

COMPLIANCE WITH ENVIRONMENTAL CLEARANCE CONDITIONS

Name of the project: Samaleswari OCP Expn. (11 Mty), MCL

No, & Date of MOEF clearance letter No:J-11015/183/2008-IA.II(M), dated :- 25/02/2013

Conditi on No.	(A) Specific conditions	Compliance Status
(i)	Topsoil, if any created in the mine, should be stacked properly with proper slope at earmarked site(s) and should not be kept active and shall be used for reclamation and development of green belt.	Top soil are being stacked at earmarked site(s) which skall be used for reclamation and development of green belt.
(ii)	Balance OB shall be simultaneously backfilled in the de-coaled area. No new OB dumps shall be created for the OB to be generated in the balance life of mine.	OB is being excavated & simultaneously backfilled in the de-coaled Area. No new OB dump is required to be created in future.
(iii)	Diversion of Pandren Nala shall ensure that the downstream user of the water from Pandren Nala area not affected by the proposed diversion. The embankment constructed along the Pandren Nala shall be stabilized by the vegetation.	Pandren Nala shall be diverted as per the plan approved by flood and irrigation department. The embankment constructed along the Pandren Nala shall be stabilized by the vegetation.
(iv)	Monitoring and management of existing reclaimed dumpsites should continue until the vegetation self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forests and its Regional office located at Bhubaneswar on yearly basis.	The monitoring & management of existing reclaimed dump sites is continuing where vegetation has not become self sustaining.
(v)	Catch drain and siltation ponds of appropriate size should be constructed to arrest silts and sediment flows from soil, OB and mineral dumps. The water so collected should be utilized for watering the mine area, roads, green belt development, etc. The drains should be regularly de-silted and maintained properly.	Catch drains & siltation ponds of appropriate size has been constructed to arrest silt & sedimentation flows from soil, OB & mineral dump. The water, so collected is being utilized for watering the mine areas, roads, greenbelt development etc. The drains are being regularly de-silted & maintained properly.

(vi)	Garland drains(size, gradients and length) and sump capacity should be designed keeping 50 % safety margin over and over the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity should also provided adequate retention period to allow proper settling of silt material.	Garland drains with proper size, gradient and length are already available along with sump in the de coaled pit of the mine for this purpose. Catch drains & siltation ponds of appropriate size has been constructed to arrest silt & sedimentation flows from soil, OB & mineral dump. The water, so collected is being utilized for watering the mine areas, roads, greenbelt development etc. The drains are being regularly de-silted & maintained properly.
(vii)	Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and siltation should be based on the rainfall data.	Retaining wall at toe of the OB dump is not required because all the OB dump have been made stable by different stabilization activities. The OB benches are kept with safe height and slope with proper drainage to the sump.
(viii)	Crushers at CHP should be operated with high efficiency bag filters, water sprinkling system should be provided to check fugitive emission from crushing operations, conveyor system, haulage roads, transfer points, etc.	The water spraying system as well as enclosures along crushing and transfer points and conveyor belts, has already been provided to check fugitive emission from crushing operation, conveyor system, haulage roads, transfer points etc.
(ix)	Drills should 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.	Drills, operating with dust extractors earlier. All drills are fitted with wet drilling arrangements. Hence wet drillings is in practice.
(x)	The total area brought under afforestation shall include an area covering of 186 ha, along the peripheral boundary of the ML, 119.66ha of external OB dump and backfilled area, 5 ha in township and avenue plantation along 22 km of roads by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha.	Afforestation program were taken every year up till 2009-10. Till date 7,88,300 nos. of plants had already been planted in 322.13 ha. Back filled area, vacant land, along road including infrastructure. In view of the re-handling plan of the backfilled area because of the further expansion of the mine (including under ground seam) plantation in the backfilled area has been stopped and grassing is proposed.

:;"

(xi)	A progressive mine closure plan shall be implemented and OB generated shall be simultaneously backfilled so as to backfill and reclaim 448.272 ha of de coaled area and stabilized with plantation.	A progressive Mine closure Plan shall be implemented at the Final stage of working. However, the OB generated is simultaneously back filled and re claimed in the de coaled area. The status of the Back filled and de coaled area as on 30/09/2013 is as follows: 1. Excavated Area: 431.162 ha. 2. Back filled Area: 320.200 ha. 3. De coaled Area: 337.440 ha. At the final stage of working, the balance 19.552 ha of the de coaled area shall be converted to water reservoir and shall be protected accordingly.
(xii)	Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and construction of new poizometers. The monitoring for quantity should be done four times a year in premonsoon(May),monsoon (August), post monsoon (November), and winter (January) seasons and for quality in May. Data thus collected should be submitted to the Ministry of Environment & Forest and to the Central Pollution Control Board quarterly within one month of monitoring.	Ground water level and quality is regularly monitored four times a year,
(xiii)	The Company shall put up artificial ground water recharge measures for segmentation of groundwater resource. The project authorities should meet water requirement of nearby villagers(s) in case the village go dry due to dewatering of mine.	The existing mine sumps and sedimentation pond are good measures for ground water recharge. Village water dose not go dry, owing to the Mine.
(xiv)	Sewage treatment plant should be installed in the existing colony, ETP should also be provided for workshop and CHP waste water.	Sewage treatment Plant is already working in the existing colony. ETP has also been provided for the work shop and CHP does not generate much waste water.
(xv)	Besides carrying out regular periodic health check up of their workers 10% of the workers identified from workforce engaged in active mining operations shall be subjected to health check up for occupational diseases and hearing impairment, if any, through an agency within the district/State and the results reported to this Ministry and to DGMS.	Regular periodic health check up is being carried out for 20 % of the employees of Samaleswari OCP every year by way of periodical Medical Examination.

Τ,

(xvi)	For monitoring land use pattern and for post	Land use maps, based on satellite imagery
(AVI)	mining land use, a time series of land use	for monitoring land use pattern for the year
	maps, based on satellite imagery(on a scale	
	of 1: 5000) of the core zone and buffer zone,	no.MCL/HQ/Env/F-61/2013/3453 dt:
	from the start of the project until end of mine	22/04/2013 of G.M.(Env.) MCL.
	life shall be prepared once in three years(for	The above report is also available on the
	any one particular season which is consistent	company website <u>www.mcl.gov.in</u> .
	in the time series), and the report submitted to	
	MOEF and its Regional office at	
	Bhubaneswar.	
(xvii)	A detail Final Mine Closure Plan along with	Shall be complied accordingly.
	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 in ML area is not	
	implemented.	
(xviii)	R&R for 416 PAFs which includes 182	Shall be complied accordingly. Action plan
	PAFS(homestead losers) from 2 villages	for 182 PAFs required to be shifted is as
	Chingiriguda(119), Bijapada(63) and 232	follows:-
	PAFs of land losers shall be completed within	
	two years. R&R norms shall be not less that	l l
	of the National R&R policy.	2011 10, 51 141111100.
	1 of the I tational Recit policy.	(

В.	GENERAL CONDITIONS	COMPLIANCE STATUS
(i)	No change in technology and scope of working shall be made without prior approval of the Ministry of Environment & Forests.	No change in the mining technology and scope of working has been made.
(ii)	No change in the calendar plan including quantum of mineral coal and waste being produced shall be made.	Work is done as per calendar plan.
(iii)	Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring PM25, PM10, SO2 and NOx Location of the station shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with Pollution Control Board. Monitoring of heavy metals such as Hg, Nl, Cd, Cr in particulate shall be carried out at least once in six month.	Four ambient air quality monitoring stations has already been established for SPM,RPM,SO2 and Nox monitoring. Location of the station was decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board and in accordance with the MoEF Notification No.GSR 742 (E), dated.25 th Sept 2000.

(iv)	Data on ambient air quality (PM10, PM25, SO2 and Nox) and heavy metals such as (Hg, Nl, Cd, Cr) and other monitoring data shall be regularly submitted to the State Pollution Control Board and the Central Pollution Control Board once in six months. Random verification of samples through analysis from dependent laboratories recognized under the EP Rules, 1986 shall be furnished as part of the compliance report.	Data on ambient air quality (RPM,SPM,SO2 and Nox) is here with submitted to the Ministry including its Regional Office at Bhubaneswar and also separately to the State Pollution Control Board once in every six months.
(v)	Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with ear plugs/ muffs.	Adequate measures has been taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc has been provided with ear plugs / muffs.
(vi)	Industrial wastewater (workshop and wastewater from the 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 th May 1993 and 31 st December 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.	Industrial wastewater (workshop and wastewater from the mine) is being properly collected, treated so as to conform to the standards prescribed under the latest notification in this regard for Coal Mines vide GSR 742 (E) dat. 25 th Sept.2000 discharge. Oil and grease trap has already been installed and is in operation.
(vii)	Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation of the mineral shall be covered with tarpaulins and optimally loaded.	Vehicular emission is under control Vehicles used for transporting the mineral out side the Mine lease area by Road is being covered with tarpaulins and is optimally loaded.
(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.	which is having a Laboratory approved by CPCB. However, CMPDIL is in process of establishing Field Laboratory in Lakhanpur Area of MCL for all the mines of Ib Valley Coalfields.
(ix)	Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects.	Personnel working in dusty areas wears protective respiratory devices and they are regularly provided adequate training and information on safety and health aspects.
(x)	Occupational health surveillance programme of the workers shall be under taken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed.	Occupational health surveillance programme of the workers is under taken periodically to observe any contractions due to exposure.

(xi)	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.	A separate environmental management cell with suitable qualified personnel has been set up under the control of a Senior Executive, who reports directly to the head of the company at the mine Area and corporate level.
(xii)	The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purposes. Year wise expenditure shall be reported to this Ministry and its Regional Office at Bhubaneswar.	The funds earmarked for environmental protection measures are kept in separate account and not diverted for other purposes.
(xiii)	The project authorities should advertise at least in two local newspapers widely circulated around the project, one of which shall be in 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 http://envfor.nic.in.	The copy of the Envt. Clearance letter has been advertised in two local newspapers widely circulated around the project, one of which was in odia language
(xiv)	A copy of the environmental clearance letter shall be marked to concerned panchayat/Zila Parisad, 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.	A copy of the environmental clearance letter has already been sent vide letter no.MCL/IBVA/ SOCP/ SAM/ENVT/ 12-13/139 dtd.18.03.2013 to the concerned panchayat / local NGO, from whom suggestion / representation has been received during public hearing
(xv)	A copy of the clearance letter State pollution 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/ Tahasildar's Office for 30 days.	Not applicable to us

F7*

F	The state of the s	
xvi	The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated EC condition shall also be uploaded by the project authorities on their website and updated atleast once every six months so as to bring the same in the public domain. The monitoring data of environmental quality parameters(air, water, noise and soil) and critical pollutants such as PM2.5, PM2.5,SO2 and Nox (ambient and stock if any) and critical sectoral parameters shall also be displaced at the entrance of the project premises and mines office and in corporate office and on the company's website.	The clearance letter has been uploaded on the company's website www.mcl.gov.in . The compliance status of the stipulated EC condition shall also be uploaded. The monitoring data of environmental quality parameters(air, water, noise & soil) and critical pollutants such as PM2.5,SO2 and NOX (ambient and stock if any) and critical sectoral parameters shall also be displayed at the entrance of the project premises and mines office and in corporate office and on the company's website.
xvii	The project proponent shall submit six monthly reports on the status of compliance of the stipulated environment clearance conditions (both in hard copy and email) to the respective Regional Office of the MOEF, the respective Zonal offices of CPCB and SPCB.	Being complied with this report, soft copy is sent through e-mail too.
xviii	The regional office of this Ministry located at Bhubaneswar shall monitor compliance of the stipulated conditions. The project authority shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/information/monitoring reports.	Not applicable to us
xix	The environmental statement for each financial year ending 31 st March in Form-V is mandated to be submitted by the project proponent tot the concern 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 compliance of EC conditions and shall be sent to the respective Regional Offices of the MOEF by E-ail.	Environmental statement for each financial year ending 31 st March 2013 in form-V submitted to SPCB vide letter no. MCL/Env/Env.Stat./13/3749 dt:26.09.2013.

Å

PROJECT OFFICER SAMLESWARI OCP