosure: Annexure -A (Comparative Statement)

Committee Member
Alok Kr. Tripathi
CM(Env.), CCL HQ

Committee Member
Shankar Kr. Jha
Sr. Mgr, (LP&R), CCL HQ

Committee Member
Shyamal Ghosh
CM(Washery), CCL HQ

Committee Member
Kameshwar Singh
PO/Nodal Officer
New Rajrappa Washery

Committee Member
Alok Kumar
General Manager
Rajrappa Area

Comparative statement of proposed washery sites (on non-forest land)

Parameter	SITE 1	SITE 2	SITE 3	SITE 4	SITE 5	SITE 6 (earlier proposed site)
Area	67.05 Ha	119.60 Ha	28.5 Ha	15.4 Ha	6.72 Ha	16.03 Ha
Approx. Distance from existing bridge on River Damodar for Block II	6.53km	7.68 km	8.58 km	2.58 km	1.9 km	4 km
Approx. Distance from existing source of water at Bhera River	3.55 km	5.7 km	6.6 km	6.4 km	4.94 km	3 km
Approx. Distance from existing main sub-station	1.7 km	3.55 km	4.5 km	4.3 km	2.74 km	1.80 km
Approx. Distance from existing loading point	2.15 km	4.3 km	5.2 km	5.0 km	3.54 km	1.4 km
Existing land use	Existing Bhuchungdih village of approx. 600 houses.	Existing residential colony of 1800 houses and other associated infra.	a) Old reclaimed OB Dump (handed over to DFO Ramgarh) b) Existing magazine c) Existing khatal of approx. 75 houses.	a) Part area is lying below HFL. b) Part area old OB dump c) Existing Dhatwatand Village of approx. 35 houses.	a) Existing Koihara village of approx. 95 houses. b) Area not sufficient for setting up of new washery.	Forest land = 15.85 Ha No. of trees = 997
Requirement of Rehabilitation/ Shifting	Yes. Approx. 600 families.	Yes. New colony site required.	Yes. Approx. 75 families.	Yes. Approx. 35 families.	Yes. Approx. 95 families.	No

28/06/2024

Committee Member
Alok Kr. Tripathy
CM(Env.), CCL HQ

28/6/2024

Committee Member
Shankar Kr. Jha
Sr. Mgr, (LP&R), CCL HQ

28/06/21

Committee Member
Shyamal Ghosh
CM(Washery), CCL HQ

28/6/24

Committee Member
Kameshwar Singh
PO/Nodal Officer
New Rajrappa Washery

28/6/24

Committee Member
Alok Kumar
General Manager
Rajrappa Area


Alternate Sites of Rajarappa Washery
SIte 5
Site 6
Site 4
Site 1
Site 3
Site 2
Rajrappa Road
Rajrappa Rd
Rajrappa Road
Chainpur - Kander - Chhotki Pona Rd
NH 23
NH 2
2351 m
Image © 2021 Maxar Technologies
© 2021 Google
Google Earth
1985
23°37'36.84" N 85°38'55.37" E elev 0 m eye alt 10.17 km

Species wise summary of trees at the site of proposed New Rajrappa Washery(16.03 Ha)

Sl. No.	Species	No. Of Trees
1	Palash	148
2	Mahua	90
3	Sakhua	461
4	Jamun	43
5	Piyaar	123
6	Seedha	42
7	Bargad	4
8	Others	86
Total		**997**

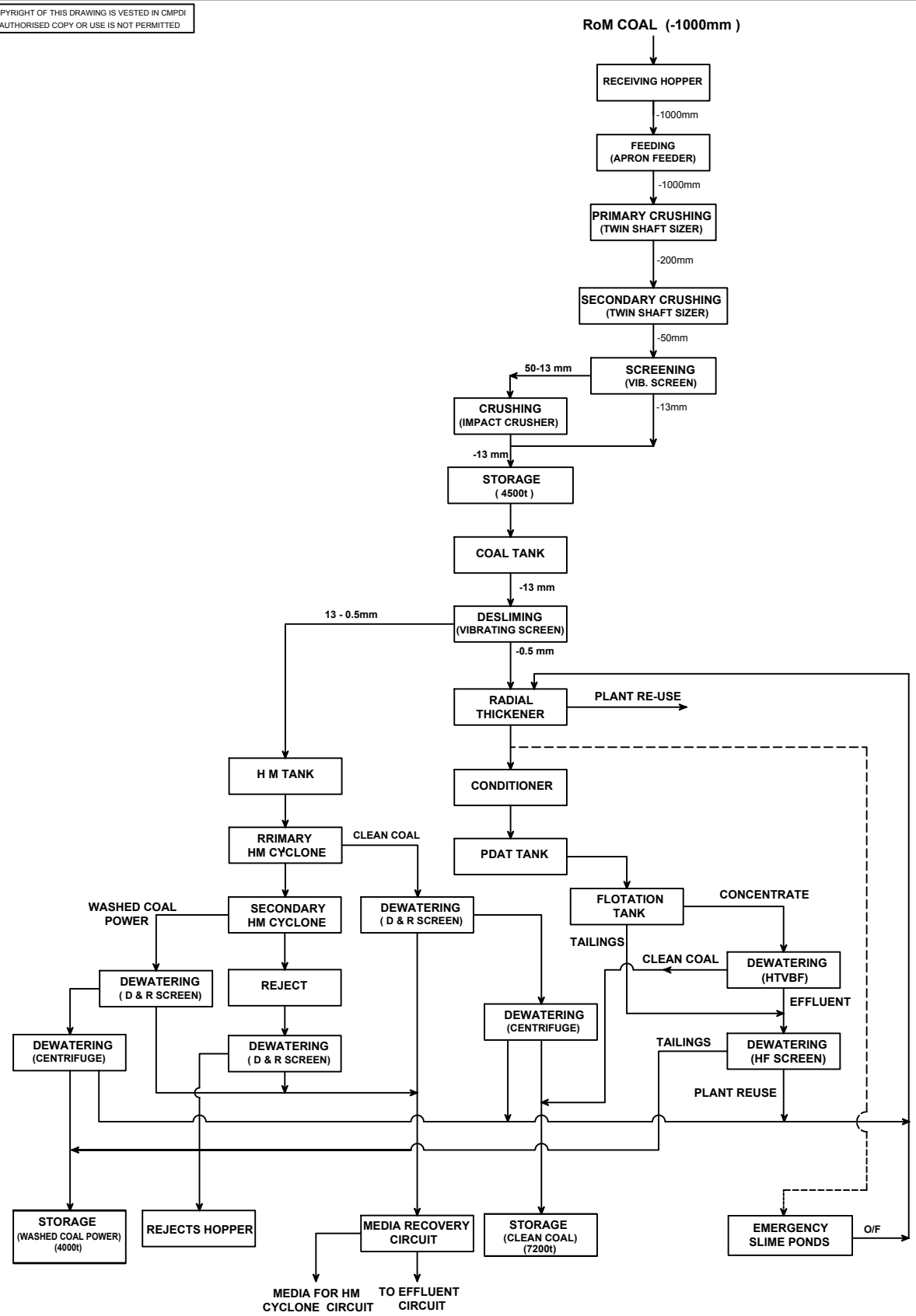
28/6/21
Surveyor (RWP)

28/6/21
Surveyor(ROCP)

28/6/21
AM(Envt.)(R)

28/06/21
PO(RWP)

Enclosure-V



REVISION	DATE	DESCRIPTION	REVISED	APPROVED
REVISION				

CUSTOMER: **CENTRAL COALFIELDS LTD.**

JOB TITLE : CONCEPTUAL REPORT FOR NEW RAJRAPPA WASHERY (3.0 MTY)

JOB NO. 314320095

SUBJECT: PROCESS FLOW SHEET

ACTIVITY	NAME	DESIGN.	SIGNATURE	DATE
PREPARED	JAYANT PRASAD	Dy.M(CP)		
PROCESSED	PK GHOSH	Ch.D/M(M)		
CHECKED	ABHA PRASAD	Ch.M(CP)		
APPROVED	P.R VARMA	GM(CMP)		

SCALE: NTS — SHEET OF

DRG. No. HQ/CMP/New Rajrappa/04/01 — REV.NO. 0

cmpdi — A Mini Ratna Company

Enclosure-VI

F. No. CCT-13011/3/2007-CA-I(Vol-III)
Government of India
Ministry of Coal

Room No. 622-A, Shastri Bhawan, New Delhi,
Dated: 27th May, 2021

To,
The Coal Controller,
Coal Controller's Organisation,
Council House Street,
Kolkata-700001

Subject: Policy for Handling & Disposal of Washery Rejects

Sir,

The proposal of Handling & Disposal of Coal washery Rejects has been under examination in this Ministry and with the approval of Competent authority, the policy for Handling & Disposal of Washery Rejects has been framed. The present Policy will regulate the handling and disposal of Coal Washery Rejects in a uniform manner and will be applicable on all coal Washeries.

Policy for Handling & Disposal of Washery Rejects

1. Objective

a. To define coal washery rejects
b. To facilitate conservation of energy through environment friendly extraction of residue energy from coal washery rejects
c. To regulate the use of coal rejects with an aim to minimize the pollution footprint
d. To decide the ownership of rejects in different modes of washery operations
e. To ensure stacking of rejects, dumping of rejects in mine voids/low lying areas in environment friendly manner
f. To provide for a mechanism for monitoring and control

2. Some of the key terms – defined

2.1 **Coal Washery Rejects (CWR)** are the by-product of Coal Washeries with Gross Calorific Value (GCV) less than 2200 kcal/kg.

2.2 **High Calorific Value (HCV) coal Washery Rejects** are rejects with GCV equal to or in excess of 1500 kcal/kg.

Sujeet kumar

2.3 **Low Calorific Value (LCV) coal Washery Rejects** are rejects with GCV less than 1500 kcal/kg.

2.4 **Owner of CWR** shall be the party, which owns the raw coal supplied to the Washery. Hereinafter, the term **Owner** shall be used for the owner of CWR.

2.5 **Deemed Owner of CWR** Any rejects generated due to washing that cannot be utilised by the owner may be sold to washery operator and in such case the washery operator will be deemed owner of CWR.

3. Stacking of CWR

3.1 Owner/deemed owner shall ensure that LCV and HCV Rejects are stacked separately at appropriate sites selected as per environmental guidelines issued in this regard.

3.2 Each stacking site shall be properly levelled, surveyed and a grid plan shall be prepared showing RLs at 15 m interval.

3.3 During stacking of CWR, all environmental and safety guidelines shall be followed. Due precautions shall be taken against spontaneous heating.

3.4 The Owner/deemed owner shall get the average GCV of each stock examined as per the guidelines issued by CCO in this regard.

3.5 Monthly records shall be maintained in respect of each stock of CWR showing the opening stock, amount of CWR received in and despatched from the stock during the month, closing stock, average GCV and other relevant details.

3.6 The owner/ deemed owner will ensure disposal of rejects as specified in EC conditions.

4. Disposal of CWR

4.1 Prioritizing conservation –Extraction of energy from the HCV rejects

4.1.1 As Indian coal is inherently difficult to wash, the loss in calorific value in rejects is often too high and therefore may be gainfully used as source of energy in CPPs (Captive Power Plants) /TPPs (Thermal Power Plants) for generation of power and other permissible end usages etc.

4.1.2 Owners/ deemed owners shall take all possible initiatives to ensure extraction of energy from the generated HCV rejects through its use as source of energy in various environmentally permissible end usages. **This is in line with Rule-27 of Solid Waste Management Rules –**

Sujeet Kumar

2016, which requires extraction of energy from solid wastes of high calorific value of 1500 kcal/kg or more. The owners shall maintain a record of all such initiatives (failed/successful) showing all relevant details in a specified format.

4.1.3 The Owner/ deemed owner shall ensure that the HCV reject is supplied to such end users who possess valid environmental clearances/permits for its use.

4.1.4Whenever it is decided to dispose HCV rejects under this route, Owner/ deemed owner shall obtain prior permission from Coal Controller's Organisation (CCO) by applying for the same in a specified format. CCO may carry out necessary inspections and draw samples of CWR being despatched for ascertaining GCV and other particulars.

4.2 Exploring alternate use of Washery Rejects – 2nd priority

4.2.1 If the initiatives taken under Para-4.1 above do not fructify for the HCV rejects, the Owner/ deemed owner will explore **other permissible uses** of HCV rejects such as replacement of construction material (for highways, railways, dams, embankments, etc.), reclamation of land, brick making, or any other alternative gainful use. This exercise will also be carried out in respect of LCV rejects.

4.2.2 Actions for disposal of HCV rejects under this route shall be taken up only when due diligence was made by the Owner/ deemed owner for utilizing the rejects in terms of Para-4.1 above. All documentary evidences of such due diligence shall be kept maintained by the Owner/ deemed owner.

4.2.3 Whenever it is decided to dispose HCV/LCV rejects under this route, Owner/ deemed owner shall obtain prior permission from Coal Controller's Organisation (CCO) by applying for the same in a specified format. The owner/ deemed owner shall also give an undertaking that due diligence was made by him for disposal of HCV rejects as per Para-4.1. CCO may carry out necessary inspections and draw samples of CWR being despatched for ascertaining GCV and other particulars.

4.3 Dumping of Washery Rejects in mine voids/low lying areas in environment friendly manner

4.3.1 If all initiatives taken under Para-4.1 and Para-4.2 above do not fructify, the Owner/ deemed owner may resort to the last option of dumping of Washery rejects in mine voids or low lying areas in an environment friendly manner observing all precautions relating to safety and environment, as stipulated in statute and various guidelines. Going for this option will require proper and prior study of implications involved and with adoption of appropriate 'engineering

Sujeet Kumar

solutions' to avoid spontaneous heating, and possible contamination of water bodies.

4.3.2 Actions for disposal of rejects under this route shall be taken up only when due diligence was made by the Owner/ deemed owner for utilizing the rejects in terms of Para-4.1 and Para-4.2 above. All documentary evidences of such due diligence shall be kept maintained by the Owner/ deemed owner for inspection/verification of CCO as and when required.

4.3.3 Selection of Mine Voids/Low lying areas shall be the look-out of the Owner/ deemed owner, who shall enter into an appropriate arrangement with owner of the mine void/low lying area for dumping of rejects therein.

4.3.4 **All Coal mining companies shall identify and make a list of abandoned mine voids/running mines suitable for dumping of rejects and submit the same to CCO. The list of such mines shall be updated annually by the coal companies.**

4.3.5Whenever it is decided to dispose rejects under this route, Owner/ deemed owner shall obtain prior permission from Coal Controller's Organisation (CCO) by applying for the same in a specified format. He shall enclose the agreement made with the owner of mine void/low lying area, a plan of the site showing the total area to be utilized for dumping, manner of transport and dumping, precautions proposed to be taken, structure of supervision, manner of final reclamation etc. The owner/ deemed owner shall also give an undertaking that due diligence was made by him for disposal of rejects as per Para-4.1 and Para-4.2.CCO may carry out necessary inspections and draw samples of CWR being despatched for ascertaining GCV and other particulars.

4.3.6 The owner/ deemed owner shall submit a Bank Guarantee (BG) @ Rs. 5.0 (five) lakh per hectare as guarantee towards final reclamation of the site to CCO. However, if the proposed mine has already an approved Mining Plan/ Mine Closure Plan, submission of BG may be dispensed with if an undertaking of the Mine is submitted in this regard.

4.3.7 It shall be responsibility of the Owner/ deemed owner to ensure that all precautions and safety measures are taken to ensure environment friendly disposal of rejects in a safe manner.CCO and other statutory agencies may carry out periodic inspections of the dumping site(s) to ensure compliance of such guidelines.

4.3.8 After completion of dumping and final reclamation by the Owner/ deemed owner, the reject dumping site shall be inspected by CCO to ascertain the efficacy of reclamation and precautionary measures put in place. If any deficiency is noticed, CCO may ask for remedial actions to be carried out by the Owner/ deemed owner failing which, CCO will

Jugeet Kumar

get the job done by any third party by encashing the BG submitted by the Owner/ deemed owner. The site shall not be declared closed for return of BG unless it is certified by the CCO that the site has been reclaimed adequately. CCO may obtain services of an accredited independent agency for carrying out such inspections at Owner's/ deemed owner's cost.

4.3.9 The Owner/ deemed owner will maintain a record of all such cases of reject dumping along with all relevant details in a specified format.

4.4 Additional obligations for Linkage holders (regulated sector) obtaining coal at subsidized rates through FSA route and the owners of coal block allocated through allotment route

4.4.1 The Linkage holders drawing coal under the Long-Term Linkage, as per National Coal Distribution Policy (NCDP)/Fuel Supply Agreements (FSAs) and the coal block owners (allotment route) are solely responsible for efficient use of coal for the specified purpose as per the FSA/allotment order.

4.4.2 **If coal is washed in a 3rd party Washery, such linkage holders/ block owners and in case any agreement is signed with washery operator as mentioned in para 2.5 the said washery operator (deemed owner) will be responsible for handling and disposal of rejects.**

4.4.3 Linkage holders/block owners have to declare the benefits derived from disposal of rejects/ agreement with washery operator and the methodology for passing on the benefits derived from such transaction to the public. The detailed information in this regard is to be furnished to the concerned Electricity Regulator or other authorities, if any.

5. Maintenance of records and submission of returns

5.1 The Owner/ deemed owner shall maintain all records that are specified in preceding paragraphs and all records required to be maintained under various applicable statutes/guidelines/orders in vogue.

6. Monitoring and Control

6.1 Subsequent to grant of permission for disposal of reject under any of the three routes, CCO may carry out inspection of concerned Washery, check the records maintained by the Owner/ deemed owner and draw samples from the reject stock/reject in transit for verifying the GCV. CCO shall carry out such inspections and maintain a record of the same along with other relevant details.

6.2 CCO shall carry out regular/surprise inspections of Washeries and also the sites of reject handling to check the efficacy of handling and

Sujeet Kumar

disposal of rejects. CCO may check the various records, as mentioned in preceding paragraphs, maintained by the Owner/ deemed owner and may also get the samples drawn and tested from reject stocks or stock of any other Washery product.

6.3 Cost of all sampling and testing carried out by the CCO under the provisions of this policy shall be borne by the Owner/ deemed owner.

7. Nothing in preceding paragraphs shall absolve the Owners/ deemed owners from fulfilling the various statutory requirements under other applicable statutes and obligations under various agreements executed with the Ministry/coal companies. Similarly the present policy shall not place any restrictions on various statutory bodies/State authorities/ coal companies in discharging their duties with regard to coal Washeries under respective statutes/agreements.

2. Since the competent authority has approved the **policy for Handling & Disposal of Washery Rejects** as mentioned in Pars 1 above, policy may be circulated to all concerned for further action. The action taken report shall be sent to this Ministry from time to time

Yours faithfully,

Sujeet Kumar 27/5/21

(Sujeet Kumar)
Under Secretary to the Government of India

Copy for necessary action to:

1. Chairman cum Managing Director, Coal India Limited, Kolkata
2. Chairman cum Managing Director, Singareni Collieries Company Limited, Telangana

Copy for information and necessary actions to:

1. PS to Minister of Coal
2. PSO to Secretary Coal. Ministry of Coal
3. PPS to Additional Secretary(VKT), Ministry of Coal
4. PPS to Additional Secretary(MN), Ministry of Coal
5. PPS to Joint Secretary(SBN), Ministry of Coal
6. PPS to Joint Secretary(BPP), Ministry of Coal
7. PPS to Joint Secretary(VT), Ministry of Coal
8. PPS to Joint Secretary & FA Ministry of Coal
9. PS to Economic Advisor, Ministry of Coal
10. PS to DDG, Ministry of Coal
11. PS to Director (T), Ministry of Coal

Copy to:

1. Director, NIC Ministry of Coal-with a request to upload it on the website of Ministry of Coal
2. Hindi Section for Hindi translation of above.
3. Under Secretary, Vigilance Section, Ministry of Coal w.r.t. Vigilance section's O.M. No. 13029/09/2014-vig dated14.04.2021.

****

Enclosure-VII

FOR KIND INFORMATION OF C.M.D., CCL.

F. No. 8-105/2003-FC
Government of India
Ministry of Environment & Forests
(FC Division)

Paryavaran Bhawan
CGO Complex, Lodhi Road
New Delhi-110 003

Dated : 15th March 2007

To

The Secretary (Forests),
Government of Jharkhand,
Ranchi.

Sub: **Diversion of 510.82 ha of forest land for Rajrappa Open Cast Mining Project in favour of Central Coalfields Limited, District Hazaribagh, Jharkhand.**

Sir,

I am directed to refer to your letter Vanbhumi-62/2003-3977 dated 06.08.2003 and subsequent letter No. Vanbhumi-62/2003-1122 dated 16.03.2004 on the above mentioned subject wherein the above proposal was submitted seeking prior approval of the Central Government in accordance with Section-2 of the Forest (Conservation) Act, 1980 and to say that the proposal has been examined by the Forest Advisory Committee constituted by the Central Government under Section-3 of the aforesaid Act.

2. After careful consideration of the proposal of the State Government and on the basis of the recommendation of the above mentioned Advisory Committee, the Central Government granted in-principle approval under Section-2 of Forest (Conservation) Act, 1980 on 11.05.2004. The compliance report has been received from the State Government vide letter No. Vanbhumi-62/2003/158 dated 10.01.2007. After considering the proposal and compliance of the stipulated conditions by the State Government, the Central Government hereby grants approval, under Forest (Conservation) Act, 1980, for **diversion of 510.82 ha of forest land** for Rajrappa Open Cast Mining Project in favour of Central Coalfields Limited, District Hazaribagh, Jharkhand, subject to fulfillment of following conditions :-

(i) Legal status of the forest land shall remain unchanged.
(ii) Compensatory Afforestation shall be raised over degraded forest land double in extent to the forest land being diverted, i.e., over 1021.64 ha and the same shall be maintained at the project cost.
(iii) Penal Compensatory Afforestation shall be raised and maintained over double the degraded forest land utilized in violation of Forest (Conservation) Act, 1980.
(iv) The period of diversion shall be 20 (twenty) years subject to possession of valid lease under the MMRD Act, 1957 or other mining Act, as the case may be.
(v) The State Government shall deposit NPV and all other funds with the Ad-hoc Body of Compensatory Afforestation Fund Management and Planning Authority (CAMPA) in Account No. CA 1587 of Corporation Bank (A Government of India Enterprises), Block-11, Ground Floor, C.G.O. Complex, Phase-1, Lodhi Road,

New Delhi-110003, as per the instructions communicated vide letter No. 5-2/2006-FC dated 20.05.2006.

(vi) RCC pillars of 4 feet height shall be erected to demarcate the area by the User Agency at the project cost and will be marked with forward and back bearings.

(vii) The user agency shall raise, fence and maintain a safety zone around the mining area and will also raise and maintain the plantation over an area one and half times in extent of the safety zone at the project cost.

(viii) All necessary measures should be taken by the user agency to protect the environment

(ix) The user agency should implement the reclamation works as per the reclamation plan. Monitoring of the reclamation works should be done continuously by the State Forest Department. The user agency shall submit progress report of reclamation works to the State Forest Department and Regional Office, Bhubaneswar.

(x) Trees shall be felled only when it is absolutely necessary and that too under strict supervision of State Forest Department.

(xi) No labour camps shall be established on the forest land.

(xii) Sufficient firewood shall be provided by the user agency to the labourers at the project cost after purchase from the State Forest Department/Forest Development Corporation.

(xiii) The user agency shall ensure that there should be no damage to the available wildlife.

(xiv) The forest land shall not be used for any purpose other than that specified in the proposal.

(xv) The forest land thus diverted shall be non-transferable. Whenever and whatever extent of forest land is not required by the user agency, it shall be surrendered to the State Forest Department after proper rehabilitation under intimation to this Ministry.

The State Government shall ensure compliance of all the above conditions.

Yours faithfully,

(Sandeep Kumar)
Assistant Inspector General of Forests

Copy to :-

1. Principal Chief Conservation of Forests, Government of Jharkhand, Ranchi.
2. The Nodal Officer, O/o the PCCF, Government of Jharkhand, Ranchi.
3. Chief Conservator of Forests (Central), Regional Office, Bhubaneswar.
4. User Agency.
5. Guard file.
6. Monitoring Cell of FC Section.

(Sandeep Kumar)

Central Coalfields Limited

A Mini Ratna Company
(A Subsidiary of Coal India Limited)
Office of the Project Officer, Rajrappa Washery Project
PO: Rajrappa Project, Distt: Ramgarh (Jharkhand), PIN-829150

Ref.No. PO(RWP)/E&F/New Washery/21/ 150

Dated: 12/4/2021

To,

The Divisional Forest Officer,
Ramgarh Division.

Subj.: Change in land use in respect of Rajrappa OCP (22.24 ha) in already diverted forest land of 510.82 Ha (F.No. 8-105/2003-FC dated 15th March 2007).

Dear Sir,

Your kind attention is drawn towards the circular MoEF No. 11-306/2014FC dated 07/10/14 (Copy enclosed) which states that "Wherever re-diversion or change in approved land use of forest land for the same project becomes essential, State Governments should seek the prior permission of the Central Government giving details of the earlier approval and proposed activities details in the letter form rather than initiating a fresh proposal".

It is to mention here that 510.82 Ha forest land was diverted in the name of Rajrappa Opencast Project for utilization in opencast mining activity, but now 22.24 Ha, part of 510.82 Ha is essentially required for its utilization as coal washery (proposed New Rajrappa Coal washery).

Application in Form A and relevant documents are being attached for your kind perusal. Therefore, it is requested to arrange change in land use for 22.24 Ha from opencast mining purpose to coal washery purpose in light of MoEF's OM F. No. 11-306/2014/FC dated 07/10/2014.

Thanking you,

Yours faithfully,

(Kameshwar Singh)
Project Officer
Rajrappa Washery Project.

Copy To:

1. GM/HOD(E&F), CCL Ranchi.

Project Officer
Rajrappa Washery
CCL

Received one copy
12/4/21