



THE SINGARENI COLLIERIES COMPANY LIMITED
(A Government Company)
Yellandu Area

PART-1

HALF YEARLY COMPLIANCE REPORT OF ENVIRONMENTAL CLEARANCE CONDITIONS
UPTO 31st March 2014

A. SALIENT FEATURES OF THE PROJECT:

1	Name of the Project	:	21 Incline Underground Coal Mine
2	Organization	:	The Singareni Collieries Company Limited
3	Coalfield	:	Godavari Valley Coal field
4	Type of Mine	:	Underground Method
5	Technology	:	SDL and Blasting Gallery Technology with LHDs
6	Environmental Clearance	:	
	A Letter No & date	:	J-11015/930/2007-I.II(M), dt 27.10.2008
	B Sanction capacity	:	Peak: 0.65 MTPA
	C Mining Lease Area	:	745 Ha
	D Date of Public Hearing	:	11-04-2008
7	Location of the Project	:	In Yellandu Area & Region of Khammam District
	A Village	:	Romped
	B Tehasil	:	Yellandu
	C District	:	Khammam
	D State	:	Telangana
	E Latitude	:	North N 17 ^o 34' 18" to 17 ^o 37' 05"
	F Longitude	:	East E 80 ^o 17' 39" to 80 ^o 9' 17"
	G Topo Sheet	:	No. 65C/6
	H Nearest railway station	:	Singareni Railway Station on Dornakal
	I Nearest Airport	:	Hyderabad
	J Nearest town	:	Yellandu
8	Address for Correspondence	:	
	A Name	:	D. Ramachander
	B Designation	:	Address
	C Address	:	24 Area, Yellandu, Khammam District
	D Pin Code	:	507124
	F E-mail ID	:	Agt_jkgrp_yld@scclmines.com
	G Telephone No.	:	08745 252093
	H Fax No.	:	08745 240348
9	Life of the Project	:	18 Years
	A Date of Opening	:	1946
	B Total Life of the project as per EMP	:	18 years
	C Balance Life	:	11Years
10	Seams	:	
	A Total Seams Present	:	3 (no.s)
	B Seams being worked	:	2 Nos
11	Depth	:	
	A Minimum Depth (m)	:	38m
	B Maximum Depth (m)	:	340m

	C	Present working depth (m)	
12	Reserves		
	A	Total Geological Reserves	: 8.50 MT
	B	Total Extractable Reserves	: 8.50 MT
	C	Reserves already Extracted	: 2.698
	D	Balance Reserves	: 5.802
	E	Coal production during last six months	: 1.63 L. Tonnes
13	Land Requirement		
	A	Total Requirement (Mine Take Area)	745Ha
	B	Forestland Involved	305Ha
	C	Non-forestland	440Ha
	D	Land acquired so far (Surface rights)	0.60Ha
14	Statutory Clearances		
	A	Ground Water Clearance	Lr.No 2o4/T/SCCL/2007, dt 29-05-2008,of GWD.
	B	Consent for Establishment	: Ref.No.55/PCB/CFE/RO-KTM/HO/2010/620,dt 31.05.2010
	C	Consent for Operation	: APPCB/VJA/KGM/55/HO/CFO/2012-3530, dt 21-01-2012 and is valid up to December 2014.
	D	Forest Clearance	: MoEF Lr No 8-260/85 Fry(Cons) dtd: 07.10.1986 30 years from 1.1.1985 to 31.12.2014
	E	Mining Lease	: GOMS.NO,134, dt 16.10.2008.
	F	Others (Specify)	
15	R & R Involved		: Not Involved

B. COMPLIANCE STATUS OF EC CONDITIONS AS ON 31.03.2014

2 A. SPECIFIC CONDITIONS:

S.No	Condition	Compliance status
i	Mining shall not be carried in forestland for which forestry clearance has not been obtained under the provisions of FC Act, 1980.	The mine take area of 21 incline is 745 Ha covered under Yellandu Mining lease and Yellandu Additional mining lease. Forest clearance under the provisions of FC Act 1980 accorded for the forestland involved in respect of Yellandu mining lease vide MoEF letter no. 8-260/85-FTY(Cons) Gol, dated 7 th October 1986 and renewal of Yellandu additional mining lease vide MoEF letter No. F.No.8-54/91-FC(PC) Gol, MoEF FC Divn. Dated 25.07.2008 for underground mining.
(ii)	Sufficient coal pillars will be left un-extracted around the Air shaft (with the subsidence influence area) to protect from any damage from subsidence, if any.	150mtrs. Length coal pillars were left un-extracted around the Airshaft and Main incline entries, to protect any damage from subsidence.
(iii)	Solid barriers shall be left below the roads falling within the blocks to avoid any damage to the road.	125mtrs. Length of Solid pillars were left below the road falling with in the mine take area to safeguard the road.

(iv)	Depression due to subsidence resulting in water accumulating within low lying areas shall be filled up or drained out by cutting drains.	Depression due to subsidence or low lying areas are being filled up regularly and properly drained. Dewatering of old goaves of the upper seams shall be continued as long as the lower seam is worked to prevent the accumulation of large water bodies over working area.
(v)	While extracting the panels in the lower seam, all the water bodies in the subsidence area shall be drained. Dewatering of old goaves of the upper seams shall be continued as long as the lower seam is worked to prevent the accumulation of large water bodies working area.	Before commencement of extraction panels in lower seam, all the water bodies in the subsidence area if any, old goaved out panels in the upper seams will be dewatered and arrangements is being made pump out continuously to ensure free of water and all precautions under the provisions of Regulation 126 and 127 of Coal Mines Regulation, 1957 are being taken. The permission from the Inspector of mines as per Reg.100 of Coal Mines Regulation, 1957 was obtained.
(vi)	Regular monitoring of subsidence movement on the surface over and around the working area and impact on natural drainage pattern, water bodies, vegetation, structure, roads and surroundings should be continued till movement ceases completely. In case of observation of any high rate of subsidence movement. Appropriate effective corrective measures should be taken to avoid the loss of life and material. Cracks should be effectively plugged with ballast and clayey soil/suitable material.	Subsidence survey is being carried out during extraction of the caving panel once in every month and after completion of the extraction once 6 months till the movement ceases completely in case of any observations found depressions or cracks, they will be effectively plugged with overburden material from nearby opencast mines and plantation is being carried after stabilization.
(vii)	Garland drains /surface drains (size , gradient and length) around the safety areas such as mine shaft and low lying areas and sump capacity should be designed keeping 50% safety margin over an above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sufficient number of pumps of adequate capacity shall be deployed to pump out mine water during peak rainfall.	The pit entries such as airshaft and main incline and man way dip was designed minimum 1.5 m above the HFL of the area. Garland drains around the proposed depillaring panels and low lying areas if any will be made. The sumps are designed keeping the highest seepage calculations and retention time to settle the silt material. Adequate numbers of the pumps were already provided to pump out mine water during peak rainfall.

(viii)	Crushers at the CHP should be operated with high efficiency bag filters, water sprinkling system should be provided to check fugitive emissions from crushing operations conveyor systems haulage roads, and transfer points etc.	Effective water spraying arrangements were made at loading, unloading, transfer, conveyor and crushing points in the existing CHP. Mobile water sprinklers are being used for sprinkling on haul roads. Coal transportation roads and permanent internal roads were black topped.
(ix)	Drills should be wet operated.	Before carrying out drilling operations in under ground water spraying was done at drilling face and up to 50 mtrs from drilling face. The water spraying on the working face as per the provisions of Regulation 123 of coal mines Regulation, 1957 are being implemented to avoid the dust generation in the working places.
(xi)	A progressive a forestation plan shall be prepared and implanted for the undisturbed area and shall include area brought under greenbelt development, areas along roads, infrastructure, over surface where mining is being done below, along ML boundary an township outside the lease areas, etc., by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per Ha.	A progressive a plantation plan has been prepared and envisaged in the EIA/EMP. The Company has separate Forestry department under the control of IFS Officer deputed from AP Forestry Department to implement a plantation plan into the action. The details of progressive plantation are being furnished in the half yearly monitoring reports submitted to Regional Office, MoEF, Bangalore and Regional Office A P Pollution Control Board. Total plantation in an area of 108 Ha was carried in 21 Incline.
(xii)	Conservation plan for endangered species found in and around the project area shall be formulated in consultation with the State Forest and Wildlife departments.	The project is expansion of existing mine and workings are restricted to underground only. As such there will not be any impact on the flora and fauna. However conservation plan will be formulated and implemented, if required.
(xiii)	Regular monitoring of groundwater level and quality should be carried out by establishing a network of exiting wells and construction of new peizometers. The monitoring of quantity should be 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 should be submitted to the Ministry of Environment & Forestry and to the Central Pollution Control Board quarterly within one month of the monitoring.	Phreatic surface levels in the area around the project is being monitored four times a year using network of 5 existing observation wells and 4 peizometers in the study area. The monitoring data is being submitted to Regional Office Bangalore and Andhra Pradesh Pollution control Board. The monitoring data is being submitting to MoEF and Central Pollution control Board quarterly within one month of the monitoring.

(xiv)	The company shall put up artificial groundwater recharge measures for augmentation of groundwater resource. The project authorities should meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.	The excess mine discharge water is being diverted to nearby poosapalli tank/nallah for augmentation of ground water and rainwater harvesting structures are being taken up in the colony.
(xv)	The company shall obtain approval of CGWA/CGWB Regional office for use of groundwater if any, for mining operations.	Ground water clearance from Ground water Department Government of Andhra Pradesh was accorded vide letter No. 2126/Hg.II(1)/07Dated 11.04.2008.
(xvi)	Sewage treatment plant should be installed in the existing colony. ETP should also be provided for Workshop and CHP wastewater.	Sewage treatment in existing colony is being carried out through septic tanks followed by soak pits. ETP is provided and operating in the JK OC Base workshop.
(xvii)	For monitoring Land use pattern and for post mining land use, a time series of land use maps, based on the satellite imaginary (on a scale of 1:5000) of the core zone and buffer zone, from the start of the project until end of mine life shall be prepared once in 3 years (for any one particular season which is consistent in the time series), and the report submitted to MoEF and its Regional office at Bangalore.	Land use pattern using satellite imaginary of core and buffer zone will be submitted to Regional Office Bangalore once in every three years.
(xviii)	A final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years in advance of final Mine Closure for approval.	A mine closer plan along with details of corpus fund will be submitted to MoEF 5 years before the closure of the mine.

2 B. GENERAL CONDITIONS

B. General Conditions.

(i)	No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment & Forests.	No change in mining technology and scope of working will be made without prior approval of the MoEF.
(ii)	No change in the Calendar plan including excavation, quantum of mineral coal and waste shall be made.	No change in the Calendar plan including excavation, quantum of mineral coal.
(iii)	Four Ambient Air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of SPM, RPM, SO ₂ and NO _x , Hg and other heavy metals such as Pb, Cr, As, etc. Location of the stations shall be decided based on the	Four ambient air quality monitoring stations namely at 21 incline (core zone), Strut Pit CSP(Weigh Bridge) (N.W(2.0Km), Yellandu town (N-E1.5Kms), Yellandu Area Workshop. (SE 0.5Km) and Polampalli village (South 2.0Km) in consultation with

	meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board.	Regional Officer, AP Pollution Control Board, Kothagudem were established considering the meteorological data. The monitoring is being carried out regularly once in a fortnight for the parameters PM ₁₀ , PM _{2.5} , SO ₂ and NO _x through external agency having MoEF recognised laboratory.
(iv)	Fugitive dust emissions (SPM, and RSPM, Hg and other heavy metals) from all the sources shall be controlled regularly monitored and data recorded properly. Water spraying arrangements on haul roads, wagon loading, dump trucks (loading and unloading) points shall be provided and properly maintained.	Fugitive dust emissions and allied activities are being monitored regularly at mines.
(v)	Data on Ambient Air quality (SPM, and RSPM, Hg and other heavy metals) shall be regularly submitted to the Ministry including its Regional office at Bangalore and to the State Pollution Control Board and the Central Control Board once in six months.	The data on Ambient air quality is being submitted regularly to RO - KGM, MoEF Bangalore and APPCB.
(vi)	Adequate measures shall be taken for control of noise levels below 85 dB(A) in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with ear plugs/muffs.	Noise control measures such as plantation around the fan house and mine take area, provision of evasee to main mechanical ventilator, reduction of height of fall in the bunkers maintenance of machinery etc., are being taken up. All the active work force engaged on drilling, blasting, operation of machinery and nose prone areas are being provided with earplugs.
(vii)	Industrial waste water (workshop and wastewater from the mine) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 th May 1993 and 31 st December 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed before discharge of workshop effluents.	Mine seepage water is being collected in the under ground sumps of adequate capacity to settle the suspended solids and pumped out to the surface slow sand filters for further treatment to conform to the prescribed standards. Oil and grease trap has been established in the JKOC base workshop for treatment of washing effluents. The efficacy of the system is being monitored through fortnight sampling and analysis by external agency having MoEF recognized laboratory.
(viii)	Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.	Vehicles are being tuned regularly for control of emissions and ensured coal is loaded optimally and covered with tarpaulin.

(ix)	Environmental laboratory shall be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution control Board	Environment monitoring is being conducted regularly through Environment Protection Training and Research Institute (EPTRI), Hyderabad and particulate matter of size PM ₁₀ , PM _{2.5} µg/m ³ , SO ₂ µg/m ³ and NO ₂ µg/m ³ are being monitored by EPTRI, which was recognized by the MoEF.
(x)	Personal 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. Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures if needed.	Personnel working in dusty areas are being provided dust respirators and adopting job rotation practice. Training and information on safety and health aspects are being given through internal safety organization and Mine Vocational Training Centers. Occupational health surveillance is being carried out periodically through periodical Medical Examinations (PME) once in every 5 years. Every year 1/5 of the total manpower are being covered under PME and the details are being furnished in half yearly monitoring reports.
(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.	An area Environmental Department with qualified Environmental Officer is functioning under the control of General Manager of the Area to monitor the environmental safeguards. Apart from this, Environmental Management Committee is being formulated with multi disciplinary team under the project Officer functioning as a chairman of EMC.
(xii)	The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year wise expenditure shall be reported to this ministry and its Regional Office at Bangalore.	The funds earmarked for environmental protection measures will be kept in separate account and will be diverted for environmental related works only. Year wise expenditure is being submitted to the Ministry and its Regional Office at Bangalore.
(xiii)	The Regional office of the Ministry located at Bangalore 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.

(xiv)	A copy will be marked to concerned panchayat/local NGO if any from whom any suggestion/representation has been received while processing the proposal.	The report was submitted to the Romped panchayat for exhibiting the above for seeing the local people. The suggestion/representation made by NGO during OH were displayed at Rompaid panchayat.
(xv)	State Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District industry centre and Collector's Office /Tahasildar's Office for 30 days.	Complied.
(xvi)	The project authorities 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 and Forests at http://envfor.nic.in	The advertisement was given on 18.11.2008 in Deccan Chronicle (English daily) and vartha (Telugu Daily) widely circulated around the project