

### THE SINGARENI COLLIERIES COMPANY LIMITED

(A Government Company)
<u>Yellandu Area</u>

### PART-1

# HALF YEARLY COMPLIANCE REPORT OF ENVIRONMENTAL CLEARANCE CONDITIONS UPTO 30<sup>th</sup> September 2018

### A. SALIENT FEATURES OF THE PROJECT:

1	Nar	me of the Project	:	21 Incline Underground Coal Mine	
2	_	ganization	:	The Singareni Collieries Company Limited	
3		alfield	:	Godavari Valley Coal field	
4	Тур	e of Mine	:	Underground Method	
5	Technology		:	Conventional Bord & Pillar (Development,	
		<b>.</b>		Depillaring) by LHDs	
6	Enν	vironmental Clearance	:		
	Α	Letter No & date	:	J-11015/930/2007-I.II(M), dt 27.10.2008	
	В	- Carrotte Carrotty	:	Peak: 0.65 MTPA	
	С		:	745 Ha	
	D	Date of Public Hearing	:	11-04-2008	
7	Loc	cation of the Project		In Yellandu Area & Region of Bhadradri-	
				Kothagudem District Telangana	
	Α	Village	:	Romped	
	В	Tehasil	:	Yellandu	
	С	District	:	Bhadradri Kothagudem	
	D	State	:	Telangana	
	Е	Latitude	:	North N 17 <sup>o</sup> 34' 18" to 17 <sup>o</sup> 37' 05"	
	F	Longitude	:	East E 80° 17' 39" to 80° 9' 17"	
	G	Topo Sheet	:	No. 65C/6	
	Н	Nearest railway station	:	Singareni Railway Station on Dornakal	
		Nearest Airport	:	Hyderabad	
	J	Nearest town	:	Yellandu	
8	Add	dress for Correspondence	:		
	Α	Name	:	Bollam Venkateswarlu	
	В	Designation	:	Agent	
	С	Address		24 Area, Yellandu, Bhadradri-Kothagudem	
				District Telangana	
	D	Pin Code	:	507124	
	F	E-mail ID	:	Agt_jkgrp_yld@scclmines.com	
	G	Telephone No.	:	08745 252093	
	Н	Fax No.	:	08745 240348	
9		of the Project	:	18 Years	
	Α	1 0		1946	
	В	Total Life of the project as per	:	18 years	
-	С	EMP Balance Life	-	1 1/2 Years	
10			· ·		
10		ams Total Seams Present	H	2 (no o)	
			Ŀ	3 (no.s)	
44		Seams being worked	<u> </u>	2 Nos	
11	Dep			00	
		Minimum Depth (m)		38m	
		Maximum Depth (m)		340m	
	C Present working depth (m) 140 m			140 m	

12	Re	serves		
	Α	Total Geological Reserves	:	8.50 MT
	В	Total Extractable Reserves	:	8.50 MT
	С	Reserves already Extracted	:	3.127
	D	Balance Reserves	:	5.532
	Е	Coal production during last six months	:	0.0175 MT
13	La	nd Requirement		
	Α	Total Requirement (Mine Take Area)		745Ha
	В	Forestland Involved		305Ha
	С	Non-forestland		440Ha
	D	Land acquired so far		0.60Ha
		(Surface rights)		
14	Sta	atutory Clearances	:	
	Α	Ground Water Clearance		Lr.No 2o4/T/SCCL/2007, dt 29-05-2008,of GWD.
	В	Consent for Establishment	:	Ref.No.55/PCB/CFE/RO-KTM/HO/2010/620,dt
				31.05.2010
	С	Consent for Operation	:	APPCB/VJA/KGM/55/HO/CFO/2012-3530,
				dt 21-01-2012 and is valid up to December 2017.
	D	Forest Clearance	:	MoEF Lr No 8-260/85 Fry(Cons) dtd: 07.10.1986
				GoMS No: 5 Energy (PRI) Dept. 20 years from
				1.1.2015 to 31.12.2034
	Е	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 30th September 2018

## 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 <sup>th</sup> 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	Before commencement of extraction panels in lower seam, all the water bodies
	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.	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 149 and 150 of Coal Mines Regulation, 2017 are being taken. The permission from the Inspector of mines as per Reg.112 of Coal Mines Regulation, 2017 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 once in a month and after completion of the extraction once in 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 mtrs 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 143 of coal mines Regulation, 2017 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 TS 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. Ge	neral 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 <sub>2</sub> and NOx, Hg and other heavy metals such as Pb, Cr, As, etc. 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.	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 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 <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> and NO <sub>X</sub> 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 <sup>th</sup> May 1993 and 31 <sup>st</sup> 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 <sub>10</sub> , PM <sub>2.5</sub> μg/m <sup>3</sup> SO <sub>2</sub> μg/m <sup>3</sup> and ,NO <sub>2</sub> μg/m <sup>3</sup> 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 Romped 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	Complied.

	/Tahasildar's Office for 30 days.	
(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 <a href="http://envfor.nic.in">http://envfor.nic.in</a>	(English daily) and vartha (Telugu Daily) widely circulated about the

# PERIODIC PROGRESS REPORT REGARDING ENVIRONMENTAL PROTECTION MEASURES TILL 30<sup>TH</sup> SEPTEMBER 2017 IS ENCLOSED AS PART - II.

### 1. Production Details

SI.	Year	Coal (in MT)		
No		As per EC	Actual	
1	2007-08	0.55	0.518	
2	2008-09	0.55	0.530	
3	2009-10	0.55	0.374	
4	2010-11	0.55	0.391	
5	2011-12	0.55	0.390	
6	2012-13	0.65	0.332	
7	2013-14	0.55	0.316	
8	2014-15	0.33	0.201	
9	2015-16	0.33	0.203	
10	2016-17	0.33	0.179	
11	2017-18	0.33	0.0175	

### 2. Plantation:

1	No of plants planted during last six months.	Nil
2	Area covered in Ha	Nil
3	Expenditure incurred in Rs. Lakhs	Rs 7,96,187/-
	Last six months	
4	Total area brought under	133.7 Ha
	plantation so far in Ha	
5	Total no of plants planted so far	42,564
	since inception	
6	Species of plants planted	Nil
7	Seeds sown so far	Nil
8	Small plants planted so far	Nil
9	Total expenditure in Rs. lakhs -	Rs 5,028,909/-

### 3. Water Balance Statement:

SI	Description	Quantity in KLD
1	Average quantity of water pumped out of the mine	4032 KLD
2	Dust suppression	288KLD
3	Water used for drinking AND Domestic in the Mine bathing and other industrial requirement	94KLD
4	Plantation & Gardening	158KLD
5	Agriculture & Drinking water supply to near by colonies plantation	3456KLD

# 4. Micro-meteorological Monitoring:

Micro-meteorological station was installed at the top of General Manager's Office Singareni Collieries Company Ltd, Yellandu:

# Summary of micro-meteorological data generated at Yellandu area for the entire study period (APRIL 2018 - SEP 18)

Month	Wind	Speed	(m/s)	Temp	erature	e (°C)	Relati	ive Hun (%)	nidity	Rainf	all (mm)
	Mean	Max	Calm %	Mean	Max	Min	Mean	Max	Min	Total	Hourly highest
APRIL, 2018	2.4	8.2	7.08	31.2	41.7	22.5	64.0	95.7	27.9	39.7	21.3
MAY, 2018	3.3	10.6	7.93	32.4	42.0	22.0	64.7	97.1	36.8	17.1	10.6
JUNE, 2018	5.2	12.5	9.58	31.0	40.6	20.5	70.8	99.7	36.6	185.5	16.2
JULY, 2018	5.9	10.0	10.62	27.5	36.3	23.3	76.5	99.6	33.5	317.9	20.5
AUG, 2018	5.6	7.0	12.5	26.8	34.9	18.4	78.4	99.9	41.3	481.3	36.8
SEP, 2018	2.2	17.0	22.34	34.6	42.4	21.8	79.9	99.0	30.8	56.3	17.4

# Summary of micro-meteorological data generated for the study period (APRIL 2018 - SEP 18)

S.No	Parameter(s)	Min	Max	Mean
1.	Temperature (°C)	18.4	42.4	30.6
2.	Wind Speed (m/s)	Calm 12.8%	12.5	7.0
3.	Relative Humidity (%)	27.9	99.9	79.9
4.	Predominant Wind direction for the study period		t (SW), Sout Vest (SSW)	th South
5.	Total Rainfall (mm)	1	097.8 mm	

# 5. Phreatic surface monitoring: (Range of Water Table) ATTITUDE OF PHREATIC SURFACE IN GODAVARI VALLEY COALFIELD Area: No. 21 Incline Yellandu

Name of the		rs,	Vell	on	ш)	∑£	bu		Dep	oth to wate	r (m)
Village and distance from Mine	and Location Anwer Location S (m) s (m) Period Period Point Location Point Location Point Location Point Location Point Location Period		2016	2017	2018						
No.21 Incline Pathapusapalli			llə					Winter	3.00	3.20	3.50
2.00 km	Village entrance	D.Lakshmaiah	Agriculture well	4.00	5.50	Barakar Fm.	0.20	Pre- monsoon	3.20	3.50	5.30
	17°36'47.18", 80°17'12.08"	shr	icult	4.00	0.00	arak	0.20	Monsoon	2.00	1.50	2.82
	00 17 12.00	D.Lal	Agr			B		Post- monsoon	1.00	2.00	
No.21 Incline Pathapusapalli								Winter	3.70	3.50	4.10
2.00,km	Opp School 17°36'50.61",	J.Lakshmaiah	Jomestic	1.00	6.00	Barakar Fm.	0.35	Pre- monsoon	4.95	4.40	5.50
	80°17'11.86"	shr	Эог	1.00	0.00	arak	0.00	Monsoon	4.25	2.20	2.80
		D.Lal				B		Post- monsoon	1.85	3.35	
No.21 Incline Rompedu								Winter	3.55	3.00	2.80
2.5km	Gundala Pakhala jn.		Domestic	1.75	9.00	al Fm.	0.60	Pre- monsoon	6.60	5.10	5.50
	17°38'33.09", 80°17'50.48"	We	Jor	1.70	5.00	Pakhal	0.00	Monsoon	1.20	1.40	1.18
	00 17 30.40	Govt Well	1			Ь		Post- monsoon	1.40	2.50	
No.21 Incline Yellandu	In Darga							Winter	AB	AB	AB
0.6km	near Magzine	e	Domestic	1.00	7.90	Gneisses	0.50	Pre- monsoon	AB	AB	AB
	17°36'55.03",	a w	Dor			Gne	0.00	Monsoon	AB	AB	AB
	80°18'45.09"	Darga well						Post- monsoon	AB	AB	
No.21 Incline Yellandu	Opp Peddamma							Winter	4.20	4.45	3.80
0.2km	temple Gundala	iiah	Domestic	1.00	9.10	Barakar Fm.	0.45	Pre- monsoon	9.00	8.60	6.50
	road	Seshaiah	Jor	1.00	9.10	ırak	0.40	Monsoon	8.70	2.00	1.70
	17°36'17.57", 80°18'56.48"	D. Se	_			Bř		Post- monsoon	2.00	2.90	

#### 6. Report on Compliance of 21 incline : : Ground Water Clearance Conditions

No. 21 incline Ground Water Clearance was obtained vide Ref..No. 2126/Hg.II(1)/05, dt 11.04.2008 of Ground Water Department, Hyderabad

SI. No	Condition	Compliance
1	It is essential cluster piezometers in soft rock areas should be shallow tube wells.	4 piezometers were provided.
2	Advised to construct piezometers up to 10km(buffer zone) at an interval of 2.5km in all the directions in addition to the existing wells and monitor water levels during pre and post monsoon periods and furnish the data to Deputy Director, Ground Water Department, Bhadradri Kothagudem time to time to study the impact of coal mining activities.	Piezometers wells are constructed up to 10km(buffer zone) at an interval of 2.5km in all the directions in addition to the existing wells and monitoris being carried levels during pre and post monsoon periods and report is being submitted.to the Deputy Director, Ground Water Department, Bhadradri Kothagudem time to time to study the impact of coal mining activities.
3	Construction of series of check dams for augmentation of groundwarer in buffer zone.  (a)Across Bugga Vagu passing Repallewada and Kattugudem (V) at feasible areas.  (b)Across streams passing through Seetharampuram, Basavapuram and Madanpalli.	Series of check dams were Constructed of streams passing through Sitharampuram, Basavapuram and Madampalli for augmentation of groundwater.
4.	Construct different Ground water augmentation structures like rock fill dams, stone check – dams and garbion structures on the smaller streams.	Rock fill dams, stone check – dams and gabion structures were constructed on the smaller streams for ground water augmentation.
5	Seepage water may be diverted into near by tanks and streams.	Excess mine water is being diverted to nearby irrigation nallahs.

#### **Water Conservation Measures**

a. Mine water is diverted in to sumps of large capacities in the under ground and pumped out to surface after settling. b. Mine water pumped out is treated in settling tanks and filter beds and after chlorination it is used for drinking, washing etc and supplied to near by villages also. The excess mine water let out is being used for irrigation by the near by farmers. c. Waste water from service buildings/office is treated in septic tank and let out on surface for plantations. Depth of water table in the open wells of near by villages is monitored seasonally the same is furnished in the annexure IV enclosed here with. About 3.25 kms of trench made around plantations for soil moisture conservation and rain water harvesting. Garland drains were constructed around the mine and declared areas to restrict the entering of water in to it. g. Excess mine water is being let out on to the surface to the filter beds where coal fines are settled and only clean water is being discharged in to the water body which is further used by the local people to irrigation

# 7. Capital and Revenue Expenditure incurred on Environment Management from apr 2017 - sep 18

Sl.	Pollution Control Measures	During last 6 months (in Rs)		
No.		Capital	Revenue	
1.	Air Pollution (Prevention & Control)		₹6995476.12	
2.	Water Pollution (Prevention & Control)		₹ 42771779.33	
3.	Plantation		₹ 1638674.47	
4.	Consultancy payments/ Scientific studies		₹ 40,000.00	
5.	Stores		₹ 0.00	
6.	Others		₹ 22150.00	
	TOTAL		₹ 51468079.92	

### 11.Report on Periodical Medical Examination from apr 2018 - sep 18

SI. No	Month	No. of Persons Examined
1	Apr-18	02
2	May-18	07
3	June-18	25
4	july 18	12
5	aug 18	07
6	sep 18	08
	Total	61

# 12. Socio-economic Measures:

# Under Corporate Social Responsibility the following programmes were conducted at near No. 21 incline, Yellandu during

1.	05-10-2013	Distribution of House Plots to JK5OCP House loosers by sri P.Balaram Naik, Hon'ble Central Minister, Sri Ramireddy Venkatreddy, Hon'ble State Minister, Sri W.Vijaybabu, GM/YA., participated in the programme.				
2.	07-10-2013	Conducting of Vocational courses (Tailoring, Computer-DTP and Maggam) examinations at 24 Area, JK Area, Lachagudem Village and Koyagudem Village and awareness programme conducted by Sri Bhasker Rao, Administrative Officer, Khadi Gramodyug Mah Vidyalaya, Hyd.bad and				
3.	20-10-2013	Area Level Football Meet inaugurated by Sri W.Vijaybabu, GM/YA conducted at Runs ar Goals Stadium Sri K.Basavaiah, Dy.GM (Per), Sri K.Maruthi, Sr.PO., 21 Inc. participated the programme.				
4.	30-10-2013	Inauguration of Tailoring and Embroidery Course by Sri GES Prakasha Rao, Personnel Manager, YA at Bachelor Hostel, JK Colony,YA.				
5.	12-11-2013	Competitions for School Children of Yellandu Area on Drawing and Painting (Seniors & Juniors), Songs Competition (Juniors and Seniors), Group Dance (Seniors) in lieu of Children's Day, 2013.				
6.	14-11-2013	14th November, Children's Day progrmme (self government day) conducted at SC High School, JK Colony and prizes distributed to runners and winners of events conducted on 12-11-2013.				
7.	03-12-2013	International Disabled Day programmes. Sports and Games conducted at JK High School after conducting the sports and games prizes distributed to runners, winners and every participant.				
8.	12-12-2013	Inauguration of Army coaching Camp at CER Club Grounds by Sri W.Vijaya Babu, GM.YA.				
9.	01-01-2014	Inauguration of Beautician Course and Maggam Work Course by SMT. W.Suchitra Rani Vijaybabu, President, SEWA, YA at Bachelor Hostel, JK Colony, YA.				
10.	01-01-2014	Inauguration of Beautician Course by SMT. W.Suchitra Rani Vijaybabur President, SEWA, YA at SSS Officce, 24 Area,YA.				
11.	01-01-2014	Inauguration of Maggam Work Course at SSS Officce, 24 Area, YA.				
12.	30-01-2014	Steel Plates, Glasses and Sports Material (Volley ball net, ball) distributed to ST School children of Polampally Thanda, Bhagya Nagar Thanda and Usrikayalapalli villages.				
13.	04-02-2014	Inauguration of Motor Driving (Car/Jeep) Course at Bachelor Hostel, JK Colony, YA.				
14.	22-02-2014	World Thinking Day Programmes inaugurated by Sri W.Vijay Babu, General Manager, YA., at JK High School,YA.				
15.	24-02-2014	Free Medical Camp and LV Prasad Eye Testing Camp conducted at Lavudya Thanda Village . Singareni Collieries Doctors has given treatment for 300 Upper Primary School students of Usirikayalapally, Bhagyanagar Thanda, Polampally Thanda etc.,				
16.	30-01-2014	Steel Plates, Steel Glasses and Sports Material (Volley ball net and ball) distributed to ST School children of Polampally Thanda, Bhagya Nagar Thanda and Usrikayalapalli villages.				
17.	04-02-2014	Inauguration of Motor Driving (Car/Jeep) Course by Sri. W. Vijaybabu, General Manager YA at Bachelor Hostel, JK Colony, YA.				

		For Madical Command IV Proved F. T. C. C. L. C.
18.	24-02-2014	Free Medical Camp and LV Prasad Eye Testing Camp conducted at Lavudya Thanda Village, given treatment for 300 Upper Primary School students of Usirikayalapally, Bhagyanagar Thanda, Polampally Thanda etc.,
19.	30-02-2014	Steel Plates, Steel Glasses and Sports Material (Volley ball net and ball) distributed to ST School children of Polampally Thanda, Bhagya Nagar Thanda and Usrikayalapalli villages.
20.	04-03-2014	Quiz competition conducted to Mahilas in lieu of International women's Day-2014 at CER Club, JK Colony, YA.
21.	06-03-2014	Sports and Games conducted in lieu of International Women's Day 2014 at CER Club, JK Colony, YA
22.	08-03-2014	International Women's Day-2014 celebrations (Distribution of bred, milk and fruits to patients at Govt. Hospital, Rally from JK High School to Govt. Hospital, JK Colony back to JK Colony, speeches and distribution of prizes at JK High School, YA.
23.	2015	10 Medical camps Conducted KOCP and JK5OCP Surrounding areas Examined patients 1583.
24.	2015	4 Eye Medical camps conducted LV Prasad Eye Institute, Paloncha refractionists have examined Eye testing to 684 villagers.
25.	2015	Mobile Medical van Facility Inauguration to MLA & GM at Kistaram village KOCP YA.
26.	2015	SSS examinations conducted at JK Colony /24 Area/ Koyagudem/ Kistaram Village.
27.	2015	School note books distribution at Polampally,B Tanda,usirekayalapally villages on 21.06.2014.
28.	2015	Tube lights, School benches and spectacles distribution at Koyagudem village to Five Sarpanches on:27.06.2014.
29.	2015	Inauguration of 1 Driving Course at Yellandu Area ( KOC & JK OC 20 persons ).and Feb-2014 batch 20 License Issued. at CER Club YA.
30.	2015	Inauguration of 2 DTP course training Programmes conducted at Lachagudem KOCP and Bhagyanagar Thanda JK5OCP Area.
31.	2015	6" Pipes flanges welding work for 100nos and jointing work for 600 mtrs for Supply water to Usirikayala palli villagers.06.09.2014
32.	2015	For purchases of opticals lans with frame to provide the same to the PAF's/PDF's who are going to under gone Medical Examination by M/S SCCI Ltd and L.V.Prasad Eye Instuits Palvancha.for KOCP Villagers. 12.09.2014
33.	2015	6" Old pipes Flanges welding and jointing for 250 nos for 10kgs for supply Of was to Daliya Thanda. 14.10.2014
34.	2015	6" Old GI pipes jointing and welding work of 300 pipes for a Length 1.5 Km Supply of raw water to Bhagyanagar Thanda Near JK5OC 18.11.2014
35.	2015	Repairing of old benches for school of Kistaram,Laxmipuram Villages under CSR KOCP 27.11.2014
36.	2015	Supply of Lens and goods to surrounding villagers KOCP 24.11.2014
37.	2015	Supply of Lens and goods to surrounding villagers KOCP 26.11.2014

2015	Supply of Lens an goods to surrounding villagers KOCP 03.10.2014
2015	Repairs to rods at Kothur & Laxmipuram PAF's Under CSR 2014-15 – 20.12.2014.
2015	Supply of Optical lens to Surrounding villagers of JK5OCP to PDF;s 23.12.2014
2015	Drilling bore holes and boring of hand pumps JK5OCP 05.01.2015
2015	Supply & spreading of gravel to the road leading to polampalli thanda village under CSR YLD 11.02.2015
2015	Purchase of SS Plates and Glass & Sports material to school KOCP 06.01.2015
2015	Old benches repairs KOCP 19.02.2015
2018	Supplying & spreading of gravel to the road leading to Polampalli Thanda (V) Yellandu area
"	Supplying & spreading of gravel 150mm thick on 400 RM of road and spreading ditches with 40mm metal at Laxmipuram (V), Yellandu area
"	Supplying & spreading of gravel 150mm thick on 200 RM of road at Kothur (V), Yellandu area
"	Laying of CC road from Anjaneya swami temple at MVTC to Patha poosapalli (V), Yellandu area
"	Laying of CC roads for Usirikayalapalli, Polampalli & Bhagyanagar Thanda Villages, Yellandu area
"	Construction of 2 sheds for RO Plants at Bodu & Gangaram (V), near KOCP, Yellandu area
"	Laying of CC roads in Seetharampuram & Thodithalagudem (V), Yellandu area
"	Laying of CC roads in Polampalli & Usirikayalapalli (V), Yellandu area
"	Laying of CC roads in Bhagyanagar Thanda & Lavudya Thanda (V), Yellandu area
"	Construction of CRS masonry dividers from Mahabubabad- Yellandu road to bus stand centre, Yellandu area
Construction of CRS masonry dividers from Mahabubabad- Yellandu r center to Jagadamba center, Yellandu area.	
	2015 2015 2015 2015 2015 2018  "" "" "" "" "" "" "" "" "" "" "" "" "

• Singareni Seva Samithi has conducted trainings programs at Yellandu and surrounding villages and the details of the same is as below.

CNIC	₹7	<i>T</i> . 11	3.6	D 41.1	α .	3.5.4	A /TD 71	F.1.
<u>SNO</u>	<u>Year</u>	<u>Tailoring</u>	<u>Maggam</u>	<b>Beautician</b>	<u>Computer</u>	<u>Motor</u>	Army/Polic	<u>Fabric</u>
		Course/	Course/	Course/	Course/	<b>DrivingCour</b>	<u>e</u>	<b>Painting</b>
		Persons	Persons	Persons	Persons	se	Recruitmen	course/per
						/Persons	t/Persons	sons
						<u>/1 CI SUIIS</u>	UI CI SUIIS	50115
1	2011-12	3/60	<u>=</u>	=	=	1/20	1/80	1/20
_		<u> </u>	-	-	=	<u> </u>	2700	<u> </u>
	2012 12	4/00	1/20		1/20	1/20	1/20	2/40
<u>2</u>	<u>2012-13</u>	<u>4/80</u>	<u>1/20</u>	=	<u>1/20</u>	<u>1/20</u>	<u>1/20</u>	<u>2/40</u>
<u>3</u>	2013-14	2/40	1/20	1/20	<u>1/20</u>	<u>-</u>	<u>1/50</u>	-
_						_		_
4	2014 15	1/20	1/20	1/20	2/40	1/20	1/60	
4	<u>2014-15</u>	<u>1/20</u>	<u>1/20</u>	<u>1/20</u>	<u>2/40</u>	<u>1/20</u>	<u>1/60</u>	=
<u>5</u>	2015-16	<u>6/120</u>	<u>1/20</u>	<u>1/20</u>	<u>1/20</u>	<u>=</u>	4/290	-
_						_	<del></del>	-
-	2016-17	6/120	2/40	2/40			1/135	
<u>6</u>	<u>2010-17</u>	0/120	<u>2/40</u>	<u>2/40</u>	=	=	1/135	=
<u>7</u>	2017-18	6/120	2/40	3/60	<u>1/20</u>	2/40	<u>2/31</u>	2/40
_								
8	2018-19 up to	7/140	2/40	2/40	_	1/20	2/11	1/20
8		1/170	<u> 21 70</u>	<u>2/40</u>	=	1/20	<u>4/11</u>	1/20
	<u>Sep-18</u>							
	<u>Total</u>	<u>31/620</u>	<u>10/200</u>	<u>10/200</u>	<u>6/120</u>	<u>5/100</u>	<u>11/757</u>	<u>6/120</u>

#### 13. The minutes of EMC



### **The Singareni Collieries Company Limited**

(A Government Company) Yellandu Area

Environment Review Meeting held on 21-06-2018 at the Office of the Manager 21 Incline at 5.00 PM. The following members have attended the meeting.

SI. No	Name	Designation	
1.	Sri B Venkateswarlu	Agent UG Mines	Chairman
2.	Sri.B.Satyanarayana	Sri.B.Satyanarayana Manager	
3.	Sri Govardan Reddy	Sup. Survey Officer.	Member
4.	Sri V Ravi Kumar	S.E. (Civil).	Member
5.	Sri b.sydulu	DGM Environment Cell	Member Secretary
6.	Sri Keerthi Ramesh	Safety Officer, Y.A.	Member
7.	Sri Ashok Kumar	Sr. Survey Officer	Member
8.	Sri J.Sunitha.	Jr. Estates Officer, Y.A	Member
9.	Sri Nerrella	M.S., Area Hospital Y.A	Member

#### Minutes of the Meeting:-

**1.** Chairman enquired Manager, Env. Cell, regarding the recent Air and Water quality monitoring Reports.

Manager, Environment Cell replied that the air and water quality monitoring are within the limits. The analysis is being carried out by EPTRI, Hyderabad Regularly

2. Chairman reviewed the environmental clearance conditions with the members.

Manager, 21 incline replied that the Environmental clearance conditions are being followed strictly.

**3.** Chairman reviewed the Ground Water clearance conditions with the members and advised the Manager Env. Cell for close monitoring the ground water table.

Manager, Environment Cell replied that the Ground water level monitoring is being carried out by the Exploration department, Kothagudem regularly, found that there is no decrease in the ground water level.

4. Chairman reviewed the output as per EMP and actual with the members.

Manager, 21 Incline replied that the output is not exceeding the limits of EMP.

5. Chairman enquired SE (Civil) regarding the monitoring the drinking water.

SE (Civil) replied that the drinking water analysis is being done by the external agency, and water is fit for human consumption and drinking water is chlorinated.

6. Chairman requested the Safety officer, to see water spraying properly at the UG working places to control the raising the coal dust.

Safety Officer, 21 incline replied that the water spraying is being carried out regularly at all coal transporting points.

7. Chairman reviewed the water spraying arrangements at CSP, YA. dgm, Env. Cell, YA replied that the water spraying is being done regularly at the roads, coal yards and also on the coal dumps of coal regularly to control the raise of the coal dust.

Chairman requested all the members to implement all the conditions without any lapse for better environmental protection and educate the work persons on this.

# 14- Compliance report of Public hearing meeting minutes.

	Minutes	Compliance
_	Sri Abdul Nabi, R/o. 21 Incline Area,	
1	CPM, Town Secretary	
	1. He said that SCCL is not taking	SCCL is is being taken all the precautionary
	proper precautions for minimising air	measures to protect environment for
	pollution due to dust. He also requested to	minimizing the air pollution with water
	take up all environmental protection	spraying arrangements.
	measures for minimising the pollution	
	problems.	
	2. Further, he said that mining activities	As per ground water study there is no
	are causing water depletion in nearby areas	depletion in ground water levels.
	and in this regard he requested SCCL to	
	improvise drinking water supplying system	
	in 21 Incline area, 24 Area and Strut Pit	
	area.	
	3. He suggested taking up plantation for	All the vacant area available in SCCL Yellandu area was done with block
	protecting environment and health of the	plantation.
	people.	As not the policy of the company decision
	4. He requested to set up Mini Power	As per the policy of the company, decision
	Plant at Yellandu area so as to utilize the	will be taken.
	coal generated from these mines, which in	
	turn generates additional employment.  Sri K. Saraiah, HOM, 21 Incline & Br.	
<u>2</u>	Secretary, AITUC	
	1. He suggested planning for	Exploration work is going on in Gundala for
	underground mines at Gundala,	future mining.
	Kachanapalli, and Koyagudem for	Tatalo Illining
	increasing employment opportunities and	
	also for development of Yellandu town.	
	also for development of Tellanda town.	

informed As per the policy of the company, decision 2. He that they have requested for sanction of corpus fund for will be taken. introducing science group in Degree College at Yellandu during public hearing of JK - 5 OC Project which was held in the month of December, 2007. 3. He requested for arrangement of Every month two medical camps were medical facilities to conducted for medical facilities to the people the people of neighboring villages. of neighboring villages. Water spraying is being maintained in and He also requested to put all efforts 4. for further improvement in implementing the surroundings of the CHP. environmental pollution control measures like in water spraying in particular at 21 Basti, 14 No.Basthi and CSP Basthi. He informed that neither SCCL nor 5. Excess mine water was supplied to the Yellandu Municipality is paying attention to municipality for public water and also let into solve acute drinking water problem. In this nallahs for irrigation in the surrounding area. regard, he requested SCCL to improve drinking water supply system. He informed that the SHAPE funds As per directives of The District Collector 6. are being provided to Municipalities only, by SHAPE programmes were taken which surrounding villages around the surrounding villages also. mines like Rompaid, Sudimalla and Karepalli are not covered. 7. He requested to surrender 16 to 20 As per the policy of the company, decision acres of leased land in Survey No. 588 so will be taken. as to enable the Government to allot the same to poor people. As per the policy of the company, decision While explaining the necessity of will be taken. electricity, he requested to take initiation for setting up a Mini Power Plant at Yellandu. He suggested for expansion of JK - 5 Opencast up to Rompaid village to increase

employment opportunities.

	Sri D. Prasad, IFTU Branch Secretary,	As per the policy of the company, decision
3	Yellandu	will be taken.
	1. He said that SCCL is providing jobs to	
	the contractual persons by outsourcing	
	which is reducing direct employment	
	particularly in opencast mines.	
	2. While welcoming the project He	As per the policy of the company, decision
	requested SCCL to continue dependant	will be taken.
	employment scheme.	
	Further, he requested to take initiation	
	, ε ε η	As per the policy of the company, power
	for setting up a Mini Power Plant at Yellandu so as to use the coal where it is	plant will be established.
	generated.  4. He informed that our children are	As per the policy of the company, decision
	going to other towns for science group due	will be Taken.
	to non availability of the same in Yellandu	
	Degree College and in this regard, he	
	requested SCCL for introduction of science	
	group at Yellandu Degree College	
	5. He also requested to allocate more funds	As per directives of The District Collector
	for the development of surrounding villages	SHAPE programmes were taken in surrounding villages also.
	of the project.	carrountaing timages also:
	7. He informed that there is no proper water	Excess mine water was supplied to the
	supplying scheme though there is water	municipality for public water and also let into
	source (Tank) and sufficient water.	nallahs for irrigation in the surrounding area.
	8. He suggested to take up underground	Exploration work is going on in Gundala for
	mines at Gundala and Kachanapalli Sri Kanagala Peraiah, TNTUC Secretary	future mining.  As per ground water study there is no
<u>4</u>	1. while welcoming the project he	depletion in ground water levels. However,
	informed that ground water depletion is	Excess mine water was supplied to the
	taking place due to underground mining	municipality for public water and also let into
	activities and in this regard, he requested to	nallahs for irrigation in the surrounding area.
	solve the drinking water problem.	
	2. He requested to spend SHAPE funds of	As per directives of The District Collector
	Rs.9.0 crores per annum in project affected	SHAPE programmes were taken in
	areas. Further, he requested to provide	surrounding villages also and it is a
	employment to land losers.	corporate decision.

_	Sri S. Rajeswar Rao, HOM & Asst. Br.	All the vacant available in Yellandu area
<u>5</u>	Secretary, SCWU	under SCCL was done with block plantation. Water spraying is being maintained in and
	1. He requested to take up plantation and	surroundings of the CHP.  Every month water potability test is being
	water spraying arrangements at CHP and	
	along coal transport roads to minimize air	tested.
	pollution	
	He also requested SCCL to lift the power	As per the policy of the company, power
	cut so as to take rest after coming from	cuts will be implemented in entire Singareni
	office.	colonies.
<u>6</u>	Sri Y.Prasad, R/o Bodu (V), Tekulapalli (M), CPI(ML), New Democracy  1.He complained that no SHAPE funds are	As per directives of The District Collector SHAPE programmes were taken in
	being provided to their mandal.	surrounding villages also.
	2. He requested to set up a hospital at	As per the policy of the company, decision
	Bodu village for the benefit of local poor	will be taken.
	people.	
	3. He also requested SCCL to pay proper	As per the policy of the company, decision
	compensation according to the law in	will be taken.
	vogue.	
7	Sri Mola Babu Chairman, Yellandu Municipality,  1. Requested to spare one bore hole	Excess mine water was supplied to the municipality for public water supply.
	out of three large diameter boreholes with	
	pump to Yellandu Municipality for supplying	
	drinking water.	
	2. To take environmental protection	Water spraying is being maintained in and
	measures at CSP and coal transport roads.	surroundings of the CHP.
	3. To allocate more SHAPE funds to	As per directives of The District Collector
	Yellandu Area.	SHAPE programmes were taken in
		surrounding villages also.
	<b>4.</b> Requested the Chairman of the meeting	As per the policy of the company, decision
	to provide Rs. 10 lakhs from Government	will be taken.
	for solving the water problem of	
	Yellandulapadu tank.	
<u>8</u>	Sri Gummdi Narsaiah, Hon'ble MLA.  1 He asked to extend medical facilities in Singareni Hospitals for local people.	As per the policy of the company, decision will be taken.

2. To take up developmental works like	As per directives of The District Collector
roads, water, drainage facilities within 10 KMs radius of the Project.	SHAPE programmes were taken in surrounding villages also.
3. To take up underground mines for generating employment and avoiding pollution problem.	As per the policy of the company, decision will be taken.
<b>4.</b> To give preference to Yellandu Area while allocating SHAPE funds as Yellandu is birth place of Singareni.	As per directives of The District Collector SHAPE programmes were taken in surrounding villages also.
5 With regards to Corpus fund to Degree College for introducing science group, he said that C&MD SCCL has agreed for the same.	As per the policy of the company, decision will be taken.
<b>6.</b> To supply drinking water through tankers to the public in the needy areas.	Supply of water to surround habitations.  Whenever need of drinking water in surrounding villages, water is being supplied through water tankers.
7. To allocate funds of Rs.50.00 lakhs from the Government to take up works at Yellandulapadu Tank like increasing its water retention capacity, construction of overhead tank etc.	As per the policy of the company, decision will be taken.

AGENT,

No. 21 Incline UG Mine