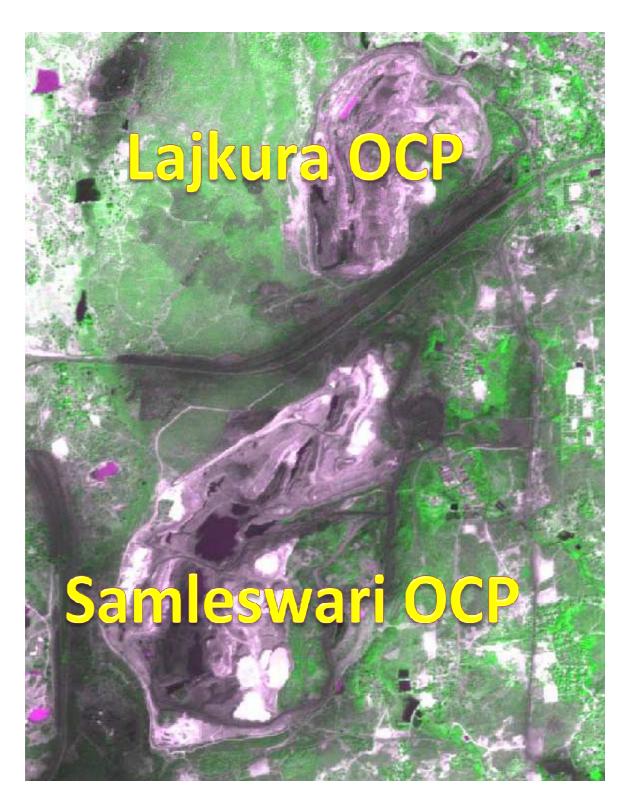
Land Restoration/Reclamation Monitoring of more than 5 million cu.m (Coal+OB) Capacity Opencast Coal Mines of Mahanadi Coalfields Limited based on Satellite Data.









Date- 27-05-2014

# OFFICE OF THE CHIEF MANAGER(MINING)/ PROJECT OFFICER Lajkura Opencast Project, IB Valley Area, Brajrajnagar, Dist- Jharsuguda, Odisha-768230, Ph no 06645-242095

Ref.No. MCL/IBVA /PO (LOCP)/Envt/14-15/

BY REGD. POST

The Chief Conservator of Forest Ministry of Environment and Forest, Regional Office, Eastern Region, A-3, Chandrashekharpur, Bhubaneswar- 751023

Sub-Submission of Half Yearly Compliance report of "Environmental clearance Condition" in respect of Lajkura OCP (2.5 Mty Peak3 Mty) from Octl-13 to March-14.

Dear Sir,

To,

Enclosed please find herewith 'Half Yearly Compliance report' along with form I, II & III and abstract of the 'monitoring report' of Air, Water, Noise & Effluent quality in respect of Lajkura Open Cast Project (3.0 Mty Peak ) for the period from Oct-13 to March-14

This is for your kind perusal & necessary action.
Thanking You,

Yours Faithfully,

- sd-

On 27/05/2014

PROJECT OFFICER LAJKURA OCP

#### Conv to

- Director .E I.A.; Monitoring Cell, Ministry of Environment and Forest,.
   Paryavaran Bhawan, C.G.O. Complex , New Delhi-110003 BY REGD. POST
- 2. Chairman, State Pollution Control Board Odisha, Paribesh BHawan Nilakanthanagar, Unit-VIII, Bhubaneswar 751012

Bhubaneswar. **BY REGD. POST** 

 Regional Officer, State Pollution Control Board Odisha, Shivom Colony, NH-6, Near Income Tax Office, Ainthapali, P.O.-Budharaja, Dist.- Sambalpur. <u>BY REGD. POST</u>

#### Distributions to :-

- 1. General Manager, lb Valley Area
- 2. General Manager(Envt.), MCL, HQ, Burla, Sambalpur.
- 3. Area Environment Officer, lb Valley Area.
- 4. Office file.

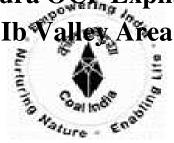
#### **HALF- YEARLY PROGRESS**

#### REPORT OF COMPLIANCE

# WITH ENVIRONMENTAL CLEARANCE CONDITIONS

(OCT- 2013 TO MAR-14)

Lajkura OCP Expn. (3.0MTPA)



#### **Mahanadi Coal Fields Limited**

(A subsidiary of Coal India limited) MCL - A Mini Ratna Company

# HALF – YEARLY REPORT OF COMPLIANCE WITH ENVIRONMENTAL CLEARANCE CONDITIONS (HALF YEARLY ENDING SEPTEMBER 2013)

## Name of the project: Lajkura OCP Expn. ( 2.5 Mty normative and peak $3MTY\,$ ), IB VALLEY AREA MCL

No. & Date of MOEF clearance letter No:J-11015/423/2008-1A-11(M) dated :- 12.3.2013

Con No	(A) Specific conditions	Compliance Status
(i)	The proponent shall not operate in the forest area without Forestry Clearance	The project is presently working within the existing ML area of 252.29 ha within 1 MTPA boundary and there is no forest land.
(ii)	The expansion of the production shall be from 1MT to 3MT within the same Mining Lease area.	The mine is strictly running in accordance with the environment clearance conditions of MOEF.
(iii)	The proponent shall obtain FC for 156.67 ha of forest land which falls within the expanded area of mining	Application of Stage -1 FC is under consideration at Nodal CCF, office of PCCF Bhubaneshwar.
(iv)	A 30 meter width should be provided to green belt.	30 mtrs green belt is exiting in the southern and western side. In the northern side plantation has been done to provide corridor.
(v)	Social audit should also be done through an Institute of repute and details of the report be submitted to Ministry	Action has been taken.
(vi)	A plan be made urgently for mechanized loading of railway wagon at the railway siding to reduce dust generation from loading by pay loader.	Proposal has been initiated to install water sprinkler all along & across the siding to wet the coal before loading it to railway wagons by mechanical means. Presently dust suppression as well as wetting of coal is being done by the mobile water tanker.
(vii)	Full EC with forest land could be granted once the stage –I Forest Clearance is obtained.	After approval of stage-1 FC request will be made for release of full FC with forest land.
(viii)	Topsoil, if any, created during the balance life of the mine, shall be stacked properly with proper slope at earmarked site(s) and shall not be kept active and shall be used within a year of its generation for mine reclamation and development of green belt.	
(ix)	OB generated during the balance life of the mine shall be simultaneously backfilled into the decoaled quarry area. No new external OB dumps shall be created for the OB generated in the balance life of mine.	backfilled into the decoaled quarry area to filling the void.

(v.)	Monitoring and management of	The evicting ODD dynama is not etter 1-141.
(x )	Monitoring and management of existing reclaimed dumpsites of an area of 326.00 ha shall continue until the vegetation becomes self-sustaining. Compliances status shall be submitted to the ministry of Environment & Forests and its Regional office located at submitted Bhubaneswar on yearly basis.	full and final height as per PR. However in the areas planted previously ,vegetation has already become self –sustainable.
(xi)	Catch drains 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 de-silted and maintained properly.	Complied
(xii)	Garland drains (size, gradient 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 of adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material.	Complied
(xiii)	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.	Provided as per mining Regulation.
(xiv)	Crusher at the CHP shall be operated with high efficiency bag filters, water sprinkling system shall be provided to check fugitive emissions from crushing operations, conveyer system, haulage road, transfer point etc.	
(xv)	Drills shall be wet operated. Roads shall be metal topped and mechanical sweepers shall be regularly deployed to clear the dust off the main approach and mineral transportation roads. Water sprinkling (fixed and mist type, mobile) shall be regularly done along the main haul roads.	wet drilling arrangement. All haul roads and Coal transportation roads are kept wet to control dust with the help of Mobile water tanker.
(xvi)	At the post mining stage, an area of 575.57 has shall be afforested which includes 60.44 has for green belt area, 189.13 has for outside dump, 326.00 has for inside dump by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per has	mining stage is incorporated in the mine plan of the project and project is going on as per plan.  Out of total Dump Area 33.3 ha External dump has been planted with 83250 nos. of

(xvii)	A Progressive mine Closure Plan shall be	Implemented
	implemented and OB generated shall be	
	simultaneously backfilled in an area of 326.00 ha	
	so as to backfill and reclaim 27.03ha of decoaled	
	quarry area and stabilized with plantation.	
(xviii)	No fly ash shall be dumped into decoaled void	Complied
	without feasibility studies on long-term impacts	
	on the aquifers and life system and without prior	
	approval of the Ministry.	
(xix)	Regular monitoring of ground water level and	The monitoring of hydrology of the area and
	quality shall be carried out by establishing the	water quality is being done by the CMPDI,
	network of existing wells and construction of new	Ranchi every month.
	piezometers. The monitoring for quantity shall be	Line report is enclosed.(Enclosure –A)
	done four times a year in pre- monsoon (May),	
	monsoon (August), post monsoon (November)	
	and winter (January) seasons and for quality in	
	May. Data thus collected shall be submitted to the	
	Ministry of Environment and Forests and to the	
	Central Board quarterly within one month of	
	monitoring.	
(xx)	The company shall put up artificial groundwater	Complied. The existing mine sumps and
	recharge measures for augmentation of	1 1 0
	groundwater resource. The project authorities	ground water recharge. Also drinking water is
	shall meet water requirement of nearby village(s)	arranged to meet water requirement of nearby
	in case the village wells go dry due to dewatering	i village(s) ulidel CSK of collidativ.
	of mine.	
(xxi)	Sewage treatment plant shall be installed in the	Work order has been issued for construction
(AAI)	existing colony. ETP shall also be provided for	
	workshop and CHP wastewater.	very shortly. ETP is existing and in well
	workshop and ern wastewater.	working condition.
(xxii)	Besides carrying out regular periodic health	The periodic health check-up of all employee
	checkup of their workers, 10% of the workers	is being done at company hospital as per the
	identified from workforce engaged in active	rules enacted in mine. The company hospital
	mining operations shall be subjected to health	also providing health services to surrounding
	checkup for occupational disease and hearing	i villages under CSK of the combany.
	impairment, if any, through an agency within the	(
	district/State and the result reported to this	
	Ministry and to DGMS.	
(xxiii)	For monitoring land use pattern and for post	The work is in progress.
	mining land use, a time series of land use maps,	
	based on satellite imagery (on the scale of	
	1:5000) of the core zone and buffer zone, from	
	the start of the project until the end of mine life	
	shall be prepared once in 3 years (for anyone	
	particular season which is consistent in the time	
	series), and the report submitted to MOEF and	
	its Regional office at Bhubaneswar.	

(xxiv)	A detailed Final Mine Closure Plan along with	N A.
	details of Corpus Fund shall be submitted to the	
	Ministry of Environment & Forests within 6	
	months of grant of this letter for approval, in case	
	expansion in ML area is not implemented.	
(xxv)	R&R of existing project has been completed. In	Rehabilitation has been done as per the
(1111)	the expansion project, Brajarajnagar unit 1, two	Govt. Of Orissa package and as per the CIL
	villages namely Chhauliberna village (near	R&R Policy.
	Chingriguda siding), Chhauliberna village	
	(Baghachhapa nallah side) consisting of	
	additional 96 families require R&R would be 263	
	for the total 3.00 MTPA. 228 Project affected	
	persons have been provided employment. R&R	
	of expansion project likely to be completed by	
	2016-17. R&R policy of Govt. of Odisha would	
	be followed. Expenditure incurred and works	
	executed at present rehabilitation colony	
	Madhuban Nagar is Rs.20, 97,414 Lakh. R&R	
	norms shall be not less than of the national R&R	
	Policy.	
(xxvi)	Corporate Environment Responsibility:	Action has been taken at HQ level.
(1111)	Corporate Environment responsionary.	riction has seen taken at 114 leven
	a) The company shall have a well laid down	
	Environment Policy approved by the	
	Board of Directors.	
	b) The Environment Policy shall prescribe	
	for standard operating process/procedures	
	to bring into focus any infringement	
	Order of the company to deal with	
	environmental or forest norms/conditions.	
	chynomicital of forest horing/conditions.	
	c) The hierarchical system or Administrative	
	Order of the company to deal with	
	environmental issues and for ensuring	
	compliance with environmental clearance	
	conditions shall be furnished.	
	d) To have proper sheets and heleness the	
	d) To have proper checks and balances, the	
	company shall have a well laid down system of reporting of non-	
	1 0	
	compliances/violations of environmental norms to the Board of Directors of the	
	company and/or shareholders or	
	stakeholders at large.	

Conditi on no.	<b>General conditions</b>	
(i)	No change in technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.	Complied
(ii)	No change in the calendar plan including quantum of mineral coal and waste being produced shall be made.	Complied
(iii)	Four ambient air quality monitoring station shall be established in the core 9zone as well in the buffer zone for monitoring PM <sub>10</sub> , PM <sub>2.5</sub> SO <sub>2</sub> , and NO <sub>X</sub> . Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, in particulates shall be carried out at least once in six month.	Complied
(iv)	Data on ambient air quality (PM <sub>10</sub> , PM <sub>2.5</sub> SO <sub>2</sub> , and NO <sub>X</sub> and heavy metals such as Hg, As, Ni, Cr, etc.) and other monitoring data shall be regularly submitted to the Ministry including its Regional Office at Bhubaneswar and to the State Pollution Control Board and the Central Pollution Control Board once in six months.	Complied
(v)	Adequate measures shall be taken for control of noise levels below 85dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with ear plugs/muffs.	Presently all HEMM used in mine are provided with inbuilt system design to minimize noise level. Ear plug/ ear muffs are also provided to work persons.
(vi)	Industrial waste water (workshop and wastewater from mine) shall be properly collected and treated so as to conform to the standards including for heavy metals before discharge prescribed under GSR 422 (E) dated 19 <sup>th</sup> May 1993 and 31 <sup>st</sup> December 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.	Oil and grease trap is in well working condition and workshop waste water is treated there. Mine waste water is presently collected in surface pond from mine settling sump and treated there before leaving it out side. Proposal for construction of latest designed MDTP is also in final stage and will be installed very soon.
(vii)	Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation of the material shall be covered with tarpaulins and optimally loaded.	Complied
(viii)	Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and type of pollution monitoring and analysis equipment in consultation with the State pollution Control Board and data got analyzed through a laboratory recognized under EP rules, 1986.	Complied. Monitoring of environmental quality parameters is being carried out by CMPDIL Ranchi.

(ix)	Personnel working in dusty areas shall wear protective respiratory devices and they shall be provided with adequate training and information on safety and health aspects. Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contractions due to expose to dust and to take corrective measures, if needed.	Complied. Under Occupational health surveillance program every employee of the Mine is periodically Medically examined at the interval of 5year (Enclosure-C).
(x)	A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the head of the company.	Complied
(xi)	The funds earmarked for environmental protection measures shall be kept in separate account and shall not diverted for other purpose. Year wise expenditure shall be reported to this Ministry and Regional Office at Bhubaneswar.	COMPLIED. The fund earmarked for environmental protection measures is kept under head ENVIRONMENT and expenditure reflect in cost sheet.
(xii)	The Project authorizes shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and may also be seen at the website of the Ministry of Environment & Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> .	Complied
(xiii)	A copy of the environmental clearance letter shall be marked to concerned Panchayat /ZilaParisad, Municipal Corporation or Urban Local Body and local NGO, if any, from whom any suggestion/ representation has been received while processing the proposal. A copy of the clearance letter shall also be displayed on the company's website.	Complied
(xiv)	A copy of the clearance letter shall be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the regional Office, District Industry Centre and Collector's Office/Tehsildar's Office for 30 days.	Complied

(xv)	The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated EC conditions shall also be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in the public domain. The monitoring data of the environmental quality parameter (air, water, noise and soil) and critical pollutants such as PM <sub>10</sub> ,PM <sub>2.5</sub> , SO <sub>2</sub> and NO <sub>X</sub> (ambient and stack if any) and critical sartorial parameters shall also be displayed at the entrance of the project premises and mines office in corporate office and on the company's website.	The monitoring data of the environmental quality parameter and critical pollutants and critical sartorial parameters are displayed on electronic display board. The compliance status of EC conditions will be loaded in website.
(xvi)	The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions (both in hard copy and in email) to the respective Regional office of the MOEF, the respective Zonal Offices of CPCB and the SPCB.	Complied
(xvii)	The regional Office of this Ministry located at Bhubaneswar shall monitor compliance of the stipulated conditions. The project authorities shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/information/ monitoring reports.	Complied
(xviii)	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be uploaded on the company's website along with the status of the compliance of EC conditions and shall be sent to the respective Regional Offices of the MOEF by E-mail.	Complied

on 27/05/2014

PROJECT OFFICER
LAJKURA OCP

#### FORM-1

#### MINISTRY OF ENVIRONMENT & FOREST REGIONAL OFFICE MONITORING PROFORMA PART- 1 (DATA SHEET)

1. Project Type: River-Valley/Mining Industry/Thermal/Nuclear/Other (Specify)

: Mining Industry

2. Name of the Project

: Lajkura OCP Expn. (2.5 Mty normative and Peak 3 MTY), MCL

3. Clearance Letter(s) OM no.& Date

4. Location:

:Jharsuguda,Odisha.

(a) district(s), State(s)5. (a) Address of concerned project

:Office of the Project Officer, Lajkura O C P, PO-Lamtibahal, Brajraj Nagar, Distt-,Jharsuguda Odisha, Pin-768230; Phone: (06645-242095)

: J-11015/423/2008-IA.II(M) dated 12.03.2013

Chief Engineer (with pin code and telephone/telex/Fax nos.

: ----do-----

b) Address of Executive project Engineer /Manager (with pin code and telephone/telex/fax nos.

6. Salient features:

a. Of the project

b. Mining Technology-

: Targeted output: 2.5 Mty. As per PR, Minable reserve: 6.23MT. Stripping ratio: 3.40 cum/t; Opencast Mining (Dragline & Shovel-dumper system of mining for OB removal and Coal seam is extracted with the help of Surface Miner as well as conventional drilling and blasting combined system; Project Life:

29Yrs.(app)etc.

c. Of the environmental

: Capital cost of Envt.Mgmt(As per EMP for expansion of 2.5 Mty).—1656.56 Lakhs Resettlement & rehabilitation, Pollution abetment measure cost, Effluent treatment

cost, compensatory

Afforestation, Arboriculture, Peripheral development, Rain water harvesting etc.

7. Break up of the project area

a. Submergence area (Forest and Non-Forest) b. Others

: 252.29Ha (Only non forest)

: NIL

8. 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.

a. SC,ST/ Adivasis : Nil b. Others : Nil

9. Financial Details:

 a) Project cost as originally planned and Subsequently estimates and the year of price reference.

b) Allocation made for environmental management plans, with item-wise and year wise break-up

: NA

As per P.R.

: -Rs-1656.56 lakhs(As per Chapter-9 of PR for expansion of 3.0Mty). The difference heads are Resettlement & rehabilitation, Land reclamation, Air pollution measure, Water pollution measures, Compensatory afforestation, Misc cost etc.

c) Benefit cost ratio/internal rate of return and the year of assessment

: Cost Rs. 833.53 /te; Profit Rs 420.53(As per cost sheet-12 of LOCP.) for the year 2013-14

d) Whether 9( c) includes the cost of environmental management plans so far.

e) Actual expenditure incurred on the Project so far (capital): Rs.14351.52 lakhs(As on 30.09.2013)

: Yes

f) Actual expenditure incurred on the Envt. : Mgmt plans, so far

For tree plantation Rs.1.66 lakhs
 Environmental Exp.(Statutory Fee etc)
 Rs-96.105 lakhs. (As per cost sheet)

 Environment monitoring Rs 27.60 lakh

10. Forest land requirements

a) The status of approval of a diversion of forest land for non-forestry use.

y use. : Application has already been made for expansion of 3.0Mty.

b) The status of Tree felling : not applicable c) Comments on the viability and : Viable,

Sustainability programme in the light of actual fields experience so far.

11. Status of construction:

a) Date of commencement : This is an Expansion Project planned initially (Actual and/or planned) for 1Mty now extended for 3.0 Mty.
b) Date of completion : Project Life: 29Yrs.etc.

(Actual and / or planned)

12. **Reason for the delay if the project is yet to start** : Not Applicable

13. Date of Site visit

a. The date on which the project was monitored by the Regional Office, If any.

b. Date of visit for this monitoring report.

14. Details of correspondence with project authority For obtaining action plan, information and status Of compliance to safe guard.

:On 05.05.14 by R.O. OSPCB

: -

:To MOEF,& OSPCB

-sd-On 27/.5/2014 PROJECT OFFICER LAJKURA OCP.

#### **FORM-II**

#### PROFORMA FOR PROVIDING INFORMATION ON REHABILITATION

(For the year 2013-2014)

1No. of village affected : Nil 2.Families affected : SC STOTH Total 3.Compensation package offered per family.: State/ Centre norms Project package As per State Govt. Package 4. Budget estimate for rehabilitation. NIL a)Total outlay b) Amount paid/used 5. Employment details a)Total employment to be provided b) Employment given so far. 6. Rehabilitation & Resettlement details. : No shifting a) Nos. of families rehabilitated : NA i)Name of the site : NA iv)Families rehabilitated. : SC STOTH **TOTAL** NA b). families yet to be rehabilitated : NA i) Name of site : NA ii).No. of families : SC STOTH **TOTAL** NA

: NO

Any other information.

on 27/05/2014

PROJECT OFFICE

LAJKURA OCP

#### FORM -III

### FORMATE FOR PROVIDING PARTICULARS ON GREEN BELT/PLANTATION <u>UNDER F (C) ACT 1980 AND E (P) ACT 1986.</u>

1. a. Name of Organization : MAHANADI COALFIELDS LIMITTED

b. Envt clearance order No. : **J-11015/423/2008-1A-11(M) dated -12.3.2013** 

c. Forest clearance order No. : 8-147/89 FC of MOEF dtd.09<sup>th</sup>Aug 2001.and

No. F.No.- 8-147/89-FC(Vol.II) dated: 17/2/2009.(For expantion project for 3 MT Stage-1 forest clearance application is pending at the office of PCCF Bhubaneshwar.)

at the office of PCCF Bhubaneshw

2. Location, Block/Sub Division/Distt./State : Vill / Mauja- Brajrajnagar,Unit-I

; Jharsuguda, Sub- division -

Jharsuguda,

Dist:- Jharsuguda (Odisha).

3. Address for communication :Lajkura OCP, P.O. Lamtibahal,

Brajrajnagar,

Dist:- Jharsuguda (Odisha). PIN-

768230.

4. Existing vegetation in the area/region:

a. Species (Trees/shrub/Grasses/climbers). : Planted Trees, shrub, Grasses and climbers.

(With in 1.0Mty boundary)

b. major prevalent species of each type : Detail enclosed

5. Land coverage by the project

a. Total area under the project : 252.29Ha

b. Area covered for basic infrastructure

(road/building/factory etc.)

6. Details about natural vegetation

a. Name and number of tree /species felled.b. Name and number of plants species stilli. N A

Available in the area

c. By protecting the area will indigenous : Yes

stock come up

d. Extent of green belt developed. : 33.3Ha (External Dump)+27.039(Internal)

Total 141.73 ha including Avenue and other

places.

7. Plantation required to be carried out as per

a. Condition of Environment : As per specific condition no. Xvi

the density of the tree shall be around

2500 plants per ha.

b. A condition of forest(C)Act: N A.

Forest clearance inHa/Nos

c. Voluntarily in Ha./Nos : N A.

8. Details about plantation

a. Total area available for plantation in 2013-14

in each category.

i.Green belt ii.Ext. Dumps iii.B/F area iv.Road sides v. Blocks

plantation

Prantation				
Nil	Nil	Nil	Nil	Nil

b. Plantation details (Category wise & Methodology used)

				- 83	
Year of	Species	Spacing	Height	Total area	Proposed plantation
Plantation	Planted		attained	covered till date	programme in 2012-
					13 (in Ha.)
1991 to Till	Given in	As per	Self	141.73 Ha.	4800 nos. avenue
date	Annexure- A	norms	sustainable		Plantation.

c. survival % of plantation (for last five years) :75% - 80% after 3 years of operation.

9. Agency carrying out plantation and maintenance : Chhatisgarh Rajya Van

Vikas Nigam Ltd, Chhatisgarh & others

Officers from OSPCB

10. Inspection of plantation by field

experts and their comments and

follow up action

11.Remarks /any other information. : Very Good.

-Sd-On 27/05/2014 PROJECT OFFICER LAJKURA OPEN CAST PROJECT IB VALLEY AREA

Date 27.05.2014

#### AMNEXURE-A

#### FINAL JOINT ENUMERATION REPORT

Lajkura OCP Plantation Year 2008

1) Year of Plantation

2008-09

2) Agreement No.

: MCL/HQ/ENVT/08/3461 Dt. 17.06.2008

3) Name of site

3) Name of site : Lajkura OCP
4) Total Area Planted : Side 'A' 6 Ha. Side 'B' 2 Ha.
5) No. of Plant : Side 'A' 15000 Side 'B' 5000
6) Period of Enumeration : 25.08.2011 to 31.08.2011

SNo.	Name of Species	Side' A'	Side'B'
$1a_{\nu m}$	Amia	58	12
21 4	Carried State of the Control of the	359	67
3	Ber	551	127
4	Bel	29	- 100 XXX 13.11
5	,Chakunda	2504	621
6	Gulmohar	314	90%
7	Guava	87	19
86	Gravelia 64 00	69	43.
9 -	Jungle Jalebi	2021	994
10	Jac Fruit	89	09/= 3/
11 %	Kaju	220	105
12	Karanj "	2346	187
13	Kapok	43	06
14	Lajestilia	11	2
1,5	Neem	100	29 3 3 3 3 3
16	Parkingsonia	768	472
17	Siris	570	108
18	Sitafal	138	108
19	Shishu	109	34:
20	Menjiam	- Carrier Walter St.	416
21	Khamhar	1689	591
医性动物	Total	12075	4038
	Survival %	80.50 %	80.76 %

Asst. Project Range Officer CGRVVN Ltd.

Sr. Manager(Civil

G. M.(Min.)/PO(LOCP)

#### MAHANADI COALFIELDS LIMITED OFFICE OF THE CHIEF OF MEDICAL SERVICES

IB COALFIELDS

014 Dt.01.01.2014

0

To The Chief of Medical Services (MCL) Jagruti Vihar, Burla

Ref No.MCL/IBV/CH/PME/2013/ 0/

Sub :- Monthly PME report of IB Coalfields for the month of December 2913 per (as: Mine

Dear Sir,

TOWN AND

Mentioned below is the P.M.E. Performance report in respect of ib Valley, Orient, Lakhanpur, Besundhara Garjanbahal Area, Central Workshop and Mines. Rescue Station for your kind information and needful.

CONTRACTOR DESIGNATION	Units	Man	Target				-	CHIE	VEME	NTI	1 201	3				Progre	Balance		cess
IB VAL	LEY AREA	power		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	HOY	DEC	ssive		CUIT.	Prog
Non	GMO+Reg.S.	255	55	1	1	3	1	2	3	6	7	15	5	2	4	50	5		
Statutory	Central Hosp.	194	. 39	1	-		-	-	-		-	-	-	-	42	43	0	4	4
Statutory	S.O.C.P.	. 666	174	5	10	10	10	9	4	19	5	36	37	18	13	176	0	2	2
	LO.C.P.	498	100	6	13	15	9	10	7	13	10	12	6		-	101	0	-	1
1	fotal :-	1813	368	13	24	28	20	21	14	38	22	63	48	29	59	370	5	6	7
LAKHA	NPUR AREA	7																	
Non.	G.M.Office	285	57	1		-	4	2	3	-	4	10	1	6		31	26		
Statutory																			
Statutory	B.O.C.M.	678	135	4	20	6	13	33	18	19	8	12	14	9	-	156	0		21
	LakhanpurOCP	912	183	-	3	15	2	18		11	34	28	29	18	31	189	0	6	6
59.5	Lilari OCP.	185	37	3	6	2	-	3	4	6	3	2	10	5	-	44	0		7
	fotal :-	2060	412	8	29	23	19	56	25	36	49	52	54	38	31	420	26	6	34
ORIE	NT AREA																		
Non	C.G.M.Office	339	63	4	4	15	-	-	4	-11		4	-	- 4	-	46	17	- 40	-
Statutory	O.S.A.	196	39	14	-	-	10		12	2		-	. 1	-	-	39	0		
	R.S.A.	187	38	-	-		-	4	18	-	-	8	**	8	-	38	9		
Statutory	MineNo.1 & 2	726	211	-	10	29	. 38	8	29	17	31	10	19	22	6	219	0	6	. 8
	Mine No.3	904	285	6	8	4	28	44	69	21	22	9	44	18	16	289	0	4	
	Mine.No.4	324	39			2	-	. 1	5	8	3	12	-	3	4	38	1	- 1	
	H.R.C.	671	177	10	3	12	12	13	10	11	-	-	-	-		71	106		
	H.B.M.	1017	220	6	18	35	24	36	23	30	37	15	-	11	1	236	0	1	16
	Total :-	4364	1072	40	43	97	112	106	170	100	93	58	64	66	27	976	124	11	28
BASUND	HARA G. AREA					1									-				-
Non Statutory	G.M.Office	143	28	-	-	-	-	-	-	-		-	-	-		0	28	1	
Statutory	B. (West) OCP	531	91	3	-	7	2	9	. 17	15	6	12	1			72	19		
	B. (Kutda) OCP	153	31	-	-	-	-		-	-	5	-	. 8		-	10	21		
-	Total :-	827	150	3	0	7	2	9	17	15	11	12	6	0	0	82	68		
CENTRA	L WORKSHOP	212	43	-	-	14	8	-			10	-	4	10		46	0		
Mine	s Rescue			9	2	13	43	15	14	4	4	5	1	-		110			
	TAL PME		-	73	98	182	204	207	240	193	189	190	176	134	117	2003		23	7
Contract Con	ctor Worker	-	-	10	00	106	204		40	82	16	78	142	20	26	and the same of	1	-	Languarini
	TOTAL PME	9276	2045	73	98	192	204	207	280	275	205	267	319	154	143				

PME	Manpower	Target	Current	Progr.	Balance	Excess
Ih Coalfielde	9276	2045	143	2407		

#### Grand Total PME for this month - 143

cc to:-1. C.G.M., Lakhangur Area.

2. C.G.M. (S&R), MGL, HQ, Burla

3. G.M., lb Valley Area. 4. G.M.Orient Area.

5. G.M., Basundhara Area.

G.M., Central Workshop
 C.M.S. I/c, CH, ib Velley.
 C.M.S., MCL, HQ., Burta.

9. Area Safety Officer, IB Valley Area. 10. Area Safety Officer, Lakhanpur Area. Area Safety Officer, Orient Area.
 Area Safety Officer, Basundhara Area.
 Area Medical Officer, Orient Area.

14. Area Medical Officer, Basundhara Area.

DValley, 15. Area Medical Officer, Lakhanpur Area.
Burta. 16. Area Personnel Manager, Central Workshop.
TAII Unit Heads of IBV/LKP/ORIENT/ B.G. Area.

a Monagos (mm.), LOCP, Ib Valley Drea.

Yours faithfully

Chief of Medical Services (OH Vc)

Ib Coalfields