

नॉर्दर्न कोलफील्ड्स लिमिटेड

(मिनी रत्न कंपनी)

कोल इंडिया लिमिटेड की अनुषंगी कंपनी)



Northern Coalfields
Limited

(A Miniratna Company)
(A subsidiary of Coal India Limited)

महाप्रबंधक कार्यालय / Office of the General Manager



CIN- U10102MP1985GOI003160

An ISO: 9001, ISO: 14001 & OHSAS: 18001 Certified Company

पोस्ट- बीना परियोजना, जिला- सोनभद्र (उ.प्र.) पिन- 231220 / Post- Bina Project, Distt- Sonebhadra (U.P.)- 231220

Phone : 05446-276279 (O), 267280 (R) Fax : 05446-276274, 07805-25610 e-mail : cgmbin.ncl@coalindia.in Website : www.nclcil.in

Ref. No: BNA/Env./EC compliance/MoEF&CC/17/.103

Date: 07.06.2017

By E-mail

To,
Addl. Director (S),
Ministry of Env. & Forest, Regional Office (Central Region),
5th Floor, Kendriya Bhawan, Sector - H , Aliganj, Lucknow- 226 0241
(Kind Attn. - Dr. S.K.Lal)

Sub :- Submission of six monthly compliance report from 01st October '2016 to 31st March '2017
(EC Letter No: J-11015/49/2011-IA.II(M) dated 06.08.2014 for 7.50 MTY PROJECT CODE- UP-12-205-2006)

Dear Sir,

Please find attached herewith a copy of six monthly compliance report for the period from 01st October 2016 to 31st March 2017 of the Bina Extn. Project (Peak Production capacity 7.50 MTPA) of M/s Northern Coalfields Limited, Singrauli.

This is for your kind information please.

Encls.: (i) Part-I Data sheet
(ii) Compliance of condition

CC:- (i) Regional office, UPPCB, Sonbhadra.
(ii) Regional office, MPPCB, Singrauli.
(iii) In-charge, Zonal office CPCB, Lucknow.
(iv) GM (Env.) - NCL, Singrauli

Yours faithfully,

Area General Manager
Bina Extn. Project.

Rakesh
07/06/17

**MINISTRY OF ENVIRONMENT & FOREST
REGIONAL OFFICE, LUCKNOW
MONITORING REPORT
PART - I**

DATA SHEET


Date: 07.06.2017.

01.	Project type : River valley / Mining Industry / Thermal / Nuclear / Others (specify)	OPEN CAST COAL MINE
02.	Name of the Project	BINA EXTN. PROJECT Coal Production Capacity- 7.50 MTPA
03.	Clearance letter No. and date	J-11015//49/2011-IA.II(M) dated: 06.08.2014
04.	Location: District: State(s): Latitude & Longitude:	Bina (Extn.) Project, P.O. Bina Project SONEBHADRA UTTER PRADESH Latitude :- 24° 09' to 24° 11' 22" N Longitude :- 82° 44' to 82° 45' 25" E
05.	Address for correspondence :- (a) Address of concerned Project Chief Engineer/General Manager (with PIN Code & Telephone No / Telex / Fax Nos.):	OFFICE OF THE GENERAL MANAGER, BINA PROJECT, NORTHERN COALFIELDS LIMITED P.O. BINA PROJECT DT: SONEBHADRA (U.P.), PIN : 231 220 TEL. 05446 - 276279 FAX : 05446 - 276274
	(b) Address of Executive Project Manager / Engineer	Office of GM-Bina Extn. Project, Sr. Mgr. (Env.) P.O. BINA PROJECT DT: SONEBHADRA (U.P.), PIN : 231 220
06.	Salient features of the Project :	Total mineable reserve- 123.94 MT Mine Lease Area- 1798 ha. Total cost of Project- Rs 168.97 Crs. Stripping ratio - 5.89m ³ /tonnes (Avg.)
07.	Break up of the Project area : (a) Existing land for Bina Project:	Bina Project -1284 Ha. existing total in UP
	(b) Others: Additional land for Bina Extn.	Forest Land:- 378.935 Ha (M.P. state) 21.61 Ha (U.P. State) Tenancy:- 16.451 Ha (M.P.) Govt. Land:- 28.223 Ha (M.P.) Total 445.219 Ha additional land.

.....2/-

08.	<p>Break up of Project affected population with enumeration of those losing houses / dwelling units only. Agricultural land only both dwelling units and agricultural land and land less labourers / artisans</p> <p>(a) SC / ST / Adivasis :</p> <p>(b) Others :</p> <p>(Please indicate whether these figures based on any scientific and survey carried out of provisional figures. If a survey carried out, give details & year of survey :</p>	<p>SC - 32 } House only :- ST - 00 } 38 Others - 06 }</p> <p>SC - 00 } Land only :- ST - 13 } 13 Others - 00 }</p> <p>SC - 00 } Land & House:- ST - 00 } 00 Others - 00 }</p>
09.	<p>Financial details :</p> <p>(a) Project cost as originally planned and subsequent revised estimate & the year of price reference</p> <p>(b) Allocation made for Environmental Management Plan</p> <p>(c) Internal rate of return and year of assessment</p> <p>(d) Whether (c) includes on the cost of management as shown in b) above</p> <p>(e) Actual expenditure incurred on the Project so far</p> <p>(f) Actual expenditure incurred on the Environmental Management so far</p>	<p>-> Rs.168.97 Crores (2006)</p> <p>-> Rs 27.08 Crores (2006)</p> <p>-> 6.10% (at 100% production)</p> <p>-> Yes</p> <p>-> Rs 561.30 Crs. Of Bina & Bina Extn. + 22.80 Crs. of Deshaling planrt. Total Rs. 584.10 Crs. till 31.03.17</p> <p>-> Rs 2.10 Crores in 2016-17 (total: Rs 31.74 Crores)</p>
10.	<p>Forest Land requirement :</p> <p>(a) The status of approval for diversion of Forest land for non forestry use</p> <p>(b) The status of compensatory afforestation</p> <p>(c) The status of clear felling</p> <p>(d) Comments on the viability & sustainability of compensatory afforestation. The afforestation programme in light of actual field experience so far.</p>	<p>21.61 Ha (U.P. State) Stage-II clearances granted vide letter No. 8-B/U.P./05/11/ 2004/F.C., dtd: 01.06.2006. G.O. issued by U.P. Govt. & trees enumeration-work completed. <u>Tree felling work has been going on & land hand over work is pending.</u></p> <p>378.935 Ha. (M.P.State) Stage - II clearance granted vide letter No. 8-58/2005-FC, dtd: 13.08.07. G.O. issued by M.P.Govt. Boundary demarcation by M.P. forest deptt. Completed. After tree felling in 350 Ha. forest land, this land has been handed over to Project.</p> <p>(i) Cost of C.A. Rs.18,05,645.00 deposited with DFO, Renukut on 28.09.05</p> <p>(ii) Cost of C.A. Rs. 7,58,37,863 deposited with DFO, Sidhi in Dec., 2006.</p> <p>In M.P. 350 ha completed & handed over. The tree felling work completed in 28.935 ha., transportation of trees and hand over is pending.</p> <p>In U.P. the tree felling work in 21.61 ha is in progress. Information not yet received from DFOs DFOs have been requested for the same.</p>
11.	<p>The status of clear felling in non-forest area (such as submergence area of Reservoir, approach roads), if any with quantitative information</p>	<p>As above</p>

12.	Status of construction : (a) Date of commencement (Actual and / or Planned) (b) The date of completion	22nd November 2006. Project completed in 2014.
13.	Reasons for delay if the Project is yet to start	N.A.
14.	Point wise report regarding implementation of environmental safeguards as stipulated in clearance letter mentioned at Sl. No. 3	Enclosed as at Annexure "B"


 AREA GENERAL MANAGER
 BINA EXTN. PROJECT

Ramesh
 07/01/17

महाप्रबंधक कार्यालय / Office of the General Manager



CIN- U10102MP1985GOI003160

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Phone : 05446-276279 (O), 267280 (R) Fax : 05446-276274, 07805-25610 e-mail : cgmbin.ncl@coalindia.in Website : www.nclcil.inCompliance Report on Environmental conditions/safeguards laid down by MoEF&CC vide letter number **J-11015/49/2011-1A.II (M) dated: -06.08.2014 Bina Extn. Project**

Sl. No.	CONDITIONS:	COMPLIANCE STATUS
(A)	Specific conditions :	
(i)	The maximum production from the mine at any given time shall not exceed the limit as prescribed in the EC.	The permission for 7.5 mtpa coal production has been given by MOEF&CC vide letter no J-11015/49/2011-1A.II(M) dated 06.08.2014 . The maximum production will be limited to 7.5 MTPA.
(ii)	No mining operations shall be undertaken in the forest land until clearance has been obtained under the provisions of FC Act.,1980	No mining operations shall be undertaken in the forest land where clearance has not been obtained from Competent Authority. Stage - II Forestry Clearance granted vide letter No. 8-58/2005-FC, dated: 13.08.07 by MoEF for 378.935 ha. in MP State & vide letter No. 8-B/U.P./05/11/2004/F.C. dated: 01.06.2006 by U.P. Govt. for 21.61 ha. land in U.P.State.
(iii)	The water body (void) should be back filled so that at the end of the mining there would be no water body and whole area will be reclaimed.	This will be complied as per specific condition no. (xi).
(iv)	It was observed that the soil and water may be contaminated with Mercury. As a matter of abundant precaution, the EAC desired that decontamination measures should be taken to reduce the mercury pollution in the area. Indian Medical Association (IMA) should be engaged to ascertain the exact number of people/villagers affected with mercury, if any..	Regular testing of water samples have been done for Hg levels. Till date no Hg contamination has been reported in Bina Project. An additional study has been carried out by National Institute of Occupational Health, Ahmadabad-(NIOH-Ahmedabad), vide work order No. NCL/SGR/ENV./WO/NIOH/14/4972 DT. 29.08.14 for the population in and around coal field areas in NCL including the possible impact of Hg. They have started the work from 24.11.2014 & tested 441 persons including villagers.
(v)	Fugitive emission is major problem. Adequate measures need to be taken so that the emissions are within the prescribed limit.	Adequate measures have been taken and fugitive emissions are within the prescribed limits. Fugitive emission as per latest report dated March 2017 varies 243 to 445 ug/cum at main substation.
(vi)	Monitoring the Ambient Air Quality should be carried out by including new parameters viz. PM ₁₀ and PM _{2.5} .	Monitoring of the ambient air quality is being carried by CMPDIL including new parameters viz. PM ₁₀ and PM _{2.5} .

(vii)	Proponent should expeditiously take up the matter with the Coal India to create an Environment cadre for future employment in Coal India and its subsidiaries.	Company has already created the environment Cadre in all its Projects & H.Q and 12 & 05 Management Trainee (Env.) have joined in NCL during 2014 & 2015 respectively & they got promoted as Assistant Manager (Env) now.
(viii)	Transportation of coal in pit by dumper, Surface to siding by tipper/conveyor and rakes loading by pay loaders. Provision was by belt to washery and from washery to siding by tube conveyor and rakes loading through silo but the same is delayed.	In pit transportation of coal is by dumpers, surface to siding is by tippers. Also from crusher to washery & washery to rake loading is by covered belt conveyors, which is in operation. Tube conveyor is for Krishanshila Project to Renusagar, which was started on 29.05.15.
(ix)	The production shall be within the same Mining Lease area.	The production is within the same mining lease area.
(x)	The OB shall be completely re-handled at the end of the mining.	This will be complied as per specific condition no. (xi).
(xi)	Final mine void depth will not be more than 40 m. The void area will be converted into water body. The rest of the area will be back filled up to the ground level and covered with about a meter thick top soil and put to use.	The final void depth will be kept less than 40m. The void area will be converted into water body. The rest of the area will be back filled up to the ground level and covered with about a meter thick top soil and put to use.
(xii)	Garland drains be provided.	8700 RMs of Garland drains have been constructed all along the OB dumps. However it is a continuous process & will be constructed as the mine advances.
(xiii)	Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the mine.	There is no river/nallah flowing near or adjacent to the mine.
(xiv)	The land after mining shall be brought back for agriculture purpose.	Technical & Bio-logical reclamation for the backfilled areas will be done as per approved EMP. Plantation is being done @ 3500/ha. through Renukoot Forest Division-U.P.Forest Deptt. Till 2015 & from 2016-17 they started their work @ 2500/ha.
(xv)	Mine water should be treated for discharge in to the lagoon. The quality of lagoon water shall be regularly monitored and mitigation measures taken.	After treatment at ETP & >95% of the treated water is reused in mine & very less quantity of treated water only during monsoon is discharged in to a lagoon near GM Office. This surplus water is being used at Nursery for tree plantations work. There is zero discharge from the mines except monsoon.
(xvi)	The CSR cost should be Rs 5 per tones of Coal produced which should be adjusted as per the annual inflation.	As per Coal India's CSR policy (2013), CSR cost is Rs 5 per tonne.
(xvii)	Everybody in the core area should be provided with mask for protection against fugitive dust emissions.	Proper water sprinkling is done by 16 nos.(8 nos. deptt.+ 8 nos. outsourcing) water sprinklers to suppress fugitive dust. In addition to it, all employees who are exposed to dust are provided with dust masks and other safety equipment.
(xvii i)	Dust mask to be provided to everyone working in the mining area.	All employees exposed to dust & working in core area are provided with dust masks & other PPE (helmat, mine shoes, gamachha, battery & ear plugs & ear muffs etc.).
(xix)	The supervisory staff should be held	Instructions in this regard have been given to all supervisory

	compulsory regarding wearing of dust mask in core area.	frequently being done.																												
(xx)	People working in the core area should be periodically tested for the lung diseases and the burden of cost on account of working in the coal mine area.	Regular Health check-ups of the worker in mining area have been carried out PME for 414 & IME for 328 Nos of employees have been completed during 2016-17 . Besides this NIOH-Ahmadabad), has been engaged for health studies as per work order No. NCL/SGR/ENV./WO/NIOH/14/4972 DT. 29.08.14																												
xxi.	The mining area should be grounded by green belt having thick closed thick canopy of the tree cover.	<p>Green belt with 3.68 lacs plants has been developed, along all infrastructures. It will be improved further where space is available. The tree plantation rate was 3500/ha. in OB & 2500/ha. in plane areas. The last 5 years tree plantations figures:</p> <table border="1"> <thead> <tr> <th>year</th> <th>OBD</th> <th>Plain</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>2011-12</td> <td>31,500</td> <td>0</td> <td>31,500</td> </tr> <tr> <td>2012-13</td> <td>35,000</td> <td>0</td> <td>35,000</td> </tr> <tr> <td>2013-14</td> <td>22750</td> <td>1325</td> <td>24075</td> </tr> <tr> <td>2014-15</td> <td>17,500</td> <td>0</td> <td>17,500</td> </tr> <tr> <td>2015-16</td> <td>24,500</td> <td>0</td> <td>24,500</td> </tr> <tr> <td>2016-17</td> <td>25,000</td> <td>0</td> <td>25,000</td> </tr> </tbody> </table>	year	OBD	Plain	Total	2011-12	31,500	0	31,500	2012-13	35,000	0	35,000	2013-14	22750	1325	24075	2014-15	17,500	0	17,500	2015-16	24,500	0	24,500	2016-17	25,000	0	25,000
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2016-17	25,000	0	25,000																											
xxii.	The embankment constructed along the river boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side and stabilized with plantation so as to withstand the peak water flow and prevent mine inundation.	There is no river nearby.																												
xxiii	There shall be no overflow of OB into the river and into the agriculture field and massive plantation of native species shall be taken up in the area between the river and the project.	There is no river and agricultural fields around the mine. Sufficient length of Gabbions/retaining walls and catch drains have been installed to control the flow of the silt to the nearby water bodies.																												
xxiv	OB shall be stacked at seven earmarked external OB dumpsite (s) only. The ultimate slope of the dump shall not exceed 28°. Monitoring and management of existing reclaimed dumpsites shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Environment, Forest and climate change and its concerned Regional office on yearly basis.	All the external OB Dumps on 50.40 ha area have been fully reclaimed, no further dumping is being done on these 7 dumps. At present dumping is being done in active internal dumps in the de-coaled area, which will be reclaimed as & when final heights is achieved, with ultimate overall slope of not more than 28 degrees. At present actual slope of the OB dumps is 21° and 19° outward and inward side respectively.																												
xxv.	Catch drain and siltation ponds of appropriate size shall be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected shall be utilized for watering the mine area, roads , green belt development etc. The drains shall be regularly desilted and maintained properly. Garland drains (size, gradient	<table border="1"> <thead> <tr> <th>S No.</th> <th>Item</th> <th>Nos./ size</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Siltation ponds</td> <td>3 (10, 4 & 0.5 ha.)</td> </tr> <tr> <td>2</td> <td>Catch Drain</td> <td>8700 RM</td> </tr> <tr> <td>3</td> <td>Sumps</td> <td>2 Nos.</td> </tr> </tbody> </table> <p>Above mention structures are made for arresting silt. (Photos of siltation pond & retaining wall are attached) Sump of adequate capacity is available and in use. Capacity</p>	S No.	Item	Nos./ size	1	Siltation ponds	3 (10, 4 & 0.5 ha.)	2	Catch Drain	8700 RM	3	Sumps	2 Nos.																
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	and length) and sump capacity shall be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material.	of sump will be increased as per make of water & for proper settling of TSS.																
xxvi	Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and siltation shall be based on the rainfall data./	<p>The dimensions of retaining walls (bottom width 2.5 m, top width 0.5 m, height 3.0 m & depth below ground 1.0 m) at toe of the OB dumps is based on the rainfall data. Gabbion walls (bottom width 2.5 m, top width 1.0 m & height 4.0 m)</p> <table border="1"> <thead> <tr> <th>S No</th> <th>Item</th> <th>2016-17</th> <th>Progressive</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Retaining walls</td> <td>45 RM</td> <td>8845 RM</td> </tr> <tr> <td>2</td> <td>Gabbion walls</td> <td>60 sqm</td> <td>16260 sqm</td> </tr> <tr> <td>3</td> <td>Kerb Wall</td> <td>72 RM</td> <td>72 RM</td> </tr> </tbody> </table> <p>(Photo attached) During 2016-17 total 45 RM of retaining walls, 72 RM Kerb wall & 60 sq. mt. of gabions walls constructed at the Project.</p>	S No	Item	2016-17	Progressive	1	Retaining walls	45 RM	8845 RM	2	Gabbion walls	60 sqm	16260 sqm	3	Kerb Wall	72 RM	72 RM
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xxvi i.	Crusher at the CHP of adequate capacity for the expansion project shall be operated with high efficiency bag filters, water sprinkling system shall be provided to check fugitive emissions from crushing operations, conveyor system, haulage roads, transfer point etc.	Crusher is provided with mist spraying system with 38 nozzles & cyclonic dust extraction & ventilation system. All belt conveyors are closed with water spraying arrangement at transfer points. This is modern & more efficient technology. However bag filters 336 numbers are provided in the Deshaling plant. (Photos of crusher & deshaling plant area enclosed)																
xxvi ii.	Drill shall be wet operated.	All Drills are provided with cyclonic dust extraction & separation system & dust guards, which is modern technology & more efficient.																
xxix	The project authorities shall under take regular repairing and tarring of roads used for mineral transportation. A-3-tier green belt comprising of a mix of native species shall be developed all along the major approach roads	The Project authorities are undertaking regular repairing and tarring of roads used for mineral transportation. Green belt 3.68 lacs plants has been developed, along all infrastructures. It will be improved further where space is available.																
xxx.	Controlled blasting shall be practiced with use of delay detonators and only during daytime. The imitative measures for control of ground vibrations and to arrest the fly rocks and boulders shall be implemented.	A study has been done for impact of blast vibration & to advise optimum blast design through CENTRAL INSTITUTE OF MINING & FUEL RESEARCH-DHANBAD in 2013 & control blasting is done as per their advice & ground vibrations are regularly monitored and kept under control.																
xxxii	A progressive afforestation plan shall be implemented covering an area of 1064 ha at the end of mining, which includes reclaimed External OB dump area (50.40 ha), Internal OB dump area (663 ha) and Green belt (187.63 ha) and in township located outside the lease by planting native species in consultation with the local DFO/Agriculture Department. The	All the reclamation and plantation work is being done by U P Forest. Density of plantation in OB was 3500 nos./ha and in Plain area is 2500 nos. /ha. At the end of Mine, a water body will be created on 48.97 ha. as given under the Env. Conditions. Present reclamation status: External OBD - 5.64 lac plants on area 50.40 ha. Internal OBD - 25.47 lac plants on area 331.88 ha Total - 31.36 lac plants on area 382. 28ha																

