

Reply To Issues Raised By EAC Members

Vide letter number- J/11015/536/2008-IA.II (M) Dated 28.02.2012.

In Respect Of

Ara Sarubera Group of Mines

Sl no	Project	Leasehold area (Ha.)	Nominal Capacity (MTPA)	Peak Capacity(MTPA)
1	Sarubera UGP	449.39	0.18	0.21
2	Chainpur OCP	237.25	0.50	0.58
3	Ara OCP	508.21	0.76	0.87
TOTAL		1194.85	1.44	1.66

**(Kuju Area)
Central Coalfields Limited**

(July, 2012)

Prepared at

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The presentation on EIA & EMP for Environmental Clearance of Ara-Sarubera Group of Mines was made on 24.01.2012. The EAC of MOEF raised following queries vide letter no. J/11015/536/2008-IA.II (M) DATED 28.02.2012.

Para Number	Particulars
1	The Committee desired that the proposed R&R Plan should be furnished.
2	The Committee desired that the proponent examine options for reworking the OB management to maximise backfilling and reducing external dumping.
3	The Committee desired that in addition to the Fund for Final Mine Closure created at the MOC, pre-nationalisation mines with a number of abandoned mines and without proper reclamation at the time of nationalisation may require to be given special focus by creating a Special Corpus Fund either at the level of the company or in CIL/MOC.
4	The Committee desired that only covered trucks of higher capacity should be used to minimise dust generation and expedite CHP/Silo loading into railway wagons and stop pay loader loading at the siding even before three years proposed by the proponent.
5	Measures for dust suppression such as fixed and mobile sprinklers, 3-tier plantation near habitations and near dust generating areas should be developed.
6	The Committee desired details of forestry clearance.

Para 1: The Committee desired that the proposed R&R Plan should be furnished.

Reply:

The R&R Policy of CIL has been revised with effect from 5th April, 2012 and the features of this policy have been incorporated in the EIA & EMP of this Project for implementation of Rehabilitation Action Plan in Ara Sarubera Group Of Mines. The salient features in brief are given below.

R&R Policy of CIL

Compensation For Land
One Employment per 2 acres to land losers (plots can be clubbed together) Or monetary compensation @ Rs.5.0 Lakh per acre subject to a minimum of Rs.0.50 Lakh.
The compensation can be paid in form of annuity also on monthly, quarterly, annually etc upto 60 years of age or life of project, whichever is earlier.
Note : A person receiving employment forgoes all claims to monetary compensation and a person receiving monetary compensation forgoes all claims to employment.

Compensation For Homestead
Compensation for homestead building as per standard valuation method under LA Act.
Payment of Rs 3.0 Lakh in lieu of alternate housing site, assistance in designing & shifting, compensation for construction cattle shed and working shed etc.
Subsistence allowance to each affected family @ 25 days Minimum Agricultural Wages per month for one year.
Compensation For Sharecroppers, Land lessees, Tenants, Day labourers, Landless tribals etc.
Affected landless tribal families will be provided one time financial assistance equivalent to 500 days MAWs as a compensation for loss of customary rights.
Assistance to PAPs to take up non-farm self employment through petty contracts or formation of co-operatives.
Contractors will be persuaded to give jobs to eligible PAPs on preferential basis.

The affected families who are not interested in monetary compensation @ Rs 3.0 Lakh will be shifted to rehabilitation site where following facilities are proposed to be provided:

- i) Roads
- ii) Drains
Lighting infrastructure only, the power supply is provided by State Electricity Board on payment basis
- iii) Well for drinking water
- iv) Community center
- v) Places of worship
- vi) Burial ground, play ground, grazing land & ponds
- vii) Any other infrastructure that was existing in original village like School, Post Office etc.
- viii) Dispensary
- ix) Children's Park
- x) Co-operative Stores
- xi) Shopping Centre

Salient Features Of Rehabilitation Action Plan For Ara Sarubera Group Of Mines

The acquisition of tenancy land is involved both in Ara OCP as well as Sarubera/Chainpur OCP, however shifting of households for implementation of the project is involved only in Ara OCP. The detail is given below.

Project Name	Name of Village from where PAFs to be shifted	Name of Village from where land to be acquired
Sarubera UGP	Not required	Sarubera
Chainpur OCP		Ara Basti
Ara OCP	Dumerbera	Dumerbera
	Baghlata Basti	Baghlata Basti
	Ara Basti	Ara Basti

Socio-economic Status Of Affected Villages

Detail Of Dwellings

Sl. No.	Name of the Village	No. of families	No. of buildings		Year of Shifting
			Pucca	Kutcha	
1	Dumerbera	266	114	152	2015-16
2	Baghlata Basti	98	42	56	2017-18
3	Ara Basti	160	68	92	2017-18
	Total	524	224	300	-

Population Composition

Name of Village	No. of H. H.	Population				
		Total	Male	Female	S.C.	S.T.
Dumerbera	266	1307	705	602	122	366
Baghlata Basti	98	482	260	222	45	135
Ara Basti	160	786	424	362	73	220
Total	524	2575	1389	1185	239	721

Family-wise Income Distribution

Sl. No.	Name of the Village	No. of families	Income Distribution (Rs per Annum)			
			<20000	20000 – 50000	50,000 –100000	>100,000
1	Dumerbera	266	27	53	106	80
2	Baghlata Basti	98	10	20	39	29
3	Ara Basti	160	16	32	64	48
	Total	524	52	105	210	157

Family-wise Occupation

Sl. No.	Name of the Village	No. of families	Family-wise Occupation				
			Main Worker	Cultivator	Agriculture Labour	Other Worker	Non Worker
1	Dumerbera	266	58	11	3	42	153
2	Baghlata Basti	98	21	4	1	15	56
3	Ara Basti	160	35	6	2	25	92
	Total	524	114	21	6	82	301

R&R Package for Land Losers & Household Shifting

A total of three villages are proposed to be rehabilitated for implementation of Ara OCP. The details of the villages proposed to be rehabilitated with population, number of households etc. is given below.

Detail of Household Shifting:

Project Name	Village Name	No. of PAFs
Sarubera UGP	Sarubera	0
Chainpur OCP		0
Ara OCP	Dumerbera	266
	Baghlata Basti	98
	Ara Basti	160
Total		524

The Rehabilitation Site has been selected at Mourpa for relocating the population of villages from this Project. This site is located approximately 4.0 Km away. This land is to be acquired under LA Act.

The area of Rehabilitation Site is 64.25 Ha, out of which 31.07 Ha has already been acquired from tenancy land. Balance 31.18 Ha of Govt. land is in process, for which application has been made under MC Rule. This Rehabilitation Site shall be used for accommodating the PAFs from other Projects of Kuju Area also.

Compensation for Homestead

Sl. No.	Name of the Village	No. of families	No. of buildings		Minimum Homestead compensation @ Rs 3.0 Lakh/ House
			Pucca	Kutcha	
1	Dumerbera	266	114	152	798.0
2	Baghlata Basti	98	42	56	294.0
3	Ara Basti	160	68	92	480.0
	Total	524	224	300	1572.0

Time Schedule For Rehabilitation

Name Of Village	Total No of PAFs To Be Shifted	Year Of Shifting					Total
		2013-14	2014-15	2015-16	2016-17	2017-18	
Dumerbera	266	60	100	106	0	0	266
Baghlata Basti	98	0	0	0	50	48	98
Ara Basti	160	0	0	0	80	80	160
Total	524	60	100	106	130	128	524

Detail of Employment to Land losers:

No	Name of Project	Name Of Village	Employment to land losers		
			Already given	To be given	Total
1	Ara OCP	Ara	104	268	372
		Murpa	11	61	72
2	Sarubera Colliery	Ara	0	17	17
		Sarubera	12	13	25
Total			127	359	486

Note: Total tenancy land requirement is 801.52 Acre.

Direct Employment Opportunities

As already mentioned, direct employment to be given to land losers is 486 out of which 127 jobs have already been given. Apart from this, additional employment (359 jobs) is proposed to be given during implementation phase of Ara OCP and Chainpur OCP.

Indirect Employment Opportunities

Indirect employment is also given to land losers on a preferential basis as per requirement. Approximately 200 to 300 mainly local persons are expected to be engaged contractually from time to time for different activities like coal transportation, coal loading & unloading, plantation and its maintenance, civil construction and maintenance jobs, petty supply jobs, E&M maintenance jobs, water sprinkling at dust generating points etc. So far 17 local persons have been given employment as security guards on contractual basis in Ara OCP.

The existing contractors and suppliers are strongly encouraged to employ local people only as a matter of Company policy unless the awarded jobs require high technical competence not available locally.

Subsistence allowance

Sl. No.	Name of the Village	No. of families to be given Subsistence	Subsistence amount @ Rs. 25 days MAWs (@ Rs 180)/month* 12 months (Rs Lakh)
1	Dumerbera	266	143.64
2	Baghlata Basti	98	52.92
3	Ara Basti	160	86.4
	Total	524	282.96

One Time Financial Assistance To Landless Tribals

Sl. No.	Name of the Village	No. of families	Total No. of tribal families	Total No. of landless tribal families	One time financial assistance @ 500 MAWs (@ Rs 180/day) Rs Lakh
1	Dumerbera	266	73	7	6.3
2	Baghlata Basti	98	27	3	2.7
3	Ara Basti	160	44	4	3.6
Total		524	144	14	12.6

Note: 10% of tribal families are assumed to be landless.

Para2: The Committee desired that the proponent examine options for reworking the OB management to maximise backfilling and reducing external dumping.

Reply:

The proposed dump plan is given below.

Ara OCP

The average stripping ratio for Quarry-1 is 2.1 m³/Te, Quarry-2 is 1.94 m³/Te and Quarry-3 is 2.46 m³/Te. Hence the quantum of OB removal from Quarry-1 is 1.596 Mm³/ annum, Quarry-2 is 1.474 Mm³/ annum and Quarry-3 is 1.860 Mm³/ annum. The Overburden from Quarry-1 is proposed to be dumped externally in void of existing 16B Quarry. Overburden from Quarry-2 is proposed to be dumped internally in the void of Quarry-1 and similarly Overburden from Quarry-3 is proposed to be dumped internally in the void of Quarry-2.

As per the approved report, 0.42 Mm³ of the OB from Quarry-1 was proposed to be utilized for the construction of Railway siding and yard.

Chainpur OCP

The total balance 21.18 Mm³ (14.67 Mm³ for Patch-I, 1.63 Mm³ for Patch-II and 4.89 Mm³ for Patch-III) overburden of Chainpur OCP would be dumped on decoaled area of Seam-III or as an external dump. Out of 21.18 Mm³ of OBR, 16.29 Mm³ OB of Patch-I and patch-II would be dumped in decoaled area of Seam-III and balance 4.89 Mm³ OB from Patch-III would be dumped as external dump. Some OB would also be utilized for reclamation of old voids as suggested by EAC in the prescribed TOR and subsequent meeting as per detail given below.

The Status Of Mine After Mine Closure Activity

Status at the end of mining		Status after earlier proposed mine closure		Status proposed now	
Internal dump in Quarry-1 & 2 in Ara OCP	73.0 Ha Area 30 m height	Internal dump in Quarry-1 & 2 in Ara OCP	73.0 Ha Area 20-22 m height after rehandling of 6 million m ³ OB.	Internal dump in Quarry-1 & 2 in Ara OCP	73.0 Ha Area 18-20 height after rehandling of 7.25 million m ³ OB.
Quarry-3 void of Ara OCP	29.87 Ha Area 156 m depth	Quarry-3 void of Ara OCP	29.87 Ha Area 100 m depth after filling of 6 million m ³ OB.	Quarry-3 void of Ara OCP	13.53 Ha Area 60 m depth after filling of 7.25 million m ³ OB.
Internal dump in existing 16B Quarry of Ara OCP	26.72 Ha Area 30 m height	Internal dump in existing 16B Quarry of Ara OCP	No change	Internal dump in existing 16B Quarry of Ara OCP	No change
Dump of Patch-I of Chainpur OCP (overlapping the barrier)	72.52 Ha Area 30 m height	Dump of Patch-I of Chainpur OCP (overlapping the barrier)	72.52 Ha Area 25-26 m height after rehandling of 2.8 million m ³ of OB.	Dump of Patch-I of Chainpur OCP (overlapping the barrier)	72.52 Ha Area 18-20 m height after rehandling of 4.7 million m ³ of OB.
Void of Patch-I of Chainpur OCP	19.13 Ha Area 105 m depth	Void of Patch-I of Chainpur OCP	19.13 Ha Area 85 m depth after rehandling of 2.8 million m ³ of OB.	Void of Patch-I of Chainpur OCP	19.13 Ha Area 50 m depth after rehandling of 4.7 million m ³ of OB.
Patch-II of Chainpur OCP	6.32 Ha Area 32 m depth	Patch-II of Chainpur OCP	6.32 Ha Area 0 m depth	Patch-II of Chainpur OCP	6.32 Ha Area 0 m depth
Patch-III of Chainpur OCP	20.57 Ha Area 75 m depth	Patch-III of Chainpur OCP	20.57 Ha Area 75 m depth	Patch-III of Chainpur OCP	20.57 Ha Area 35 m depth Recommended for filling from OB from other mines.

Para3:The Committee desired that in addition to the Fund for Final Mine Closure created at the MOC, pre-nationalisation mines with a number of abandoned mines and without proper reclamation at the time of nationalisation may require to be given special focus by creating a Special Corpus Fund either at the level of the company or in CIL/MOC.

As per the guidelines of the MOC of August 2009 and subsequent amendments the mine closure plans envisages a fund provisioning of Rs 6 lakhs / ha based on leasehold area with proper escalation factor. It can be observed that the quarry and dump area is less in most of the mines than the leasehold area and therefore the total fund provisioning at the company level is of higher order. At the company level the funds provided are sufficient, which in due course of time and depending on requirement can be utilised in other mines where more funds are required. However, the additional amount of funds can also be made available by the company, for individual mines, wherever required after approval of the competent authority. Moreover, actions shall be initiated for creating a special corpus fund for proper reclamation at CIL or MOC level.

Para4:The Committee desired that only covered trucks of higher capacity should be used to minimise dust generation and expedite CHP/Silo loading into railway wagons and stop pay loader loading at the siding even before three years proposed by the proponent.

It is planned that only covered trucks of higher capacity (25 Tonne) will be used for coal transportation to Railway siding. The detail of linked sidings is given below.

Project	Name of linked siding	Mode of coal dispatch to Siding	Method of coal loading at Siding
Sarubera UGP	NR Siding	By tipping truck	Pay loader (with water sprinkling arrangement)
Chainpur OCP	-Do-	-Do-	-Do-
Ara OCP	-Do-	-Do-	-Do-

It is proposed to start mechanised coal loading in Railway Wagons after three years.

Para5:Measures for dust suppression such as fixed and mobile sprinklers, 3-tier plantation near habitations and near dust generating areas should be developed.

Following dust suppression measures are proposed to be deployed for air pollution control.

- 1 Fixed sprinklers proposed at the pit top Truck loading hoppers in all the three mines.
- 2 Fixed sprinklers proposed at NR Siding for dust control during coal unloading & loading.
Three Mobile (2x28 KL and 1x10 KL) water sprinklers are operating on haul road / coal transportation road from Chainpur OCP, Sarubera UGP and Ara OCP to the sidings.
- 3 Avenue plantation all along coal transportation road from three mines.
- 4 Total plantation done in OB dumps, avenue plantation, etc 25000 in Sarubera, 2,41,000 in Ara colliery has already been done. Green belt development around dust generation sources in all the three mines is also included. Further, three tier avenue plantation is under progress.

Para 6: The Committee desired details of forestry clearance.

Reply: The project wise detail of forestry clearance is given below.

Project	Area in Hactare				Status Of Acquisition
	Forest	Tenancy	Government	Total	
Ara OCP	211.34	149.79	147.08	508.21	Stage-II forestry clearance for 166.90 Ha land obtained on 13.08.2008. Additional forestry clearance is not required.
Chainpur OCP	53.74	38.86	144.65	237.25	Stage-II forestry clearance for 196.55 Ha land obtained on 13.08.2008. Additional forestry clearance is not required.
Sarubera UGP	258.47	135.85	55.07	449.39	
Total	523.55	324.5	346.8	1194.85	Total 363.45 Ha acquired.
