

BHARAT COKING COAL LIMITED
(A Subsidiary of Coal India Limited)
FORM-I FOR CLUSTER IX OF BCCL MINES

Sl. No.	Name of Mines	Production Capacity (MTY)		Lease Hold Area (Ha)	Life (Years)
		Normative	Peak		
1	NT/ST Expansion OCP (in operation)	6.0	7.8	755.15	26
2	Amalgamated Joyrampur Colliery (OC)	2.512	3.25	1186.97	25
	Cluster IX			1942.12	

Note - The peak capacity of Cluster – IX will not exceed 8.512 MTPA.



November, 2017
Prepared by CMPDI, Regional Institute-II
Koyla Bhawan, Dhanbad.




APPENDIX I

(See Paragraph-6)

FORM 1



(I) Basic Information

S.No.	Item	Details																																																																	
1	Name of the Projects	<p>Cluster IX group of mines of BCCL.</p> <p>Existing Scenario of Mines in Cluster IX:</p> <table border="1"> <thead> <tr> <th>Sl. NO</th> <th>Name of the Mine</th> <th>Status</th> <th>Normative Production Capacity (MTY)</th> <th>Peak Production Capacity (MTY)</th> <th>Leasehold Area (Ha.)</th> <th>Life (Yrs.)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Lodna underground</td> <td>In operation</td> <td>0.115</td> <td>0.150</td> <td>391.64</td> <td>30</td> </tr> <tr> <td>2.</td> <td>Bagdigi underground</td> <td>In operation</td> <td>0.110</td> <td>0.143</td> <td>61.0</td> <td>30</td> </tr> <tr> <td>3.</td> <td>Joyrampur underground</td> <td>In operation</td> <td>0.153</td> <td>0.199</td> <td>89.04</td> <td>30</td> </tr> <tr> <td>4.</td> <td>Bararee underground</td> <td>In operation</td> <td>0.170</td> <td>0.221</td> <td>475.0</td> <td>30</td> </tr> <tr> <td>5.</td> <td>Jealgora underground (Closed for operation, mine not closed)</td> <td></td> <td>Nil</td> <td>Nil</td> <td>138.00 will be closed after fire dealing</td> <td>-</td> </tr> <tr> <td>6.</td> <td>NT/ST Expansion OCP</td> <td>Proposed</td> <td>6.0</td> <td>7.8</td> <td>755.15</td> <td>30</td> </tr> <tr> <td></td> <td>TOTAL</td> <td></td> <td>6.548</td> <td>8.512</td> <td>1942.12*</td> <td></td> </tr> </tbody> </table> <p>* Inclusive of 14.24 Ha of North Tisra UG and 18.05 Ha of Jeenagora OCP.</p> <p>Proposed Scenario of Mines in Cluster IX</p> <table border="1"> <thead> <tr> <th>Sl no.</th> <th>Name of the Mine</th> <th>Present Status</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Amalgamated Joyrampur Colliery (OC)</td> <td>Proposed for implementation of fire scheme under Jharia Master Plan</td> </tr> <tr> <td>2</td> <td>NT/ST Expansion OCP</td> <td>In operation</td> </tr> </tbody> </table>	Sl. NO	Name of the Mine	Status	Normative Production Capacity (MTY)	Peak Production Capacity (MTY)	Leasehold Area (Ha.)	Life (Yrs.)	1.	Lodna underground	In operation	0.115	0.150	391.64	30	2.	Bagdigi underground	In operation	0.110	0.143	61.0	30	3.	Joyrampur underground	In operation	0.153	0.199	89.04	30	4.	Bararee underground	In operation	0.170	0.221	475.0	30	5.	Jealgora underground (Closed for operation, mine not closed)		Nil	Nil	138.00 will be closed after fire dealing	-	6.	NT/ST Expansion OCP	Proposed	6.0	7.8	755.15	30		TOTAL		6.548	8.512	1942.12*		Sl no.	Name of the Mine	Present Status	1	Amalgamated Joyrampur Colliery (OC)	Proposed for implementation of fire scheme under Jharia Master Plan	2	NT/ST Expansion OCP	In operation
Sl. NO	Name of the Mine	Status	Normative Production Capacity (MTY)	Peak Production Capacity (MTY)	Leasehold Area (Ha.)	Life (Yrs.)																																																													
1.	Lodna underground	In operation	0.115	0.150	391.64	30																																																													
2.	Bagdigi underground	In operation	0.110	0.143	61.0	30																																																													
3.	Joyrampur underground	In operation	0.153	0.199	89.04	30																																																													
4.	Bararee underground	In operation	0.170	0.221	475.0	30																																																													
5.	Jealgora underground (Closed for operation, mine not closed)		Nil	Nil	138.00 will be closed after fire dealing	-																																																													
6.	NT/ST Expansion OCP	Proposed	6.0	7.8	755.15	30																																																													
	TOTAL		6.548	8.512	1942.12*																																																														
Sl no.	Name of the Mine	Present Status																																																																	
1	Amalgamated Joyrampur Colliery (OC)	Proposed for implementation of fire scheme under Jharia Master Plan																																																																	
2	NT/ST Expansion OCP	In operation																																																																	
2	S.No. of the schedule	1(a)																																																																	

S.No.	Item	Details																																																													
3	Proposed capacity/area/length/tonnage to be handled/command area/lease area/number of wells to be drilled	<table border="1"> <thead> <tr> <th rowspan="2">Sl No</th> <th rowspan="2">Name of Mines</th> <th colspan="2">Production Capacity (MTY)</th> </tr> <tr> <th>Normative</th> <th>Peak</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>NT/ST Expansion OCP (in operation)</td> <td>6.0</td> <td>7.8</td> </tr> <tr> <td>2</td> <td>Amalgamated Joyrampur Colliery (OC)</td> <td>2.512</td> <td>3.25</td> </tr> </tbody> </table>		Sl No	Name of Mines	Production Capacity (MTY)		Normative	Peak	1	NT/ST Expansion OCP (in operation)	6.0	7.8	2	Amalgamated Joyrampur Colliery (OC)	2.512	3.25	<p>Note - The peak capacity of Cluster - IX will not exceed 8.512 MTPA.</p> <p>Total combine Mine Lease Hold Area : 1942.12 ha [Mine lease hold area of NT/ST Expansion OCP - 755.15 Ha Mine lease hold area of proposed Amalgamated Joyrampur Colliery (OC) - 1186.97 Ha]</p> <p>No of holes drilled : 101 (EC exists for Cluster IX of mines for Peak capacity of 8.512 MTPA & total combine Mine Lease Hold Area of 1942.12 ha)</p>																																													
Sl No	Name of Mines	Production Capacity (MTY)																																																													
		Normative	Peak																																																												
1	NT/ST Expansion OCP (in operation)	6.0	7.8																																																												
2	Amalgamated Joyrampur Colliery (OC)	2.512	3.25																																																												
4	New/Expansion/Modernization	Proposal is for Amendment of Prior EC granted for the Cluster IX vide letter no. - J-11015/307/2010-IA.II(M) dated 21 st May,2013 for a peak capacity of 8.512 MTPA in a total combine ML Area of 1942.12 Ha.																																																													
5	Existing capacity/Area etc.	<table border="1"> <thead> <tr> <th>Sl. NO</th> <th>Name of the Mine</th> <th>Status</th> <th>Normative Production Capacity (MTY)</th> <th>Peak Production Capacity (MTY)</th> <th>Leasehold Area (Ha.)</th> <th>Life (Yrs.)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Lodna underground</td> <td>In operation</td> <td>0.115</td> <td>0.150</td> <td>391.64</td> <td>30</td> </tr> <tr> <td>2.</td> <td>Bagdigi underground</td> <td>In operation</td> <td>0.110</td> <td>0.143</td> <td>61.0</td> <td>30</td> </tr> <tr> <td>3.</td> <td>Joyrampur underground</td> <td>In operation</td> <td>0.153</td> <td>0.199</td> <td>89.04</td> <td>30</td> </tr> <tr> <td>4.</td> <td>Bararee underground</td> <td>In operation</td> <td>0.170</td> <td>0.221</td> <td>475.0</td> <td>30</td> </tr> <tr> <td>5.</td> <td>Jealgora underground (Closed for operation, mine not closed)</td> <td></td> <td>Nil</td> <td>Nil</td> <td>138.00 will be closed after fire dealing</td> <td>-</td> </tr> <tr> <td>6.</td> <td>NT/ST Expansion OCP</td> <td>Proposed</td> <td>6.0</td> <td>7.8</td> <td>755.15</td> <td>30</td> </tr> <tr> <td colspan="3">TOTAL</td> <td>6.548</td> <td>8.512</td> <td>1942.12*</td> <td></td> </tr> </tbody> </table> <p>* Inclusive of 14.24 Ha of North Tisra UG and 18.05 Ha of Jeenagora OCP.</p>						Sl. NO	Name of the Mine	Status	Normative Production Capacity (MTY)	Peak Production Capacity (MTY)	Leasehold Area (Ha.)	Life (Yrs.)	1.	Lodna underground	In operation	0.115	0.150	391.64	30	2.	Bagdigi underground	In operation	0.110	0.143	61.0	30	3.	Joyrampur underground	In operation	0.153	0.199	89.04	30	4.	Bararee underground	In operation	0.170	0.221	475.0	30	5.	Jealgora underground (Closed for operation, mine not closed)		Nil	Nil	138.00 will be closed after fire dealing	-	6.	NT/ST Expansion OCP	Proposed	6.0	7.8	755.15	30	TOTAL			6.548	8.512	1942.12*	
Sl. NO	Name of the Mine	Status	Normative Production Capacity (MTY)	Peak Production Capacity (MTY)	Leasehold Area (Ha.)	Life (Yrs.)																																																									
1.	Lodna underground	In operation	0.115	0.150	391.64	30																																																									
2.	Bagdigi underground	In operation	0.110	0.143	61.0	30																																																									
3.	Joyrampur underground	In operation	0.153	0.199	89.04	30																																																									
4.	Bararee underground	In operation	0.170	0.221	475.0	30																																																									
5.	Jealgora underground (Closed for operation, mine not closed)		Nil	Nil	138.00 will be closed after fire dealing	-																																																									
6.	NT/ST Expansion OCP	Proposed	6.0	7.8	755.15	30																																																									
TOTAL			6.548	8.512	1942.12*																																																										
6	Category of Projects i.e., 'A' or 'B'	'A' (more than 150 ha)																																																													
7	Does it attract the general condition? If yes, please specify.	NO																																																													
8	Does it attract the specific condition? If yes, please specify.	NO																																																													
9	Location	SI	Name of the Mine	Latitude	Longitude/ Departure																																																										

S.No.	Item	Details			
		No.			
		1	NT/ST Expansion OCP	23°41'50" & 23°43'48"N	86°26'14" & 86°27'33" E
		2	Amalgamated Joyrampur Colliery (OC)	23°40'57" to 23°44'03"N	86° 24' 43" to 86° 26' 46"E
	Plot/Survey/Khasra No.	Jeenagora -156, parbad(P)-157, Suranga(P)-155, Bagdigi-121, Joyrampur-120, Jharia-131, Padhadih-124, Lodna-125, Madhuban-126, Bhaga-123, Jealgora-122, Alkdiha-148, Makunda-126, Tisra-147, Bhulan Bararee-118, Barahman Bararee-119, Nunudih-115, Parbad(P)-157, Radhackak-116, Bhatdih-117,			
	Village	Jeenagora, parbad(P) , Suranga(P), Bagdigi , Joyrampur, Jharia , Padhadih, Padhadih, Lodna, MadhubanBhaga, Jealgora, Alkdiha, Makunda, Tisra, Bhulan Bararee, Barahman Bararee, Nunudih, Parbad(P), Radhackak, Bhatdih-			
	Tehsil	Dhanbad, Jharia			
	District	Dhanbad			
	State	Jharkhand			
10	Nearest railway station/airport along with distance in kms.	Bhaga Rly Stn- 4 KM			
11	Nearest Town, city, District Headquarters along with distance in kms.	Jharia- 6 KM			
12	Village Panchayats, Zilla Parishad, Municipal Corporation, Local body (complete postal addresses with telephone nos. to be given)	Jeenagora, parbad(P) , Suranga(P), Bagdigi , Joyrampur, Jharia , Padhadih, Padhadih, Lodna, MadhubanBhaga, Jealgora, Alkdiha, Makunda, Tisra, Bhulan Bararee, Barahman Bararee, Nunudih, Parbad(P), Radhackak, Bhatdih-			
13	Name of the applicant	Mr Kalyanjee Prasad			
14	Registered Address	Lodna Area Office, - X, PO:Khasjeenagora, Dist: Dhanbad, Jharkhand.			
15	Address for correspondence:				
	Name	Mr Kalyanjee Prasad			
	Designation (Owner/Partner/CEO)	General Manager, Lodna Area			
	Address	Lodna Area Office, - X, PO:Khasjeenagora, Dist: Dhanbad, Jharkhand			
	Pin Code	828115			
	E-mail	-			
	Telephone No.	9470599648			
	Fax No.	-			
16	Details of Alternative Sites examined, if any. Location of these sites should be shown on a topo sheet.	Not required as coal mining is site specific			
17	Interlinked Projects	NO			
18	Whether separate application of interlinked project has been submitted?	Not required			
19	If yes, date of submission	Not applicable			
20	If no, reason	Not applicable			
21	Whether the proposal involves approval/clearance under: if yes, details of the same and their status to be given. (a) The Forest (Conservation) Act, 1980 ?	NO			

S.No.	Item	Details
	(b) The Wildlife (Protection) Act, 1972 ? (c) The C.R.Z Notification, 1991 ?	
22	Whether there is any Government Order/Policy relevant/relating to the site?	NO
23	Forest land involved (hectares)	NO
24	Whether there is any litigation pending against the project and/or land in which the project is proposed to be set up? (a) Name of the Court (b) Case No. (c) Orders/directions of the Court, if any and its relevance with the proposed project.	NO

(II) Activity

1. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (Topography, Land use, changes in water bodies, etc.)

Sl.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data.																																																																																												
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	Yes	<p>Total leasehold area is 1942.12 Hectares. Land use of the Cluster :</p> <table border="1"><thead><tr><th>Sl.No.</th><th>Type of land use</th><th></th><th>Present mining land use (in Ha)</th><th>Post-mining land use (in Ha)</th><th>Remarks</th></tr></thead><tbody><tr><td rowspan="2">1</td><td rowspan="2">Running Quarry</td><td>Backfilled</td><td>70.12</td><td>0</td><td></td></tr><tr><td>Not Backfilled</td><td>109.88</td><td>103.43</td><td></td></tr><tr><td rowspan="2">2</td><td rowspan="2">Abandoned Quarry</td><td>Backfilled</td><td>24.53</td><td>0</td><td></td></tr><tr><td>Not Backfilled</td><td>61.29</td><td>0</td><td></td></tr><tr><td>3</td><td>External OB dump</td><td></td><td>61.82</td><td>0</td><td></td></tr><tr><td>4</td><td>Service building/ Mine Infrastructure</td><td></td><td>12.81</td><td>99.48</td><td></td></tr><tr><td>5</td><td>Coal dump</td><td></td><td>4.81</td><td>0</td><td></td></tr><tr><td>6</td><td>Road and rail</td><td></td><td>95.83</td><td>99.72</td><td></td></tr><tr><td>7</td><td>Homestead Land</td><td></td><td>199.86</td><td>156.39</td><td></td></tr><tr><td>8</td><td>Agricultural Land</td><td></td><td>0</td><td>0</td><td></td></tr><tr><td>9</td><td>Forest Land</td><td></td><td>0</td><td>0</td><td></td></tr><tr><td>10</td><td>Plantation</td><td></td><td>46.67</td><td>1348.39</td><td></td></tr><tr><td>11</td><td>Water Body</td><td></td><td>23.76</td><td>23.5</td><td></td></tr><tr><td>12</td><td>Barren Land</td><td></td><td>1230.74</td><td>111.21</td><td></td></tr><tr><td></td><td>Total</td><td></td><td>1942.12</td><td>1942.12</td><td></td></tr></tbody></table> <p>(Source = As per details and record available at Colliery Office & Mining Plan)</p>	Sl.No.	Type of land use		Present mining land use (in Ha)	Post-mining land use (in Ha)	Remarks	1	Running Quarry	Backfilled	70.12	0		Not Backfilled	109.88	103.43		2	Abandoned Quarry	Backfilled	24.53	0		Not Backfilled	61.29	0		3	External OB dump		61.82	0		4	Service building/ Mine Infrastructure		12.81	99.48		5	Coal dump		4.81	0		6	Road and rail		95.83	99.72		7	Homestead Land		199.86	156.39		8	Agricultural Land		0	0		9	Forest Land		0	0		10	Plantation		46.67	1348.39		11	Water Body		23.76	23.5		12	Barren Land		1230.74	111.21			Total		1942.12	1942.12	
Sl.No.	Type of land use		Present mining land use (in Ha)	Post-mining land use (in Ha)	Remarks																																																																																										
1	Running Quarry	Backfilled	70.12	0																																																																																											
		Not Backfilled	109.88	103.43																																																																																											
2	Abandoned Quarry	Backfilled	24.53	0																																																																																											
		Not Backfilled	61.29	0																																																																																											
3	External OB dump		61.82	0																																																																																											
4	Service building/ Mine Infrastructure		12.81	99.48																																																																																											
5	Coal dump		4.81	0																																																																																											
6	Road and rail		95.83	99.72																																																																																											
7	Homestead Land		199.86	156.39																																																																																											
8	Agricultural Land		0	0																																																																																											
9	Forest Land		0	0																																																																																											
10	Plantation		46.67	1348.39																																																																																											
11	Water Body		23.76	23.5																																																																																											
12	Barren Land		1230.74	111.21																																																																																											
	Total		1942.12	1942.12																																																																																											
1.2	Clearance of existing land, vegetation and buildings?	Yes	<p>Vegetation There is almost no vegetation except few plants of Palash and local shrubs, which are to be cleared.</p> <p>Habitation Following structures are to be demolished</p> <table border="1"><thead><tr><th></th><th>Nos of existing Houses</th><th>Houses/structures considered in Master Plan of July 2006</th><th>Rehabilitation provisions</th></tr></thead><tbody><tr><td>Pvt</td><td>2089</td><td>197</td><td>1892</td></tr><tr><td>BCCL</td><td>1555</td><td>750</td><td>Nil</td></tr><tr><td>Encroachers</td><td>177</td><td>104</td><td>73</td></tr><tr><td>Other</td><td>30</td><td>19</td><td>11</td></tr><tr><td>Total</td><td>3851</td><td>1069</td><td>1976</td></tr></tbody></table> <p>(Source = As per details and record available at Colliery Office)</p>		Nos of existing Houses	Houses/structures considered in Master Plan of July 2006	Rehabilitation provisions	Pvt	2089	197	1892	BCCL	1555	750	Nil	Encroachers	177	104	73	Other	30	19	11	Total	3851	1069	1976																																																																				
	Nos of existing Houses	Houses/structures considered in Master Plan of July 2006	Rehabilitation provisions																																																																																												
Pvt	2089	197	1892																																																																																												
BCCL	1555	750	Nil																																																																																												
Encroachers	177	104	73																																																																																												
Other	30	19	11																																																																																												
Total	3851	1069	1976																																																																																												
1.3	Creation of new land uses?	Yes	<p>Land use will be as per details given in Point No. 1.1. (Source = As per details and record available at Colliery Office & Mining Plan)</p>																																																																																												

Sl.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data.																								
1.4	Pre-construction investigations e.g. bore holes, soil testing?	Yes	No. of Bore Holes =101 Nos. Bore holes has been drilled to prove coal reserve towards assessing feasibility of mining. (Source = As per details and record available at Colliery Office)																								
1.5	Construction works?	Yes	Workshop, Elect. Sub-station, Feeder Breaker will be constructed for Amalgamated Joyrampur Colliery (OC). (Source = As per details and record available at Colliery Office & Mining Plan)																								
1.6	Demolition works?	Yes	Following structures are to be demolished <table border="1"> <thead> <tr> <th></th> <th>Nos of existing Houses</th> <th>Houses/structures considered in Master Plan of July 2006</th> <th>Rehabilitation provisions</th> </tr> </thead> <tbody> <tr> <td>Pvt</td> <td>2089</td> <td>197</td> <td>1892</td> </tr> <tr> <td>BCCL</td> <td>1555</td> <td>750</td> <td>Nil</td> </tr> <tr> <td>Encroachers</td> <td>177</td> <td>104</td> <td>73</td> </tr> <tr> <td>Other</td> <td>30</td> <td>19</td> <td>11</td> </tr> <tr> <td>Total</td> <td>3851</td> <td>1069</td> <td>1976</td> </tr> </tbody> </table>		Nos of existing Houses	Houses/structures considered in Master Plan of July 2006	Rehabilitation provisions	Pvt	2089	197	1892	BCCL	1555	750	Nil	Encroachers	177	104	73	Other	30	19	11	Total	3851	1069	1976
	Nos of existing Houses	Houses/structures considered in Master Plan of July 2006	Rehabilitation provisions																								
Pvt	2089	197	1892																								
BCCL	1555	750	Nil																								
Encroachers	177	104	73																								
Other	30	19	11																								
Total	3851	1069	1976																								
1.7	Temporary sites used for construction works or housing of construction workers?	No	--																								
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations	Yes	<table border="1"> <thead> <tr> <th></th> <th>Nos of existing Houses</th> <th>Houses/structures considered in Master Plan of July 2006</th> <th>Rehabilitation provisions</th> </tr> </thead> <tbody> <tr> <td>Pvt</td> <td>2089</td> <td>197</td> <td>1892</td> </tr> <tr> <td>BCCL</td> <td>1555</td> <td>750</td> <td>Nil</td> </tr> <tr> <td>Encroachers</td> <td>177</td> <td>104</td> <td>73</td> </tr> <tr> <td>Other</td> <td>30</td> <td>19</td> <td>11</td> </tr> <tr> <td>Total</td> <td>3851</td> <td>1069</td> <td>1976</td> </tr> </tbody> </table> <p>About 186.979 Mt of coal and 1255.04 Mm³ of OB will be excavated from open cast mine which will be finally reclaimed. (Source = As per details and record available at Colliery Office & Mining Plan)</p>		Nos of existing Houses	Houses/structures considered in Master Plan of July 2006	Rehabilitation provisions	Pvt	2089	197	1892	BCCL	1555	750	Nil	Encroachers	177	104	73	Other	30	19	11	Total	3851	1069	1976
	Nos of existing Houses	Houses/structures considered in Master Plan of July 2006	Rehabilitation provisions																								
Pvt	2089	197	1892																								
BCCL	1555	750	Nil																								
Encroachers	177	104	73																								
Other	30	19	11																								
Total	3851	1069	1976																								
1.9	Underground works including mining or tunneling?	No	-----																								
1.10	Reclamation works?	Yes	Total OB dumps area will be reclaimed technically & biologically. Development of Vegetation and green cover to improve aesthetic value is being done. The subsided area will filled and dozed. Vegetation and development of green cover is being done. (Source = As per details and record available at Colliery Office)																								
1.11	Dredging?	No	---																								
1.12	Offshore structures?	No	---																								
1.13	Production and manufacturing processes?	Yes	In opencast mine coal will be produced using shovel - dumper combination by opencast method. (Source = As per details and record available at Colliery Office)																								
1.14	Facilities for storage of goods or materials?	Yes	Existing Regional stores and colliery stores will be utilized for storage of goods & materials. New workshops, store, etc will be constructed for the proposed																								



Sl.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data.
			Amalgamated Joyrampur Colliery (OC). Coal will be stored in coal dumps before it is dispatched through rail/road/conveyor. Existing Explosive magazine will be used for storage of explosives. Storage will be done as per Indian Explosive Act 1884. (Source = As per details and record available at Colliery Office)
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	Yes	OB will be dumped at planned site internally/externally and will be reclaimed technically & biologically. Oil & Grease trap and sedimentation pond/sump is proposed for settling of suspended solids. The ground water accumulated in the mine face during working has been envisaged to be discharged into the settling tanks to arrest the suspended solids and then the same will be allowed to go into the natural course. Domestic discharge will be soaked into soak pit. (Source = As per details and record available at Colliery Office)
1.16	Facilities for long term housing of operational workers?	Yes	1) Operational workers will be arranged from existing strength of the mine, which have already been provided with housing facilities at the residential colonies of the collieries (Source = As per the data and records available in colliery office)
1.17	New road, rail or sea traffic during construction or operation?	No	----
1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc?	Yes	i) The Project envisages widening and strengthening of PWD road for a length of 1.02 Km . ii) Project envisages construction of 7.5 Km peripheral drain . iii) Dismantling of JGB & Bastacolla Rly siding of about 1 km. iv) Rerouting of Power lines.
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	No	---
1.20	New or diverted transmission lines or pipelines?	No	---
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	Yes	Project envisages diversion of a part of Chutkari Jore for a length of about 2.5 km.
1.22	Stream crossings?	No	----

Sl.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data.
1.23	Abstraction or transfers of water from ground or surface waters?	Yes	<p>Ground Water – Due to excavation, strata seepage water and direct precipitation get accumulated at the floor of the coal seam in the sump having capacity to deal with peak rainfall. In order to maintain the working faces dry for coal production this water is pumped out daily in peak monsoon period.</p> <p>Surface Water - Potable water is being supplied from Mineral Area Development Authority (MADA). (Source = As per details and record available at Colliery Office)</p>
1.24	Changes in water bodies or the land surface affecting drainage or run-off?	Yes	Project envisages construction of 7.5 Km peripheral drain.
1.25	Transport of personnel or materials for construction, operation or decommissioning?	Yes	<p>Transport of materials will be done through tippers, Jeep etc. Personnel are transported by the public / personal conveyance or conveyance provided by the Company.</p> <p>(Source = As per the data and records available in colliery office)</p>
1.26	Long-term dismantling or decommissioning or restoration works?	Yes	Long term dismantling or decommissioning or restoration works will be carried out as per progressive and final mine closure plan.
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	No.	<p>Decommissioning activities will not have any significant adverse environmental effect.</p> <p>(Source = As per details and record available at Colliery Office)</p>
1.28	Influx of people to an area in either temporarily or permanently?	No	<p>Coal Mining is going on for more than 200 Years in the Jharia Coal Fields. The existing Population is largely depending on the Mining activities in the Area. Hence no more influx of people is expected apart from the manpower required for the Project.</p> <p>(Source = As per details and record available at Colliery Office)</p>
1.29	Introduction of alien species?	No	----
1.30	Loss of native species or genetic diversity?	No	----
1.31	Any other actions?	No	----

U

Q

2. Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):

S.No.	Information/checklist confirmation	Yes/No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data												
2.1	Land especially undeveloped or agricultural land (ha)	Yes	No agricultural land will be required.												
2.2	Water (expected source & competing users) unit: KLD	Yes	<table border="1"> <thead> <tr> <th>Sl No.</th> <th>Name of the Mine</th> <th>Water Consumption in KLD with source</th> <th>Additional Water requirement in future</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Amalgamated Joyrampur Colliery (OC)</td> <td> <ul style="list-style-type: none"> ▪ Domestic : Drinking water : 102.0 (MADA) ▪ Industrial : 1500.0 (mine water) </td> <td>Nil</td> </tr> <tr> <td>2</td> <td>NT/ST Expansion OCP</td> <td> <ul style="list-style-type: none"> ▪ Domestic : Drinking water : 84.55 (MADA) ▪ Industrial : 1309.43 (mine water) </td> <td>Nil</td> </tr> </tbody> </table> <p>(Source = As per details and record available at Colliery Office)</p>	Sl No.	Name of the Mine	Water Consumption in KLD with source	Additional Water requirement in future	1	Amalgamated Joyrampur Colliery (OC)	<ul style="list-style-type: none"> ▪ Domestic : Drinking water : 102.0 (MADA) ▪ Industrial : 1500.0 (mine water) 	Nil	2	NT/ST Expansion OCP	<ul style="list-style-type: none"> ▪ Domestic : Drinking water : 84.55 (MADA) ▪ Industrial : 1309.43 (mine water) 	Nil
Sl No.	Name of the Mine	Water Consumption in KLD with source	Additional Water requirement in future												
1	Amalgamated Joyrampur Colliery (OC)	<ul style="list-style-type: none"> ▪ Domestic : Drinking water : 102.0 (MADA) ▪ Industrial : 1500.0 (mine water) 	Nil												
2	NT/ST Expansion OCP	<ul style="list-style-type: none"> ▪ Domestic : Drinking water : 84.55 (MADA) ▪ Industrial : 1309.43 (mine water) 	Nil												
2.3	Minerals (MT)	Yes	<p>Mineable Coal Reserve is as under:</p> <table border="1"> <thead> <tr> <th>Sl no</th> <th>Name of the Mine</th> <th>Mineable Reserve (Million Te)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Amalgamated Joyrampur Colliery (OC)</td> <td>52.029</td> </tr> <tr> <td>2</td> <td>NT/ST Expansion OCP</td> <td>134.95*</td> </tr> </tbody> </table> <p>*Balance as on 1.4.2017 (Source = As per details and record available at Colliery Office and Mining Plan)</p>	Sl no	Name of the Mine	Mineable Reserve (Million Te)	1	Amalgamated Joyrampur Colliery (OC)	52.029	2	NT/ST Expansion OCP	134.95*			
Sl no	Name of the Mine	Mineable Reserve (Million Te)													
1	Amalgamated Joyrampur Colliery (OC)	52.029													
2	NT/ST Expansion OCP	134.95*													
2.4	Construction material – stone, aggregates, sand / soil (expected source – MT)	No	----												
2.5	Forests and timber (source – MT)	No	---												
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)	Yes	<p>Source of electrical energy is DVC.</p> <ul style="list-style-type: none"> • NT/ST Expansion OCP : Fuel (Diesel) = 68.0 KLD Elect. Energy = 76.38 M kwh per annum. • Amalgamated Joyrampur Colliery (OC) : Fuel (Diesel) = 107.0 KLD Elect. Energy = 48.0 M kwh per annum <p>(Source = As per the data and records available in colliery office)</p>												
2.7	Any other natural resources (use appropriate standard units)	No	----												

3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.

Sl. No.	Information / Checklist confirmation	Yes / No.	Details thereof (with approximate quantities / rates, wherever possible) with source of information data.
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna and water supplies).	Yes	Spent / burnt oil and oil soaked filters, old batteries. The aforesaid are being taken care of as per Hazardous Waste (Management & Handling) Rules, 1989 and 2003 and sent to stores for disposal through authorized agents. (Source = As per details and record available at Colliery Office)
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water-borne diseases)	No	----
3.3	Affect the welfare of people e.g. by changing living conditions?	No	The project has positive impact on the welfare of people. The fund for the CSR is being allocated based on 2% of the average net profit of the Company for the three immediate preceding financial years or Rs. 2.00 per tonne of Coal Production of previous year whichever is higher.
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.,	No	----
3.5	Any other causes.	No	----

4. Production of solid wastes during construction or operation or decommissioning (MT/month).

Sl. No.	Information / Checklist confirmation	Yes / No.	Details thereof (with approximate quantities / rates, wherever possible) with source of information data.									
4.1	Spoil, overburden or mine wastes.	Yes	<table border="1"> <thead> <tr> <th>Sl no</th> <th>Name of the Mine</th> <th>Amount of OB (M. cu.m.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Amalgamated Joyrampur Colliery (OC)</td> <td>869.68</td> </tr> <tr> <td>2</td> <td>NT/ST Expansion OCP</td> <td>385.36*</td> </tr> </tbody> </table>	Sl no	Name of the Mine	Amount of OB (M. cu.m.)	1	Amalgamated Joyrampur Colliery (OC)	869.68	2	NT/ST Expansion OCP	385.36*
			Sl no	Name of the Mine	Amount of OB (M. cu.m.)							
			1	Amalgamated Joyrampur Colliery (OC)	869.68							
2	NT/ST Expansion OCP	385.36*										
*Balance as on 1.4.2017 (Source = Project Report & Mining Plan)												
4.2	Municipal waste (domestic and or commercial wastes).	Yes	145 tonnes per month of municipal waste. Domestic waste of houses which will be allowed to go into the soak pit as per township planning .									
4.3	Hazardous wastes (as per Hazardous Waste	Yes	Spent / burnt oil and oil soaked filters, old batteries. The aforesaid are being taken care of as per Hazardous Waste (Management & Handling) Rules, 1989 and 2003 and sent to stores for disposal through authorized agents. (Source = As per details and record available at Colliery Office)									

Sl. No.	Information / Checklist confirmation	Yes / No.	Details thereof (with approximate quantities / rates, wherever possible) with source of information data.																								
	Management Rules).																										
4.4	Other industrial process wastes	No	-																								
4.5	Surplus product	No	-																								
4.6	Sewage sludge or other sludge from effluent treatment.	Yes	It will be generated from cleaning of oil & grease trap. (Source = As per details and record available at Colliery Office)																								
4.7	Construction or demolition wastes	Yes	Following structure will be removed/demolished from the mines during operation: - <table border="1" style="margin-left: 20px;"> <thead> <tr> <th></th> <th>Nos of existing Houses</th> <th>Houses/structures considered in Master Plan of July 2006</th> <th>Rehabilitation provisions</th> </tr> </thead> <tbody> <tr> <td>Pvt</td> <td>2089</td> <td>197</td> <td>1892</td> </tr> <tr> <td>BCCL</td> <td>1555</td> <td>750</td> <td>Nil</td> </tr> <tr> <td>Encroachers</td> <td>177</td> <td>104</td> <td>73</td> </tr> <tr> <td>Other</td> <td>30</td> <td>19</td> <td>11</td> </tr> <tr> <td>Total</td> <td>3851</td> <td>1069</td> <td>1976</td> </tr> </tbody> </table> <p>Source = As per details and record available at Colliery Office)</p>		Nos of existing Houses	Houses/structures considered in Master Plan of July 2006	Rehabilitation provisions	Pvt	2089	197	1892	BCCL	1555	750	Nil	Encroachers	177	104	73	Other	30	19	11	Total	3851	1069	1976
	Nos of existing Houses	Houses/structures considered in Master Plan of July 2006	Rehabilitation provisions																								
Pvt	2089	197	1892																								
BCCL	1555	750	Nil																								
Encroachers	177	104	73																								
Other	30	19	11																								
Total	3851	1069	1976																								
4.8	Redundant machinery or equipment	Yes	The redundant machineries or equipments will be transferred to other collieries where required. If they have outlived these working life, they will be surveyed off and disposed as per Company's Rule. (Source = As per details and record available at Colliery Office)																								
4.9	Contaminated soils or other materials	No	-																								
4.10	Agricultural wastes	No	-																								
4.11	Other soil wastes	No	-																								

5. Release of pollutants or any hazardous, toxic or noxious substances to air (Kg/hr).

Sl. No.	Information / Checklist confirmation	Yes / No.	Details thereof (with approximate quantities / rates, wherever possible) with source of information data.
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources.	Yes	About 175.0 KLD of diesel on an average will be consumed. Individual transport equipment are being maintained to comply with the emission norms. As per routine environmental monitoring records, the level of pollutants are well within limit of CPCB standard. (Source =As per details and record available at Colliery Office)
	Emissions from production processes.	Yes	Suspended Particulate Matter (SPM) is being taken care of with water sprinkling to keep the level within permissible limit. As per routine environmental monitoring records, the level of pollutants are well within

Sl. No.	Information / Checklist confirmation	Yes / No.	Details thereof (with approximate quantities / rates, wherever possible) with source of information data.
			limit of Central Pollution Control Board (CPCB) standard. (Source = As per details and record available at Colliery Office)
5.3	Emissions from materials handling including storage or transport.	Yes	SPM & RPM from CHP & Feeder breaker & coal transportation. As per the records of existing mines the level of pollutants are well within limit of CPCB standard. Care will be taken to keep the pollutant level well within the standard level. (Source = Monitoring Report)
5.4	Emissions from construction activities including plant and equipment.	No	There is no major construction.
5.5	Dust or odors from handling of materials including construction materials, sewage and waste.	Yes	Dust gets generated during transportation, loading, unloading, crushing etc of coal. Water sprinkling is done to prevent the dust from becoming air borne. (Source = As per details and record available at Colliery Office)
5.6	Emissions from incineration of waste.	No	-
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris).	No	-
5.8	Emissions from any other sources.	No	-

6. Generation of Noise and Vibration and Emissions of Light and Heat:

Sl. No.	Information / Checklist confirmation	Yes / No.	Details thereof (with approximate quantities / rates, wherever possible) with source of information data.
6.1	From operation of equipment e.g. engines, ventilation plant, crushers.	Yes	Noise is being generated due to operation of HEMM & other machineries. Regular monitoring is being carried out for noise level measurement every fortnightly and the results are found to be within the permissible limits.
6.2	From industrial or similar processes.	No	-
6.3	From construction or demolition.	Yes	Not significant
6.4	From blasting or Drilling.	Yes	Generations will be instantaneous. Drilling and Blasting operations which will be as per the guide lines of DGMS. Noise level will be maintained within permissible limit. (Source = As per details and record available at Colliery Office)
6.5	From construction or operational traffic.	Yes	Movement of coal transporting equipments / HEMM. As per the records of existing mines the noise levels are well within permissible limit. (Source = As per details and record available at Colliery Office)

Sl. No.	Information / Checklist confirmation	Yes / No.	Details thereof (with approximate quantities / rates, wherever possible) with source of information data.
			Office)
6.6	From lighting or cooling systems	No	-
6.7	From any other sources.	No	-

7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:

Sl. No.	Information / Checklist confirmation	Yes / No.	Details thereof (with approximate quantities / rates, wherever possible) with source of information data.
7.1	From handling, storage, use or spillage of hazardous materials.	Yes	Hazardous Materials like Spent / burnt oil, soaked filters, old batteries are being disposed off as per the existing Rules & Guidelines of Hazardous Waste (Management & Handling) Rules, 1989 and 2003 and sent to stores for disposal through authorized agents. (Source = As per details and record available at Colliery Office)
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	Yes	Total Suspended Solid (TSS) in the mine water is being taken care in settling ponds and in mine sumps. There is practically no discharge as industrial discharge is being put in closed water circuit and utilized for industrial use and non-drinking purposes. Sewage is being treated in septic tank-cum-soak pits. (Source = As per details and record available at Colliery Office)
7.3	By disposition of pollutants emitted to air into the land or into water.	Yes	Release of pollutants is indicated under point No.5 the PH value of the discharge water will be kept within permissible limit. Source = Project Report)
7.4	From any other sources.	No	-
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?	No	-

7.5 Risk of accidents during construction or operation of the Project, which could affect human health or the environment.

Sl. No.	Information / Checklist confirmation	Yes / No.	Details thereof (with approximate quantities / rates, wherever possible) with source of information data.
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances.	Yes	Risk exists on account of storage and use of explosives and fuel. Safety precautions are taken to avoid such risks. (Source = As per the data and records available in colliery office)



Sl. No.	Information / Checklist confirmation	Yes / No.	Details thereof (with approximate quantities / rates, wherever possible) with source of information data.
8.2	From any other causes.	Yes	<p>Open Cast Projects</p> <ul style="list-style-type: none"> - Slope failure in OB dump. - Slope failure in mine pit. - Blasting operations. - Explosives Handling. - Fire dealing <p>To avoid accidents proper Risk Assessment and Management will be done as per the guide line of CMR-1957 and circulars issued by DGMS, from time to time. (Source = As per details and record available at Colliery Office)</p>
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburst etc.)?	Yes	<p>The Project is falling within the seismically active Zone:- III</p> <p>(Source = As per details and record available at Colliery Office)</p>

9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality.

Sl. No.	Information / Checklist confirmation	Yes / No.	Details thereof (with approximate quantities / rates, wherever possible) with source of information data.
9.1	Lead to development of supporting, facilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.	Yes	Economic growth associated with coal mining activity leads to semi urban like development. This supports development of ancillary and supporting industries and other related activities. (Source = As per details and record available at Colliery Office)
	Supporting infrastructure (roads, power supply, waste or waste water treatment etc.).	Yes	Housing, Roads, Power Supply, Water Supply & Water Treatment Plant and other community developments. (Source = As per details and record available at Colliery Office)
	• Housing development	Yes	Complete rehabilitation package stipulated by rehabilitation and resettlement policy of Coal India Ltd. and JAP, where applicable, will be provided.
	• Extractive industries	Yes	Ancillary & Supply Industries have developed which in turn generated employment in directly and lead to growth in income generation.
	supply industries other	Yes	do (Source = As per details and record available at Colliery Office)
9.2	Lead to after-use of the site, which could have an impact on the environment.	Yes	Some of the activity enumerated in 9.1 above could assume permanent residency with appropriate facilities. Community Development like Health Care facilities, educations facilities & Self Employment Scheme will improve the quality of life. Beyond this, physically and biologically reclaimed land

Sl. No.	Information / Checklist confirmation	Yes / No.	Details thereof (with approximate quantities / rates, wherever possible) with source of information data.
			would undergo transformation over time which would have positive impact on environment. (Source = As per details and record available at Colliery Office)
9.3	Set a precedent for later developments.	Yes	Activities at 9.1 & 9.2 above do culminate in conjunction with local set up and in a number of cases has set precedence of economic development leading to over all socio-economic growth of the area. (Source = As per details and record available at Colliery Office)
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects.	Yes	Coal occurs in layers continuously for long distances. Associated mining activity with numerous such closely located centers as indicated at 9.1, 9.2 and 9.3 along with other activities could have cumulative impact. (Source = As per details and record available at Colliery Office)

III) Environmental Sensitivity

Sl. No.	Areas	Name / Identity	Aerial distance (within 15 Km.) Proposed project location boundary.
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value.	No	Source: Topo sheet no. 73 (I/6, I/10, I/5 & I/9)
2	Areas which are important or sensitive for ecological reasons – wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests.	Dhangri RF Damodar River	12.km 8 km Source: Topo sheet no. 73 (I/6, I/10, I/5 & I/9)
3	Area used by protected, important or sensitive species of flora or fauna for breeding, resting, foraging, resting, over wintering, migration.	No	Source :Topo sheet no. 73 (I/6, I/10, I/5 & I/9)
4	Inland, coastal, marine or underground waters.	No	Source Topo sheet no. 73 (I/6, I/10, I/5 & I/9)
5	State, National boundaries.	West Bengal	8 km Source Top sheet no. 73 (I/6, I/10, I/5 & I/9)
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas.	NH 32, NH-2, Grand cord line ,leads to Howrah	10-12 Km approx 5-6 Km approx 5-6 Km approx (Source :Top sheet no. 73 (I/6, I/10, I/5 & I/9)
7	Defense installations	No	Source Top sheet no. 73 (I/6, I/10, I/5 & I/9)
8	Densely populated or built-up	- Jharia,	4 Km approx

Sl. No.	Areas	Name / Identity	Aerial distance (within 15 Km.) Proposed project location boundary.
	area	- Dhanbad, - Sindri	7-8 Km approx 7-8 Km approx Source : Top sheet no. 73 (I/6, I/10, I/5 & I/9)
9	Areas occupied by sensitive man-made land uses (<i>hospitals, schools, places of worship, community facilities</i>).	Hospitals, Schools, Places of worship, Community facilities exist in general in the above towns	Source Top sheet no. 73 (I/6, I/10, I/5 & I/9)
10	Areas containing important, high quality or scarce resources (<i>ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals</i>).	No	Source Top sheet no. 73 (I/6, I/10, I/5 & I/9)
11	Areas already subjected to pollution or environmental damage. (<i>those where existing legal environmental standards are exceeded</i>)	Yes	Extensive coal fire within the area
12	Areas susceptible to natural hazard which could cause the project to present environmental problems. (<i>earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions</i>).	Yes	The area falls under category III in the Earthquake map of India

I hereby give undertaking that the data and information given in the application and enclosures are true to the best of my knowledge and belief and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at our risk and cost.

Date: 14/10/17
Place: Dhanbad.


Mr. Kalyanjee Prasad
General Manager
BCCL, Lodna Area
PO- Khasjeenagora, Dist. - Dhanbad
Jharkhand - 828115



महाप्रबंधक
लोदना क्षेत्र-10, भा.को.को.लि.
General Manager
Lodna Area No. X, B.C.C.L.