



THE SINGARENI COLLIERIES COMPANY LIMITED

(A Govt. Company)

Sustainable Development Activities (2020-21)



Reclamation



Agriculture by
Mine Water Utilisation



Eco-Park



Summer Storage Tank



In pit crusher



Surface Miner



Processed Overburden Plant



Solar Power Plant

Creation of Eco-parks

Foundation stone was laid for the proposed Eco-Park at Gautham Khani OC on 23.07.2020 by Shri Vanama Venkateswara rao, Hon'ble MLA, Kothagudem Constituency and Shri S.Chandra Shekar, Director (OP)&(PA&W) in connection with VRIKSHAROPAN ABHIYAN – 2020 programme of MoC.

The tentative budgetary requirement for the proposed Eco-Park at GK OC project is Rs.2.00 Crores.

Eco-park works are under progress



Mine Water Utilization

The mine discharge water is being utilized for industrial & domestic purposes such as dust suppression, stowing, washing of machinery, fire fighting, plantation, and drinking.

After meeting the industrial requirement, part of the excess mine discharge water is being supplied to SCCL colonies and surrounding villagers for drinking purpose after treatment in filter beds.

The remaining excess mine discharge water is channeled through settling tanks before discharging in to nearby agriculture tanks for community use such as irrigation and for ground water recharge.

Summer water storage tanks have been created near most of the opencast mines to store excess mine discharge water.

About 100 surrounding villages are being benefitted by excess mine water discharge.

Mine Water Utilization

Year 2020-21	Water pumped out from mines	Own Use (Industrial)	Community Use				
			Domestic water		Irrigation water		Total
			Volume	Beneficiaries (@15 LPCD) (per day)	Volume	Irrigation	Volume
LKL			LKL	Nos.	LKL	Acres	LKL
Target	992.17	525.95	13.16	2,40,000	453.06	4,500	466.21
Actual	992.30	524.57	13.17	2,42,000	454.56	4,500	467.73

Agricultural Fields near by OB dumps of JVR Open Cast Mine



Agricultural Fields near by OB dumps of RG Open Cast Mine-III



Mine Water Utilization

Summer Storage Tank near RG OC-III project



Summer Storage Tank near RG OC-II project



Mine water Utilization

Supply of drinking water to surrounding villagers



Parshuram pally



Venkateswarla pally

Mine water Utilization

List of benefitted villages

1	Strut-pit Basthi	27	Peddampaet & Mangalpalli	53	Dhanbad	79	Beddalonipalli
2	Stalin Nagar	28	Medapalli Village	54	Kistaram	80	Kashimpalli
3	Thilak Nagar	29	Dubbagudem	55	Rejerla	81	Reddy colony
4	Kummar Basthi	30	Bhagatsingh Nagar	56	Barlipet	82	Gandhinagar
5	Seshagiri Basthi	31	Muthyalampalli Village	57	Main Hospital Area	83	Shanthinagar
6	Bolli Nagar	32	Orregadda	58	Budidagadda	84	Madina Nagar
7	Cheuvu Katta	33	Kasipeta	59	Old Rama Talkies area	85	LB nagar
8	Bupesh Nagar	34	Amarwadi, Sarangapalli	60	Babu Camp	86	Krishna colony Plots area
9	Vijayalaxmi Nagar	35	BPA Muncipal Area	61	Writer Basthi	87	Subhash colony plots area
10	JK-5 Hutment	36	Rachapalli Village	62	CMPF Office area	88	Bhaskara gadda village
11	Vengalrao Nagar	37	Akkapalli Village	63	Coolie line	89	Veshyalapalli
12	Indira Nagar	38	Kannala Village	64	Ganesh Basthi	90	Basavarajupalli
13	No.15 Basthi	39	Vempadu Village	65	Superbazar area	91	Parashurampalli
14	Kakatiya Nagar	40	Huts area-KK Nagar	66	Sanyasi Bhasthi	92	Peddapur
15	Subash Nagar	41	Huts area-Lamadi Thanda	67	Nehru Basthi	93	Ravinagar
16	Sanjay Nagar	42	SingireddyPalli&Chandanapur	68	Durgam Basthi	94	Arunakka nagar
17	Balaji Nagari	43	Alluru village	69	Ram nagar	95	Sundarayya Colony
18	Lalithapuram	44	Penchikalpet	70	N.K.Nagar	96	Singapur
19	Usirikayalapalli	45	Penagadapa	71	Bhajanamandir	97	Thallapalli
20	Seetaramapuram	46	Sitampeta	72	Gajularam Basthi	98	Guttedar Palli
21	Bhagyanagar Thanda	47	Rudrampur	73	Gouthamnagar	99	Ramarao Peta
22	Lachagudem	48	Garibpeta	74	Patha Kothagudem	100	Jangeti Village
23	Venkateshwarlapalli	49	Ramavaram	75	Ganga Hussain Basthi	101	Bhupalapalli village
24	Huts area(Sector 1&2)	50	3 Incline colony	76	A-Power House Basthi	102	Vippala Singaram
25	Janagama Village	51	Seetampeta	77	Main Bazar	103	Annaram village
26	Private Area	52	Gouthampur	78	Mathura Basthi	104	Kommugudem village

Reclamation

Details of Bio-Reclamation/Plantation (2020-21)									
	Within leasehold (Ha)					Reclamation/Plantation Outside Lease hold		Total	
	Bio-reclamation		Cultivation	Bamboo	Grassing				
	Area (Ha)	Plantation (Nos.)	Area (Ha)	Area (Ha)	Area (Ha)	Area (Ha)	Plantation (Nos.)	Area (Ha)	Plantation (Nos.)
	793.5	19,83,750	-	162	259	11	27,500	804.5	20,11,250
Target									
Achievement	799.00	19,98,000	-	162	259	10	25,000	809.00	20,23,000

Note: The Bio-reclamation consists of both Bamboo and Grass as mentioned above.

Reclamation

RG OC-I- External Dump Plantation



JVR OC-I- External Dump Plantation



Plantation over stabilized Internal dumps



Avenue Plantation
Sathupalli-Kothagudem Highway



Processed Overburden

Processed Overburden (POB) and **Bottom Ash from TPPs** are being used as stowing material in underground mines of SCCL in place of river sand which is a scarce commodity and its use is environmentally un-friendly.

[Processed Overburden Plant at Sri Rampur](#)



[Processed Overburden Plant at Ramagundam](#)



[Processed Overburden Plant at Bhupalpalli](#)



Processed Overburden

POB Utilisation-2020-21

POB (All fig. in Cu.m)												
	Mine	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	TOTAL
1	PVK 5					6125	46819	36157	9532	0	0	98633
2	GDK-1&3						48103	29935	76059	56748	30999	241844
3	GDK-2&2A						37702	15685	31123	6710	24037	115257
4	GDK-5						43400	173489	72164	0	0	289053
5	GDK-11 Inc.						0	24244	56015	0	11640	91900
6	GDK 7LEP						48054	0	0	0	0	48054
7	RK 7						5803	5909	23736	45357	56860	137665
8	RK 8						52287	25253	50279	916	2986	131721
9	SRP- 1 Inc.					27596	130557	89287	2496	34046	59982	343964
10	SRP- 3 Inc.					620	10766	15053	15807	45477	64993	152716
11	IK-1A						0	7997	0	2720	35379	46097
12	KASIPET					31249	77872	12610	0	11704	34350	167785
13	RK 1A					48287	99117	78523	0	255	13908	240090
14	KK-1					10000	7628	44268	420	40369	75029	177714
15	KTK-1 Inc.	64533	47200	3369	5633		14619	0	49339	28166	11233	224091
16	KTK-2 Inc.	28270	6002	27642	77615	64073	26348	0	0	0	0	229950
17	KTK-5 Inc.	4278	1952	5601	1496	43989	18397	5026	21489	46278	17371	165876
18	KTK-6 Inc.	0	34132	73149	19865	2719	2275	1062	17025	37752	29702	217682
19	Total	97081	89286	109761	104609	234658	669747	564498	425484	356498	468469	3120091

Bottom Ash Utilisation

Bottom ash is being utilized successfully for stowing in UG mines. The particle size of the bottom ash shall be not less than 53 microns or otherwise there is problem of water drainage. As per statute, DGMS has permitted to use bottom ash of particle size not less than 53 microns. The size of the bottom ash is tested at frequent intervals. Bottom ash is transported to mines in wet condition in tarpaulin covered trucks.

Sources:

1. NTPC located at Ramagundam
2. STPP located at Jaipur, Mancheria
3. Navabharat & KTPS located at Palvoncha, Kothagudem.

Bottom Ash Utilisation

Bottom Ash Utilisation-2020-21

Bottom ash (All fig. in Cu.m)												
	Mine	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	TOTAL
1	PVK 5					10039	17393	16784	10406	6378	0	61000
2	GDK-1 Inc.		24471	114372	161804	37353	78896	191574	110605	164079	61650	944803
3	GDK-2 Inc.						43450	229677	114322	275582	78281	741312
4	GDK-5 Inc.		0	27917	116249	86478	131250	91261	195373	24742	0	673270
5	GDK-11 Inc.						0	0	0	6061	0	6061
6	GDK-7Lep						46823	206044	182369	219398	212740	867375
7	Vakilpalli					54163	175565	123561	112786	18699	54326	539101
8	GDK-10 Inc.						29635	78468	28529	0	0	136632
9	RK-7 Inc.		18868	110975	208777	144776	232177	193070	67099	86452	64507	1126700
10	RK-8 Inc.		9693	92355	143061	121563	95372	157828	72891	155795	34121	882679
11	SRP-1 Inc.		24953	79824	15680	51305	843	710	0	25	41951	215290
12	SRP-3 & 3A Inc.		12686	31802	106374	181063	174200	205973	132392	60520	38448	943458
13	IK-1A Inc.		0	51442	156785	125379	107303	127416	110924	81865	43986	805100
14	kasipet						2586	32569	58478	94621	56004	244259
15	RK 1A						15124	42541	13623	15841	15473	102603
16	KK- 1						11034	29219	20532	45787	5436	112008
17	KTk-1 Inc.								0	0	0	0
18	KTk-2 Inc.								0	0	0	0
19	KTk-5 Inc.		2276						0	0	0	2276
20	KTk-6 Inc.								0	0	0	0
	TOTAL	0	92947	508687	908730	812119	1161651	1726694.8	1230329	1255846	706923	8403926

Promoting Renewable Energy

SCCL proposed to set up 299.5 MW capacity solar plants (in 3 phases) with capital outlay Rs.1361.5 Crores. Of the 299.5 MW capacity, **109** MW capacity plants were commissioned in 2020-21. Remaining **190.5** MW capacity units will be commissioned in 2021-22.

Phase-I (2020-21)

Sl. No	Area	Solar plant capacity (MW)	Commissioned as on 31.03.2021	Status of installation
1	Manuguru	30	30	30 MW Synchronized on 30.07.2020
2	Yellandu	39	39	15 MW synchronized on 09.01.2021
				24 MW synchronized on 05.03.2021
3	Ramagundam -3	50	30	1). 15 MW Synchronized on 27.11.2020 2). 15 MW synchronized on 20.01.2021.
4	STPP	10	10	10 MW Synchronized on 10.02.2020.
	TOTAL	129 MW	109 MW	

Phase-II (2021-22)

Sl. No	Area	Solar plant capacity (MW)	Status of installation
1	Mandamarri stage - 1	28	Synchronized on 17.04.2021
2	Mandamarri stage - 2	15	Synchronized on 08.04.2021
3	Kothagudem stage -1	37	Under Erection
4	Bhupalapalli	10	Under Erection
	TOTAL	90	

Promoting Renewable Energy

Phase-III (2021-22)

S. No.	Location	Type	Capacity (MW)
1	Kothagudem	Ground mounted	22.5
2	Chennur		11.0
3	RG OC1 Dump	OB Dump	22.0
4	Dorli OC1 Dump		10.0
5	STPP Raw water reservoir	Floating solar	10.0
6	Dorli OC2 Void area		5.0
		TOTAL	80.5

Promoting Renewable Energy

Solar Power Plant at STPP (10 MW)



Solar Power Plant at Manuguru (30 MW)



Promoting Renewable Energy



Synchronization of 15 MW Solar Power Plant at RG 3 on 27.11.2020

Promoting Renewable Energy

Office Buildings/Guest Houses

Present Installed Capacity

S.No.	Location of the solar plant	Capacity of the plant	Type
1	Guest House, MMR	4 kWp	Roof Top
2	GMO, RG3	10 kWp	Roof Top
3	Singareni Bhavan, Hyderabad	60 kWp	Roof Top
4	SC Polytechnic, SRP	100 kWp	Ground Mounted

Proposed Units

S.No	Location of the solar plant	Capacity of the plant	Type
1	New Head office building, Corp.	80 kWp	Roof Top
2	EPI centre building, Corp.	80 kWp	Roof Top