HALF YEARLY COMPLIANCE REPORT ON ENVIRONMENTAL CLEARANCE CONDITIONS AS ON 31<sup>st</sup> March, 2023

FOR 21 INCLINE UNDERGROUND COAL MINE EXPANSION PROJECT BHADRADRI KOTHAGUDEM DISTRICT, TELANGANA STATE



THE SINGARENI COLLIERIES COMPANY LIMITED (A Government Company) YELLANDU AREA The Singareni Collieries Company Limited (Λ Government Company) Yellandu Area

YELLANDU- P.O 507124 Khammam Dist., A.P. Telephone GM: 08745-240044 Env. Manager: 08745-240329 Fax No. : 08745-240348

Ref .:- YLD/AGTUG/21 TMC/ G-29/85

Dt: \_\_\_\_\_\_6-06-2023

To, The Director, Ministry of Environment, Forests & Climate Change (MoEF & CC), Integrated Regional Office, 3rd Floor, Room No. 309 Aranya Bhavan, Opp:RBI Saifabad-500004, Hyderabad.

#### THROUGH G.M, SCCL, YELLANDU AREA

Sir,

Sub: - Half-Yearly Environmental Monitoring Report of 21 Incline Mine of Yellandu Area of S. C. Co. Ltd. - Reg.

Ref: - MoEF letter No.J-11015/930/2007-IA.II(M),Dt.27<sup>th</sup> October 2008. -X-

With reference to the above, please find enclosed herewith the Half-yearly Environmental Monitoring Report for the period ending 31-03-2023 in respect of No 21 Incline Mine of Yellandu Area of the Singareni Collieries Co. Ltd., Yellandu Area, Bhadradri Kothagudem District, Telangana State

The report consists includes the status of implementation of Environmental clearance conditions and various control measures taken by us during the said half-yearly period.

Thanking You,

Yours faithfully, AGENT 21INCLINE, 🎾 YELLANDU AREA JK OC & 21 Inc/YLD

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Cc to: Member Secretary, TSPCB, Hyderabad, Environmental Engineer, RO,TSPCB, Kgm. GM(Environment), Kgm.



### THE SINGARENI COLLIERIES COMPANY LIMITED (A Government Company) 21 Incline Underground Coal Mine Expansion Project, Yellandu Area

### PRESENT STATUS OF THE MINE:

The mining operations are stopped at this underground coal mine in the year 2019-20 except pumping of water through bore-wells by submersible pumps for supplying of water to nearby colonies and villages. The mine entries were closed on 26.12.2021. It is proposed to extract the balance coal reserves (standing on pillars) by opencast method by amalgamating with the adjacent JK-5 Opencast Expansion Project by utilizing its voids for dumping of OB after obtaining environmental & other related permissions.

### <u> PART-1</u>

#### HALF YEARLY MONITORING REPORT FOR THE PERIOD FROM Oct-22 to Mar-23

#### A. SALIENT FEATURES OF THE PROJECT:

1	Na	me of the Project	:	21 Incline Underground Coal Mine Expansion Project						
2	Orę	ganization	:	The Singareni Collieries Company Limited						
3	Со	alfield	:	Godavari Valley Coal field						
4	Тур	be of Mine	:	Underground Method						
5	Те	chnology	:	Conventional Bord & Pillar (Development, Depillaring) by LHDs						
6	En	vironmental Clearance	:							
	Α	Letter No & date	:	J-11015/930/2007-I.II(M), dt 27.10.2008						
	В	Sanction capacity	:	Peak: 0.65 MTPA						
	С	Mining Lease Area	:	745 Ha						
	D	Date of Public Hearing	:	11-04-2008						
7	Loo	cation of the Project		In Yellandu Area & Region of Bhadradri- Kothagudem District Telangana						
	А	Village	:	Romped						
	В	Tehasil	:	Yellandu						
	С	District	:	Bhadradri Kothagudem						
	D	State	:	Telangana						
	Ε	Latitude	:	North N 17 <sup>0</sup> 34' 18" to 17 <sup>0</sup> 37' 05"						
	F	Longitude	:	East E 80 <sup>0</sup> 17' 39" to 80 <sup>0</sup> 9' 17"						
	G	Topo Sheet	:	No. 65C/6						
	Н	Nearest railway station	:	Singareni Railway Station on Dornakal						
	Ι	Nearest Airport	:	Hyderabad						
	J	Nearest town	:	Yellandu						
8	Ad	dress for Correspondence	:							
	А	Name	:	Bollam Venkateswarlu						
	В	Designation	:	Agent						
	С	Address		24 Area, Yellandu, Bhadradri- Kothagudem District Telangana						
	D	Pin Code	:	507124						

15	R 8	R Involved	:	Not Involved
	F	Others (Specify)		Nil
	Е	Mining Lease	:	GOMS.NO,134, dt 16.10.2008.
				Dept. 20 years from 1.1.2015 to 31.12.2034
	D	Forest Clearance	:	MoEF Lr No 8-260/85 Fry(Cons) dtd: 07.10.1986 GoMS No: 5 Energy (PRI)
			•	Dated;03.01.2018 Valid upto 31.12.2022
	С	Consent for Operation		KTM/HO/2010/620,dt 31.05.2010 CFO order NO;17082998052
	B	Consent for Establishment	:	Ref.No.55/PCB/CFE/RO-
	A	Ground Water Clearance	-	Lr.No 321/SCCL/2021,dt 09.03.2023
14	Sta	atutory Clearances	:	
	D	Land acquired so far (Surface rights)		0.60Ha
	C	Non-forestland		440Ha
	B	Forestland Involved		305Ha
	A	Total Requirement (Mine Take Area)		745Ha
13		nd Requirement		
	E	Coal production during last six months	•	Nil (Mine closed)
	D	Balance Reserves	:	5.532
	C	Reserves already Extracted	:	3.127
	B	Total Extractable Reserves	:	8.50 MT
	A	Total Geological Reserves	:	8.50 MT
12		serves		
	С	Present working depth (m)		Nil (Mine closed)
	В	Maximum Depth (m)		340m
	А	Minimum Depth (m)		38m
11	De			
	В	Seams being worked	:	2 Nos
	А	Total Seams Present	:	3 (no.s)
10	Sea	ams	:	
	С	Balance Life	:	Nil (Mine closed)
	В	Total Life of the project as per EMP	:	18 years
	Α	Date of Opening		1946
9		e of the Project	:	18 Years
	Н	Fax No.	:	08745 240348
	G	Telephone No.	:	08745 252093
	F	E-mail ID	:	Agt_jkgrp_yld@sccImines.com

#### B. CONDITION WISE COMPLIANCE STATUS OF ENVIRONMENTAL CLEARANCE OF 21 Incline Underground Coal Mine Expansion Project:

The conditions stipulated in Environmental Clearance i.e. EC. No: J-11015/930/2007-I.II(M), dt 27.10.2008 were complied when mine was in operation and condition wise compliance status reports along with Post Project Env. Monitoring data was submitted on half yearly basis to MoEF & CC, IRO.

It is proposed to extract the balance reserves of the mine through opencast method for which the Mining Plan including the Mine Closure Plan of Jawahar Khani Opencast Mine [Amalgamation of JK-5 OC and 21 Incline (Conversion to OC)] was approved by Ministry of Coal, Gol. The details of the final mine closure activities of 21 incline are addressed in that plan and the same will be submitted to MoEF&CC.

For depositing the corpus fund for mine closure activities, Escrow account was opened for 21 Incline (A/C No.37624458903) and deposited principal amount Rs. 3.668 Cr up to 31.03.2020 and submitted the annual returns to CCO up to 31.03.2020 pending approval of FMCP.

#### C. PLANTATION DETAILS UPTO March, 2023

A total plantation of 108 Ha was done in the mine so far.

#### <u> PART – II</u>

#### Post project environmental monitoring data & other reports of 21 Incline UG Coal Mine Expansion Project for the period from October-22 to March-23

#### 1. Production Details

SI.	Year	Coal (ir	n MT)
No		As per EC	Actual
1	2007-08	0.65	0.518
2	2008-09	0.65	0.530
3	2009-10	0.65	0.374
4	2010-11	0.65	0.391
5	2011-12	0.65	0.390
6	2012-13	0.65	0.332
7	2013-14	0.65	0.316
8	2014-15	0.65	0.201
9	2015-16	0.65	0.203
10	2016-17	0.65	0.179
11	2017-18	0.65	0.064
12	2018-19	0.65	0.036
13	2019-20	0.65	Nil
14	2020-21 (Mine Closed)	0.65	Nil
15	2021-22 (Mine Closed)	0.65	Nil
16	2022-23 (Mine Closed)	0.62	Nil

#### 2. Plantation:

A total plantation of 108 Ha was done in the mine so far.

#### 3. Water Balance Statement:

About 4032 KLD of water is being pumped out through bore-wells by submersible pumps and the same is being supplied to nearby colonies and villages.

	Wind Speed (m/s)			Temperature (°C)			Relative Humidity (%)			Rainfall (mm)	
Month	Mean	Max	Calm %	Mean	Max	Min	Mean	Max	Min	Total	Hourly highest
October, 2022	2.4	9.0	22.85	26.6	36.3	16.2	69.9	99.7	19.0	54.0	11.9
November, 2022	3.3	5.7	6.94	26.9	35.6	16.2	65.3	95.9	19.0	2.3	0.5
December, 2022	2.4	8.0	18.55	22.6	29.1	15.8	64.9	95.9	19.0	3.7	2.1
January, 2023	2.7	8.0	15.73	22.9	35.7	11.2	62.7	97.1	9.4	0.0	0.0
February, 2023	2.4	7.0	12.65	27.0	39.1	17.3	63.4	99.6	11.2	2.9	1.7
March, 2023	1.7	5.6	29.57	29.9	41.8	16.4	51.9	96.2	8.5	89.4	25.0

# 4. Summary of monthly Micro-Meteorological data generated

Summary of Micro-Meteorological data generated for the entire study period (October, 2022 – March, 2023)

S.No	Parameter (s)	Min	Max	Mean			
1.	Temperature (°C)	11.2	41.8	26.0			
2.	Wind Speed (m/s)	Calm 17.86%	9.0	2.5			
3.	Relative Humidity (%)	8.5	99.7	63.0			
4.	Predominant Wind direction for the study period	North (N), followed by South West (SW)					
5.	Total Rainfall (mm)	152.3mm					

# 5. Ambient Air Quality Monitoring

Ambient Air Quality at Osman Fit- Core Zone										
Period	l of	: October 2022 –	Sar	npling	:	24hrs period				
Monitoring		March 2023								
S	.No.	Date of Sampling	PM <sub>10</sub> (μg/m <sup>3</sup> )	ΡΜ <sub>2.5</sub> (μg/m³)	SO₂ (μg/m³)	NO₂ (μg/m³)				
	Coa	al mine standards,								
	G	SR 742(E), Dated	250	-	120	120				
		25.09.2000								
	1.	03.10.2022	77	23.7	9.5	14.3				
	2.	17.10.2022	81	24.1	9.0	14.6				
	3.	02.11.2022	78	25.7	9.9	15.1				
	4.	17.11.2022	77	23.8	9.3	15.1				
	5.	02.12.2022	75	24.8	10.2	14.6				
	6.	19.12.2022	80	24.5	9.0	14.5				
	7.	02.01.2023	81	24.2	10.5	14.9				
	8.	19.01.2023	83	26.1	10.1	14.8				
	9.	02.02.2023	87	25.2	10.7	15.3				
	10.	17.02.2023	85	25.8	10.3	14.6				
	11.	02.03.2023	78	25.3	10.5	15.1				
	12.	19.03.2023	72	24.4	10.1	14.5				
		MIN	72.0	23.7	9.0	14.3				
		MAX	87.0	26.1	10.7	15.3				
		AVERAGE	79.5	24.8	9.9	14.8				
		PERCENTILE	86.6	26.0	10.7	15.3				

# Ambient Air Quality at Osman Pit- Core Zone

# Ambient Air Quality at Yellandu Town - Buffer Zone

Period Monito		: October 2022 – March 2023	Sa	mpling	:	24hrs period	
	S.No.	Date of Sampling	PM <sub>10</sub> (μg/m³)	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO₂ (µg/m³)	NO₂ (µg/m³)	
		Standards, CPCB, 18.11.2009	100	60	80	80	
	1.	04.10.2022	58	21.4	8.4	13.8	
	2.	18.10.2022	61	21.3	9.2	14.5	
	3.	03.11.2022	55 52	21.1 20.4	9.6 9.7	14.9 14.7	
	4.	18.11.2022					
	5.	03.12.2022	51	21.3	9.1	13.9	
	6.	20.12.2022	58	21.1	9.2	14.5	
	7.	03.01.2023	55	21.7	9.2	14.1	
	8.	20.01.2023	53	20.3	9.5	14.4	
	9.	03.02.2023	57	21.8	9.5	14.3	
	10.	18.02.2023	55	20.8	9.1	14.2	
	11.	03.03.2023	62	62 22.5	9.3	14.6	
	12.	20.03.2023	53	20.3	8.9	14.4	
		MIN	51.0	20.3	8.4	13.8	
		MAX	62.0	22.5	9.7	14.9	
		AVERAGE	55.8	21.2	9.2	14.4	
		PERCENTILE	61.8	22.3	9.7	14.9	

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

Name of the		ľs,	f		Ê	2	ie te		Dept	h to wate	er (m)
Village and distance from Mine	Location	Ownwers Name	Type of Well	Dimensio ns (m)	Total Depth(m)	Geology	Measurin g Point	Period	2020	2021	2022
No.21 Incline								Winter	2.73	2.43	2.40
Pathapusapalli 2.00 km	Village entrance 17°36'49.43",	D.Lakshmaiah	public well	4/100	5.50	Barakar Fm.	0.20	Pre- monsoon	4.10	3.24	3.00
	80°17'16.61"/Near	(sh	ildr	4/100	0.00	rak	0.20	Monsoon	1.85	2.08	
	nala	D.La	Ъ			Ba		Post- monsoon	2.22	2.18	
No.21 Incline	 		ſ '		· ۲	「 <u> </u>		Winter	4.02	3.75	3.50
Pathapusapalli 2.00,km	Opp School 17°36'50.77" ,80°17'7.96"	Puli veeranna	Domestic	1.00	6.00	ar Fm.	0.35	Pre- monsoon	6.00	4.62	5.00
		eer	mo	1.00	0.00	Barakar	0.55	Monsoon	1.80	2.38	
		Puli v				Ba		Post- monsoon	2.82	2.58	
No.21 Incline	 		ſ '		· ۲	「'		Winter	2.97	1.56	1.30
Rompedu 2.5km	Gundala Pakhala jn. 17°38'33.09", 80°17'50.48"	ell	Domestic	1.75	0.00	Pakhal Fm.	0.60	Pre- monsoon	7.20	4.58	2.50
	dal: dal: 38'3 38'3	t V	mor	-	6	kh,	ō	Monsoon	0.90	0.80	
	Gundala Pakhala jn 17°38'33.0 80°17'50.4	Govt Well				Ρŝ		Post- monsoon	0.96	1.00	
No.21 Incline	Opp Peddamma		<u> </u>		·	ا		Winter	2.49	2.38	2.24
Yellandu 0.2km	temple Gundala	Seshaiah	Domestic	1.00	9.10	ar Fm.	0.45	Pre- monsoon	4.10	3.53	3.45
	17°36'17.57",	Ses	mor	1.00	0.10	Barakar	0.70	Monsoon	0.95	1.51	
	80°18'56.48"	D. S				Ba		Post- monsoon	1.71	1.60	

