



**THE SINGARENI COLLIERIES COMPANY LIMITED**

(A GOVERNMENT COMPANY)

Registered Office

Kothagudem Collieries (P.O) - 507 101, Bhadradi Kothagudem Dist, Telangana State

**CIN: U10102TG1920SGC000571**

**Environment Dept., Srirampur Area**

PO: Srirampur Colony-504 303, Dist. Mancherial, Telangana State

Phone No: 08736-238039.

Fax No : 08736-238222.

e-mail: env\_srp@scclmines.com

website: www.scclmines.com

Ref.No: SRP/ENV/E-417/2024/ 252

Date: 21.11.2024.

To  
The Environmental Engineer,  
Telangana State Pollution Control Board,  
Regional Office, H.No: 6-2-166/A, Subhash Nagar,  
Nizamabad - 503 002.

Sir,

Sub: Half yearly Environmental monitoring Report in respect of Ravindra Khani – 5  
(RK-5) Incline Underground Coal Mine Expansion Project of SCCL for the  
period ending 30.09.2024(April, 2024 to September, 2024) - Reg.

Ref : MoEF Lr.No. J-11015/306/2007-1A.II(M), dated. 24.10. 2008.

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Reference to the MoEF&CC, Environmental Clearance (E.C) letter cited above,  
please find enclosed herewith the Half yearly Environmental Compliance report for the  
period ending 30.09.2024 (April,2024 to September,2024) in respect of Ravindra Khani-5  
(RK-5) Incline Underground Coal Mine Expansion Project, Srirampur Area.

Thanking you,

Yours Sincerely,

Encl: As above.

C.C. : Dy.GM, Rk-5 Incline.



  
General Manager,  
Srirampur Area.  
General Manager  
SRIRAMPUR





**THE SINGARENI COLLIERIES COMPANY LIMITED**

(A Government Company)  
SRIRAMPUR AREA

**HALF YEARLY COMPLIANCE REPORT OF ENVIRONMENTAL CLEARANCE CONDITIONS AS ON 30<sup>TH</sup> SEPTEMBER, 2024.**


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

1	<b>Name of the Project</b>	:	<b>Ravindra Khani – 5 (RK-5) Incline Underground Coal Mine Expansion Project.</b>
2	Organization	:	Singareni Collieries Company Limited
3	Coalfield	:	Godavari Valley Coal Field
4	Type of Mine	:	<b>Underground Coal Mine</b>
5	Technology	:	Bord and pillar method with SDLs.
6	<b>Environmental Clearance</b>	:	
	A Letter No & date	:	EC. No: J-11015/306/2007-1A.II (M), dtd. 24 <sup>th</sup> October, 2008.
	B Sanctioned capacity	:	0.5 MTPA
	C Mining Lease Area	:	376.20 Ha.
	D Date of Public Hearing	:	12.03.2008
7	<b>Location of the Project</b>	:	
	A Village	:	Naspur, Tallapalli, Kankur
	B Tehasil	:	Mancherial and Jaipur
	C District	:	Mancherial
	D State	:	Telangana State
	E Latitude	:	N 18 <sup>o</sup> 52' 48" to 18 <sup>o</sup> 53' 56"
	F Longitude	:	E 79 <sup>o</sup> 30' 08" to 79 <sup>o</sup> 30' 50"
	G Topo Sheet	:	56/9
	H Nearest railway station	:	Mancherial
	I Nearest Airport	:	Hyderabad
	J Nearest town	:	Mancherial
8	<b>Address for Correspondence</b>	:	
	A Name	:	N.Sridhar
	B Designation	:	Agent
	C Address	:	O/o Agent, RK-5 & 6 group of Mines, Coal Chemical Complex (Post) Naspur (Mandal), Mancherial (District) Telangana State
	D Pin Code	:	504 302.
	F E-mail ID	:	agt_rk5n6_srp@scclmines.com
	G Telephone No.	:	Mobile No:8332974766
	H Fax No.	:	08736 - 238222
9	<b>Life of the Project</b>	:	
	A Date of Opening	:	06.04.1975.
	B Total Life of the project as per EMP	:	46Years (EC dated 24.10.2008)
	C Balance Life	:	03 Years
10	<b>Seams</b>	:	
	A Total Seams Present	:	08 No's
	B Seams being worked	:	03 (3seam, 4seam and 5Seam)
11	<b>Depth</b>	:	
	A Minimum Depth (m)	:	39.00 m.
	B Maximum Depth (m)	:	168.00 m
	C Present working depth (m)	:	150.00 m

12	<b>Reserves</b>	:	
	A	Total Geological Reserves	: 47.047 MT
	B	Total Extractable Reserves	: 17.500 MT
	C	Reserves already Extracted	: 17.401 MT
	D	Balance Reserves	: 0.099MT
	E	Coal production during last six months (apr2024-sep2024)	: 0.119 MT
13	<b>Land Requirement</b>	:	
	A	Total Requirement (Mine Take Area)	: 376.20 Ha.
	B	Forestland Involved	: 337.15 Ha.
	C	Non-forestland	: Nil
	D	Land acquired so far (Surface rights)	: 39.05 Ha. (34.20 Ha. SCCL acquired Forest land before enactment of FC Act, 1980) (4.85 Ha. for RK-5B additional mine SCCL acquired Vide order No. 8-72/93-FC Dt. 23.02.1996)
		i) Built -up Area.	: 7.398 Ha.
		ii) Plantation Area.	: 31.652 Ha.
		iii) Vacant Land.	: --
14	<b>Statutory Clearances</b>	:	
	A	Ground Water Clearance	Lr. No. 149/T/SCCL/2022, dated.20.03.2023 valid up to 20.03.2025.
	B	Consent for Establishment	: Order No: 47/PCB/CFE/RO-NZB/HO/2009-1073, dtd.20.07.2009.
	C	Consent for Operation	: Consent Order No: TGPCB/RCP/NZB/ CFO/ 210522943403, dtd.15.09.2021 valid upto 30.06.2026.
	D	Forest Clearance	: 337.15 ha of forest land is involved in the project and diverted for mining purpose with underground rights, vide letter No. F. No. 8-5/1988-FC(pt) dated 04.02.2013 (G.O. Ms. No. 73 Dt. 23.08.2013 (Co-terminus with the period of the Mining Lease) valid up to 21.05.2030. Forest Land of 4.85 ha for surface rights was diverted vide F.No.8-72/93-FC, Dt.23.02.1996 (Co-terminus with the period of the Mining Lease) valid up to 21.05.2030. Total Forest land involved in the project is 342.00 ha.
	E	Mining Lease	: 376.20 ha covered in North Godavari Mining Lease (4494 ha) which was issued by G.O.Ms.No.01, dated 12.01.2015 valid up to 21.05.2030.
	F	Others (Specify)	--
15	<b>R &amp; R Involved</b>	:	Nil.
			


## B. COMPLIANCE STATUS OF EC CONDITIONS AS ON 30.09.2024



E. C. Cond. No.	Condition	Status as on 30.09.2024
<b>2. (A)</b>	<b>SPECIFIC CONDITIONS:</b>	
(i)	Mining shall not be carried in forest land for which forestry clearance has not been obtained under the provisions of FC Act, 1980.	<p><b>Complied.</b></p> <p>Forest land involved in the project is 342.00 ha and forest clearance for the entire forest land has been obtained. Out of 342.00 ha of forest land involved in the project, 337.15 ha of forest land is involved in the project and diverted for mining purpose with underground rights, vide letter No. F. No. 8-5/1988-FC(pt) dated 04.02.2013 (G.O. Ms. No. 73 Dt. 23.08.2013 (Co-terminus with the period of the Mining Lease) valid up to 21.05.2030. Forest Land of 4.85 ha for surface rights was diverted vide F.No.8-72/93-FC, Dt.23.02.1996 (Co-terminus with the period of the Mining Lease) valid up to 21.05.2030. All the mining activities are being carried out in diverted Forest land only.</p>
(ii)	Sufficient coal pillars shall be left un-extracted around the airshaft (within the subsidence influence area) to protect from any damage from subsidence, if any.	<p><b>Complied.</b></p> <p>Air shaft with a diameter of 5.5 m width and 42 m depth is connected to IV&amp;V seams. To protect the Air shaft about <u>60 meters</u> of solid barrier was left all along the perimeter of the shaft as per the DGMS guide lines.</p>
(iii)	Solid barriers shall be left below the roads falling within the blocks to avoid any damage to the roads.	<p><b>Complied.</b></p> <p>A length of around 300m public road is falling over the Panel No. RN 24(A+B) of 2 seam and Panel No. YN 24(A+B) of 2A seam in sector B. And length of around 310m over the Panel No. YN2 and YS 11(A+B) of 2A seam and Panel No. RN 2 and RS 11 (A+B) of 2 seam of sector-A. Sufficient barrier (45 m) is left on either sides of the road to avoid any damage. as per the Regulation No.119 of CMR-2017.</p>
(iv)	Depression due to subsidence resulting in water accumulating within the low lying areas shall be filled up or drained out by cutting drains.	<p><b>Complied.</b></p> <p>Depression due to subsidence resulting in water accumulating within low lying areas are being drained out by cutting drains and being ensured that no water is accumulated on the surface of the mine.</p>
(v)	While extracting panels in the lower seam, all water bodies in the subsidence area shall be drained. Dewatering of the old goaves of the upper seam shall be continued as long as the lower seam is worked to prevent accumulation of large water bodies over working area.	<p><b>Complied.</b></p> <p>While extracting the panels in the lower seam, all the water bodies in the subsidence area is being drained.</p> <p>Dewatering of old goaves of the upper seams are being done as long as the lower seam is being worked to prevent the accumulation of</p>

E. C. Cond. No.	Condition	Status as on 30.09.2024
		<p>large water bodies over working area.</p> <p>Further, all the precautions are being taken as per the provisions of Regulation 149 &amp;150 of CMR 2017.</p>
(vi)	<p>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 loss of life and material. Cracks should be effectively plugged with ballast and clayey soil/suitable material.</p>	<p><b>Complied.</b></p> <p>Subsidence survey is being carried out during extraction of the caving panel once in every month and after completion of the extraction once in 6 months till the movement ceases completely. The system, frequency and recording of observations will be carried out as per the provisions DGMS Technical circular No.4 of 1988. The depressions / Cracks are being plugged, if any.</p> <p>Subsidence management details are furnished in <b>Annexure-I.</b></p>  <p style="text-align: center;"><b><u>Pillars Subsidence Survey</u></b></p>
(vii)	<p>Garland/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 and 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.</p>	<p><b>Complied.</b></p> <p>Garland/surface drains of adequate size are made around the Air shaft and entries of the mine so that no water from the surface advertently enter into the mine.</p> <p>The mine openings were designed 5.0 m to 9.71 m above the HFL of the nearby water bodies (HFL: 868.63). HFL of Main Incline Dip is 873.63, Man Way Dip is 874.36 and Air Shaft is 877.50.</p> <p>The sumps are designed keeping the highest seepage calculations and retention time to settle the silt material. Sufficient capacities of pumps were installed keeping in view of the maximum seepage during rainy season.</p>
(viii)	<p>Crusher at the CHP should be operated with high efficiency bag filters, water sprinkling system should be provided to check fugitive emissions from crushing operations,</p>	<p><b>Complied.</b></p> <p>As, no crusher and CHP is provided on the surface of the mine. The blasted coal in the underground is of good fragmentation which</p>




E. C. Cond. No.	Condition	Status as on 30.09.2024
	conveyor system, haulage roads, transfer points, etc.	<p>is loaded into tubs by the SDL's and brought to the surface from where some part is transported to consumers by road and some part is transported to nearby SRP CHP for transportation by Rail mode.</p> <p>However, to arrest the fugitive emissions water spraying is being carried out in the underground faces before drilling and after blasting. Water spraying is being carried out at the surface bunkers. All the coal transportation roads and permanent internal roads on the surface of the mine area black topped.</p> <p>Further, in the connected SRP CHP coal is not pulverized in the crushers and is only crushed to (-) 200 mm size. Hence, instead of bag filters, fixed as well as mobile mist spray arrangements have been provided for controlling dust emissions and the air quality parameters monitored at the CHP are well within the stipulated norms. Further a 12 KL capacity water sprinkler is being deployed for dust suppression at CHP and surroundings.</p>
(ix)	Drills should be wet operated	<p><b>Complied.</b></p> <p>This is an underground mine and hand held drills are being operated. Hence, wet drilling is not possible. However, as per the provisions of Regulation No.143 of CMR-2017 water spraying is being done in the underground working face before drilling and after blasting to avoid the dust generation in the working places. Also dust masks are being provided to the persons working in dusty environment periodically.</p>
(xi)	A progressive afforestation plan shall be prepared and implanted for the undisturbed area and shall include area brought under green belt development, areas along roads, infra- structure, 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.	<p><b>Complied.</b></p> <p>A progressive afforestation plan has been prepared as envisaged in the EIA/EMP. Accordingly, 36.13 ha of plantation was carried out in the project area. A plan showing the plantation is enclosed as <b>Annexure-II.</b></p> <p>Plantation was carried out with the following native species with a density of 2500 plants per hectare.</p> <p><i>Dendrocalamus strictus, Hardwickia binata, Ferronia limonea, Inga dulcii, Holoptelia integrifolia, Azadirachta indica, Acacia nilotica, Acacia planifrons, Acacia ferruginea, Delbergia sisoo, Ficus benghalensis, Emblica officinalis, Aegle marmolose, Peltoforum ferrugenium, Pongamia pinnata, Cassia</i></p>

E. C. Cond. No.	Condition	Status as on 30.09.2024
		<p><i>seamea, Albezia procera, Styloxanthus hamata, Sesbania rostrata, Glyricidia maculate, Leucana leucocephala, Agave, Vettiveria, Saccharum munja..</i></p>  <p><b><u>Thick Greenery around Mine Premises</u></b></p>
(xii)	<p>Conservation Plan for endangered species found in and around the project area shall be formulated in consultation with the State Forest and Wildlife Departments.</p>	<p><b>Complied.</b></p> <p>There are no endangered species found in core and buffer zone of the project area. However, a Wildlife Conservation &amp; Mitigation Plan for Schedule-I species (Indian Monitor, Indian Peafowl &amp; Indian Rock Python) present in the buffer zone of Sri Rampur group of mines was prepared for an amount of Rs.526.367 Lakhs and was approved by the PCCF &amp; CWW vide Ref. No.5694/2021/WL-1 dated: 01.04.2022.</p> <p>SCCL has deposited the amount to forest department towards implementation of conservation plan. The copy was enclosed as <b>Annexure-III.</b></p>
(xiii)	<p>Regular monitoring of groundwater level and quality should be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring for 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 &amp; Forests and to the Central Pollution Control Board quarterly within one month of monitoring.</p>	<p><b>Complied.</b></p> <p>Monitoring of ground water levels in the surrounding villages is being carried out four times a year by establishing a network of existing piezometers to assess the long-term effects. <b>Annexure-IV.</b></p> <p>Regular monitoring of ground water quality is also being carried out as per statute through NABT accredited third party laboratory, M/s Environment Protection Training and Research Institute (EPTRI), Hyderabad. Latest ground water levels and ground water quality are enclosed as <b>Annexure-V.</b></p>
(xiv)	<p>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</p>	<p><b>Complied.</b></p> <p>32 nos. of rain water harvesting pits have been constructed at various locations of Srirampur area to recharge ground water. Seven check dams were constructed in the</p>


E. C. Cond. No.	Condition	Status as on 30.09.2024
	wells go dry due to dewatering of mine.	<p>nearby nallah for augmentation of ground water. The list of the locations of the rain water harvesting structures is furnished <b>Annexure-VI.</b></p>  <p style="text-align: center;"><b><u>Rain Water Harvesting Pit</u></b></p> <p>The excess mine discharge water of 1480 KLD after treated through the slow sand filter beds is being let out into nearby nallah for augmentation of ground water and also for agriculture use by nearby villagers.</p> <p>SCCL will supply drinking water to the nearby villages if the village wells go dry.</p>
(xv)	The Company shall obtain approval of CGWA/CGWB Regional Office for use of groundwater if any, for mining operations.	<p><b>Complied.</b></p> <p>Ground water clearance was obtained from Ground water department; vide Lr. No. 149/T/SCCL/2022, dated.20.03.2023.</p> <p>A copy of the obtained GWC is enclosed as <b>Annexure-VII.</b></p>
(xvi)	Sewage treatment plant should be installed in the existing colony. ETP should also be provided for workshop and CHP wastewater.	<p><b>Complied.</b></p> <p>Sewage generated in the existing colony is being treated in STP of 3.0 MLD capacity located in Naspur Colony.</p>  <p style="text-align: center;"><b><u>Sewage Treatment Plant, Naspur colony</u></b></p> <p>ETP is provided in the Area Workshop and CHP at Srirampur Area.</p> <p>The effluents from the Area Workshop are treated in the ETP.</p>




E. C. Cond. No.	Condition	Status as on 30.09.2024
		 <p><b>Oil &amp; Grease Trap (ETP) at Area Workshop</b></p> <p>The monitoring of ETP and STP outlet is furnished in <b>Annexure-VIII</b>.</p>
(xvii)	<p>For monitoring land use pattern and for post mining land use, a time series of land use maps, based on satellite imagery (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.</p>	<p><b>Complied.</b></p> <p>Digital processing of the entire lease area based on satellite imagery is being done regularly once in 3 years for monitoring land use pattern and post mining land use. Satellite imagery land survey was conducted in year 2022, and the report was submitted to MoEF and its Regional Office at Hyderabad. SRP/ENV/D-404A/2023/377 date:20.12.2023 .The land use land cover report is enclosed as <b>Annexure-IX</b></p>
(xviii)	<p>A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment &amp; Forests 5 years in advance of final mine closure for approval.</p>	<p><b>Complied.</b></p> <p>A final mine closure plan along with details of corpus fund was approved by Ministry of Coal vide Lr.No: TEMCH/APP00206/2022, Dt: 22.03.2022 and same submitted to the Ministry of Environment &amp; Forests vide ltr No: SRP/ENV/2023/373, date.16.12.2023. Amount deposited in ESCROW account up to 31.03.2024 is Rs. 5,94,00,000, balance amount in ESCROW account till now is Rs. 7,04,17,606 and Rs.1,83,14,940 is reimbursed from ESCROW account.</p> <p>A copy of the ESCROW agreement and bank statement showing amount in the ESCROW account is furnished in <b>Annexure-X</b>.</p>
<b>2) B</b>	<b>General Conditions</b>	
(i)	<p>No change in Mining technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.</p>	<p><b>Complied.</b></p> <p>There is no change in Mining technology and scope of working as detailed in the approved EMP.</p> <p>Any change in the scope or technology, prior approval of the Ministry of Environment, Forests and Climate change (MoEF&amp;CC) will be obtained..</p>

E. C. Cond. No.	Condition	Status as on 30.09.2024																																																																																													
(ii)	No change in the calendar plan including excavation, quantum of mineral coal and waste shall be made.	<p><b>Complied.</b></p> <p>RK-5 Incline exceeded the EC capacity of 0.50 MTPA for 6 years from 2008-09 (0.514 MTPA), 2009-10 (0.518), 2010-11 (0.524), 2011-12 (0.534), 2012-13 (0.688) to 2013-14 (0.648 MTPA) violating the EC conditions and excess production of 0.427 MT was produced. The year-wise productions details from 2008-09 are furnished below.</p> <table border="1" data-bbox="847 533 1445 1377"> <thead> <tr> <th rowspan="2">Sl. No</th> <th rowspan="2">Year</th> <th colspan="3">Coal (in MT)</th> </tr> <tr> <th>EC Capacity</th> <th>Actual production</th> <th>Excess</th> </tr> </thead> <tbody> <tr><td>1</td><td>2008-09</td><td>0.5</td><td>0.514</td><td>0.014</td></tr> <tr><td>2</td><td>2009-10</td><td>0.5</td><td>0.518</td><td>0.018</td></tr> <tr><td>3</td><td>2010-11</td><td>0.5</td><td>0.524</td><td>0.024</td></tr> <tr><td>4</td><td>2011-12</td><td>0.5</td><td>0.534</td><td>0.034</td></tr> <tr><td>5</td><td>2012-13</td><td>0.5</td><td>0.688</td><td>0.188</td></tr> <tr><td>6</td><td>2013-14</td><td>0.5</td><td>0.648</td><td>0.148</td></tr> <tr><td>7</td><td>2014-15</td><td>0.5</td><td>0.447</td><td>-</td></tr> <tr><td>8</td><td>2015-16</td><td>0.5</td><td>0.469</td><td>-</td></tr> <tr><td>9</td><td>2016-17</td><td>0.5</td><td>0.445</td><td>-</td></tr> <tr><td>10</td><td>2017-18</td><td>0.5</td><td>0.336</td><td>-</td></tr> <tr><td>11</td><td>2018-19</td><td>0.5</td><td>0.343</td><td>-</td></tr> <tr><td>13</td><td>2020-21</td><td>0.5</td><td>0.198</td><td>-</td></tr> <tr><td>14</td><td>2021-22</td><td>0.5</td><td>0.284</td><td>-</td></tr> <tr><td>15</td><td>2022-23</td><td>0.5</td><td>0.146</td><td>-</td></tr> <tr><td>16</td><td>2023-24</td><td>0.5</td><td>0.276</td><td>--</td></tr> <tr><td>17</td><td>2024-25 (apr-sep)</td><td>0.5</td><td>0.119</td><td>--</td></tr> <tr> <td colspan="2"><b>Total</b></td> <td><b>8.00</b></td> <td><b>6.489</b></td> <td><b>0.427</b></td> </tr> </tbody> </table> <p>As per MoEF&amp;CC, S.O. No.804 (E), dated 14<sup>th</sup>March, 2017 and its subsequent amendments, SCCL applied for ToR/EC under violation category and MoEF&amp;CC/SEIAA recommended EC for a capacity of 0.50 MTPA during its meeting held on 10.07.2024. EC is awaited.</p>	Sl. No	Year	Coal (in MT)			EC Capacity	Actual production	Excess	1	2008-09	0.5	0.514	0.014	2	2009-10	0.5	0.518	0.018	3	2010-11	0.5	0.524	0.024	4	2011-12	0.5	0.534	0.034	5	2012-13	0.5	0.688	0.188	6	2013-14	0.5	0.648	0.148	7	2014-15	0.5	0.447	-	8	2015-16	0.5	0.469	-	9	2016-17	0.5	0.445	-	10	2017-18	0.5	0.336	-	11	2018-19	0.5	0.343	-	13	2020-21	0.5	0.198	-	14	2021-22	0.5	0.284	-	15	2022-23	0.5	0.146	-	16	2023-24	0.5	0.276	--	17	2024-25 (apr-sep)	0.5	0.119	--	<b>Total</b>		<b>8.00</b>	<b>6.489</b>	<b>0.427</b>
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17	2024-25 (apr-sep)	0.5	0.119	--																																																																																											
<b>Total</b>		<b>8.00</b>	<b>6.489</b>	<b>0.427</b>																																																																																											
(iii)	Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring SPM, RPM, SO <sub>2</sub> , NO <sub>x</sub> , 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.	<p><b>Complied.</b></p> <p>4 No's Ambient Air Quality monitoring stations comprising of core and buffer zone have been established based on meteorological data, topographical features and environmental sensitive areas, in consultation with Regional Office of Telangana State Pollution Control Board</p> <p>The results of monitoring of Ambient Air Quality including locations, frequency and parameters are furnished in <b>Annexure-XI</b>.</p>																																																																																													

E. C. Cond. No.	Condition	Status as on 30.09.2024
		 <p><b>Photograph showing Ambient air quality monitoring station At RK-5 Incline</b></p>
(iv)	<p>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 arrangement on haul roads, wagon loading, and dump trucks (loading and unloading) points shall be provided and properly maintained.</p>	<p><b>Complied.</b></p> <p>As per new ambient air quality guidelines the parameters PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> are being monitored once in every fortnight through NABET accredited third party laboratory M/s Environment Protection Training and Research Institute (EPTRI), Hyderabad. Data being recorded properly and being submitted to RO, MoEF&amp;CC and RO, TGPCB along with Half yearly monitoring report.</p> <p>The emissions of PM<sub>10</sub>, PM<sub>2.5</sub>, and SO<sub>x</sub>, NO<sub>x</sub> and other heavy metals are within the limits. <b>A copy was enclosed as Annexure –XI.</b></p> <p>Effective water spraying arrangements are being provided at coal loading, unloading points and along the coal transport route. Coal is being transported in lorries covering with tarpaulin to arrest fugitive dust emissions.</p>  <p><b><u>Water spraying arrangement at Transportation Road, RK-5 Incline</u></b></p>



E. C. Cond. No.	Condition	Status as on 30.09.2024
(v)	Data on ambient air quality (SPM, RSPM, SO <sub>2</sub> and NO <sub>x</sub> , 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 Pollution Control Board once in six months.	<p><b>Being Complied.</b></p> <p>Data on ambient air quality (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>) is being submitted regularly to the MoEF&amp;CC and RO, on half yearly basis.</p>
(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.	<p><b>Complied.</b></p> <p>All the noise control measures such as thick Plantation around the fan house and project area has been carried to dampen the noise, provision of Evasee to main mechanical ventilator to reduce the noise from the main mechanical ventilator and height of fall of coal in the bunkers is reduced to minimize the noise etc.,</p> <p>All the employees engaged on drilling, blasting, operations of machinery and pumps and other noise prone areas in the underground are being provided with 60 earplugs.</p> <p>Noise quality is being monitored once in every fortnight through NABET accredited third party laboratory M/s Environment Protection Training and Research Institute (EPTRI), Hyderabad. Data being recorded properly and being submitted to RO, MoEF&amp;CC and RO, TGPCB along with Half yearly monitoring report.</p> <p>The noise levels are within the limits. The latest noise quality data is enclosed as <b>Annexure-XII.</b></p>  <p style="text-align: center;"><b>USAGE OF EAR PLUGS</b></p>
(vii)	Industrial wastewater (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	<p><b>Being Complied.</b></p> <p>The quality of mine discharge water is being monitored as per MoEF&amp;CC recent guidelines i.e. GSR 742 (E) and GSR801 (E) effluent Standards for Coal Mines.</p> <p>The mine discharge water is being treated</p>

E. C. Cond. No.	Condition	Status as on 30.09.2024
	from time to time before discharge. Oil and grease trap shall be installed before discharge of workshop effluents.	through the slow sand filter beds and treated mine discharge water is being partly utilized for the purposes of drinking, dust suppression, plantation etc., and partly sent to the nearby nallah.  The mine discharge and colony STP water quality parameters are meeting the stipulated norms and analysis reports are being submitted to the ministry along with half yearly reports. enclosed as <b>Annexure-VIII.</b>
(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.	<b>Complied.</b>  Vehicles used for transportation of coal are being tuned regularly for control of emissions as per manufacturer schedule. Coal is loaded optimally in the coal transportation trucks which are covered with tarpaulin to reduce the dust emission during transportation.
(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.	<b>Complied.</b>  Environmental monitoring is being carried out through M/s EPTRI, Hyderabad, a MoEF&CC, CPCB recognized and NABL accredited laboratory. A Regional Environmental Lab has been established by M/s EPTRI, at Mandamarri Area with adequate number and type of pollution monitoring and analysis equipment's in consultation with the TGPCB.  
(x)	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.  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.	<b>Complied.</b>  All the Persons deployed in dusty atmosphere are being provided with dust masks 200 and adequate training is being provided in the mine vocational training centers on safety and health aspects. Occupational health surveillance is being carried out periodically through Periodical Medical Examinations (PME) once in every 5 years (below 45 Years employees) and 3 years (45 Years and above employees). Every year 1/3rd and 1/5th of the total manpower is being covered under PME respectively. Corrective measures are being taken if any abnormality is found during the



E. C. Cond. No.	Condition	Status as on 30.09.2024																																							
		<p>PME. About 128 persons have under gone PME during last six months.</p>  <p style="text-align: center;"><b><u>DUST MASKS USING</u></b></p>																																							
(xi)	<p>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.</p>	<p><b>Complied.</b></p> <p>A company level environment cell with qualified personnel headed by General Manager (Environment) who is reportable to the Director of the Company is established to monitor and guide in implementation of the environmental safeguards.</p> <p>An area level environmental cell headed by qualified environmental officer is established and functioning under the control of area General Manager to monitor and guide in implementation of the environmental safeguards.</p> <p>Apart from this, a unit level Environmental Management Committee with multidisciplinary team has been constituted under the chairmanship of SO to GM. The committee has been constituted with following members.</p> <table border="1" data-bbox="847 1339 1430 1800"> <tbody> <tr><td>1.</td><td>SO to General Manager</td><td>Chairman</td></tr> <tr><td>2.</td><td>Project Officer</td><td>Member</td></tr> <tr><td>3.</td><td>Area Engineer (E&amp;M)</td><td>Member</td></tr> <tr><td>4.</td><td>Area Civil Engineer</td><td>Member</td></tr> <tr><td>5.</td><td>Area Forest Officer</td><td>Member</td></tr> <tr><td>6.</td><td>Area Estates Officer</td><td>Member</td></tr> <tr><td>7.</td><td>Project Manager</td><td>Member</td></tr> <tr><td>8.</td><td>Project Engineer</td><td>Member</td></tr> <tr><td>9.</td><td>Project Surveyor</td><td>Member</td></tr> <tr><td>10.</td><td>Project Env. Officer</td><td>Member</td></tr> <tr><td>11.</td><td>Area Env. Officer</td><td>Secretary</td></tr> <tr><td>12.</td><td>Sr. Hydro Geologist</td><td>Member</td></tr> <tr><td>13.</td><td>Area Survey Officer</td><td>Member</td></tr> </tbody> </table>	1.	SO to General Manager	Chairman	2.	Project Officer	Member	3.	Area Engineer (E&M)	Member	4.	Area Civil Engineer	Member	5.	Area Forest Officer	Member	6.	Area Estates Officer	Member	7.	Project Manager	Member	8.	Project Engineer	Member	9.	Project Surveyor	Member	10.	Project Env. Officer	Member	11.	Area Env. Officer	Secretary	12.	Sr. Hydro Geologist	Member	13.	Area Survey Officer	Member
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12.	Sr. Hydro Geologist	Member																																							
13.	Area Survey Officer	Member																																							
(xii)	<p>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.</p>	<p><b>Complied.</b></p> <p>The funds earmarked for environmental protection measures are not being diverted for any other purpose.</p> <p>For implementing EMP and environmental conditions, responsibilities are being</p>																																							

E. C. Cond. No.	Condition	Status as on 30.09.2024
		<p>assigned to the concerned unit level and area level officers after time-to-time review meetings. Till now about Rs.13.11 Crores as environmental revenue expenditure.</p> <p>Year wise progress of implementation of environmental protection measures is being reported to the RO, MoEF&amp;CC along with the half yearly monitoring report.</p> <p>Copy enclosed as <b>Annexure-XIII</b>.</p>
(xiii)	<p>The Regional Office of this Ministry located at Bangalore shall monitor compliance of the stipulated conditions. The Project authorities shall extend full co-operation to the Office(s) of the Regional Office by furnishing the requisite data / information/ monitoring reports.</p>	<p><b>Being Complied.</b></p> <p>Project Authority is extending full cooperation to the office (s) of the regional office by furnishing the requisite data / information / monitoring reports.</p>
(xiv)	<p>A copy of the clearance letter will be marked to concerned Panchayat / local NGO, If any, from whom any suggestion/ representation has been received while processing the proposal.</p>	<p><b>Complied.</b></p> <p>The copy of the Clearance letter was send to following Panchayats vide Lr.No.SRP/ ENV/ E-417/2008/241, dtd.29.11.2008</p> <ul style="list-style-type: none"> <li>i) Naspur Gram panchayat,</li> <li>ii) Theegalpahad Grampanchayat</li> <li>iii) Kankur Grampanchayat</li> </ul> <p>Further, a copy of the EC copy displayed on company's website i.e., <a href="https://scclmines.com/env/docs/ECS/34002.pdf">https://scclmines.com/env/docs/ECS/34002.pdf</a> for public viewing.</p>
(xv)	<p>State Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industry Centre and Collector's Office/ Tehsildar's Office for 30 days.</p>	<p><b>Complied.</b></p> <p>A copy of the EC letter was at RO, office of SPCB, District Industry Centre and Collector's Office/ Tahsildar's Office for 30 days and was displayed on the website of the State pollution control board. Further, EC copy is also displayed on company's website <a href="https://scclmines.com/env/docs/ECS/34002.pdf">https://scclmines.com/env/docs/ECS/34002.pdf</a> for public viewing.</p>
(xvi)	<p>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 &amp; forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a>.</p>	<p><b>Complied.</b></p> <p>The advertisement was given on 18.11.2008 in Deccan chronicle (English Daily paper) and Vartha (Telugu Daily paper) widely circulated around the project area 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 EC copy is also be seen at the website of the MoEF&amp;CC.</p>

E. C. Cond. No.	Condition	Status as on 30.09.2024	
		Vaartha (Telugu) daily on 18.11.2008 	Deccan Chronicle (English) daily on 18.11.2008. 
		Advertisements have to be attached in PDF format	
3.	The Ministry or any other competent authority may stipulate any further condition for environmental protection.	<b>Agreed to Comply.</b> The additional conditions will be complied.	
4.	Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract the provisions of the Environment (Protection) Act, 1986.	<b>Complied.</b> All the conditions mentioned in the EC are being complied with.	
5.	The above conditions will be enforced <b>inter-alia</b> , under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and Rules.	Complied. CFE was obtained vide no.47/PCB/CFE/RO-NZB/HO/2009-1073 Dt: 20.07.2009. CFO was obtained vide no. 210522943404 Dt: 15.09.2021 valid up to 30.06.2026.  Public Liability Insurance Policy is taken from the New India Assurance Company Ltd under Public Liability Insurance Act, 1991 vide policy No. 550200492410000034, valid from 30.04.2024 to 29/04/2025. The copy enclosed as <b>Annexure-XIV</b> .	
6.	“The mining lease holders shall, after ceasing mining operations, undertake regressing the mining area and any other area which may have been disturbed due to their mining activities which is fit for growth of fodder, flora, fauna etc”.	<b>Agreed to comply.</b>  At the end of mining operations, the mining areas and other areas which were disturbed due to mining will be regressed and restored to the land to a condition which is fit for growth of fodder, flora, fauna etc.	



  
 Agent,  
 RK-5&6 Group of mines.  
 Agent  
 RK-5 & 6 Group of Mines  
 Srirampur Area.

**Subsidence management details:**

## (a) Total Seam wise development details

Sl. No:	Seam	Area in Ha.	Depth (m)		Total Thickness (m)	Working thickness (m)	Remarks.
			Min.	Max.			
1.	1 A Seam	4.754	50.00	118.00	3.00 To 4.00	2.80	Non vendible certificate
2.	1 Seam	42.283	37.00	150.00	3.00 To 4.00	2.80	
3.	2 B Seam	6.787	54.40	125.00	1.20	1.20	
4.	2 A Seam	130.064	47.00	193.50	1.60	1.60	
5.	2 Seam	175.822	42.00	225.00	4.00 To 4.50	2.80	
6.	3 Seam	78.217	33.60	183.70	1.20	1.20	
7.	4 Seam	197.979	43.00	242.00	1.80	1.80	
8.	5 Seam	119.354	36.00	233.40	1.60	1.60	

## (b) Total Seam wise depillaring details

Sl. No:	Seam	Area in Ha.	Depth (m)		Total Thickness (m)	Working thickness (m)	Caving/ stowing.
			Min.	Max.			
1.	1A Seam	---	---	---	3.00 To 4.00	2.80	Standing on pillar
2.	1 Seam	---	---	---	3.00 To 4.00	2.80	Standing on pillar
3.	2B Seam	---	---	---	1.20	1.20	Standing on pillar
4.	2A Seam	126.960	47.00	193.50	1.60	1.60	Caving
5.	2 Seam	166.855	42.00	225.00	4.00 To 4.50	2.80	Caving
6.	3 Seam	46.016	33.60	183.70	1.20	1.20	Caving
7.	4 Seam	157.084	43.00	242.00	1.80	1.80	Caving
8.	5 Seam	77.718	36.00	233.40	1.60	1.60	Caving

c) Total surface area effected due to subsidence so far : 166.855 Ha.

- Max. Crack width observed so far : 0.40 m
- Max. Subsidence occurred so far : 0.873 Mtrs (3&4 seams) (apr24-sep24)
- Whether the vegetation effected if any : Not Affected
- if affected, give details. : Nil

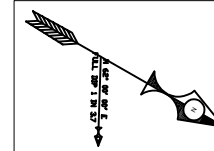
d) Mode of treatment given to substantiate subsidence effect:

- Total man-shifts worked in subsidence area for crack filling : 555 (apr24-sep24)
- Total dozer-shifts worked for subsidence reclamation : Nil
- Area filled up with OB/ subsoil material : Nil
- Quantity of OB / Subsoil dumped : Nil
- Maximum height of dump : Nil

d) i) Expenditure incurred for last six months for subsidence treatment: Rs. 2,60,850.

ii) Expenditure incurred for subsidence treatment so far : Rs. 80,35,094.

LIST OF WGS 84 CO-ORDINATES OF  
RK-5 PLANTATION AREA



BACK SIDE OF RK-5 ERODED BIT-2

1	18° 53' 12.80244" N	79° 30' 04.45384" E
2	18° 53' 15.79964" N	79° 30' 12.39268" E
3	18° 53' 09.44288" N	79° 30' 15.64441" E
4	18° 53' 08.91595" N	79° 30' 06.99544" E

BACK SIDE OF RK-5 NEAR LPG SHED

1	18° 52' 35.58235" N	79° 29' 40.94422" E
2	18° 52' 40.29671" N	79° 29' 42.71207" E
3	18° 52' 40.14255" N	79° 29' 52.08686" E
4	18° 52' 33.53756" N	79° 29' 50.98478" E
5	18° 52' 31.42153" N	79° 29' 45.26385" E
6	18° 52' 33.83789" N	79° 29' 45.46120" E

LPG GODOWN & KRISHNA COLONY

1	18° 52' 55.40832" N	79° 29' 30.07461" E
2	18° 52' 57.48423" N	79° 29' 30.07461" E
3	18° 52' 42.73289" N	79° 29' 30.07461" E
4	18° 52' 36.29551" N	79° 29' 30.07461" E

Opp. to RK-5B Mine (Bamboo)

1	18° 53' 35.10000" N	79° 29' 55.30736" E
2	18° 53' 36.12338" N	79° 29' 58.12546" E
3	18° 53' 48.53564" N	79° 29' 52.72463" E
4	18° 54' 02.12002" N	79° 29' 46.96543" E
5	18° 54' 10.73094" N	79° 29' 42.95241" E
6	18° 54' 15.13714" N	79° 29' 41.01234" E
7	18° 54' 13.10803" N	79° 29' 38.25001" E
8	18° 53' 54.77074" N	79° 29' 46.90842" E
9	18° 53' 40.88780" N	79° 29' 52.84207" E

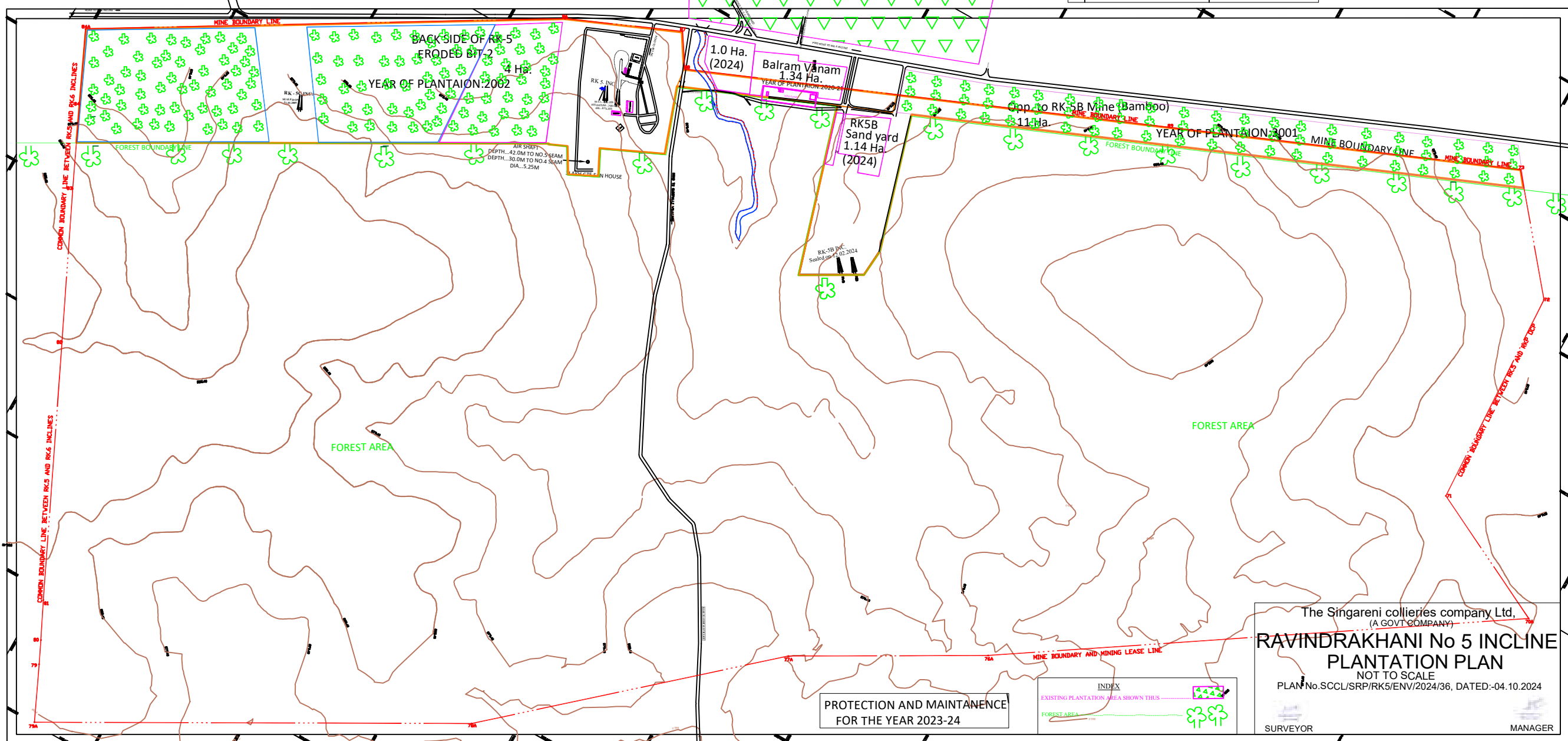
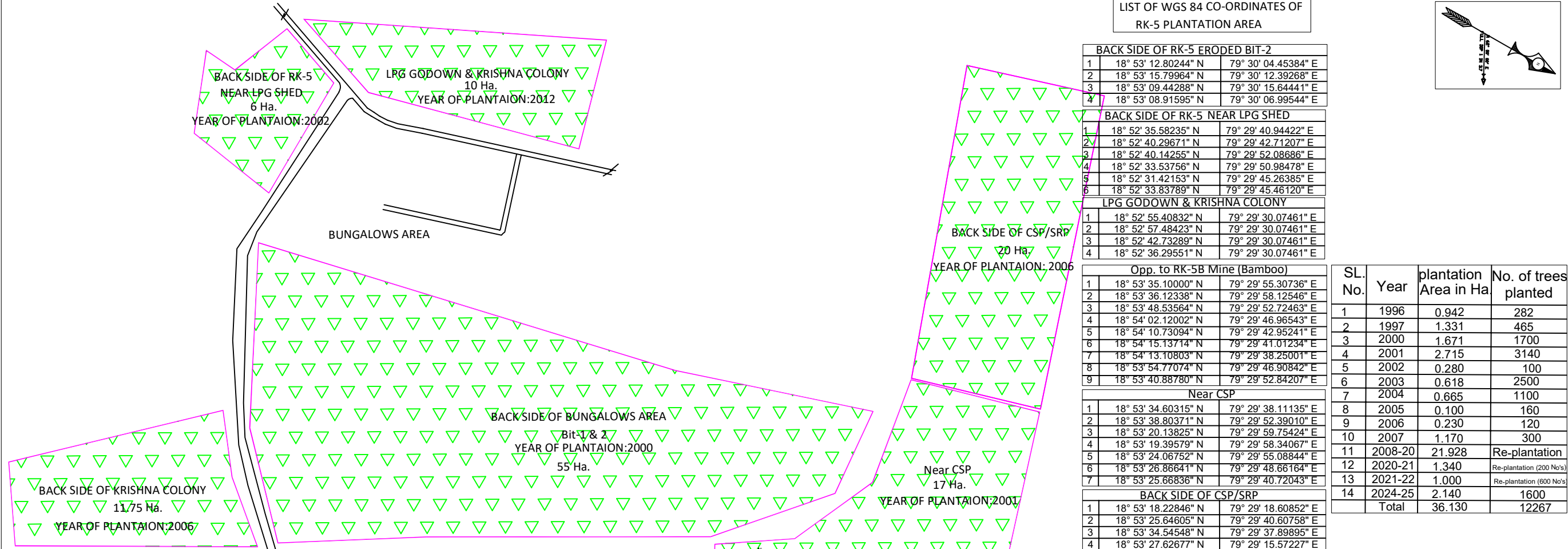
Near CSP

1	18° 53' 34.60315" N	79° 29' 38.11135" E
2	18° 53' 38.80371" N	79° 29' 52.39010" E
3	18° 53' 20.13825" N	79° 29' 59.75424" E
4	18° 53' 19.39579" N	79° 29' 58.34067" E
5	18° 53' 24.06752" N	79° 29' 55.08844" E
6	18° 53' 26.86641" N	79° 29' 48.66164" E
7	18° 53' 25.66836" N	79° 29' 40.72043" E

BACK SIDE OF CSP/SRP

1	18° 53' 18.22846" N	79° 29' 18.60852" E
2	18° 53' 25.64605" N	79° 29' 40.60758" E
3	18° 53' 34.54548" N	79° 29' 37.89895" E
4	18° 53' 27.62677" N	79° 29' 15.57227" E

SL. No.	Year	plantation Area in Ha	No. of trees planted
1	1996	0.942	282
2	1997	1.331	465
3	2000	1.671	1700
4	2001	2.715	3140
5	2002	0.280	100
6	2003	0.618	2500
7	2004	0.665	1100
8	2005	0.100	160
9	2006	0.230	120
10	2007	1.170	300
11	2008-20	21.928	Re-plantation
12	2020-21	1.340	Re-plantation (200 No's)
13	2021-22	1.000	Re-plantation (600 No's)
14	2024-25	2.140	1600
	Total	36.130	12267

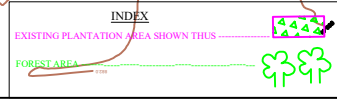


The Singareni collieries company Ltd.  
(A GOVT COMPANY)

**RAVINDRAKHANI No 5 INCLINE PLANTATION PLAN**  
NOT TO SCALE  
PLAN No. SCCL/SRP/RK5/ENV/2024/36, DATED:-04.10.2024

SURVEYOR: [Signature] MANAGER: [Signature]

PROTECTION AND MAINTANENCE FOR THE YEAR 2023-24







The Singareni Collieries Company Limited  
(Government Company)  
Srirampur Area

Ref.No SRP/ENV/Wildlife/2023/ 197

Date: 13.07.2023.

To,  
The District Forest Officer,  
Mancherial.

Sir,

Sub:- Wildlife Conservation & Mitigation Plan for Schedule-I species in Mancherial forest Division of Srirampur Area Mines (RK-5, RK-6, RK-7, RKNT, RK-8, SRP-1, SRP-3&3A, IK-1A, SRP.OC-I, OC-II Exp, Indaram OC projects) for 10 years - Depositing of funds of Rs.5,26,36,700/- Payment through RTGS on dt. 10.07.2023 - Reg.

Ref:- 1) 5694/2021/WL-1, dated: 01.04.2022, issued by The PCCF & CWW.  
2) Lr.No.2698/2021/D5, dated: 22.04.2022, issued by DFO, MNCL.

-oOo-

With reference to the subject cited, approval was accorded by The PCCF & CWW for the Wildlife Conservation & Mitigation Plan for Schedule-I species in Mancherial forest Division of Srirampur Area Mines (RK-5, RK-6, RK-7, RKNT, RK-8, SRP-1, SRP-3&3A, IK-1A, SRP.OC-I, OC-II Exp, Indaram OC projects) for 10 years with an amount of Rs. 5,26,36,700/- (Rupees Five Crore twenty six lakhs thirty six thousand and seven hundred only).

Vide reference (2), it was requested to deposit the required funds in the following Account No.

Sl. No.	Description/ Account No.	Account Name	Branch & IFSC code
1.	110310100030284	Forest Bio Diversity Conservation Society of Telangana	Union Bank of India (Secretariat Branch, HYDERABAD), IFS code. UBIN0811793

Accordingly, vide UTR. No. SBINR52023071059966092, Dated. 10.07.2023, an amount of Rs. 5,26,36,700/- (Rupees Five Crore Twenty six lakhs thirty six thousand and seven hundred only) was deposited through RTGS on dated: 10.07.2023 towards payment of Wildlife Conservation & Mitigation Plan.

Kindly acknowledge receipt of the same and it is requested to take up the works as per the approved Wildlife Conservation & Mitigation Plan for Schedule-I species. The approved plan is enclosed for your kind reference.

Yours faithfully,

Encl: 1. UTR Receipt.  
2. Wild life conservation and mitigation plan



*S. Sreenivasulu Reddy*  
**General Manager**  
**Srirampur Area**  
General Manager  
SRIRAMPUR

1506  
6/4/2022  
GOVERNMENT OF TELANGANA  
FOREST DEPARTMENT



Re. No.: 5694/2021/WL-1  
Date: 01.04.2022

Office of Prl. Chief Conservator of Forests, Telangana  
Amrany Bhavan, Saifabad, Hyderabad

*Sri. Swargam Srinivas, I.F.S.,  
Prl. Chief Conservator of Forests (P&V) &  
Chief Wildlife Warden (FAC)*

7-5  
Sub: - TSFD - Wildlife - Obtaining Environmental Clearance for Srirampur group of mines and accordingly approval of CWLW for wildlife mitigation plan for schedule - I species in Mancherial forest division - Request for expansion of srirampur area projects. (srirampur oc-i, srirampur oc-ii exp., indaram oc & ik-1a incline (part of indaram mining lease), srirampur-1, srirampur-3&3a, ravindra khani-5, ravindra khani-6, ravindra khani-7, ravindra khani-nt, ravindra khani-8 and indaram khani-1a projects) SCCL for revision of SCCL for revision of wildlife mitigation plan - Revised wildlife mitigation measures plan for (10) years - Approved and communicated- Regarding.

Ref: - 1. CCF& FDPT, KTR Re. No. 3069/2021/D2, dt. 22.02.2022.  
2. Prl. CCF&CWLW TS, Hyd Re. No.5694/2021/WL-1, dt. 12.07.2021&22.11.2021.

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This is to inform that, the CCF& FDPT, KTR in the 1<sup>st</sup> reference, submitted his remarks on the wildlife mitigation plan prepared by EPTRJ, Hyderabad as called for in this office references 2<sup>nd</sup> cited for obtaining environment clearance for Srirampur Group of Mines being operated by SCCL falling in Mancherial District.

The FD, KTR also enclosed a revised Wildlife conservation and mitigation plan for the proposed expansion of the Srirampur area projects. (Srirampur OC-I, Srirampur OC-II exp., Indaram OC & IK-1A incline (part of indaram mining lease), Srirampur-1, Srirampur-3&3A, Ravindra Khani-5, Ravindra Khani-6, Ravindra khani-7, Ravindra khani-NT, Ravindra khani-8 and indaram khani-1A projects). The plan prepared by the FD, KTR with a proposed outlay of Rs.526.367 lakh is to be implemented over a period of (10) years from 2022-23 to 2030-31. The major components proposed are:-

Sl. No.	Component	Proposed allocation (Rs in lakh)
1	Strengthening of Wildlife Protection	100.311
2	Wildlife Habitat improvement	205.630
3	Monitoring of Wildlife and Research	102.960
4	Publicity, awareness and Education	14.400
5	Fire Protection and Management	16.00
6	Repairs and maintenance to Camp offices	10.00
7	Eco-Development activities	52.00
8	Administrative cost and unforeseen	25.065
	Total	526.367

The revised Wildlife conservation and mitigation plan for the proposed expansion of the Srirampur area projects by SCTL (Srirampur OC-1, Srirampur OC-11 exp., Indaram OC & 1K-1A include part of inland mitigation lease), Srirampur-1, Srirampur-3&3A, Ravindra Khani-5, Ravindra Khani-6, Ravindra Khani-7, Ravindra Khani-NT, Ravindra Khani-8 and Indaram Khani-1A projects) for a period of 10 years with proposed outlay of Rs.526.367 lakh prepared by FDDT, KTR as shown is approved. A copy of the detailed plan is enclosed.

The CCFD, KTR is requested to raise demand with SCTL for depositing the proposed mitigation amount of Rs.526.367 lakh in MDSCT account of Chief Wildlife Warden account, Telangana.

Incl: As above.

Sd/- Swargam Srinivas,  
Pr. Chief Conservator of Forests (P&V) &  
Chief Wildlife Warden (P&V)

To  
The Chief Conservator of Forests / FDDT, KTR.

Copy to Pr. Chief Conservator of Forests (HoFP) & I/c FCA, O/o PCCF(HoFP) for information and necessary action.

Copy to the General Manager, Environment, SCL Limited, Bhadrachalam Road Rly. Station, Kothagudem - 507 101 for information and necessary action.

Copy to the Advisor, (Forestry), SCC Limited, Singareni Bhuvan, Red Hills, P.B.No. 18, Kahirebad, Hyderabad - 500 004 for information and necessary action.

✓ Copy to District Forest Officer, Mancherial for information and necessary action.

// True Copy //

for Pr. Chief Conservator of Forests

**ATTITUDE OF PHREATIC SURFACE IN SRIRAMPUR AREA**

Well No.	Name of the Village	Location	Owner's name	Type of well	Total depth (m)	MP (m)	Dia(m)	Depth to water (m)		
									2023	2024
1	Arunakka Nagar	Near GM Office, 18°51'18.38" N, 79°30'40.68"E	N. Lingaiah	DW	9.40	1.00	1.00	Winter	3.84	4.38
								Pre monsoon	5.27	5.20
								Monsoon	1.64	1.43
								Post monsoon	2.49	
2	RK6 Colony	Near Shiva temple, 18°52'15.84" N, 79°30'04"E	Q.No.SA-13	DW	10.00	1.20	1.20	Winter	1.74	2.52
								Pre monsoon	3.53	3.70
								monsoon	0.81	0.90
								Post monsoon	1.53	
3	RK6 Colony	Kurma wada, 18°52'14" N, 79°30'04"E	Karre Posham	DW	6.50	1.00	1.00	Winter	2.96	1.87
								Pre monsoon	1.90	2.18
								Monsoon	1.28	1.30
								Post monsoon	1.63	
5	Srirampur (Naspur X road)	Naspur X Road, 18°51'17"N, 79°28'48"E	Suddula Shankar	DW	10.00	0.60	1.00	Winter	6.18	6.24
								Pre monsoon	7.82	7.85
								Monsoon	4.29	2.85
								Post monsoon	4.68	
6	Sethar ampalli	On the way to Intake well, 18°50'31.72" N, 79°28'34.46"E	Surimella Lachanna	DW	8.50	1.00	1.00	Winter	2.92	3.76
								Pre monsoon	4.47	5.80
								Monsoon	2.23	1.58
								Post monsoon	2.87	
7	Sethar ampalli	On the way to Tallapalli, 18°50'37.91"N, 79°29'0.81"E	M. Gopaiyah	DW	15.00	1.20	1.20	Winter	10.31	10.55
								Pre monsoon	13.30	13.00
								Monsoon	5.00	3.50
								Post monsoon	7.25	
		Roadside, 18°49'59" N, 79°29'16"E	Rukum Ramaiah					Winter	2.08	2.96
								Pre monsoon	2.17	3.09

Well No.	Name of the Village	Location	Owner's name	Type of well	Total depth (m)	MP (m)	Dia(m)	Depth to water (m)		
									2023	2024
8*	Tallapalli			DW	9.10	3.00	3.00	Monsoon	2.03	2.60*
								Post monsoon	2.05	
9	Tallapalli	Towards OC, 18°50'3.60"N, 79°29'34.41"E	B.Rajaiah	DW	10.50	1.20	1.20	Winter	5.97	6.80
								Pre monsoon	9.97	7.15
								Monsoon	4.40	2.89
								Post monsoon	6.15	
10	Singapuram	Opp.Panchayat office, 18°49'26.43" N, 79°30'11.09"E	Nammala Srinivasu	DW	7.40	3.20	3.20	Winter	3.18	AB
								Pre monsoon	4.17	AB
								Monsoon	1.83	AB
								Post monsoon	2.54	
12	Ramaraopet	Near bridge, 18°49'17.80" N, 79°30'48.89"E	Gunta Chadraiah	DW	7.00	1.30	1.30	Winter	5.22	4.85
								Pre monsoon	5.67	5.60
								Monsoon	1.08	1.00
								Post monsoon	3.53	
14	Indaram	Opp.Essar petrol bunk, 18°49'13.91" N, 79°31'39.44"E	Adla Bakkaiah	DW	11.50	3x4	3X4	Winter	6.17	5.60
								Pre monsoon	3.60	6.53
								Monsoon	3.44	2.00
								Post monsoon	3.46	
18	Tekumatla	Along the road, 18°48'48.52" N, 79°32'37.20"E	Ricemill (Kamalakar)	DW	11.50	1.60	1.60	Winter	9.74	8.50
								Pre monsoon	11.37	11.40
								Monsoon	7.68	7.07
								Post monsoon	8.21	
19	Tekumatla	Along the road, 18°48'40.20" N, 79°32'50.84"E	V. Ramireddy	DW	11.00	1.00	1.00	Winter	3.88	4.00
								Pre monsoon	5.07	4.70
								Monsoon	3.10	2.10
								Post monsoon	3.19	
20	Indaram	On the way to Tekumatla, 18°49'11.71" N, 79°31'59.03"E	Govt. Well	DW	9.30	2.00	2.00	Winter	4.86	4.26
								Pre monsoon	7.37	7.30
								monsoon	3.73	3.00
								Post monsoon	4.10	



Well No.	Name of the Village	Location	Owner's name	Type of well	Total depth (m)	MP (m)	Dia(m)	Depth to water (m)		
									2023	2024
21	Indaram	Side of HP petrol bunk, 18°49'39.46" N, 79°31'39.96"E	M.Uppalaiah	DW	8.00	1.20	1.20	Winter	6.33	6.19
								Pre monsoon	6.40	6.45
								Monsoon	2.01	2.30
								Post monsoon	2.81	
22*	Rasulpalli	Near bus stop, 18°50'33.40" N, 79°33'8.13"E	Gomati sattaiah	DW	8.00	1.00	1.00	winter	2.98	2.85
								Pre monsoon	3.05	3.00
								monsoon	1.48	1.22*
								Post monsoon	2.44	
23	Mudikunta	Near Village junction, 18°51'43.69" N, 79°33'18.11"E	G.Rajaiah	DW	11.40	1.20	1.00	Winter	5.08	6.20
								Pre monsoon	5.51	8.20
								Monsoon	2.70	2.00
								Post monsoon	3.28	
25	Kankur	SC Colony, 18°53'07" N, 79°32'44"E	Reguntla Mallesh	DW	10.00	2.30	2.30	Winter	6.82	2.63
								Pre monsoon	2.85	3.00
								Monsoon	2.00	1.75
								Post monsoon	2.47	
26	Jaipur	Near bus stop, 18°50'41.33" N, 79°34'43.27"E	Behind AE off.	DW	12.00	1.00	1.00	Winter	2.99	3.45
								Pre monsoon	3.80	3.96
								Monsoon	0.88	0.83
								Post monsoon	1.21	
28	Venkata Raopalli	Opp. to Primary School, 18°52'5.81"N, 79°34'39.14"E	--	Ag.W	14.00	1.80	1.80	Winter	2.09	3.00
								Pre monsoon	3.12	4.15
								Monsoon	0.58	AB
								Post monsoon	2.04	
29	Mittapalli	Village center, 18°52'30" N, 79°33'36"E	Gaddam Suresh goud	DW	8.00	1.00	1.00	Winter	5.73	5.33
								Pre monsoon	4.39	4.44
								Monsoon	1.83	3.28
								Post monsoon	4.10	
30	Elkanti	Village center,	Jalampalli Posha mallu	DW	10.00	2.40	2.40	Winter	6.72	4.40
								Pre monsoon	9.70	8.20

Well No.	Name of the Village	Location	Owner's name	Type of well	Total depth (m)	MP (m)	Dia(m)	Depth to water (m)		
									2023	2024
		18°48'07"N, 79°34'24"E	(GDK10A-Maz.)					Monsoon	1.70	1.60
								Post monsoon	2.73	
31	Ponnaram	Opp.to TSSWR School, 18°55'26.88" N, 79°32'31.76"E	Penchal Anjanna	DW	8.00	1.00	1.00	Winter	3.40	3.83
								Pre monsoon	4.67	4.71
								Monsoon	2.08	1.88
								Post monsoon	3.11	
32	Gudipalli	Along the mainroad, 18°54'4.14"N, 79°32'25.41"E	Velpula Sampath	Ag.W	11.00	5.00	5.00	Winter	6.91	6.98
								Pre monsoon	7.67	7.71
								Monsoon	3.38	2.48
								Post monsoon	5.73	
33	Gangipalli	Primaryschoolroad, 18°48'31.31" N, 79°35'4.60"E	Opp.NaredlaMall areddy /PusalaRajeswari	DW	10.00	1.50	1.50	Winter	4.63	7.56
								Pre monsoon	Dry	5.28
								Monsoon	4.75	2.44
								Post monsoon	4.88	
36	Shetpalli	Near Hanuman temple, 18°46'52" N, 79°34'26"E	Rangu Kittaiah	DW	8.00	2.00	2.00	Winter	6.87	3.75
								Pre monsoon	4.10	6.50
								monsoon	3.02	1.56
								Post monsoon	3.21	
37	Jaipur	Opp.to Post office, 18°50'45.19" N, 79°35'10.70"E	Beeskula Mallaiah	DW	10.00	1.50	1.50	Winter	6.96	6.82
								Pre monsoon	7.02	7.72
								Monsoon	4.08	3.60
								Post monsoon	4.49	
38	Jaipur	Hanmanwada, 18°50'56.36" N, 79°35'5.14"E	BhuneniRajaiah,N earGram panchayath	DW	10.00	2.00	2.00	Winter	6.86	7.56
								Pre monsoon	8.30	8.35
								Monsoon	6.19	AB
								Post monsoon	6.28	
39	Narwa	Village entrance, 18°51'09" N, 79°33'49"E	Salluri venkatesh SCCL Employee	DW	12.00	2.00	2.00	Winter	8.81	8.82
								Pre monsoon	10.50	10.69
								Monsoon	6.08	4.90
								Post monsoon	7.75	

Well No.	Name of the Village	Location	Owner's name	Type of well	Total depth (m)	MP (m)	Dia(m)	Depth to water (m)		
									2023	2024
40	Gudipalli	OpptoSC Colony, 18°54'6.84"N, 79°32'12.90"E	Segyam rajuwell/Openland	DW	10.00	3.00	3.00	Winter	6.54	6.50
								Pre monsoon	dry	8.10
								Monsoon	3.23	2.49
								Post monsoon	5.18	
41	VenkataRaopalli	Villagecenter, 18°52'6.46"N, 79°34'33.74"E	Durgam Kishtaiah	DW	12.00	5.00	5.00	Winter	6.28	7.50
								Pre monsoon	7.67	8.00
								Monsoon	3.39	3.00
								Post monsoon	4.05	
42	Narsingapur	Near Hanuman temple, 18°47'17.08" N, 79°35'17.18"E	Naskur Mallaiah	DW	12.00	1.00	1.00	Winter	5.39	6.25
								Pre monsoon	8.28	8.28
								Monsoon	2.74	1.00
								Post monsoon	3.45	
43	Bejjala	Village Centre, 18°46'11.73" N, 79°34'53.69"E	ThotaBapu, Adj.to Grampanchayath	DW	10.00	3.00	3.00	Winter	4.91	4.30
								Pre monsoon	5.93	6.12
								Monsoon	2.56	3.00
								Post monsoon	3.78	
44	Kistapur	Near Hanuman temple, 18°44'53.49" N, 79°38'7.81"E	Dhanda Krishna Reddy	DW	8.00	1.00	1.00	Winter	4.10	4.64
								Pre monsoon	dry	5.00
								Monsoon	3.35	1.00
								Post monsoon	3.90	
45	Maddulapalli	Village center, 18°47'2.53"N, 79°36'12.36"E	SandhanaveniBala iah/ SCCL Employee	DW	9.00	2.00	2.00	Winter	5.99	3.74
								Pre monsoon	6.47	6.41
								Monsoon	0.88	2.00
								Post monsoon	1.38	
46	Polampalli	Indirama colony, 18°50'25.66" N, 79°39'8.63"E	Dharshinala Madhukar	DW	7.50	1.00	1.00	Winter	4.64	3.54
								Pre monsoon	4.80	5.00
								Monsoon	1.80	1.00
								Post monsoon	3.24	
47	Bhimaram	Alongthehighway, 18°50'51.85" N,	Bandari Ramaiah	DW	11.00	3.60	3.60	Winter	4.18	WD
								Pre monsoon	WD	WD
								Monsoon	NA	1.00

Well No.	Name of the Village	Location	Owner's name	Type of well	Total depth (m)	MP (m)	Dia(m)	Depth to water (m)		
									2023	2024
		79°40'38.25"E						Post monsoon	WD	
48	Bhimaram	Padmashaliwada, 18°51'10.60" N, 79°40'18.97"E	KokkulaRamulu	DW	9.00	1.16	1.15	Winter	2.08	2.00
								Pre monsoon	2.20	2.53
								Monsoon	1.18	1.15
								Post monsoon	1.93	
49	Kothagudem	Adj.to Road,18°51'47.07" N, 79°40'31.14"E	Govt well	Ag.W	5.50	4.00	4.00	Winter	1.88	2.85
								Pre monsoon	2.41	3.32
								Monsoon	1.18	4.00
								Post monsoon	1.99	
50	Kazipalli	VillageEntrance,18°55'26.98" N, 79°38'44.18"E	KommuDevender	DW	7.00	2.00	2.00	Winter	5.51	5.80
								Pre monsoon	6.27	6.32
								Monsoon	3.10	2.00
								Post monsoon	4.84	
51	Dampur	Gollawada, 18°54'45.59" N, 79°37'52.25"E	KoriviThirupathi	DW	10.50	1.90	1.90	Winter	4.57	4.30
								Pre monsoon	6.47	4.60
								monsoon	2.64	1.90
								Post monsoon	3.89	
52	Reddipalli	Villagecenter, 18°55'22.45" N, 79°37'12.10"E	KudenthaNelama	DW	10.00	2.50	2.50	Winter	3.54	4.41
								Pre monsoon	3.97	4.60
								monsoon	2.64	2.50
								Post monsoon	2.08	
53	Dharmaram	Villagecenter, 18°55'29.90" N, 79°36'52.94"E	SanthoshamSriram Reddy	DW	10.00	2.45	2.45	Winter	2.08	3.18
								Pre monsoon	3.22	4.03
								Monsoon	2.77	2.45
								Post monsoon	1.80	
54	Theegalpahad	Opp.to Bharat petroleum bunk, 18°51'23.15" N, 79°29'24.72"E	Md.RahmanS/o Kaleel	DW	10.00	2.00	2.00	Winter	3.18	3.20
								Pre monsoon	4.37	5.60
								Monsoon	2.36	2.00
								Post monsoon	3.11	
55	Mudikunta	Village center,18°51'42.63" N, 79°33'16.24"E	PadalaShankaraiahS/o Gattaiah	DW	15.00	2.20	2.20	Winter	5.10	3.35
								Pre monsoon	11.07	10.50
								Monsoon	2.70	2.20
								Post monsoon	3.65	

Well No.	Name of the Village	Location	Owner's name	Type of well	Total depth (m)	MP (m)	Dia(m)	Depth to water (m)		
									2023	2024
56	Mancherial	Opp.Sunnambattiwada, 18°51'47.99" N, 79°27'25.30"E	PesaraRayalingu	DW	15.00	2.20	2.20	Winter	8.91	8.45
								Pre monsoon	8.45	8.60
								Monsoon	4.19	2.20
								Post monsoon	6.80	

**Note: MP: Measuring point ,WD: Well Damaged.**  
**Well No.:4,11,13,15,16,17,24,27,34&35 were Abandoned.**

#### ATTITUDE OF PIEZOMETRIC SURFACE AROUND SRIRAMPUR OC-II EXPANSION PROJECT

Piezometric well no.	Location	Depth (m)	Dia. (m)	Measuring point (m)	Depth to water (m)		
					Winter 2024	Pre monsoon 2024	Monsoon-2024
SRP_OCP.I PW-5	About 500 m south of the quarry and 150m north of Indaram Tank (N18°49'35.43" – E 79°30'57.60" )	208	0.10	0.30	2.74	4.53	1.20
SRP_OCP.II PW-7	Near Singapur village (N18°49'46.47" – E 79°30'25.52" )	50	0.10	0.20	AB	AB	AB
SRP_OCP.II PW-8	Near Project Office sub-station. About 125m from N side of quarry surface limit. (N18°51'4.12" – E 79°29'39.90" )	50	0.10	0.40	22.98	23.80	17.70
SRP_OCP.II PW-10	Road to SRP bus stand, about 300m from N side of quarry surface limit	50	0.1	0.50	15.90	17.07	17.00



	(N18°51'7.10" – E 79°30'11.26" )						
*SRP_CSIRO PW-11	West side External dump area, Near to Thallapalli village. (N18°49'54.731" – E 79°29'11.085	50	0.1	0.2	NA	NA	AB
*SRP_CSIRO PW-12	West side External dump area. Near to Thallapalli village (N18°49'50.573" - E 79°29'06.202")	50	0.1	0.2	2.00	2.65	NA
*SRP_CSIRO PW-13	West side External dump area. Road to Godavari river (N18°49'45.286" – E 79°29'06.811")	50	0.1	0.2	3.25	4.22	2.20
*SRP_CSIRO PW-14	West side External dump area. Road to Godavari River (N18°49'32.305" – E 79°28'50.154")	50	0.1	0.2	4.55	6.48	4.24

Note: Piezometric well No.- SRP OCP-PW\_1, 2, 3, 4 and 6,7 & 9 were abandoned.

WD: Well damaged, \*NA: Not Approachable.

**ATTITUDE OF PHREATIC SURFACE IN GODAVARI VALLEY COAL FIELD**

Area: Chennur

Well No	Name of the Village	Location	Owners Name	Type of well	Total depth (m)	MP (m)	Dia (m)	D T W (m)		
								Winter-2024	Pre monsoon-2024	Monsoon-2024
5	Chennur	Srinagar Colony, 18°51'16.48" N, 79°46'56.91"E	Sabbani Devaiah	DW	8.50	0.50	1.20	4.98	7.40	2.75
8	Chennur	Towards Theatre road, 18°51'27" N, 79°47'18"E	Rambai	DW	10.00	0.60	0.80	WD	WD	4.30
10	Shivalingapur (Chennurlocal)	18°51'39.30"N, 79°47'31.03"E	Ch. Rangaiah	DW	7.80	0.70	2.00	6.74	6.90	1.50
12	Chennur	ChennurG.P.Kothagudem, 18°51'33"N, 79°47'05"E	SunkariLingaiah	DW	10.00	G.L.	1.20	9.95	9.91	2.20
13	Chennur	Jendawada, 18°51'37.68" N, 79°47'49.81"E	Monitoring by TSGWD	DW	10.00	G.L.	1.20	2.44	3.50	AB
14	Chennur	Bokkalagudem 18°51'30" N, 79°48'03"E	Govt well	DW	11.00	0.50	3.50	4.32	6.90	2.00

15	Kistampet	Opp. ZPHS School, 18°50'52.81" N, 79°45'14.11"E	Bera Chiranjeevi	DW	7.00	0.55	3.60	3.73	4.10	0.73
16	Ellakkapet	TowardsLambadipalliroad,18°5 1'24.53" N, 79°45'45.78"E	Opp.toCheruvu	Ag. W	10.00	GL	8.00	3.41	3.57	2.75
17*	Shivalingapur (village)	18°52'55"N, 79°47'51"E	MekalaGattakka	DW	8.00	0.50	2.00	4.64	7.40	2.95
18	Buddaram	Endofthevillage, 18°54'51.82" N, 79°42'50.66"E	Kotavena odelu	Ag.W	9.50	0.40	2.70	8.82	9.00	3.42
19	Kotapalli	TowardsVemanapalli 18°57'20.76" N, 79°47'24.35"E	Kashetti Ramaiah	DW	11.00	0.50	1.50	2.35	2.41	1.25

**Note:-MP: Measuring point, Observation**

**well No.: From 1 to 4,6,7,9 &11 were Abandoned**

**\*Observation wellNo.17was shifted about 300m distance towards West.**

Block / Mine : **IKOCP Area: Srirampur**

Piezometric Well No.	Location	Depth(m)	Dia(m)	MP (m)	Depth to water(m)		
					Winter-2024	Pre Monsoon-2024	Monsoon-2024
IKOCP-PW1	On the way to PO office, adj. to coal transport road, Dip side of the project.3057126.41,949693.45	250	0.10	1.35	15.00	16.56	14.00
IKOCP-PW2	Near Indaram village, On the way to PO office adj. to coal transport road, Dip side of the project.3056296.11,950728.54	250	0.10	1.35	28.14	30.16	25.00

Block / Mine : **CHENNUR SAND MINE LEASE**

Piezometric Well No.	Location	TD(m)	Dia(m)	MP (m)	Monsoon-2024
					DTW(m)
PW-2	First well from upstream side of Godavari river (SW edge of the sand lease, Opp to Palgula village)18 <sup>0</sup> 50'34.9"N,79 <sup>0</sup> 49'21.7"E	30	0.10	0.30	<b>AB</b>
PW-4	Third well from upstream side 18 <sup>0</sup> 51'12.8"N,79 <sup>0</sup> 49'16.5"E	30	0.10	0.30	<b>3.10</b>

<b>PW-5</b>	Fourth well from upstream and adjacent to the road connecting the sand reach 18°51'31.7"N, 79°49'20.7"E	30	0.10	0.30	<b>7.80</b>
<b>Filter well</b>					
<b>PW-2</b>	Between PW-3 and PW-4 18°50'59.3"N, 79°49'17.4"E	9.75	0.10	0.40	<b>3.50</b>

Note: TD: Total depth, MP: Measuring point, WD: Well damaged and AB: Abandoned.

Piezometric well No: Filter well PW-1 was abandoned and Piezometric well No: PW-1,2,3,6&7 are abandoned due to heavy flood in River Godavari.







**ANNEXURE – V****Surface Water Sampling Locations**

<b>Sl. No.</b>	<b>Sample code</b>	<b>Date of sampling</b>	<b>Sampling Location</b>	<b>Latitude</b>	<b>Longitude</b>
1.	SW-1	14.03.2024	Godavari River Upstream (near Sitharampalli)	N 18° 49' 33.5"	E 79° 28' 21.5"
2.	SW-2	14.03.2024	Godavari River Downstream (Shettipalli)	N 18° 53' 41.8"	E 79° 40' 32.6"

**Groundwater Sampling Locations**

<b>Sl. No.</b>	<b>Sample code</b>	<b>Date of sampling</b>	<b>Sampling Location</b>	<b>Latitude</b>	<b>Longitude</b>
1	GW-1	14.03.2024	Kankur Village	N 18° 53' 11.4"	E 79° 32' 44.4"
2	GW-2	14.03.2024	Mudigunta Village	N 18° 53' 08.3"	E 79° 32' 46.3"

## Physico-Chemical and Bacteriological Characteristics of Surface Water

### Physico-Chemical and Bacteriological Characteristics of Surface Water as per CPCB Water Quality Criteria

Sl.No	Parameters	Unit	Test Method	CPCB Water Quality Criteria					RESULT	
				Class A	Class B	Class C	Class D	Class E	SW-1 Godavari River Upstream	SW-2 Godavari River Downstream
1	pH	-	4500-H+B	6.5-8.5	6.5-8.5	6.0 – 9.0	6.5-8.5	6.0-8.5	8.2	8.5
2	Electrical Conductivity	µmhos/cm	2510-B	-	-	-	-	2250 µmhos/cm	798	810
3	Dissolved Oxygen (DO)	mg/l	4500-O.C	6 mg/l or more	5 mg/l or more	4 mg/l or more	4 mg/l or more	-	6.5	6.2
4	Bio chemical Oxygen Demand (3 days 27° C)	mg/l	IS: 3025	2 mg/l or less	3 mg/l or less	3 mg/l or less	-	-	2.4	3.0
5	Total Coliforms	MPN/100ml	9221 B	50 or less	500 or less	5000 or less	-	-	170	220
6	Free Ammonia (as N)	mg/l	4500-NH <sub>3</sub> -F	-	-	-	1.2 mg/l or less	-	BDL	BDL
7	Boron as B	mg/l	3120-B	-	-	-	-	Less than 2 mg/l	0.08	0.15
8	SAR	-	-	-	-	-	-	Less than 26	1.23	1.45

### Physico-Chemical Characteristics of Surface Water at Selected Locations in the Study Area

S. No	Parameters	Unit	Test Method	SW-1 Godavari River Upstream	SW-2 Godavari River Downstream
1	Colour	Hazen	2120. B	5	5
2	Odour	TON	2150. B	No odour observed	No odour observed
3	Temperature	°C	2550. B	25.3	25.4
4	Turbidity	NTU	2130. B	1.23	2.22
5	Total Dissolved Solids at 180° C	mg/l	2540.C	466	485
6	Total Suspended Solids at 105° C	mg/l	2540. D	12	14
7	Chemical Oxygen Demand	mg/l	5220. D	10	10
8	Calcium as Ca	mg/l	3500-Ca.B	54	60
9	Magnesium as Mg	mg/l	3500-Mg.B	43	56
10	Sodium as Na	mg/l	3500-Na.B	50	65
11	Potassium as K	mg/l	3500-K.B	5.2	6.0
12	Chlorides as Cl <sup>-</sup>	mg/l	4500-Cl <sup>-</sup> .B	79	85
13	Sulphates as SO <sub>4</sub> <sup>2-</sup>	mg/l	4500-SO <sub>4</sub> <sup>2-</sup> .E	68	82
14	Fluoride as F <sup>-</sup>	mg/l	4500-F <sup>-</sup> .C	0.82	0.85
15	Nitrates as NO <sub>3</sub>	mg/l	4500-NO <sub>3</sub> <sup>-</sup> .B	0.43	0.59
16	Nitrites as NO <sub>2</sub>	mg/l	4500-NO <sub>2</sub> <sup>-</sup> .B	BDL	BDL
17	Total Phosphates	mg/l	4500-P-D	0.12	BDL

<b>S. No</b>	<b>Parameters</b>	<b>Unit</b>	<b>Test Method</b>	<b>SW-1 Godavari River Upstream</b>	<b>SW-2 Godavari River Downstream</b>
18	Ammonical Nitrogen as NH <sub>3</sub> -N	mg/l	4500-NH <sub>3</sub> -C	BDL	BDL
19	Phenolic compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/l	5530-D	BDL	BDL
20	Oil & Grease	mg/l	5520. B	<1	<1
21	Carbonates as CO <sub>3</sub>	mg/l	2320. B	Nil	Nil
22	Bi-carbonates as HCO <sub>3</sub>	mg/l	2320. B	260	300
23	Fecal Coliforms	MPN/100ml	9221 E	23	33
24	Zinc as Zn	mg/l	3120. B	0.17	0.23
25	Iron as Fe	mg/l	3120. B	0.42	0.71
26	Arsenic as As	mg/l	3120. B	BDL	BDL
27	Lead as Pb	mg/l	3120. B	BDL	BDL
28	Cadmium as Cd	mg/l	3120. B	BDL	BDL
29	Total Chromium as Cr	mg/l	3120. B	BDL	BDL
30	Nickel as Ni	mg/l	3120. B	BDL	BDL
31	Copper as Cu	mg/l	3120-B	BDL	BDL
32	Selenium as Se	mg/l	3120-B	BDL	BDL

## Physico-Chemical, Bacteriological Characteristics of Groundwater Collected within the Study Area

### Organoleptic and Physical Parameters

Sl. No.	Parameters	Unit	Test Method	IS: 10500 Requirement (Acceptable Limit)	IS: 10500 Permissible Limit in the absence of alternate source	RESULT	
						GW-1 Kankur Village	GW-2 Mudigunta Village
3.	Colour	Hazen	2120. B	5	15	<5	<5
4.	Odour	TON	2150. B	Agreeable	Agreeable	Agree.	Agree.
5.	pH	-	4500-H+B	6.5 to 8.5	No relaxation	7.8	7.9
6.	Taste	FTN	2160. B	Agreeable	Agreeable	Agree.	Agree.
7.	Turbidity	NTU	2130. B	1	5	0.1	0.2
8.	Total Dissolved Solids at 180°C	mg/l	2540.C	500	2000	625	757

### General Parameters Concerning Substances Undesirable in Excessive Amounts

Sl. No.	Parameters	Unit	Test Method	IS: 10500 Requirement (Acceptable Limit)	IS: 10500 Permissible Limit in absence of alternate source	RESULT	
						GW-1 Kankur Village	GW-2 Mudigunta Village
1.	Calcium as Ca	mg/l	3500-Ca.B	75	200	62	78
2.	Magnesium as Mg	mg/l	3500-Mg.B	30	100	60	63
3.	Chlorides as Cl-	mg/l	4500-Cl-.B	250	1000	108	134
4.	Sulphates as SO42-	mg/l	4500-SO42- .E	200	400	50	125



5.	Fluoride as F-	mg/l	4500-F-.C	1.0	1.5	0.59	0.97
6.	Nitrates as NO3	mg/l	4500-NO3-.B	45	No relaxation	53	48
7.	Total Alkalinity as CaCO3	mg/l	2320. B	200	600	355	330
8.	Total Hardness as CaCO3	mg/l	2340. C	200	600	402	454
9.	Sulphide as H <sub>2</sub> S	mg/l	4500-S2-F&D	0.05	No relaxation	BDL	BDL
10.	Total Ammonia-N	mg/l	IS 3025 (Part 34)	0.5	No relaxation	BDL	BDL
11.	Phenolic compounds as C6H5OH	mg/l	5530-D	0.001	0.002	BDL	BDL
12.	Residual free chlorine	mg/l	4500-Cl-.B	0.2	1.0	BDL	BDL
13.	Mineral oil	mg/l	IS:3025 (part 39)	1.0	No relaxation	absent	absent
14.	Anionic Detergents (as MBAS)	mg/l	IS:13428:2005K	0.2	1.0	<0.2	<0.2
15.	Aluminium as Al	mg/l	3120-B	0.03	0.2	0.09	0.12
16.	Barium as Ba	mg/l	3120. B	0.7	No relaxation	0.08	0.28
17.	Boron as B	mg/l	3120-B	0.5	2.4	0.09	0.17
18.	Iron as Fe	mg/l	3120-B	1.0	No relaxation	0.39	0.67
19.	Zinc as Zn	mg/l	3120-B	5	15	0.15	0.24
20.	Copper as Cu	mg/l	3120-B	0.05	1.5	BDL	BDL
21.	Manganese as Mn	mg/l	3120-B	0.1	0.3	BDL	0.08
22.	Selenium as Se	mg/l	3120-B	0.01	No relaxation	BDL	BDL
23.	Silver as Ag	mg/l	3120. B	0.1	No relaxation	BDL	BDL

**Parameters Concerning Toxic Substances**

S. No.	Parameters	Unit	Test Method	IS: 10500 Requirement (Acceptable Limit)	IS: 10500 Permissible Limit in the absence of alternate source	RESULT	
						GW-1 Kankur Village	GW-2 Mudigunta Village
1.	Cadmium as Cd	mg/l	3120-B	0.003	No relaxation	BDL	BDL
2.	Cyanide as CN-	mg/l	4500-CN.F	0.05	No relaxation	BDL	BDL
3.	Lead as Pb	mg/l	3120-B	0.01	No relaxation	BDL	BDL
4.	Molybdenum as Mo	mg/l	3120. B	0.07	No relaxation	BDL	BDL
5.	Nickel as Ni	mg/l	3120-B	0.02	No relaxation	BDL	BDL
6.	Total Arsenic as As	mg/l	3120-B	0.01	0.05	BDL	BDL
7.	Total Chromium as Cr	mg/l	3120-B	0.05	No relaxation	BDL	BDL
8.	Mercury as Hg	µg/l	3500-Hg.B	0.001	No relaxation	BDL	BDL
9.	<b>Pesticides:</b> α-BHC, β-BHC, γ-BHC, δ-BHC, o, p-DDT, p, p' -DDT, Endosulfan, β- Endosulfan, Aldrin, Dieldrin	µg/l	6630. D	Absent	0.001	ND	ND
	2,4-D, Carboryl (Carbonate) Malathion Methyl Parathion Anilophos, Chloropyriphos	Qualitative analysis	6630. D	Absent	0.001	ND	ND
10.	<b>Polyaromatic Hydrocarbons (PAH's):</b> Acenaphthene, Acenaphthylene, Anthracene, B(a)A, B(a)P, B(b)F, B(k)F, Pyrene, Dibenz (a,h) anthracene, Fluoranthene, Fluorene, Indeno (1,2,3-(d) Pyrene, Naphthalene, Phenanthrene, Pyrene, Methyl Naphthalene	µg/l	6440.C	-	-	ND	ND

### Bacteriological Quality of Drinking water

S. No.	Parameters	Unit	Test Method	IS: 10500 Requirement (Acceptable Limit)	IS: 10500 Permissible Limit in the absence of alternate source	RESULT	
						GW-1 Kankur Village	GW-2 Mudigunta Village
1	Total Coliforms	MPN/100 ml	9221 B	-	-	<1.8	<1.8
2	Fecal Coliforms	MPN/100 ml	9221 E	-	-	<1.8	<1.8

*NTU – Nephelometric Turbidity Unit; BDL – Below Detection Limit Detection Limits of Aluminium (Al), Antimony (Sb), Arsenic (As), Barium (Ba), Boron (B), Cadmium (Cd), Chromium (Cr)/Total Chromium, Cobalt (Co), Copper (Cu), Iron (Fe), Lead (Pb), Magnesium (Mg), Manganese (Mn), Molybdenum (Mo), Nickel (Ni), Nickel (Ni), Selenium (Se), Silver (Ag), Vanadium (V), Zinc (Zn), Phenols is 0.01mg/l. Detection Limit of Mercury (Hg), Phosphates/Total Phosphates, Nitrites NO<sub>2</sub>, Free Ammonia, Total Ammonia is 0.02mg/l. Detection Limits of Potassium (K), Sodium (Na) is 0.03mg/l. Detection Limits of Cyanide (CN), Sulfide (S<sub>2</sub>), Hexavalent Chromium Cr+6 is 0.05mg/l. Detection Limits of Nitrates as NO<sub>3</sub>, Fluoride is 0.1mg/l. Detection Limits of Residual Free chlorine, Free Available chlorine, O&G is 1mg/l. Detection Limits of Sulfate SO<sub>4</sub><sup>2-</sup>, Ammonical Nitrogen, Total Kjeldahl Nitrogen (TKN), COD, Total Nitrogen (TN) is 5mg/l. BOD-3mg/l. ND-Not Detected; Detection Limit: Pesticides- 0.1 ppm; PAHs – 1 ppm.*

### Surface Water Sampling Locations

Sl. No.	Sample code	Date of sampling	Sampling Location	Latitude	Longitude
9.	SW-1	11.06.2024	Godavari River Upstream (near Sitharampalli)	N 18° 49' 33.5"	E 79° 28' 21.5"
10.	SW-2	11.06.2024	Godavari River Downstream (Shettipalli)	N 18° 53' 41.8"	E 79° 40' 32.6"

### Groundwater Sampling Locations

Sl. No.	Sample code	Date of sampling	Sampling Location	Latitude	Longitude
1	GW-1	11.06.2024	Kankur Village	N 18° 53' 11.4"	E 79° 32' 44.4"
2	GW-2	11.06.2024	Mudigunta Village	N 18° 53' 08.3"	E 79° 32' 46.3"

## Physico-Chemical and Bacteriological Characteristics of Surface Water

### Physico-Chemical and Bacteriological Characteristics of Surface Water as per CPCB Water Quality Criteria

Sl.No	Parameters	Unit	Test Method	CPCB Water Quality Criteria					RESULT	
				Class A	Class B	Class C	Class D	Class E	SW-1 Godavari River Upstream	SW-2 Godavari River Downstream
1	pH	-	4500-H+B	6.5-8.5	6.5-8.5	6.0 – 9.0	6.5-8.5	6.0-8.5	8.5	8.4
2	Electrical Conductivity	µmhos/cm	2510-B	-	-	-	-	2250 µmhos/cm	755	920
3	Dissolved Oxygen (DO)	mg/l	4500-O.C	6 mg/l or more	5 mg/l or more	4 mg/l or more	4 mg/l or more	-	6.4	6.0
4	Bio chemical Oxygen Demand (3 days 27° C)	mg/l	IS: 3025	2 mg/l or less	3 mg/l or less	3 mg/l or less	-	-	2.8	3.0
5	Total Coliforms	MPN/100ml	9221 B	50 or less	500 or less	5000 or less	-	-	220	220
6	Free Ammonia (as N)	mg/l	4500-NH <sub>3</sub> -F	-	-	-	1.2 mg/l or less	-	BDL	BDL
7	Boron as B	mg/l	3120-B	-	-	-	-	Less than 2 mg/l	0.08	0.12
8	SAR	-	-	-	-	-	-	Less than 26	1.01	1.75

### Physico-Chemical Characteristics of Surface Water at Selected Locations in the Study Area

S. No	Parameters	Unit	Test Method	SW-1 Godavari River Upstream	SW-2 Godavari River Downstream
1	Colour	Hazen	2120. B	5	5
2	Odour	TON	2150. B	No odour observed	No odour observed
3	Temperature	°C	2550. B	25	26.8
4	Turbidity	NTU	2130. B	2.8	4.7
5	Total Dissolved Solids at 180° C	mg/l	2540.C	450	535
6	Total Suspended Solids at 105° C	mg/l	2540. D	14	18
7	Chemical Oxygen Demand	mg/l	5220. D	20	20
8	Calcium as Ca	mg/l	3500-Ca.B	52	50
9	Magnesium as Mg	mg/l	3500-Mg.B	45	43
10	Sodium as Na	mg/l	3500-Na.B	41	70
11	Potassium as K	mg/l	3500-K.B	4.9	8.04
12	Chlorides as Cl <sup>-</sup>	mg/l	4500-Cl.B	65	94
13	Sulphates as SO <sub>4</sub> <sup>2-</sup>	mg/l	4500-SO <sub>4</sub> <sup>2-</sup> .E	61	70
14	Fluoride as F <sup>-</sup>	mg/l	4500-F.C	0.47	0.53
15	Nitrates as NO <sub>3</sub>	mg/l	4500-NO <sub>3</sub> .B	7.8	10
16	Nitrites as NO <sub>2</sub>	mg/l	4500-NO <sub>2</sub> .B	BDL	BDL
17	Total Phosphates	mg/l	4500-P-D	BDL	BDL
18	Ammonical Nitrogen as NH <sub>3</sub> -N	mg/l	4500-NH <sub>3</sub> -C	BDL	BDL
19	Phenolic compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/l	5530-D	BDL	BDL
20	Oil & Grease	mg/l	5520. B	<1	<1
21	Carbonates as CO <sub>3</sub>	mg/l	2320. B	Nil	Nil



S. No	Parameters	Unit	Test Method	SW-1 Godavari River Upstream	SW-2 Godavari River Downstream
22	Bi-carbonates as HCO <sub>3</sub>	mg/l	2320. B	280	305
23	Fecal Coliforms	MPN/100ml	9221 E	33	46
24	Zinc as Zn	mg/l	3120. B	0.1	0.15
25	Iron as Fe	mg/l	3120. B	0.56	0.49
26	Arsenic as As	mg/l	3120. B	BDL	BDL
27	Lead as Pb	mg/l	3120. B	BDL	BDL
28	Cadmium as Cd	mg/l	3120. B	BDL	BDL
29	Total Chromium as Cr	mg/l	3120. B	BDL	BDL
30	Nickel as Ni	mg/l	3120. B	BDL	BDL
31	Copper as Cu	mg/l	3120-B	BDL	BDL
32	Selenium as Se	mg/l	3120-B	BDL	BDL

### Physico-Chemical, Bacteriological Characteristics of Groundwater Collected within the Study Area

#### Organoleptic and Physical Parameters

Sl. No.	Parameters	Unit	Test Method	IS: 10500 Requirement (Acceptable Limit)	IS: 10500 Permissible Limit in the absence of alternate source	RESULT	
						GW-1 Kankur Village	GW-2 Mudigunta Village
1.	Colour	Hazen	2120. B	5	15	<5	<5
2.	Odour	TON	2150. B	Agreeable	Agreeable	Agree.	Agree.
3.	pH	-	4500-H+B	6.5 to 8.5	No relaxation	7.3	7.5
4.	Taste	FTN	2160. B	Agreeable	Agreeable	Agree.	Agree.

5.	Turbidity	NTU	2130.B	1	5	0.33	0.4
6.	Total Dissolved Solids at 180° C	mg/l	2540.C	500	2000	698	658

### General Parameters Concerning Substances Undesirable in Excessive Amounts

Sl. No.	Parameters	Unit	Test Method	IS: 10500 Requirement (Acceptable Limit)	IS: 10500 Permissible Limit in absence of alternate source	RESULT	
						GW-1 Kankur Village	GW-2 Mudigunta Village
1.	Calcium as Ca	mg/l	3500-Ca.B	75	200	66	55
2.	Magnesium as Mg	mg/l	3500-Mg.B	30	100	53	40
3.	Chlorides as Cl-	mg/l	4500-Cl-.B	250	1000	116	128
4.	Sulphates as SO42-	mg/l	4500-SO42-.E	200	400	51	90
5.	Fluoride as F-	mg/l	4500-F-.C	1.0	1.5	0.66	0.48
6.	Nitrates as NO3	mg/l	4500-NO3-.B	45	No relaxation	32	26
7.	Total Alkalinity as CaCO3	mg/l	2320. B	200	600	445	315
8.	Total Hardness as CaCO3	mg/l	2340. C	200	600	383	302
9.	Sulphide as H2S	mg/l	4500-S2-F&D	0.05	No relaxation	BDL	BDL
10.	Total Ammonia-N	mg/l	IS 3025 (Part 34)	0.5	No relaxation	BDL	BDL
11.	Phenolic compounds as C6H5OH	mg/l	5530-D	0.001	0.002	BDL	BDL
12.	Residual free chlorine	mg/l	4500-Cl-.B	0.2	1.0	BDL	BDL
13.	Mineral oil	mg/l	IS:3025 (part 39)	1.0	No relaxation	absent	absent
14.	Anionic Detergents (as MBAS)	mg/l	IS:13428:2005K	0.2	1.0	<0.2	<0.2
15.	Aluminium as Al	mg/l	3120-B	0.03	0.2	BDL	0.07
16.	Barium as Ba	mg/l	3120. B	0.7	No relaxation	0.16	0.28
17.	Boron as B	mg/l	3120-B	0.5	2.4	0.3	0.25

18.	Iron as Fe	mg/l	3120-B	1.0	No relaxation	0.59	0.68
19.	Zinc as Zn	mg/l	3120-B	5	15	0.21	0.09
20.	Copper as Cu	mg/l	3120-B	0.05	1.5	BDL	BDL
21.	Manganese as Mn	mg/l	3120-B	0.1	0.3	BDL	BDL
22.	Selenium as Se	mg/l	3120-B	0.01	No relaxation	BDL	BDL
23.	Silver as Ag	mg/l	3120. B	0.1	No relaxation	BDL	BDL

### Parameters Concerning Toxic Substances

S. No.	Parameters	Unit	Test Method	IS: 10500 Requirement (Acceptable Limit)	IS: 10500 Permissible Limit in the absence of alternate source	RESULT	
						GW-1 Kankur Village	GW-2 Mudigunta Village
1.	Cadmium as Cd	mg/l	3120-B	0.003	No relaxation	BDL	BDL
2.	Cyanide as CN-	mg/l	4500-CN.F	0.05	No relaxation	BDL	BDL
3.	Lead as Pb	mg/l	3120-B	0.01	No relaxation	BDL	BDL
4.	Molybdenum as Mo	mg/l	3120. B	0.07	No relaxation	BDL	BDL
5.	Nickel as Ni	mg/l	3120-B	0.02	No relaxation	BDL	BDL
6.	Total Arsenic as As	mg/l	3120-B	0.01	0.05	BDL	BDL
7.	Total Chromium as Cr	mg/l	3120-B	0.05	No relaxation	BDL	BDL
8.	Mercury as Hg	µg/l	3500-Hg.B	0.001	No relaxation	BDL	BDL
9.	<b>Pesticides:</b> α-BHC, β-BHC, γ-BHC, δ-BHC, o, p-DDT, p, p' -DDT, Endosulfan, β- Endosulfan, Aldrin, Dieldrin	µg/l	6630. D	Absent	0.001	ND	ND
	2,4-D, Carbaryl (Carbonate) Malathion Methyl Parathion Anilophos, Chloropyriphos	Qualitative analysis	6630. D	Absent	0.001	ND	ND
10.	<b>Polyaromatic Hydrocarbons (PAH's):</b> Acenaphthene,	µg/l	6440.C	-	-	ND	ND

Acenaphthylene, Anthracene, B(a)A, B(a)P, B(b)F, B(k)F, Pyrene, Dibenz (a,h) anthracene, Fluoranthene, Fluorene, Indeno (1,2,3-(d) Pyrene, Naphthalene, Phenanthrene, Pyrene, Methyl Naphthalene							
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### Bacteriological Quality of Drinking water

S. No.	Parameters	Unit	Test Method	IS: 10500 Requirement (Acceptable Limit)	IS: 10500 Permissible Limit in the absence of alternate source	RESULT	
						GW-1 Kankur Village	GW-2 Mudigunta Village
1	Total Coliforms	MPN/100 ml	9221 B	-	-	<1.8	<1.8
2	Fecal Coliforms	MPN/100 ml	9221 E	-	-	<1.8	<1.8

*NTU – Nephelometric Turbidity Unit; BDL – Below Detection Limit Detection Limits of Aluminium (Al), Antimony (Sb), Arsenic (As), Barium (Ba), Boron (B), Cadmium (Cd), Chromium (Cr)/Total Chromium, Cobalt (Co), Copper (Cu), Iron (Fe), Lead (Pb), Magnesium (Mg), Manganese (Mn), Molybdenum (Mo), Nickel (Ni), Nickel (Ni), Selenium (Se), Silver (Ag), Vanadium (V), Zinc (Zn), Phenols is 0.01mg/l. Detection Limit of Mercury (Hg), Phosphates/Total Phosphates, Nitrites NO<sub>2</sub>, Free Ammonia, Total Ammonia is 0.02mg/l. Detection Limits of Potassium (K), Sodium (Na) is 0.03mg/l. Detection Limits of Cyanide (CN), Sulfide (S<sub>2</sub>), Hexavalent Chromium Cr+6 is 0.05mg/l. Detection Limits of Nitrates as NO<sub>3</sub>, Fluoride is 0.1mg/l. Detection Limits of Residual Free chlorine, Free Available chlorine, O&G is 1mg/l. Detection Limits of Sulfate SO<sub>4</sub><sup>-2</sup>, Ammonical Nitrogen, Total Kjeldahl Nitrogen (TKN), COD, Total Nitrogen (TN) is 5mg/l. BOD-3mg/l. ND-Not Detected; Detection Limit: Pesticides– 0.1 ppm; PAHs – 1 ppm.*

## Annexure – VI

<b>Sl. No</b>	<b>Location of the Rain water Harvesting Pits</b>	<b>No.of Rain water Harvesting pits</b>
1.	G.M's Office	01
2.	Area Stores	02
3.	Auto garage	02
4.	RK-8 Dispensary	01
5.	SRP Dispensary (Deccan Gramina Bank)	01
6.	SC High School, SRP( ITI College)	02
7.	CER Club, Srirampur (Pragathi Stadium)	02
8.	M&R Office, Srirampur	01
9.	MVTC, SRP	01
10.	C-2 Type Quarters, RK-8 Colony	01
11.	'C' Type Quarters, RK-8 Colony	02
12.	Dispensary, Naspur Colony	01
13.	G.T Hostel, Naspur Colony	02
14.	Community Hall, Naspur Colony	01
15.	M& R Office, Naspur Colony	02
16.	Venkateswara Temple, Naspur Colony	01
17.	Sub-station premises, Godavari Colony	01
18.	Sub-station premises, Nagarjuna Colony	01
19.	Guest House, CCC	01
20.	M & R Office, CCC	01
21.	RK-5 GLSR	01
22.	Pump House, CCC	01
23.	SRP OCP-II	03
	<b>Total</b>	<b>32</b>

GOVERNMENT OF TELANGANA  
GROUND WATER DEPARTMENT

From

P.Srinivasa Babu, M.Sc.(Tech),  
District Ground Water Officer (GWD),  
Ground Water Department,  
MANCHERIAL – 504 208.



To

The General Manager,  
SCCL Srirampur Area,  
MANCHERIAL.

Lr.No.149/T/SCCL/2022

Dated: 20.03.2023.

Sub:- Ground Water Department - Mancherial District - Mining Projects -  
Groundwater Clearance for proposed RK-5 Incline of SCCL in Srirampur  
Area of Mancherial District - Report Approved - Regarding.

- Ref:- 1. General Manager SCCL, Srirampur Area Lr. No.SRP/ENV/Q-408/2022/05,  
Dated: 26.05.2022  
2. District Ground Water Officer, GWD, Mancherial, Lr.No:149/T/SCCL/2022,  
Dated:25.11.2022.  
3. The Director, GWD, Hyderabad. Memo No.2182/HgII/2018-1, Dated:17.03.2023.

\*\*\*\*\*

Attention is invited to the subject and reference cited above, after scrutiny of the report, through reference 3<sup>rd</sup> cited, The Director, GWD, Hyderabad has accorded the permission subject to the conditions laid down by Ministry of Environment/MoWR for proposed Enhancement of **“RK-5 Incline of SCCL in Srirampur Area of Mancherial District”** subject to fulfillment of following conditions in due course in order to maintain safe ground water regime and also protect the rights and interests of local habitation and environment.

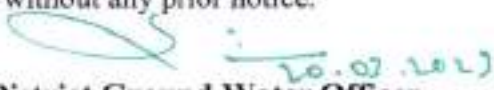
- The project proponent should ensure that water available from dewatering operations is properly treated and should be gainfully utilized for drinking water, supply for irrigation, dust suppression, mining process, recharge in downstream and for maintaining in e-flows in catchment area.
- Proponent shall use the advance dewatering technology fitted with digital flow meters to the existing dewatering structures to avoid the contamination of surface water.
- Establish formation wise/ aquifer wise purpose built piezometers with DWLRs installation in the periphery of mine area for study the confined aquifers, are recommended and ground water level monitoring shall be mandatory. Drilling of piezometer wells shall take up with the Rigs registered under TSWALTA and drilling details to submit in Form -I (E) to the undersigned.
- The department will extend technical guidance for construction of Piezometers with designs, if required.
- The project proponent shall monitor groundwater levels manually and regularly once in a month by establishing observation wells in core and buffer zone area and data should be submitted to O/o District Ground Water Officer, GWD, Mancherial District.
- The mining authority shall also monitor the ground water quality from wells, mine seepage and discharge through NABL accredited/ Govt. approved laboratories for pre and post monsoon seasons and must be furnished to O/o District Ground Water Officer, Mancherial District in every six months, with a copy to the Director, Ground Water Department, Hyderabad.

District Ground Water Officer  
Ground Water Department  
Mancherial District



- The effluents generated must not be let out into any surface or ground water bodies and must be recycled and re-used.
- Precautions must be taken to prevent pollution of surface and groundwater sources by pre treatment of mine water in Ion Chamber unit with water softener beds and mine seepage should be pumped out, through unlined channel, into nearby water bodies.
- All measures must be taken to see that water table in mining area should not be Lower than near by Godavari River Surface water flows (from center of River bed).
- Suitable afforestation in the nearby area must be taken up.
- Precautions to be taken to prevent damage of stream flow direction during the mining.
- Proposed diversion of drainage channels should be unlined and change in irrigation area may be worked out from present to every year (mainly with additional mine water), if any.
- Artificial Recharge Structures like Check dams with recharge shafts, rock fill dams, Stone check dams, Gabion Structures on the smaller streamlets within 10 Kms distance should be constructed well before initiation of mining activity and importance should be given for augmentation of ground water conservation in contact zones and the SCCL is advised to consult District Ground Water Officer for technical advice and monitoring of harvesting structures.
- Recharge pits has to be constructed in the every house hold of where the deep groundwater levels are observed apart from the existing structures.
- Status and Completion report on Construction of all types of Artificial Recharge Structures are to be submitted to the undersigned well in advance to initiation of mining activity.
- Provisions should be made to maintain present use/supply of groundwater in and around the area and also its restoration use to any adverse effects as a result of mining in future.
- Annual water budget must be carried out and data be furnished to the District Ground Water Officer, Ground Water Department, Mancherial District .
- Ground Water Department or CGWA officials have the right to inspect the mine at any time for carrying out ground water impact study.
- All the Mining projects shall be required to pay groundwater abstraction charges as per CGWA rules thereon, as and when enforced through TSWALTA by Govt. of Telangana.
- Digital flow meters should be installed wherever mine water is extracted in Mining area and data should be preserved and submitted to DGWO, Mancherial, along with water levels on monthly basis and the data should be consolidated in annual water budget calculation.
- Groundwater Modelling studies on likely impact should be carried out and the report should be submitted to the District Ground Water Officer, Ground Water Department, Mancherial District with copy to the Director, Ground Water Department, Hyderabad.
- Mining Authorities should take up impact assessment studies through SCCL Hydrogeology official's from time to time and submit the report to The Director, GWD, Hyderabad, Govt. of Telangana before approaching for renewal.
- **NOC is accorded for two years initially and proponent should approach to the authorities for renewal well in advance.**

Proposed project on *"RK-5 Incline of SCCL in Srirampur Area of Mancherial District"* in authority has to adhere the above recommendations otherwise Groundwater Department, Government of Telangana reserves the right to take action as per rules in vogue without any prior notice.

  
District Ground Water Officer,  
Ground Water Department,  
Mancherial.

District Ground Water Officer  
Ground Water Department  
Mancherial District.

## Annexure-VIII.

Analysis Report of monthly summary of 3.0MLD Sewage treatment Plant – Naspur Colony from April, 2024 to September, 2024

All Values in Mg/Liter (Except pH)

Month	Description	Characteristics of Raw Sewage				Characteristics of Aeration Water					Characteristics of Treated Water				
		pH	TSS	COD	BOD	pH	DO	MLSS	MLVSS	TDS	pH	DO	TSS	COD	BOD
April-2024	Min	7.7	205	205	205	7.3	1.7	3200	382	1900	6.8	1.2	12	12	28
	Max	7.9	220	220	220	7.6	1.9	3980	400	2410	7.1	1.6	16	16	32
	Aver	7.8	209.7	211.7	210.0	7.4	1.8	3585.7	391.0	2201.3	7.0	1.4	14.5	13.3	30.4
May-2024	Min	7.7	205	205	205	7.3	1.7	2900	382	1820	6.8	1.2	12	12	28
	Max	7.9	220	220	220	7.7	1.9	3880	400	2390	7.1	1.6	16	16	32
	Aver	7.8	213.7	212.8	209.2	7.5	1.8	3361.1	391.0	2142.9	6.9	1.4	14.4	14.0	30.3
June-2024	Min	7.7	200	205	205	7.3	1.6	3100	382	1840	6.8	1.2	12	12	28
	Max	7.9	210	220	210	7.6	1.9	3890	398	2480	7.1	1.4	16	16	32
	Aver	7.8	207.3	211.7	207.5	7.4	1.8	3506.7	390.6	2218.8	7.0	1.3	13.7	14.3	30.5
July-2024	Min	7.7	205.0	205.0	205.0	7.2	1.7	2460.0	381.0	1700.0	6.8	1.2	12.0	14.0	28.0
	Max	7.9	220.0	250.0	215.0	7.6	1.9	3695.0	398.0	2390.0	7.1	1.4	16.0	16.0	32.0
	Aver	7.8	208.4	213.0	207.5	7.3	1.8	3223.7	390.1	2113.8	6.9	1.3	14.3	14.7	30.5
August-2024	Min	7.7	205	205	205	7.3	1.7	2800	384	1780	6.8	1.2	12	14	28
	Max	7.9	215	220	210	7.6	1.9	4040	398	2490	7.1	1.6	16	16	32
	Aver	7.9	208.3	210.3	207.9	7.4	1.8	3339.8	391.0	2105.7	6.9	1.4	14.8	14.9	30.5
Sep-2024	Min	7.7	205	205	205	7.3	1.7	1740	384	1730	6.8	1.2	14	14	28
	Max	7.9	210	220	210	7.6	1.9	4020	398	2495	7.1	1.6	16	16	32
	Aver	7.8	208.3	209.0	207.5	7.4	1.8	2922.7	392.1	2185.6	7.0	1.4	15.1	14.7	30.0
	standard	-	-	-	-	-	-	-	-	--	5.5-9.0	--	100	30	250

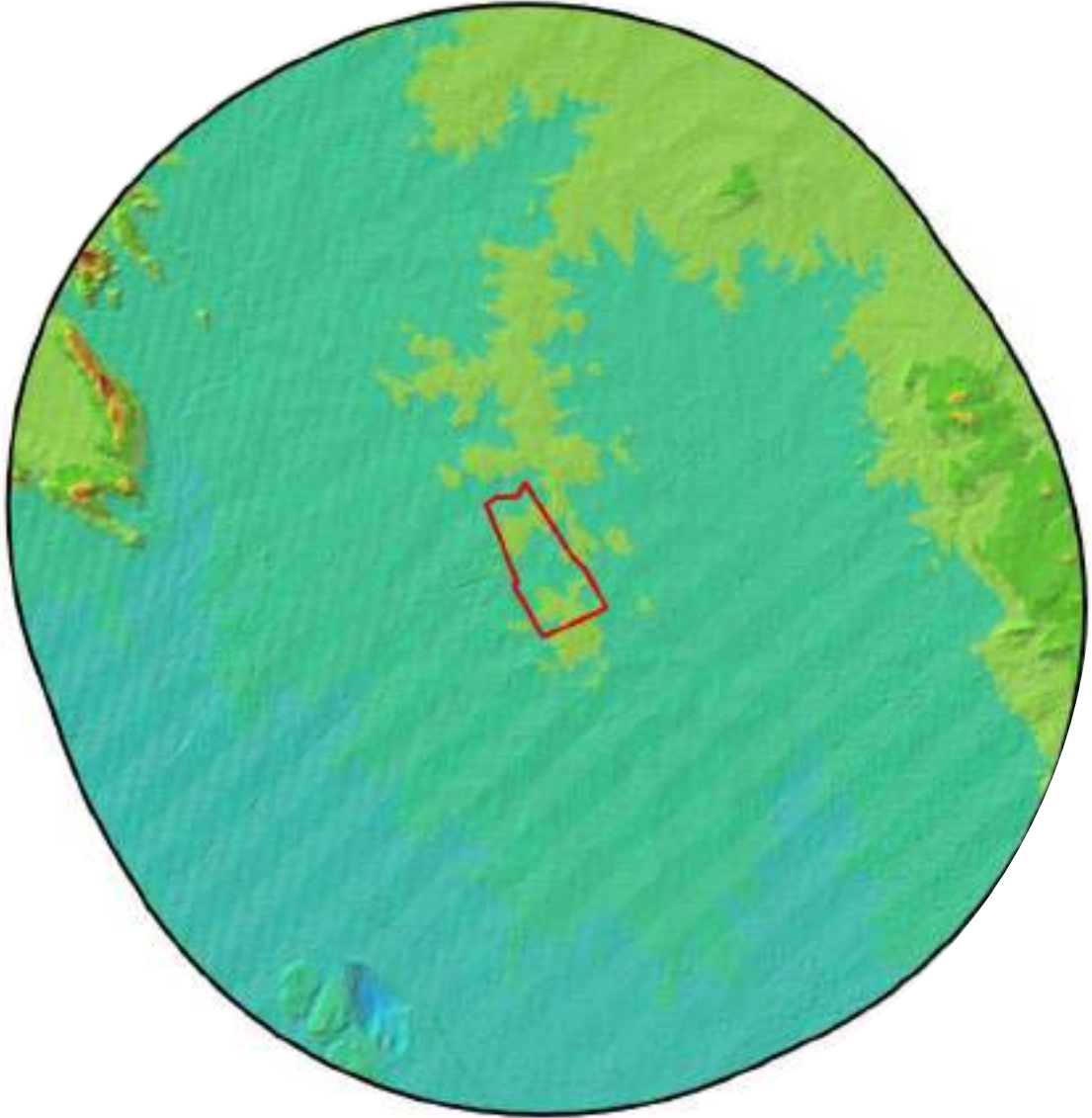
❖ Location of the water Quality monitoring Station : Area Workshop Effluent (ETP Outlet)

Sl. No.	Station name	Date of sampling	Concentration in mg/Liter (Except pH)						
			pH (at 250 C)	TSS At 1050 C	TDS (At 1800 C)	COD	BOD	Oil & Grease	
	<b>Test Method</b>		<b>4500H+B</b>	<b>2540-D</b>	<b>2540-C</b>	<b>5220-D</b>	<b>IS 3025</b>	<b>2540-C</b>	
	<b>MoEF GSR 742(E) and GSR 801(E) Effluent standards for coal mines</b>		5.5-9.0	100	--	250	30	10	
1.	Area Workshop Effluent (ETP Outlet)	15.04.2024	7.9	66	1145	40	9.5	2.2	
		30.04.2024	8.1	72	105	52	13.6	1.8	
		15.05.2024	7.7	59	1237	63	15.4	2	
		30.05.2024	8.2	63	1172	55	11.2	2	
		14.06.2024	7.8	55	1019	60	14.2	3	
		27.06.2024	7.6	61	1233	67	15.3	3.2	
		15.07.2024	7.3	47	1368	51	12.6	2.8	
		30.07.2024	7.7	72	1179	56	11.2	3	
		14.08.2024	7.8	37	1025	47	10.5	1.8	
		31.08.2024	8.1	61	1148	55	11.2	2	
		13.09.2024	7.6	61	1362	48	12.2	2.6	
	30.09.2024	7.2	67	1085	59	14.4	2.2		
		<b>Minimum</b>		<b>7.20</b>	<b>37.00</b>	<b>105.00</b>	<b>40.00</b>	<b>9.50</b>	<b>1.80</b>
		<b>Maximum</b>		<b>8.20</b>	<b>72.00</b>	<b>1368.00</b>	<b>67.00</b>	<b>15.40</b>	<b>3.20</b>
	<b>Average</b>		<b>7.75</b>	<b>60.08</b>	<b>1089.83</b>	<b>54.42</b>	<b>12.61</b>	<b>2.38</b>	
	<b>98% tile</b>		<b>8.18</b>	<b>72.00</b>	<b>1366.68</b>	<b>66.12</b>	<b>15.38</b>	<b>3.16</b>	

# Report on Land Use Land Cover Study of Core & Buffer Zone of Ravindra Khani-5 Incline Underground Coal Mining Project

Project Location: Srirampur, Mancherial District, Telangana.

Year of Study: 2022



PROJECT PROPONENT  
THE SINGARENI COLLIERIES COMPANY LIMITED  
(A Government Company)  
Department of Environment and Project Planning.  
(ISO-9001-2015 certified)



ENVIRONMENT CONSULTANT  
M/s Greencindia Consulting Private Limited  
QCI-NABET certificate no: NABET/EIA/2023/SA0155

**THE LAND USE / LAND COVER STUDY REPORT FOR**

**RAVINDRA KHANI-5 INCLINE UNDERGROUND COAL MINE PROJECT  
LOCATED AT SRIRAMPUR, MANCHERIAL DISTRICT, TELANGANA STATE.  
PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**

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**ENVIRONMENT CONSULTANT:  
GREENCINDIA CONSULTING PRIVATE LIMITED**

**PROJECT PROPONENT: M/S SINGARENI  
COLLIERIES COMPANY LTD.**



**THE LAND USE / LAND COVER STUDY REPORT FOR**  
**RAVINDRA KHANI-5 INCLINE UNDERGROUND COAL MINE PROJECT**  
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**THE LAND USE / LAND COVER STUDY REPORT FOR**

**RAVINDRA KHANI-5 INCLINE UNDERGROUND COAL MINE PROJECT  
LOCATED AT SRIRAMPUR, MANCHERIAL DISTRICT, TELANGANA STATE.  
PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**

# 1 INTRODUCTION

## 1.1 PURPOSE OF THE REPORT

The mining industry in India is a significant economic activity which contributes significantly to the economy of India. The mining and quarrying sector contributes around 2.5% of the Gross Domestic Product (GDP). The mining sector under the index of Industrial Production (IIP) witnessed a growth of 1.7 percent Year on Year basis. Indian economy is on the aspirational path of becoming a \$5 trillion GDP economy by 2024-25. Mining Industry is going to have a sizable contribution to the envisaged GDP and wealth creation (Desk of DG & CIM 2020).

Unless mining of the minerals is properly regulated, they can show adverse consequences on environment and socio-economic components of the society. It also disturbs the Air, soil, water and ecological parameters. On the other hand, it develops the economic standard of the region. Issues of Technology for zero waste or low waste mining, relief & rehabilitation, mine closure activity need to implemented strictly and monitored otherwise leads to land degradation and other adverse consequences on environment.

The study of land use and land cover changes by remote sensing and GIS tools give valuable and accurate information for the study area. This kind of study beneficial for regulator and mine operator and developer for making sustainable planning of mine operation. In order to mitigate the impact of mineral mining on the environment, a scientific assessment is very important for framing sustainable development strategies.

The ISRO/DOS have built the framework for indigenous remote sensing system specially design for Indian sub-continent. The evolution of Indian remote sensing program over the past two decades, providing a variety of remote sensing- based solutions for national development, is an apt and timely national initiative. Some of the important projects of ISRO/DOS under the theme of LULC are given in the Table – 1-1.

**Table 1-1: Major Land Use Land Cover Mapping Projects carried out by ISRO / DOS**

S. No.	PROJECT NAME	YEAR
1	Nationwide Wasteland Mapping	1985, 1986 – 1999, 2003, 2005-06, 2008-09, 2015-16

Source: Desk of DG & CIM 2020 (<https://www.dgms.gov.in/UserView/index?mid=1287> ).

**ENVIRONMENT CONSULTANT:  
GREENCINDIA CONSULTING PRIVATE LIMITED**

**PROJECT PROPONENT: M/S SINGARENI  
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**THE LAND USE / LAND COVER STUDY REPORT FOR**

**RAVINDRA KHANI-5 INCLINE UNDERGROUND COAL MINE PROJECT  
LOCATED AT SRIRAMPUR, MANCHERIAL DISTRICT, TELANGANA STATE.  
PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**

<b>S. No.</b>	<b>PROJECT NAME</b>	<b>YEAR</b>
2	Land Use Land Cover Mapping for Planning based on Agro-Climatic Zone	1989 – 1990
3	Nationwide Wetland Mapping	1995
4	Urban Sprawl of Million Plus Cities	1988 – 1990
5	Land Use Land Cover Database for Zoning Atlas for siting of Industries	1999
6	Urban Information Systems (BMR; NCR; MMDA; AUDA, HUDA, NCRPB etc.	From 1990 onwards at different times
7	Land Use Land Cover Mapping using AWiFS data	2004 onwards at one year of interval
8	Integrated Mission for Sustainable Development	1992-1998
9	Integrated Resource Information for Desert Areas	2002
10	Land Use/Land Cover Mapping on 1: 50,000 scale	2005-06, 2011-12

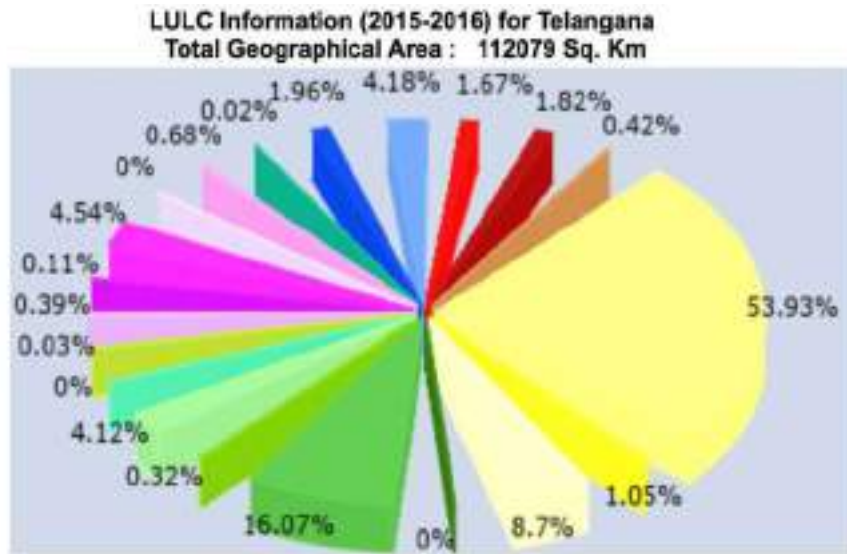
A project on National Land Use/ Land Cover Mapping on 1:50,000 scale (Second Cycle) using multi-temporal Resourcesat-2 terrain corrected Linear Imaging Self Scanning Sensor (LISS) -III data was taken up by DOS, under Natural Resources Census (NRC) Project of National Natural Resources Repository (NRR) Program. The above project final outcome of the land use and land cover study for Telangana state are presented in figure 1-1. For Telangana state major land use type is Agriculture, crop land and Fallow land are 63.68 % of the total geographic area of the state. Second highest land cover type is Forest cover and plantation, which is approx. 20.52 % of the total geographic area of the state.

**ENVIRONMENT CONSULTANT:  
GREENCINDIA CONSULTING PRIVATE LIMITED**

**PROJECT PROPONENT: M/S SINGARENI  
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 LOCATED AT SRIRAMPUR, MANCHERIAL DISTRICT, TELANGANA STATE.  
 PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.



**Figure 1-1: LULC statistical information (2015-2016) for Telangana state.**

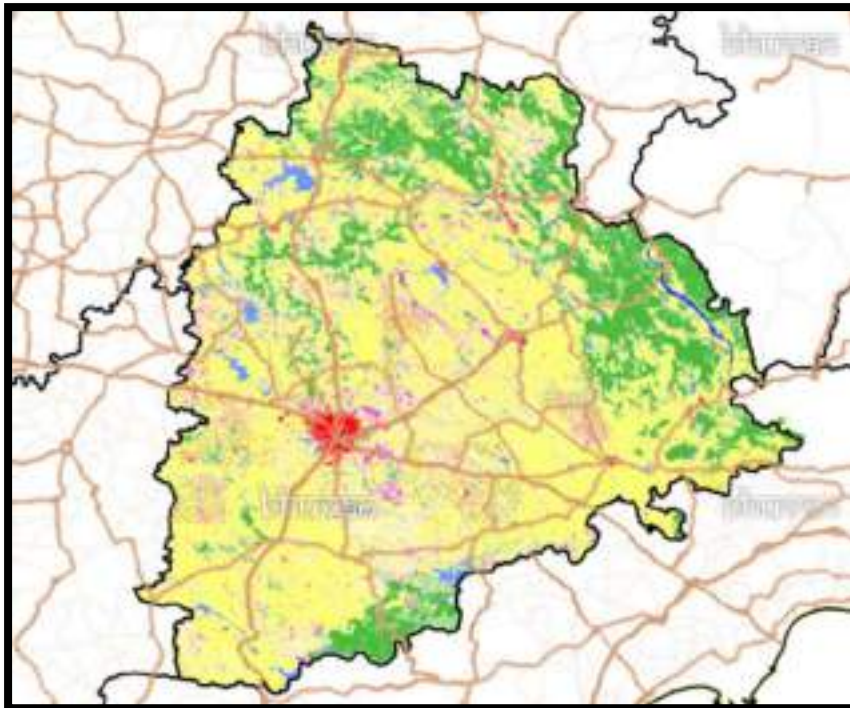
Date Source: National Remote Sensing Centre, Hyderabad.  
<https://bhuvan-app1.nrsc.gov.in/thematic/thematic/index.php>

**Table 1-2: LULC class with respective area for Telangana State**

LULC Class	Area (Sq.Km)	LULC Class	Area (Sq.Km)
Builtup,Urban	1866.44	Builtup,Rural	2035.82
Builtup,Mining	466.35	Agriculture,Crop land	60442.02
Agriculture,Plantation	1176.89	Agriculture,Fallow	9748.65
Forest,Evergreen/ Semi evergreen	0.13	Forest,Deciduous	18014.42
Forest,Forest Plantation	354.02	Forest,Scrub Forest	4616.13
Forest,Swamp/ Mangroves	0.03	Grass/Grazing	32.48
Barren/unculturable/Wastelands, Salt Affected land	434.11	Barren/unculturable/Wastelands, Gullied/Ravinous Land	128.8
Barren/unculturable/Wastelands, Scrub land	5087.01	Barren/unculturable/Wastelands, Sandy area	4.99
Barren/unculturable/Wastelands, Barren rocky	767.26	Wetlands/Water Bodies, Inland Wetland	18.97
Wetlands/Water Bodies, River/Stream/canals	2196.58	Wetlands/Water Bodies, Reservoir/Lakes/Ponds	4587.91

Date Source: National Remote Sensing Centre, Hyderabad.  
<https://bhuvan-app1.nrsc.gov.in/thematic/thematic/index.php>

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**PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**



**Figure 1-2: LULC map of Telangana state (2015-2016)**

Date Source: National Remote Sensing Centre, Hyderabad.  
(<https://bhuvan-app1.nrsc.gov.in/thematic/thematic/index.php>)

M/s The Singareni Collieries Company Limited, Srirampur is holding a mining lease of Ravindra Khani - 5 Incline Underground Coal Mine Expansion Project with EC No. J-11015/306/2007-IA. II (M) Project for an area of 376.24 Ha at Mancherial District, Srirampur, Telangana State. EPTRI is preparing Environmental Impact Assessment Study and Environment Compliance Report to maintain Environmental Clearance for coal mining in the SCCL Project area from Ministry of Environment, Forest and Climate Change (MOEFCC), Government of India.

M/s Greencindia consultant Private Limited is an Indian company providing world-class Enterprise Geographic Information System (GIS) solutions thereby helping businesses, governments and private organizations to make timely, informed and mission-critical decisions by leveraging the power of geography.

## **1.2 SCOPE OF THE STUDY**

The objective of the present study is to prepare the Essential (Thematic) Maps of Core zone (project area) & Buffer zone (10 Km. radius around periphery of the project) for coal mining projects to be

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**PROJECT PROPONENT: M/S SINGARENI**  
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provided to the Ministry of Environment & Forests as part of the EIA/EMP and Environment Compliance Report, for maintaining the Environmental Clearance (EC), as per Environmental Impact Assessment Guidance Manual.

### 1.3 LOCATION OF THE PROJECT

The mine is covered with in Naspur Village, Naspur Tehsil, Mancherial District, Telangana State. The location of the Mining lease area falls under Survey of India Toposheet No: E44H5 (56N/5) & E44H9 (56N/9) the geographical co- ordinates of the lease area as follows:

North-West Corner: 18°52'44.8427" N (Latitude), 79° 29' 39.8399" E (Longitude)

South-East Corner: 18° 54' 29.8619" N (Latitude), 79° 31' 06.4667" E (Longitude)

The 10km buffer Zone of the Ravindra Khani - 5 Incline Underground Coal Mine Expansion Project is falling in E44H5(56 N/5) and E44H9 (56 N/9) SOI Toposheets. The buffer zone is covered in Mancherial District of Telangana State. Location Map shown in Figure 1.3

### 1.4 TOOLS AND RESOURCES

To meet the project requirements, M/s Greencindia consultant Private Limited has acquired the following satellite data for the study area from National Remote Sensing Centre, Hyderabad. The Resourcesat-2 imageries have been merged with the Cartosat-2E Pan A imageries for the core zone to get the high spatial and spectral information in single image. The Cartosat-2E Pan A imagery for the core zone is shown in the Figure 1-6.

**Table 1-3: Details of the satellite data used for LULC study.**

Details Parameters of the data Source	10 km Buffer Zone		Core Zone
	Rabi Season	Kharif Season	High resolution Panchromatic Data
<b>Satellite:</b>	ResourceSat-2	ResourceSat-2	CartoSat-3
<b>Sensor:</b>	LISS4 (MX 70)	LISS4 (MX 70)	PAN(SPOT)
<b>Path:</b>	100	100	12238
<b>Row:</b>	059	059	29
<b>Spatial Resolution:</b>	5.0 m	5.0 m	0.28 m

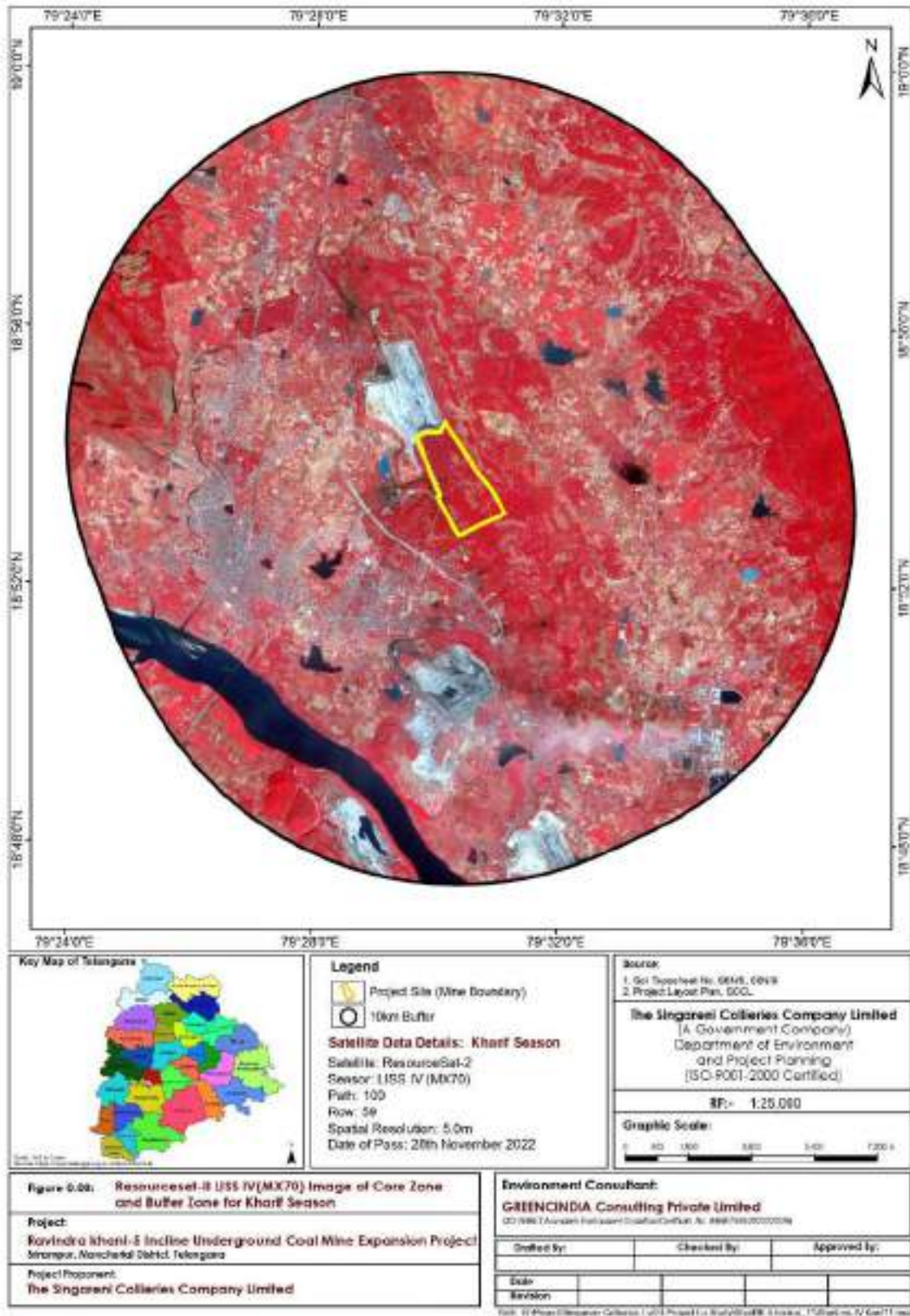
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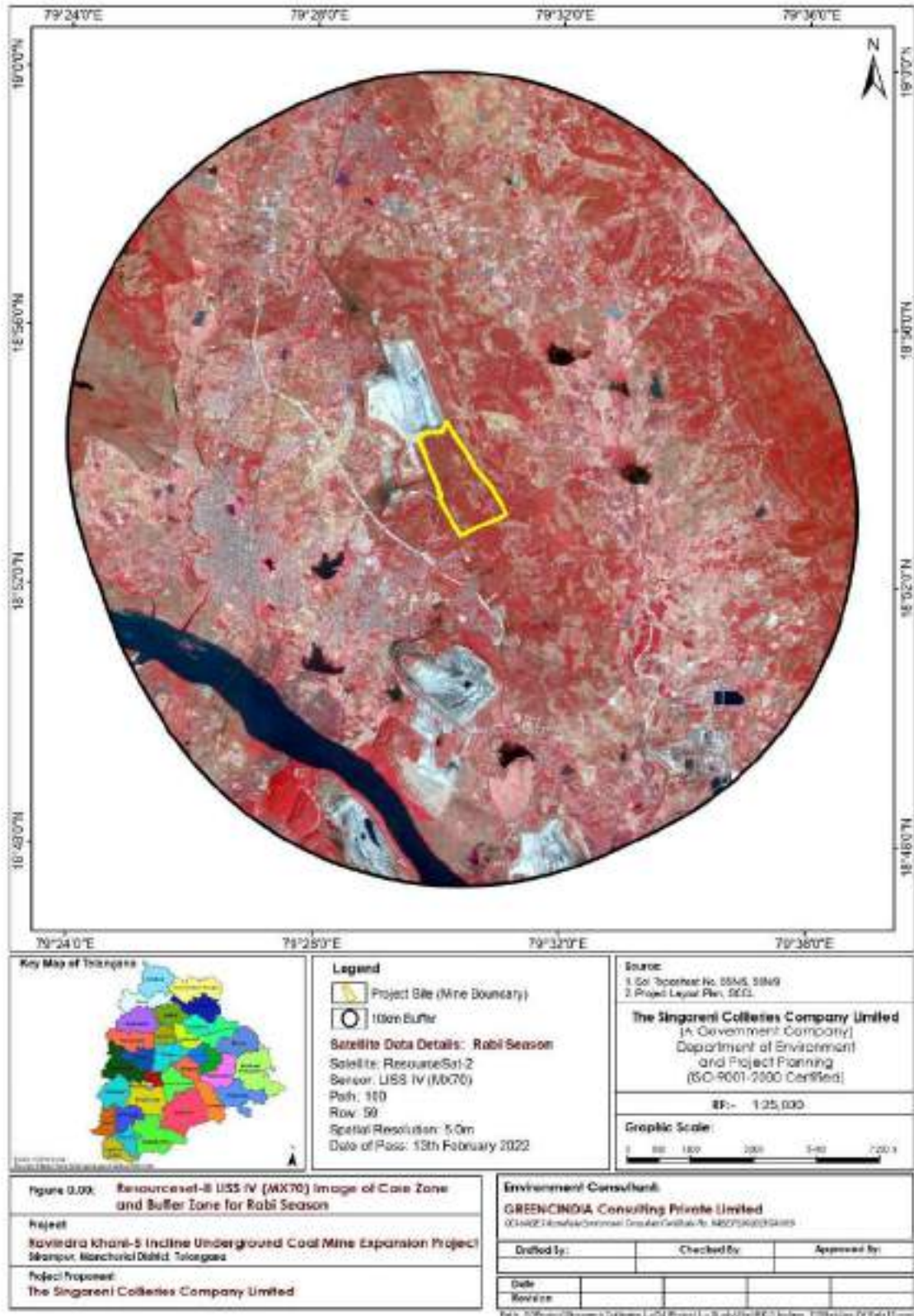
**Figure 1-4: ResourceSat 02 LISS-IV (MX70) Image of Core and Buffer Zone for Kharif season.**

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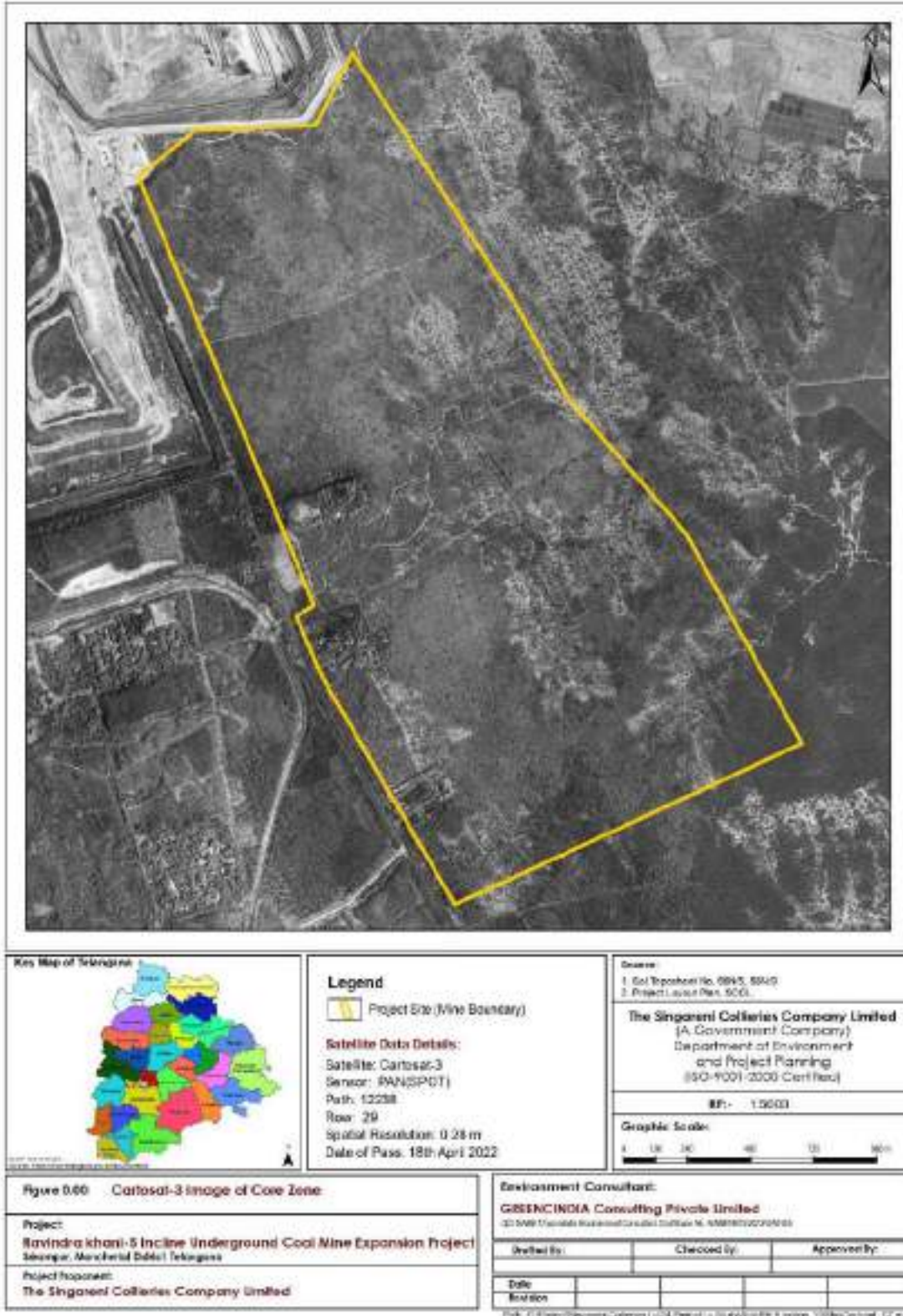


**Figure 1-5: ResourceSat 02 LISS-IV (Mx70) Image of Core and Buffer Zone for Rabi season.**

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**Figure 1-6: CartoSat 1 Pan A Imagery Map of The Core Zone**

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## **2 METHODOLOGY**

### **2.1 DATA PROCESSING**

For the creation of the Land use/Land cover maps, the IRS Resourcesat 2 LISS IV Multispectral satellite imageries of the Kharif and Rabi seasons for buffer zone and Cartosat 2E MX (SPOT) and PAN (SPOT) imageries for core zone were used.

ArcGIS Desktop and ArcGIS Pro software tools have been used to carry out the digital image processing, classification and on-screen digitization. At the end, a polygon map was created, with each polygon standing for a different class. Thereafter the, the classes were matched with the appropriate attributes. Using high resolution photos from independent sources, accuracy was verified.

For the purpose of creating the land use/land cover map, both remote sensing and the visual image interpretation technique of classification were used. It is a process of recognising the characteristics that appear in photographs and conveying the knowledge gathered from these images to others for the purpose of assessing their importance.

For the study area, the remote sensing and visual interpretation method was used. It includes the following six crucial steps:

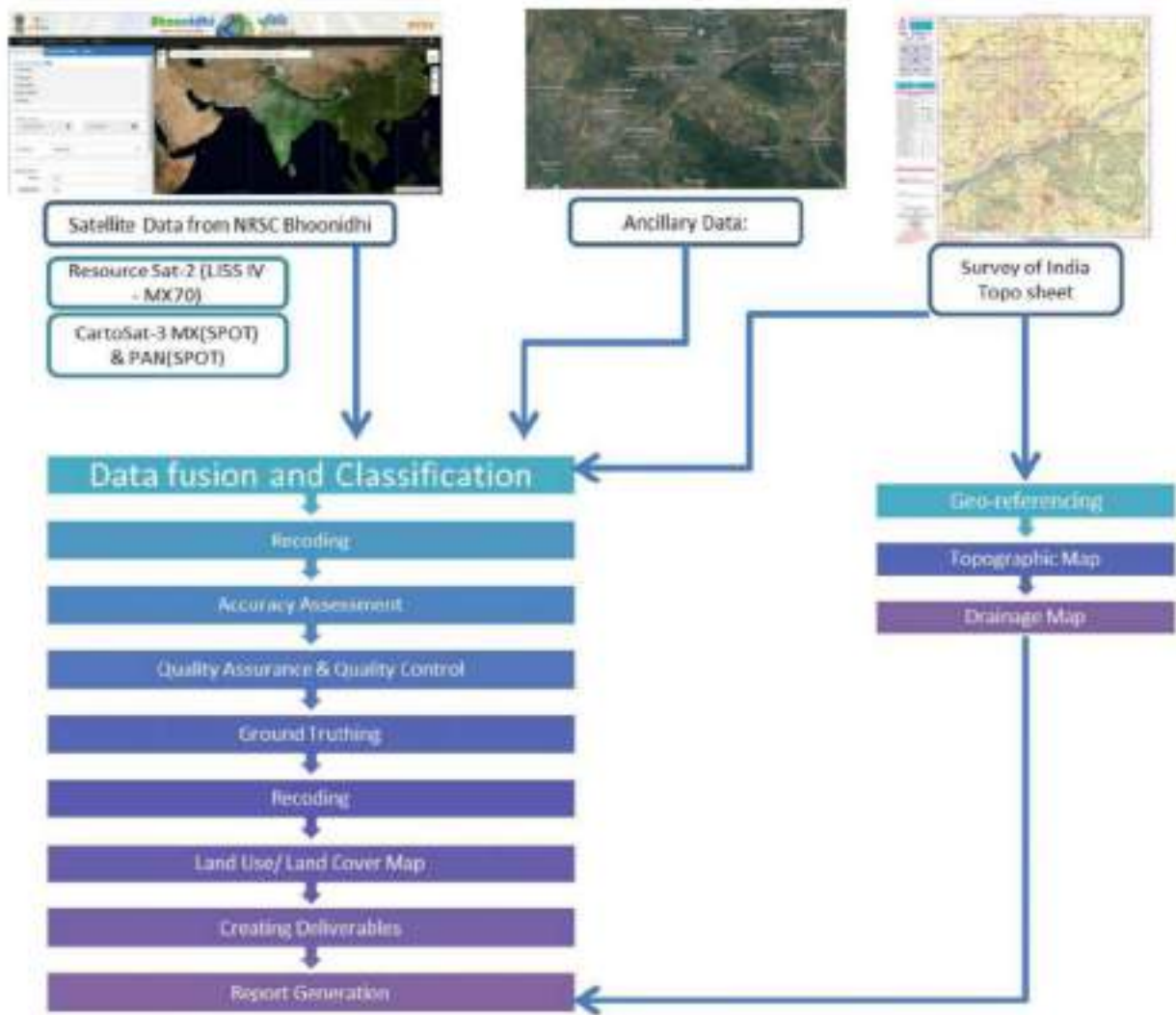
1. Selection and acquisition of data
2. Pre-Processing
3. Classification
4. Ground data collection and verification
5. Post-field Interpretation and Modification
6. Computation of area
7. Final cartographic Map preparation.

Each endeavour to map the earth's natural resources must begin with a reconnaissance of the area under consideration. In order to adopt a suitable categorization scheme and interpretation key for the final map production, the preliminary survey of the area helped in familiarising with the various classes of LULC types that are present in the field.


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Using the spectral properties of the classes and with reference to other sources, a final Interpretation key for the different classes was created. Table 2-1 contains the LULC classification's interpretation key.

**2.2 FLOWCHART OF THE STUDY**












**Table 2-1: Image Interpretation techniques.**

S.no	LULC Class	Tone	Texture	Shape	Spectral Signature	Description
1	Water Bodies	Dark Blue or Light Blue	Smooth	Irregular /Regular		Rivers, Streams and Ponds

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S.no	LULC Class	Tone	Texture	Shape	Spectral Signature	Description
2	Mining area	Light Blue or Light Cyan with white spots	Smooth	Irregular		Place where Mining Operations are taken.
3	Industrial Establishments	Cyan or Whitish	Rough	Irregular /Regular		Large footed building in Urban and Rural Areas
4	Built-up Land	Cyan	Rough	Irregular		Urban and Rural Areas
5	Open Forest	Light Red	Smooth	Irregular		Tree Cover (If Forest Canopy Density is between 10-40%)
6	Dense Forest	Dark Red to Light Red	Rough	Irregular		Tree Cover (If Forest Canopy Density >40%)
7	Roads	Cyan	Rough	Linear		Major and other roads used for transportation
8	Barren Land	Light Blue or Light Cyan	Smooth	Irregular		Areas are sparse, stunted and contain limited biodiversity
9	Fallow Land	Light Cyan or Whitish	Medium Smooth	Regular		Fields without any Crop surrounded by small to Medium Size Settlements
10	Plantation	Blackish Red to Dark Red	Medium Smooth / Medium Coarse	Irregular / Regular / Rectangular		Mature or Young Plants

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S.no	LULC Class	Tone	Texture	Shape	Spectral Signature	Description
11	Single Crop	Pinkish or Light Greenor Light Blue or Light Cyan	Medium Smooth	Regular		Crops/Current Fallow Lands surrounded by small to Medium Size Settlements
12	Double Crop	Dark Red to Light Red	Medium Smooth	Regular		Crops Lands surrounded by small to Medium Size Settlements

ArcGIS Desktop and ArcGIS Pro were used for classification and on-screen digitisation. At the end, a polygon map was created, with each polygon standing for a different class. Afterwards, the classes were matched with the appropriate attributes. During the field visit, a handheld GPS device was used to verify the ground truth. It was discovered that the satellite image's points were highly accurate. Ultimately, a color-coded classification map and area statistics for the various LULC categories were developed.

### 2.3 LAND USE / LAND COVER CLASSIFICATION FOR BUFFER ZONE

IRS Resourcesat2 LISS IV Multispectral satellite imageries of the Kharif and Rabi seasons were used for buffer zone LULC classification. By assigning the necessary training sets, which were identified based on tone, texture, size, shape pattern, and location information, digital image processing was used to delineate various land use/ land cover categories in the 10 km buffer Zone, including built-up area, crop lands, forests, scrubs, land with or without scrub, and water bodies. Where there is a disagreement between the signatures of different classes, the right land use class has been identified with the necessary care. The final land use/land cover map was created after the interpreted map was only validated on the ground at limited points.

### 2.4 LAND USE / LAND COVER CLASSIFICATION FOR CORE ZONE

Cartosat 3 MX (SPOT) and PAN(SPOT) imageries were used for core zone LULC classification. By assigning the necessary training sets, which were identified based on tone, texture, size, shape pattern,

**THE LAND USE / LAND COVER STUDY REPORT FOR**

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and location information, digital image processing was used to delineate various land use/ land cover categories in the core Zone, including active mining, area under reclamation, area under plantation, agricultural area, waste land, forest land, water body and settlements. The final land use/land cover map was created after the interpreted map was only validated on the ground.

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### **3 LULC RESULTS AND DISCUSSION**

#### **3.1 LAND USE & LAND COVER DETAILS FOR BUFFER ZONE**

The satellite imagery of the study area around 10 km from mine site (core zone boundary) as captured by satellite. The Land use land cover in this study area is given here below.

**Table 3-1: Land use Land Cover details of 10km Buffer zone.**

<b>Land Use Land Cover Class</b>	<b>2022</b>	
	<b>Area in Hectares</b>	<b>Area Percentage</b>
Water Bodies	1737.44	4.31
Mining Area	1550.02	3.84
Industrial Establishments	240.14	0.60
Built-up Land	2773.67	6.88
Open Forest	3008.94	7.46
Dense Forest	9432.34	23.39
Roads	944.83	2.34
Barren Land	606.35	1.50
Fallow Land	1266.50	3.14
Plantation	2893.43	7.18
Single Crop	5023.67	12.46
Double Crop	7332.42	8.18
Land with/without scrub	3515.24	8.72
<b>TOTAL AREA</b>	<b>40324.99</b>	<b>100.00</b>

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**PROJECT PROPONENT: M/S SINGARENI  
COLLIERIES COMPANY LTD.**



79°24'0"E

79°28'0"E

79°32'0"E

79°36'0"E

19°0'0"N

19°0'0"N

18°56'0"N

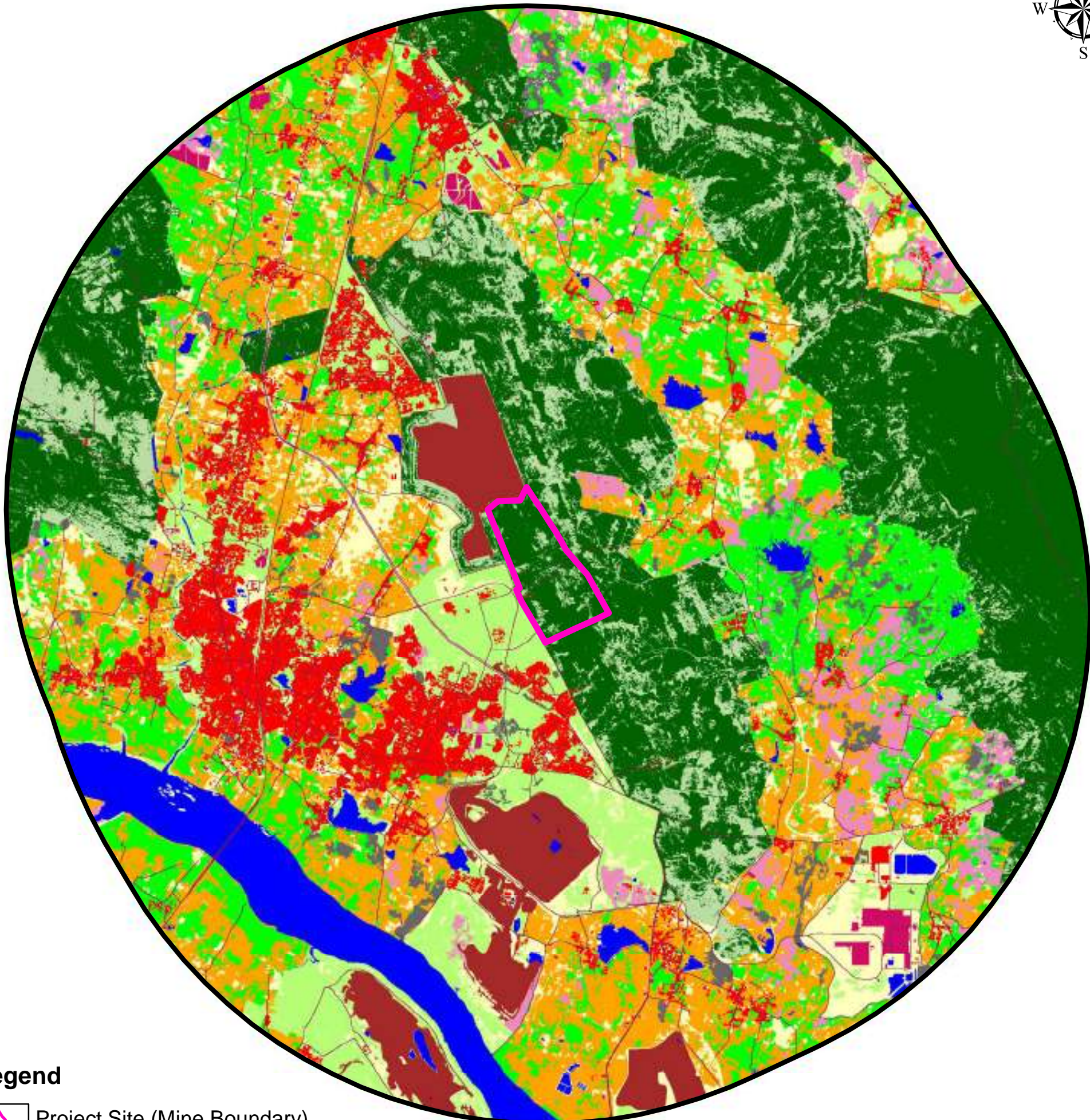
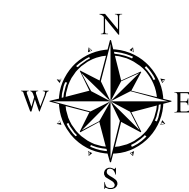
18°56'0"N

18°52'0"N



18°52'0"N

18°48'0"N

18°48'0"N



**Legend**

-  Project Site (Mine Boundary)
-  10km Buffer




79°24'0"E

79°28'0"E

79°32'0"E

79°36'0"E



Map Symbol	Land Use Land Cover Class	Area in Hectares	Area Percentage
	Water Bodies	1737.44	4.31
	Mining Area	1550.02	3.84
	Industrial Establishments	240.14	0.60
	Built-up Land	2773.67	6.88
	Open Forest	3008.94	7.46
	Dense Forest	9432.34	23.39
	Roads	944.83	2.34
	Barren Land	606.35	1.50
	Fallow Land	1266.50	3.14
	Plantation	2893.43	7.18
	Single Crop	5023.67	12.46
	Double Crop	7332.42	18.18
	Land with/without scrub	3515.24	8.72

**Source:**  
1. Sol Toposheet No. 56N/5, 56N/9  
2. Project Layout Plan, SCCL

**The Singareni Collieries Company Limited**  
(A Government Company)  
Department of Environment and Project Planning  
(ISO-9001-2000 Certified)

**RF:- 1:25,000**

**Graphic Scale:**  
0 900 1,800 3,600 5,400 7,200 m

**Figure 0.00: Land Use/Land Cover pattern map of the Buffer Zone**

**Project:**  
**Buffer Area Classification of Ravindra khani-5 Incline Underground Coal Mine Expansion Project**  
Srirampur, Mancherla District, Telangana

**Project Proponent:**  
**The Singareni Collieries Company Limited**

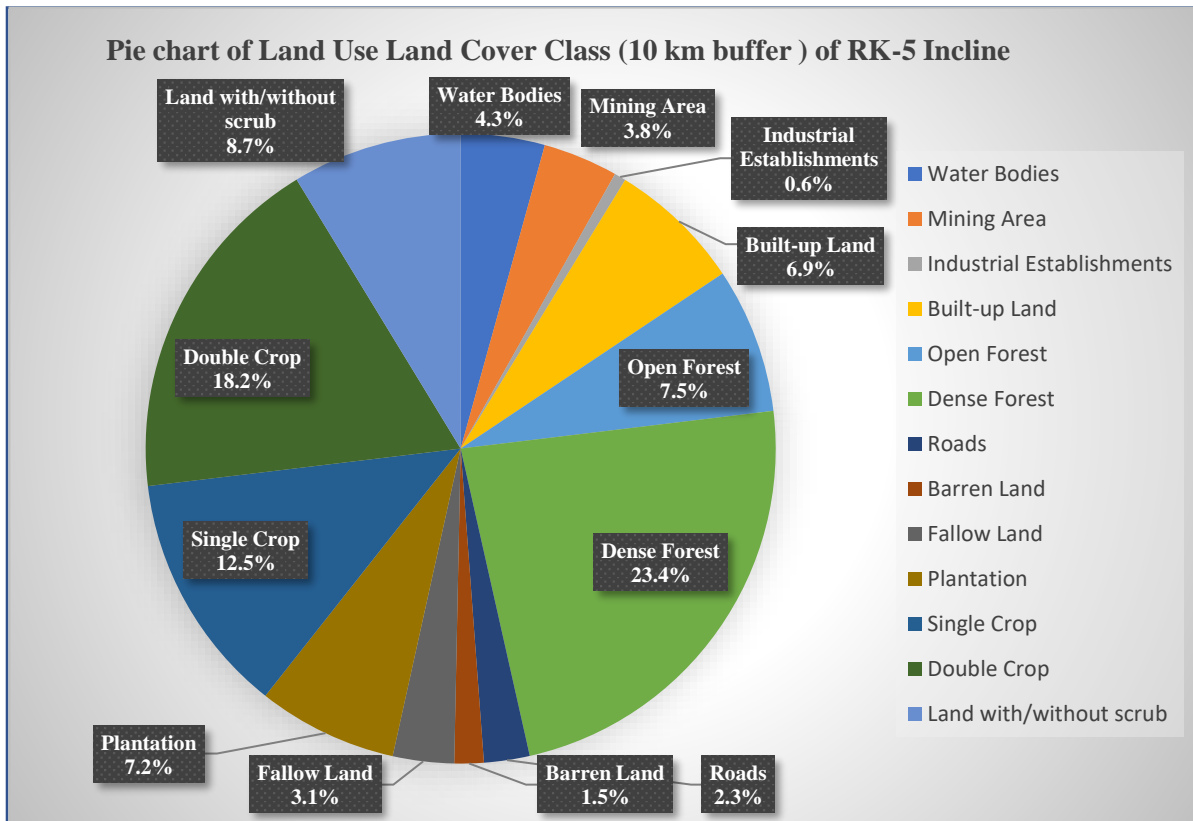
**Environment Consultant:**  
**GRENCINDIA Consulting Private Limited**  
QCI-NABET Accrediate Environment Consultant Certificate No. NABET/EIA/2023/SA0155

<b>Drafted By:</b>	<b>Checked By:</b>	<b>Approved By:</b>

<b>Date</b>	<b>25/02/2023</b>		
<b>Revision</b>	<b>00</b>		



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**Figure 3-2: Pie chart of LULC class (10 km buffer) of RK-5 Incline UG in 2022.**

### 3.1.1 RESULTS FOR BUFFER AREA

The visual interpretation of the satellite imagery data along with ground verification was used to map different categories of land use/ land cover (LULC) for Buffer Area. Figure 3.2 shows the LULC map of RK-5 Incline UG Coal Mine Project for Buffer Area. The Area statistics of different categories of Buffer Area of land use/ land cover is also given in Table 3-1.

Thirteen categories of LULC were classified in Buffer Area are shown in Table 3.1. Agriculture covers the major proportion (30.96%) of RK-5 Incline UG Coal Mine Project. The forest type of this region belongs to Reserved Forest. Other land use categories included Forest, settlement, water bodies and wasteland. Agriculture is the major source of livelihood economy. Human settlements occupy 6.88% of the total area and are sparsely distributed. Water bodies occupy 4.31% and the main water body is Godavari River which flows across the Buffer zone of Ravindra Khani - 5 Incline



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Underground Coal Mine Expansion Project. Few ponds were also found scattered in and around the villages.

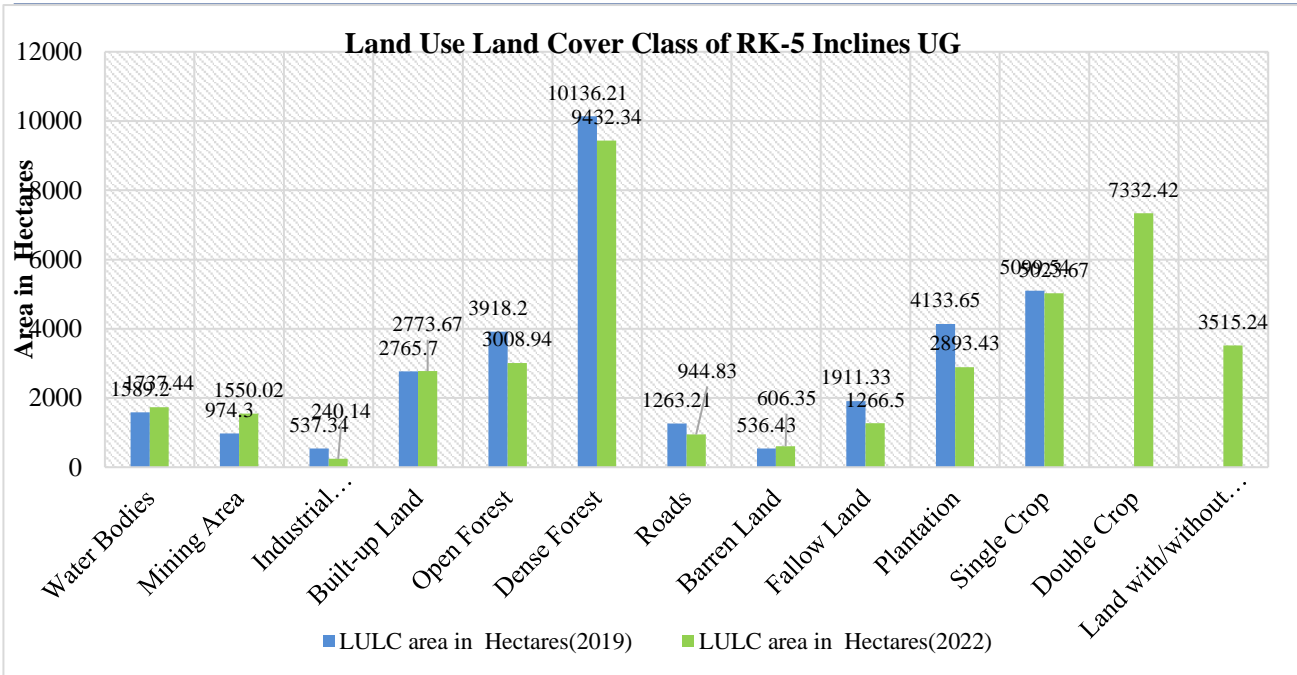
### 3.1.2 LULC COMPARATIVES STUDY OF BUFFER ZONE FOR 2019 AND 2022

**Table 3-2: LULC data (Buffer Zone) of 2019 and 2022**

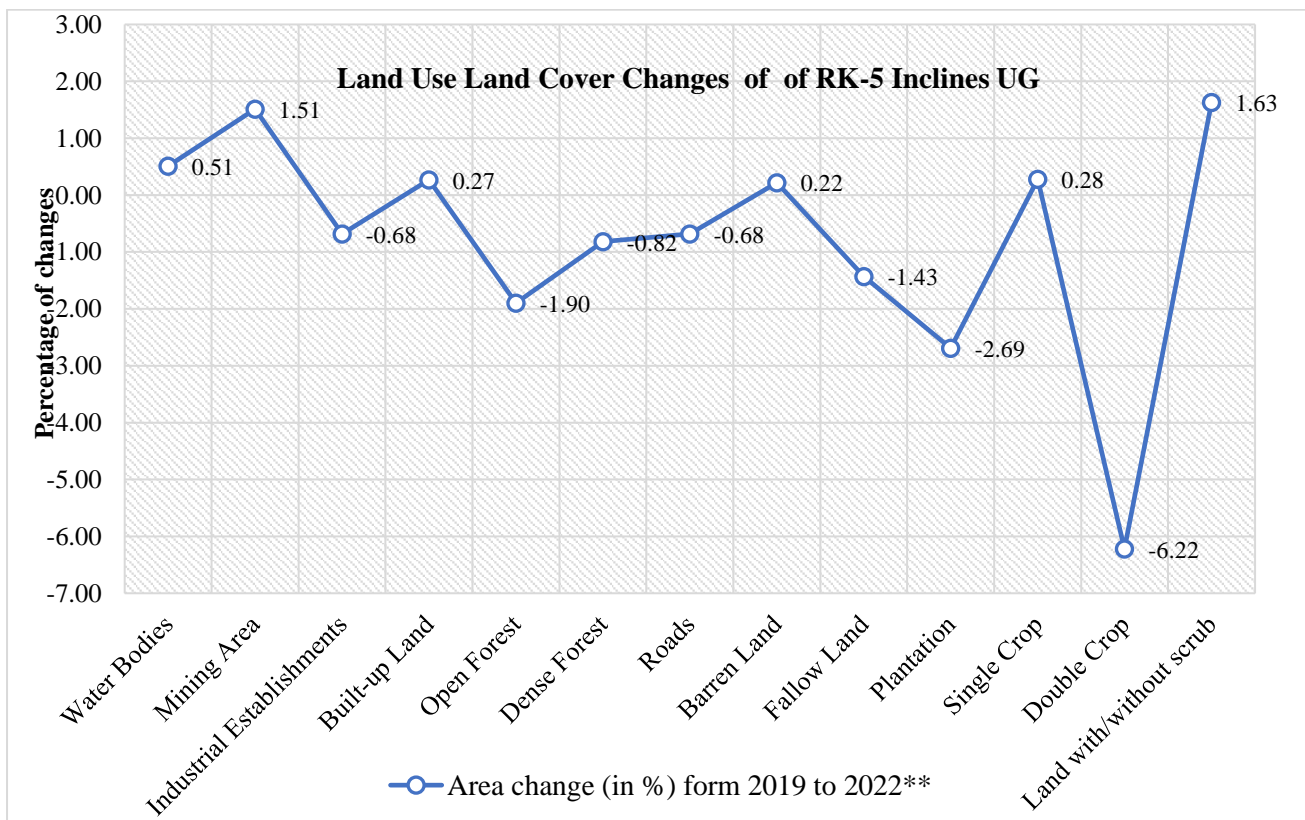
Land Use Land Cover Class	2019		2022		Area change (in %) from 2019 to 2022**
	LULC area in Hectares (2019)	Area in Percentage	LULC area in Hectares (2022)	Area in Percentage	
Water Bodies	1589.20	3.80	1737.44	4.31	<b>0.51</b>
Mining Area	974.30	2.33	1550.02	3.84	<b>1.51</b>
Industrial Establishments	537.34	1.28	240.14	0.60	<b>-0.68</b>
Built-up Land	2765.7	6.61	2773.67	6.88	<b>0.27</b>
Open Forest	3918.20	9.36	3008.94	7.46	<b>-1.90</b>
Dense Forest	10136.21	24.21	9432.34	23.39	<b>-0.82</b>
Roads	1263.21	3.02	944.83	2.34	<b>-0.68</b>
Barren Land	536.43	1.28	606.35	1.50	<b>0.22</b>
Fallow Land	1911.33	4.57	1266.50	3.14	<b>-1.43</b>
Plantation	4133.65	9.87	2893.43	7.18	<b>-2.69</b>
Single Crop	5099.54	12.18	5023.67	12.46	<b>0.28</b>
Double Crop	6027.70	14.40	7332.42	8.18	<b>-6.22</b>
Land with/without scrub	2968.61	7.09	3515.24	8.72	<b>1.63</b>
<b>Total Area</b>	<b>41861.42</b>	<b>100</b>	<b>40324.99</b>	<b>100.00</b>	

\*\* Positive and Negative value implies LULC specific class area (in %) correspondingly increases or decrease from 2019 to 2022. The formula used for calculating LULC changes is (% of area change = Percentage of LULC class area for 2022 - Percentage of LULC class area for 2019).

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**PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**



**Figure 3-3: LULC Class (10 km buffer) of RK-5 Inclines UG on 2019 and 2022.**



**Figure 3-4: Land Use Land Cover Changes (10 km buffer) of RK-5 Inclines UG on 2019 & 2022.**

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### 3.2 LAND USE & LAND COVER DETAILS FOR CORE ZONE

The Satellite data of the core zone of 376.24 Ha has been presented. The classified data of the Mine core zone. The extents of various Land Use/Land Cover classes pertaining to the study area.

**Table 3-3: Land use Land Cover details of Core zone.**

<b>Land Use Land Cover Class</b>	<b>Area in Hectares</b>	<b>Area in Percentage</b>
Coal Dump	0.37	0.1
Plantations Greenbelt	34.29	9.1
Roads	4.23	1.1
Service Buildings	6.08	1.6
Dense Forest	257.38	68.4
Open Forest	72.99	19.4
Water Bodies	0.90	0.2
<b>Total Area</b>	<b>376.24</b>	<b>100.0</b>

#### 3.2.1 RESULTS FOR CORE AREA

Figure 3-5 shows the LULC map of RK-5 Inclines UG Coal Mine Project for Core Area. Area statistics of different categories of Core Area of land use/ land cover is also given in Table 3-3.

Seven Categories of LULC were classified in the core zone area. Dense forest area constitutes the major proportion (68.4%) of RK-5 Inclines UG Coal Mine Project. Other land use categories include coal dump, waterbodies, service buildings, roads, open forest and waterbodies. Water bodies covers 0.2% of the total area, Plantation greenbelt covers 9.1% of the total area, Coal dump occupies 0.1% of the total area.

79°30'0"E

79°30'45"E



18°54'0"N

18°54'0"N

18°53'15"N

18°53'15"N

79°30'0"E

79°30'45"E

Map Symbol	Land Use Land Cover Class	Area in Hectares	Area %
	Coal Dump	0.37	0.1
	Plantations Greenbelt	34.29	9.1
	Roads	4.23	1.1
	Service Buildings	6.08	1.6
	Dense Forest	257.38	68.4
	Open Forest	72.99	19.4
	Water Bodies	0.90	0.2

**Key Map of Telangana**



Scale: Not to Scale  
Source: <https://www.telangana.gov.in/about/districts>

**Legend**

- Mine Boundary
- Coal Dump
- Plantations Greenbelt
- Water Bodies
- Roads
- Service Buildings
- Dense Forest
- Open Forest

**Source:**

1. Sol Toposheet No. 56N/5, 56N/9
2. Project Layout Plan, SCCL

**The Singareni Collieries Company Limited**  
(A Government Company)  
Department of Environment  
and Project Planning  
(ISO-9001-2000 Certified)

**RF:- 1:5000**

**Graphic Scale:**



**Figure 0.00: Core Area Classification Ravindra khani-5 Incline Underground Coal Mine Expansion Project**

**Project:**  
**Ravindra khani-5 Incline Underground Coal Mine Expansion Project**  
Srirampur, Mancherial District, Telangana

**Project Proponent:**  
**The Singareni Collieries Company Limited**

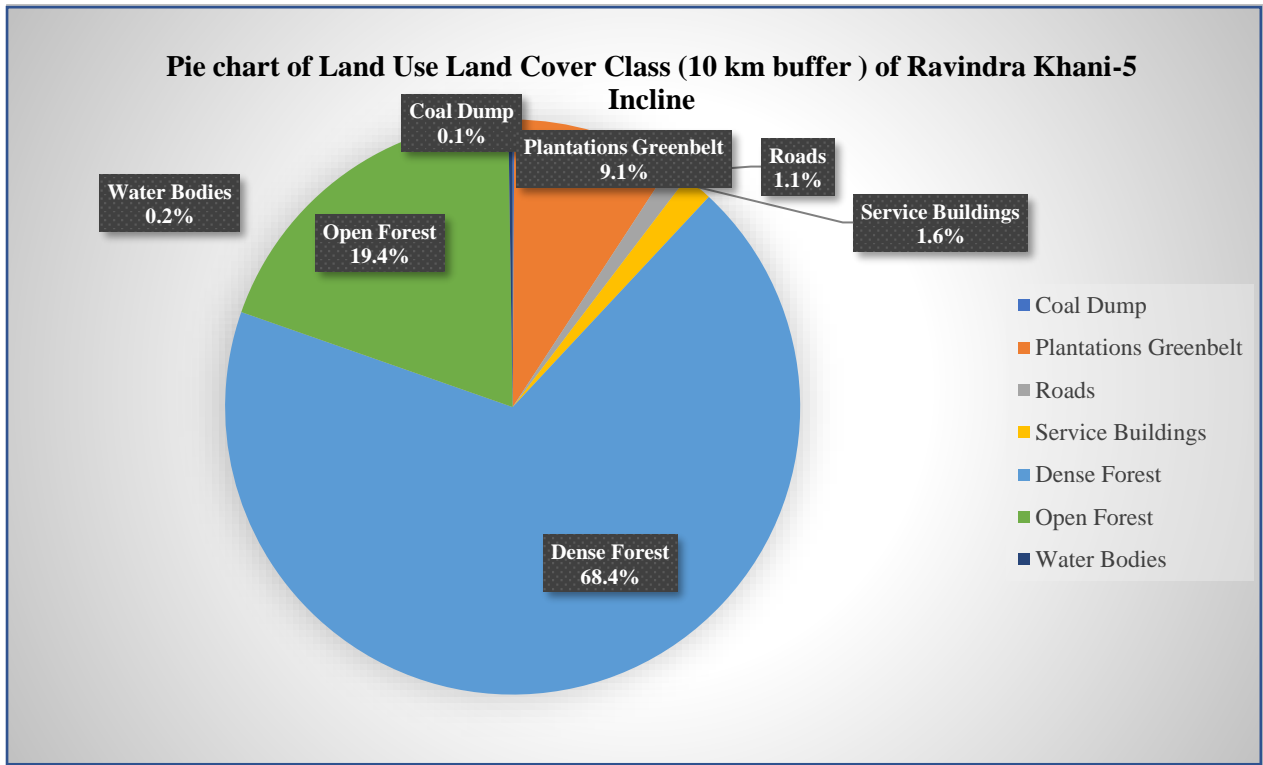
**Environment Consultant:**

**GRENCINDIA Consulting Private Limited**  
QCI-NABET Accrediate Environment Consultant Certificate No. NABET/EIA/2023/SA0155

<b>Drafted By:</b>	<b>Checked By:</b>	<b>Approved By:</b>

<b>Date</b>				
<b>Revision</b>				

**THE LAND USE / LAND COVER STUDY REPORT FOR**  
**RAVINDRA KHANI-5 INCLINE UNDERGROUND COAL MINE PROJECT**  
**LOCATED AT SRIRAMPUR, MANCHERIAL DISTRICT, TELANGANA STATE.**  
**PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**



**Figure 3-6: Pie chart of Land use Land Cover details of Core zone.**

### 3.2.2 TOPOGRAPHY

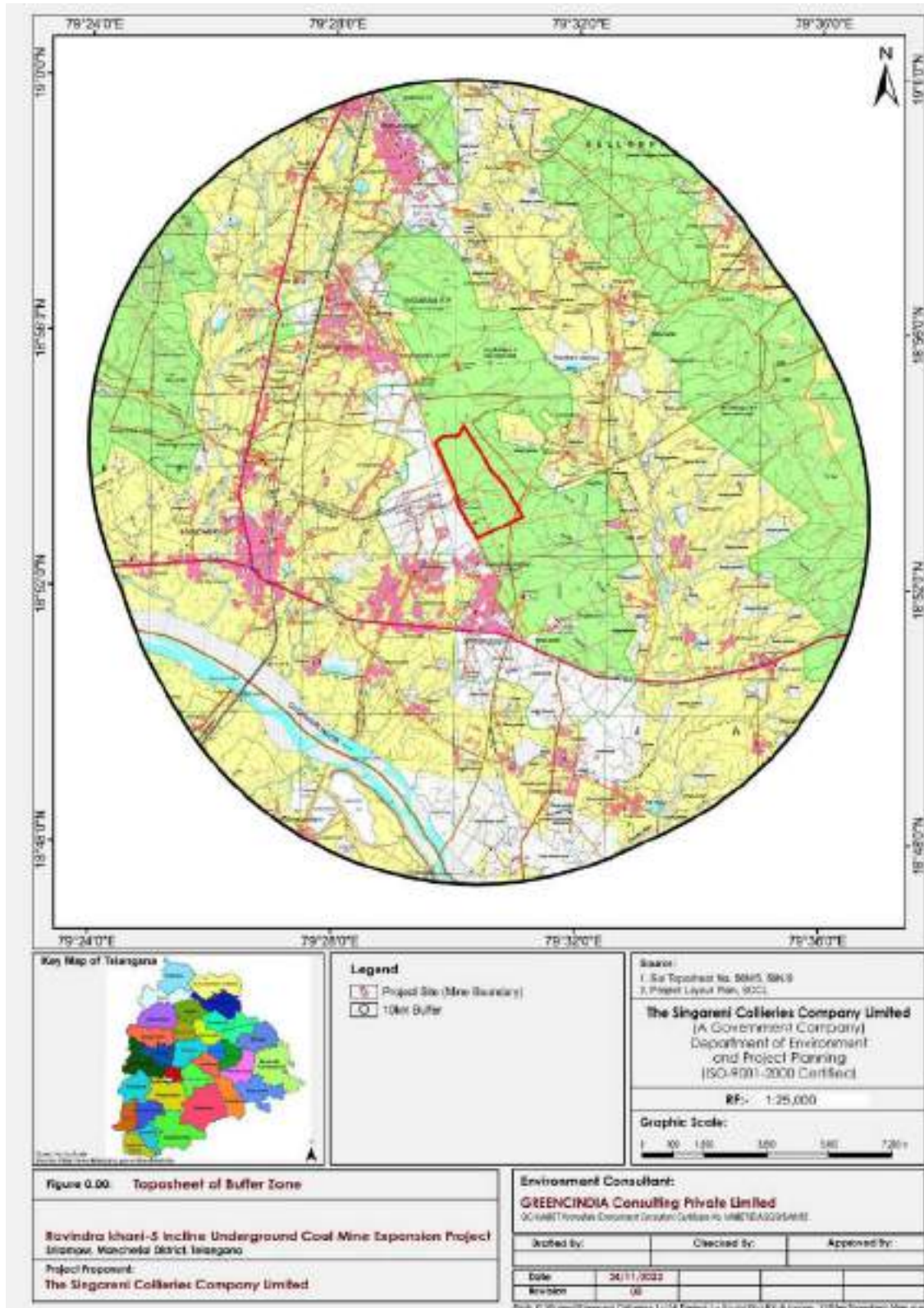
Survey of India Toposheets E44H5 and E44H9 has been used for the topography studies. In topography map of buffer zone contours, drainage pattern, Roads, settlements, water bodies and forest boundaries has been shown.

The 10km buffer zone from the core zone boundary i.e. mine lease area of Ravindra Khani - 5 Incline Underground Coal Mine Expansion Project is mostly plain area, the elevation values range between -90m to 472m. The buffer zone covers the reserved forests namely Indaram Reserve Forest, Rali RF, Bellampalli RF and Mittapalli Reserve Forest. Gamilla, Ralla vagu, Rali vagu, Pedda vagu, Tolla vagu, Ponnaram cheruvu, Uda cheruvu, Pedda cheruvu, Jangaon Ora cheruvu, Medapalli Cheruvu and Godavari River are passing through the buffer zone.

The buffer zone is covered with 1- 4th order streams: Mancherial, Shrapuram, Hanumannagar, Godavarikhani and Ravindrakhani R S are the major urban Settlements that are covered in the 10km buffer zone. The South- Central Railway main line is passing in the buffer zone.



**THE LAND USE / LAND COVER STUDY REPORT FOR**  
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**LOCATED AT SRIRAMPUR, MANCHERIAL DISTRICT, TELANGANA STATE.**  
**PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**

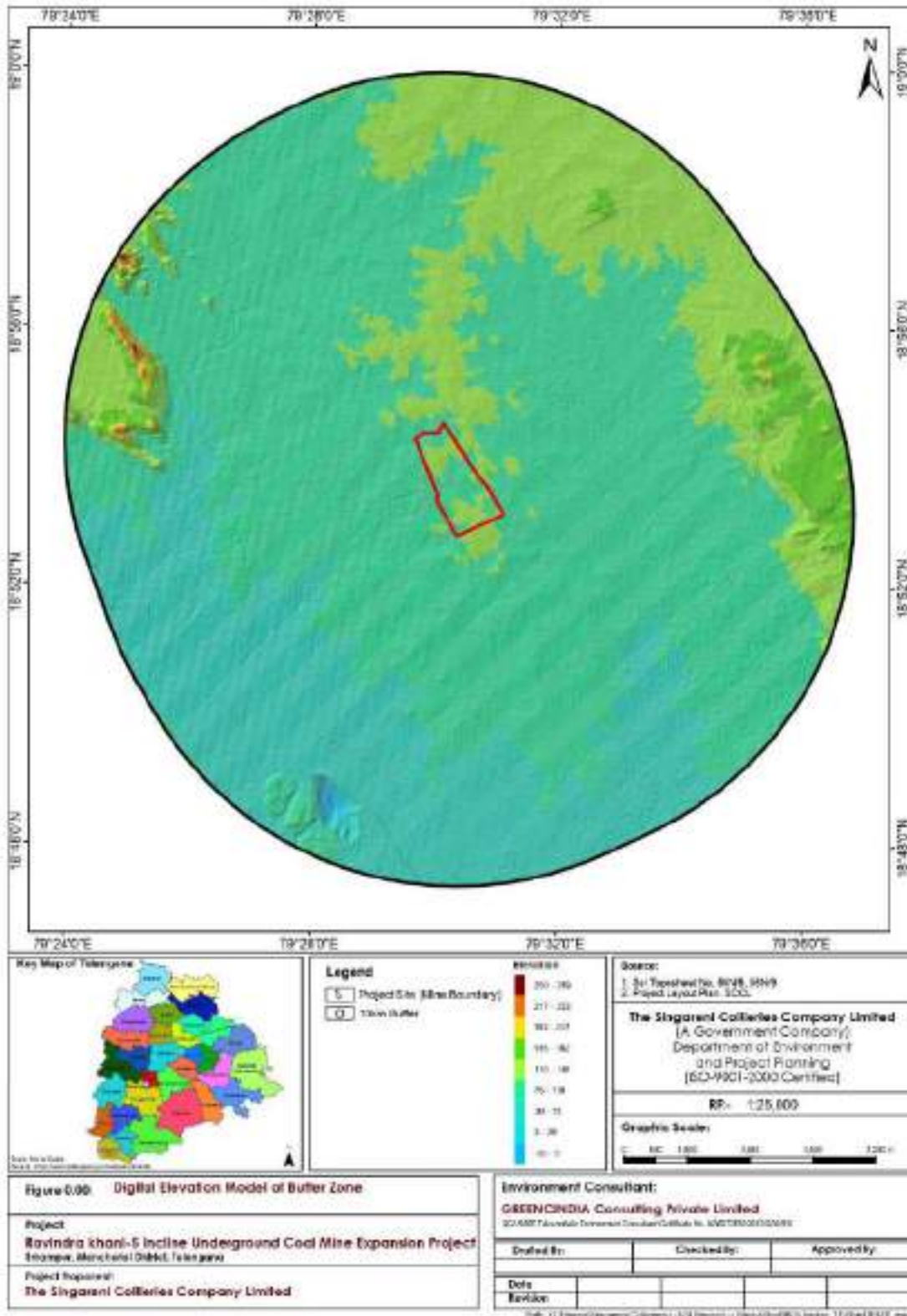


**Figure 3-7: RK-5 Incline UG Coal Mine Extension Project with 10 km buffer zone on Toposheet.**

**ENVIRONMENT CONSULTANT:**  
**GREENCINDIA CONSULTING PRIVATE LIMITED**

**PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**

**THE LAND USE / LAND COVER STUDY REPORT FOR**  
**RAVINDRA KHANI-5 INCLINE UNDERGROUND COAL MINE PROJECT**  
**LOCATED AT SRIRAMPUR, MANCHERIAL DISTRICT, TELANGANA STATE.**  
**PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**



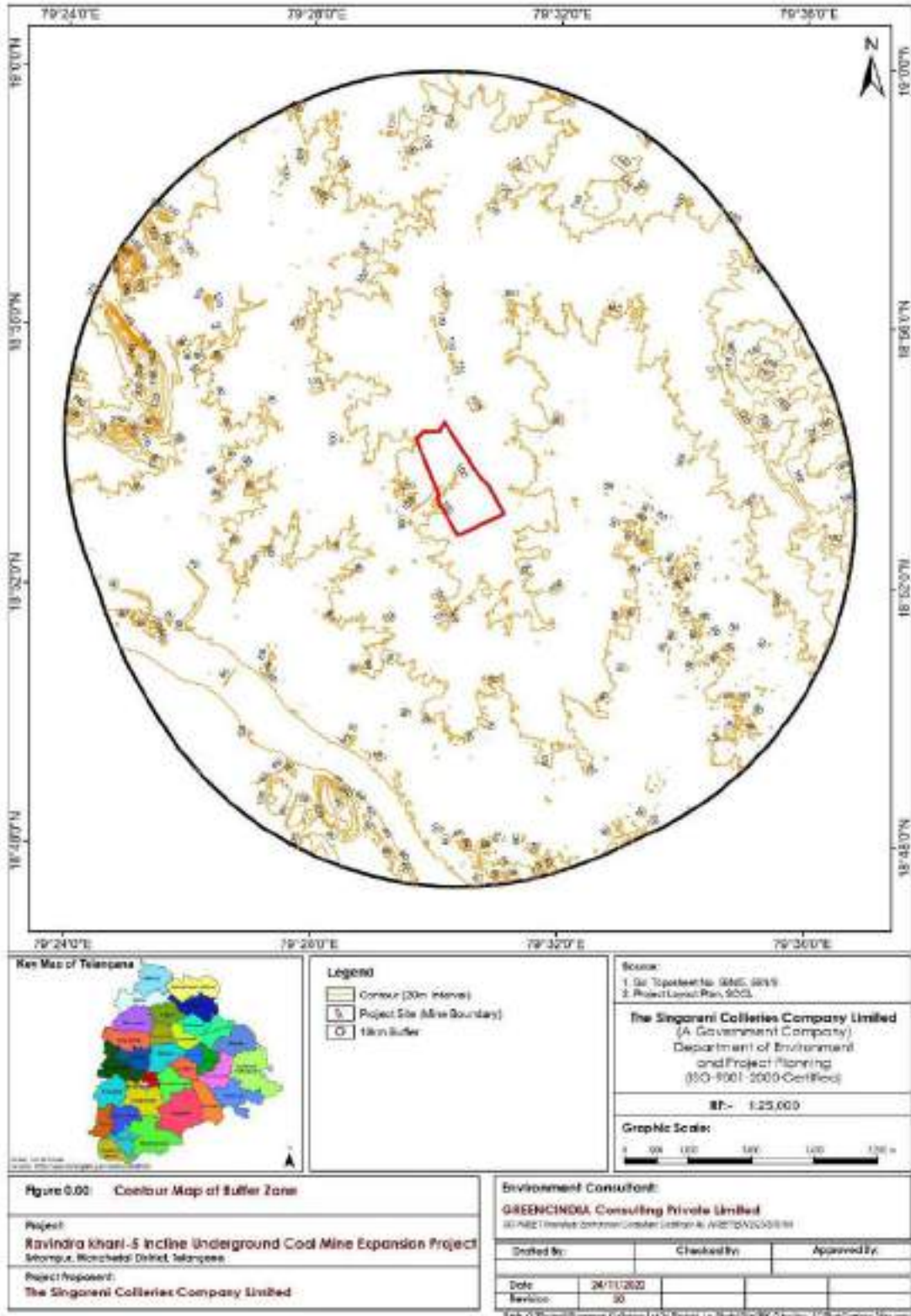
**Figure 3-8: Digital elevation map of RK-5 Incline UG Coal Mine Extension Project with 10 km buffer zone**

**ENVIRONMENT CONSULTANT:**  
**GREENCINDIA CONSULTING PRIVATE LIMITED**

**PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**



**THE LAND USE / LAND COVER STUDY REPORT FOR**  
**RAVINDRA KHANI-5 INCLINE UNDERGROUND COAL MINE PROJECT**  
**LOCATED AT SRIRAMPUR, MANCHERIAL DISTRICT, TELANGANA STATE.**  
**PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**



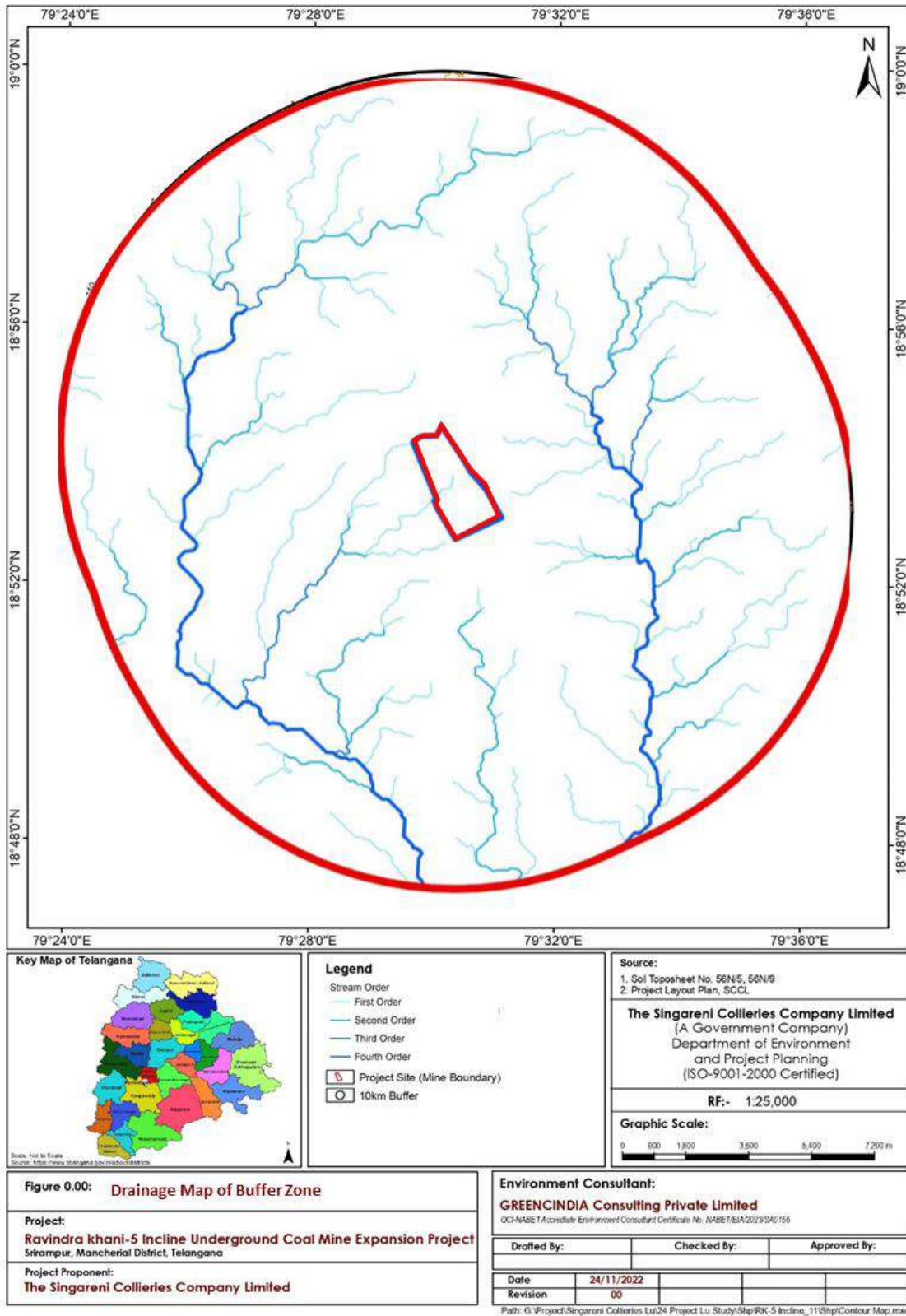
**Figure 3-9: Contour for Buffer Zone.**

**ENVIRONMENT CONSULTANT:**  
**GREENCINDIA CONSULTING PRIVATE LIMITED**

**PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**



**THE LAND USE / LAND COVER STUDY REPORT FOR**  
**RAVINDRA KHANI-5 INCLINE UNDERGROUND COAL MINE PROJECT**  
**LOCATED AT SRIRAMPUR, MANCHERIAL DISTRICT, TELANGANA STATE.**  
**PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**



**Figure 3-10: Drainage Map of Buffer zone.**

**ENVIRONMENT CONSULTANT:**  
**GREENCINDIA CONSULTING PRIVATE LIMITED**

**PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**

**THE LAND USE / LAND COVER STUDY REPORT FOR**

**RAVINDRA KHANI-5 INCLINE UNDERGROUND COAL MINE PROJECT  
LOCATED AT SRIRAMPUR, MANCHERIAL DISTRICT, TELANGANA STATE.  
PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**

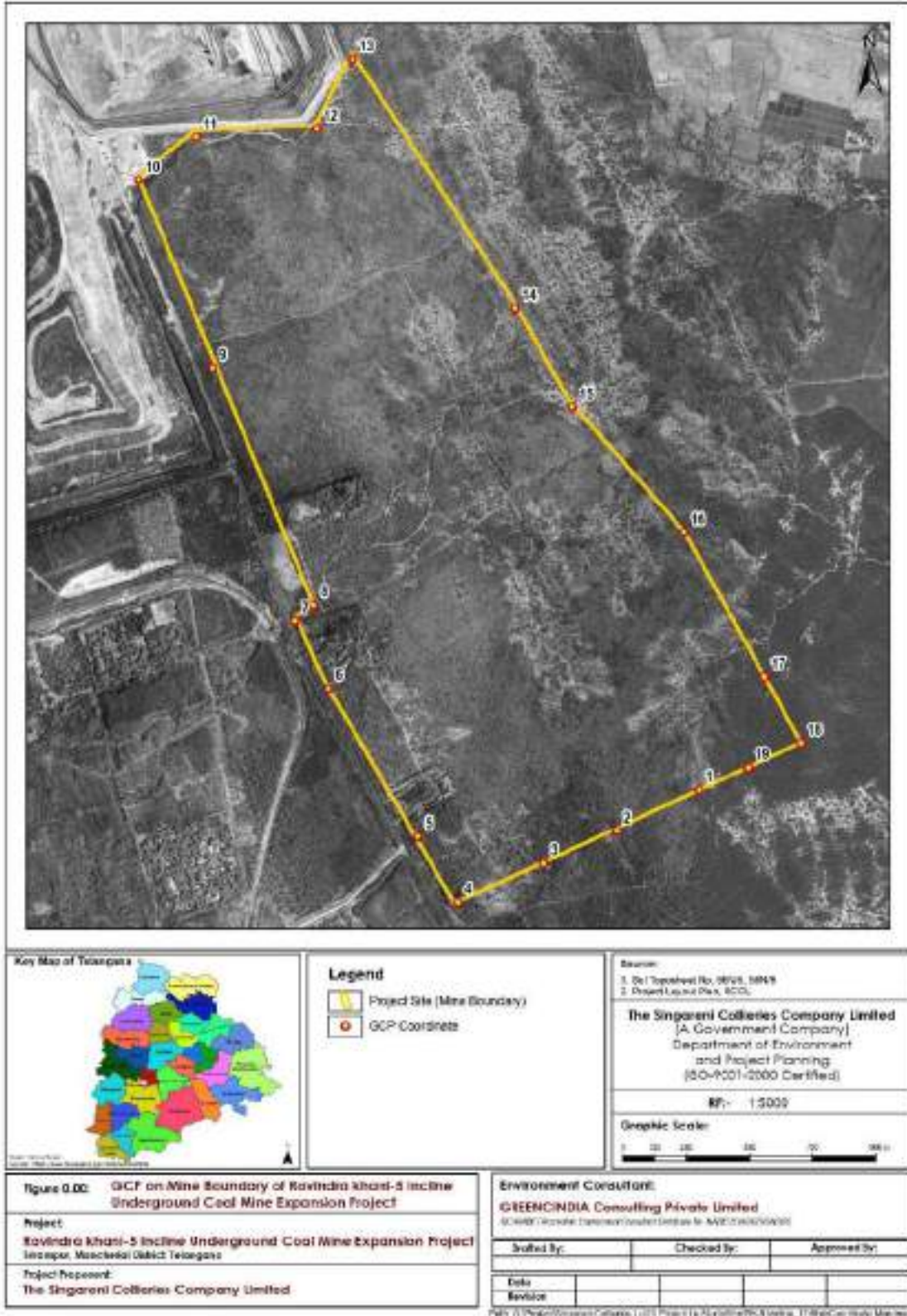
### 3.2.3 BOUNDARY COORDINATES

The Geographic Coordinates of the boundary have been collected from field visit. The Coordinates of the Mine Boundary's GCP are shown below.

**Table 3-4: Project Boundary Co-ordinates.**

<b>GCP_ID</b>	<b>Longitude</b>	<b>Latitude</b>
1	79.5148270434	18.8835270536
2	79.5118672017	18.8820932258
3	79.5092614569	18.8809624866
4	79.5061774185	18.8796005490
5	79.5047193956	18.8818344278
6	79.5014419281	18.8868968063
7	79.5002171375	18.8892042885
8	79.5008839721	18.8897526283
9	79.4971569698	18.8978579258
10	79.4944394710	18.9042858633
11	79.4965151100	18.9057781403
12	79.5008558948	18.9060947026
13	79.5021163062	18.9084947451
14	79.5080637335	18.8999895586
15	79.5101566015	18.8966140001
16	79.5142184556	18.8923501906
17	79.5171565541	18.8874130494
18	79.5184820717	18.8851681965
19	79.5165899830	18.8842986270

**THE LAND USE / LAND COVER STUDY REPORT FOR**  
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**LOCATED AT SRIRAMPUR, MANCHERIAL DISTRICT, TELANGANA STATE.**  
**PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**



**Figure 3-11: Mine boundary on high resolution satellite image.**

**ENVIRONMENT CONSULTANT:**  
**GREENCINDIA CONSULTING PRIVATE LIMITED**

**PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**

**THE LAND USE / LAND COVER STUDY REPORT FOR**  
**RAVINDRA KHANI-5 INCLINE UNDERGROUND COAL MINE PROJECT**  
**LOCATED AT SRIRAMPUR, MANCHERIAL DISTRICT, TELANGANA STATE.**  
**PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**

### 3.2.4 LULC COMPARATIVES STUDY CORE ZONE FOR 2019 AND 2022

**Table 3-5: LULC data (Core Zone) of 2019 and 2022.**

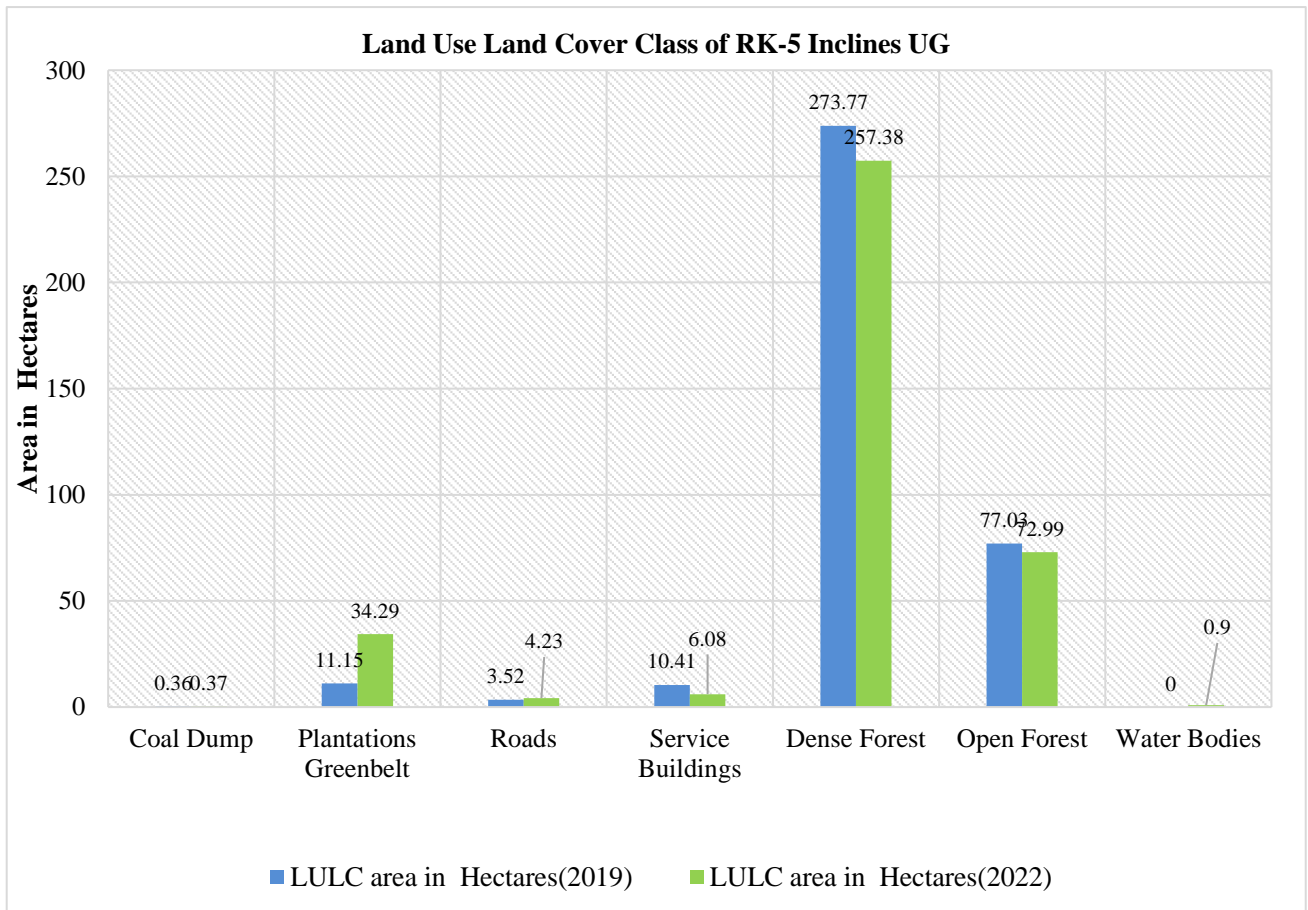
Land Use Land Cover Class	2019		2022		Area change (in %) from 2019 to 2022**
	LULC area in Hectares (2019)	Area Percentage	LULC area in Hectares (2022)	Area Percentage	
Coal Dump	0.36	0.09	0.37	0.1	<b>0.01</b>
Plantations Greenbelt	11.15	2.96	34.29	9.1	<b>6.14</b>
Roads	3.52	0.94	4.23	1.1	<b>0.16</b>
Service Buildings	10.41	2.77	6.08	1.6	<b>-1.17</b>
Dense Forest	273.77	72.76	257.38	68.4	<b>-4.36</b>
Open Forest	77.03	20.47	72.99	19.4	<b>-1.07</b>
Water Bodies	0	0	0.90	0.2	<b>0.20</b>
<b>Total Area</b>	<b>376.24</b>	<b>100.0</b>	<b>376.24</b>	<b>100.0</b>	<b>---</b>

\*\* \*\* Positive and Negative value implies LULC specific class area (in %) correspondingly increases or decrease from 2019 to 2022. The formula used for calculating LULC changes is (% of area change = Percentage of LULC class area for 2022 - Percentage of LULC class area for 2019).

**THE LAND USE / LAND COVER STUDY REPORT FOR**  
**RAVINDRA KHANI-5 INCLINE UNDERGROUND COAL MINE PROJECT**  
**LOCATED AT SRIRAMPUR, MANCHERIAL DISTRICT, TELANGANA STATE.**  
**PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**

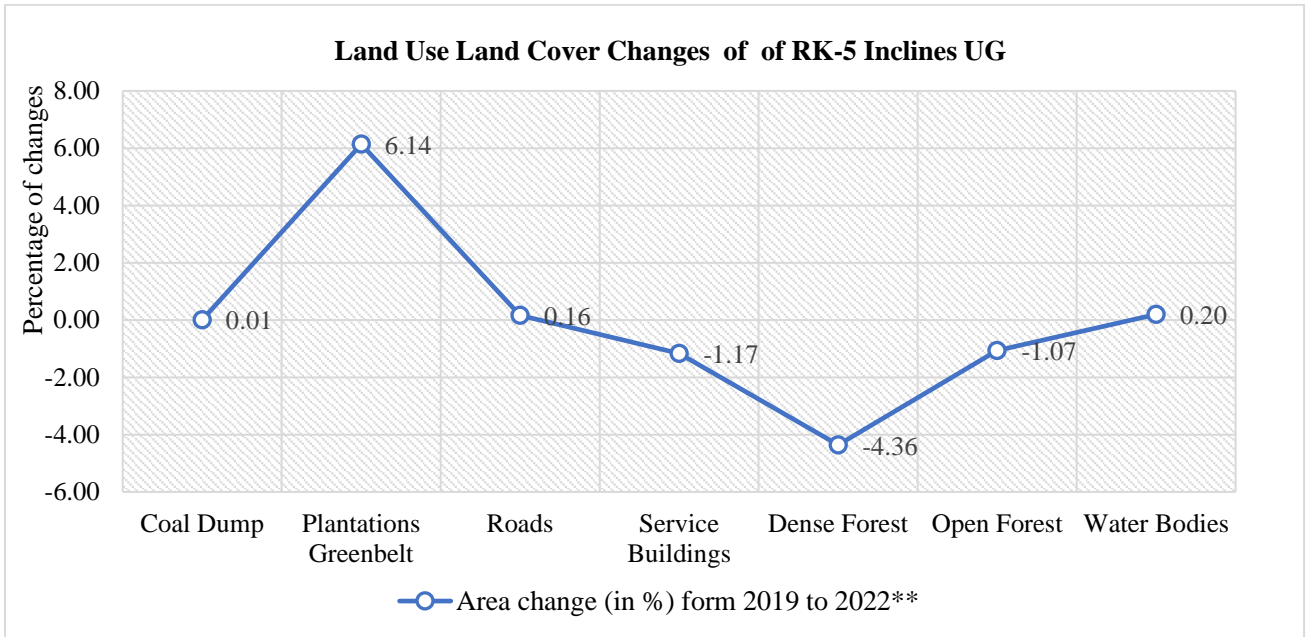
**3.2.5 COMPARISON OF LULC DATA OF 2019 & 2022**

Coal Dump increased from 0.09% to 0.1%, Plantation Greenbelt increased from 2.96% to 9.1% as well. Dense forest decreased from 72.76% to 68.4% and open forest also decreased from 20.47% to 19.4%. The area for service buildings decreased from 2.77% to 1.6%.



**Figure 3-12: LULC Class (Core Zone) of RK-5 Inclines UG at 2019 and 2022**

**THE LAND USE / LAND COVER STUDY REPORT FOR**  
**RAVINDRA KHANI-5 INCLINE UNDERGROUND COAL MINE PROJECT**  
**LOCATED AT SRIRAMPUR, MANCHERIAL DISTRICT, TELANGANA STATE.**  
**PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**



**Figure 3-13: Land Use Land Cover Changes (Core Zone) of RK-5 Inclines UG.**



**THE LAND USE / LAND COVER STUDY REPORT FOR**  
**RAVINDRA KHANI-5 INCLINE UNDERGROUND COAL MINE PROJECT**  
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**PROJECT PROPONENT: M/S SINGARENI COLLIERIES COMPANY LTD.**

**SITE PHOTOGRAPHS**



**RK-5 Incline UG Mine**



**Forest**



**Plantation**



**Mine**



**Mine Office**



**Service Building**

**ENVIRONMENT CONSULTANT:**  
**GREENCINDIA CONSULTING PRIVATE LIMITED**

**PROJECT PROPONENT: M/S SINGARENI**  
**COLLIERIES COMPANY LTD.**



Mine Closure Escrow accounts summary as on 31.03.2024

Sl.No.	Name of Company	Name of the mine as per approved MP	Account No	ROI	Face Value or Total Yearly Deposits of the Past Years upto 31.03.2023	Total Interest upto 31.03.2023	Amount Withdrawn till 31.03.2023	Closure Cost deposited in 2023-24	Closure Cost deposited in 2024-25	Amount Withdrawn during 2023-24	Interest for FY 2023-24	TDS deducted from 01.04.2023 to 31.03.2024	Balance as on 31.03.2024
1	The Singareni Collieries company Ltd.	Kasipet-1 Incline	41794082858	6.50%	4,50,80,000	1,11,31,607	1,34,79,254	27,10,000	28,50,000	-	29,33,625	2,80,622	3,18,39,356
2	The Singareni Collieries company Ltd.	Godavarikhani No.1&3 Incline	41794083853	6.50%	1,45,40,000	32,21,138	36,16,804	17,20,000	18,10,000	-	9,50,996	93,651	1,81,31,479
3	The Singareni Collieries company Ltd.	Godavarikhani Coal Mine(No.2 &3A and No.5)	41794079640	6.50%	53,29,00,000	4,24,74,169	-	11,40,70,000	11,97,70,000	-	3,86,85,335	28,66,596	84,40,12,908
4	The Singareni Collieries company Ltd.	Ekatiya Khani OC II Project	41794073253	6.50%	22,60,70,000	2,90,94,710	-	5,82,00,000	6,11,10,000	-	1,71,56,023	17,23,197	38,95,07,536
5	The Singareni Collieries company Ltd.	GDE-7 LEP	41794084729	6.50%	3,24,50,000	65,23,023	78,80,025	-	-	-	21,06,679	2,03,665	3,32,36,032
6	The Singareni Collieries company Ltd.	KTK-6 Incline	40886378236	5.45%	1,52,00,000	35,01,105	37,30,432	20,00,000	21,00,000	-	8,33,376	85,200	1,98,28,989
7	The Singareni Collieries company Ltd.	KX 7& NT	40886379342	5.45%	6,02,00,000	1,35,16,338	1,47,56,714	78,00,000	82,00,000	-	32,82,103	3,25,477	7,79,06,250
8	The Singareni Collieries company Ltd.	Srirampur -1 Incline	40886380007	5.45%	2,76,00,000	79,29,523	88,55,772	20,60,000	21,60,000	-	14,84,895	1,50,403	3,22,17,385
9	The Singareni Collieries company Ltd.	Srirampur 3&3A Incline	40886381363	5.45%	2,74,00,000	63,23,075	66,87,954	35,00,000	37,00,000	-	15,04,963	1,53,767	3,55,86,317
10	The Singareni Collieries company Ltd.	Prakashkhani OC Mine	41794074619	6.50%	85,16,20,000	19,90,12,598	-	26,13,90,000	27,44,60,000	-	7,06,38,379	71,39,365	1,65,90,02,612
11	The Singareni Collieries company Ltd.	RG OC-II Expansion Project	41794075498	6.50%	80,64,90,000	26,91,78,030	-	20,11,70,000	21,12,30,000	-	7,23,22,638	72,15,227	1,55,31,75,441
12	The Singareni Collieries company Ltd.	Khairagura Opencast Expansion Project	41794076479	6.50%	88,52,00,000	21,53,89,653	21,64,43,825	11,46,00,000	12,04,00,000	-	5,94,45,625	58,74,241	1,17,27,17,212
13	The Singareni Collieries company Ltd.	Ramagandam Coal Mine	40886382855	5.45%	1,44,17,10,000	35,42,99,330	50,58,90,820	13,89,60,000	14,59,00,000	-	7,26,51,667	72,81,880	1,64,03,48,297
14	The Singareni Collieries company Ltd.	Dorli OC II	41794077304	6.50%	22,38,00,000	9,81,12,536	-	-	-	-	2,16,43,819	20,62,432	34,14,63,523
15	The Singareni Collieries company Ltd.	Dorli OCP -I Expansion	40117327610	5.30%	55,08,30,000	15,42,12,186	8,13,34,775	-	-	-	3,37,45,707	33,74,571	65,40,98,527
16	The Singareni Collieries company Ltd.	Jalagam Venigala Rao Opencast Mine( I&II Expansion)	41794077972	6.50%	48,09,70,000	17,22,39,091	-	7,65,80,000	8,04,50,000	-	4,03,57,734	39,86,675	84,63,70,150
17	The Singareni Collieries company Ltd.	Koyagudem OC-II Project	41794086525	6.50%	53,21,00,000	11,79,20,952	13,01,27,314	-	-	-	3,49,55,069	33,79,307	55,14,69,000
18	The Singareni Collieries company Ltd.	Kakatiyakhani 2 OC (Covering KTK 2&3A Incline and KTK OC Sector 4)	3928634495	5.90%	30,91,40,000	11,05,99,939	-	5,36,00,000	5,41,80,000	-	2,72,86,472	3,09,997	55,24,90,414
19	The Singareni Collieries company Ltd.	RFP OC Project Phase-I Project	40886384579	5.45%	86,53,00,000	19,82,38,951	16,26,29,550	-	-	-	3,67,94,156	36,79,416	69,40,84,141
20	The Singareni Collieries company Ltd.	Venkatesh Khani Coal Mine	40138837007	5.30%	86,71,10,000	21,85,55,913	3,44,00,000	4,68,50,000	4,92,00,000	-	4,48,82,834	45,15,823	98,76,82,904
21	The Singareni Collieries company Ltd.	Goleti OC Mine	41794080522	6.50%	30,52,30,000	6,40,67,493	-	10,36,30,000	10,87,20,000	-	1,34,11,745	14,09,487	57,16,39,700
22	The Singareni Collieries company Ltd.	JR OC Mine	40117328943	5.30%	55,10,38,000	13,40,43,854	9,96,33,920	3,48,50,000	3,75,90,000	-	3,17,17,668	32,19,539	72,63,91,063
23	The Singareni Collieries company Ltd.	Ravindra Khani No.6 Incline	40886385933	5.45%	4,24,00,000	2,40,99,241	99,29,326	54,90,000	57,60,000	-	12,15,486	2,26,659	6,88,08,742
24	The Singareni Collieries company Ltd.	KX -1 Incline	41794087482	6.50%	6,72,00,000	1,44,92,462	1,62,24,645	87,00,000	-	-	67,20,806	3,71,593	8,05,17,230
25	The Singareni Collieries company Ltd.	Ravindra Khani No.5 Incline	40886386837	5.45%	5,94,00,000	1,43,48,823	1,83,14,940	82,60,000	84,40,000	-	25,43,879	2,60,156	7,04,17,606
26	The Singareni Collieries company Ltd.	KTK 3 & 1A Incline	40886387784	5.45%	2,16,00,000	41,38,716	50,59,934	28,00,000	29,40,000	-	10,01,637	1,02,771	2,73,17,148
27	The Singareni Collieries company Ltd.	Medapalli Opencast Project	41794082133	6.50%	1,23,64,60,000	28,33,41,274	-	-	-	-	9,97,19,268	96,50,988	1,60,98,69,805
28	The Singareni Collieries company Ltd.	KX -5 Incline	41794088273	6.50%	7,03,40,000	1,84,79,731	2,54,32,583	-	-	-	19,41,783	4,70,679	6,48,55,252
29	The Singareni Collieries company Ltd.	Kalyanikhani Opencast Project (KKDCP)	39237601674	5.90%	26,71,40,000	3,54,64,899	-	6,65,10,000	6,98,30,000	-	2,06,91,301	2,58,323	45,89,81,677
30	The Singareni Collieries company Ltd.	Manuguru Mining Lease(Manuguru OC Mine)	39238634053	5.90%	44,73,60,000	6,37,45,583	-	10,33,30,000	10,84,90,000	-	3,36,54,274	4,25,031	75,01,54,826
31	The Singareni Collieries company Ltd.	GDE-11 Incline	41794119030	6.50%	2,62,20,000	45,37,277	82,04,500	41,30,000	43,20,000	-	15,16,338	1,51,165	3,23,57,950
32	The Singareni Collieries company Ltd.	KX 1A Incline	40884334387	5.45%	1,46,80,000	44,58,277	-	68,30,000	-	-	21,78,709	2,16,406	4,79,30,580
33	The Singareni Collieries company Ltd.	Ravindrakhani No.8 Incline (RK No.8 Incline)	40884244771	5.45%	3,14,40,000	50,45,249	-	-	-	-	20,31,023	1,98,845	3,83,17,427
34	The Singareni Collieries company Ltd.	Shanthikhani LW Project (Shanthikhani Extension Block)	40884255057	5.45%	6,29,80,000	80,88,818	-	1,24,10,000	1,30,30,000	-	39,56,185	1,98,880	10,00,66,323
35	The Singareni Collieries company Ltd.	Kondapuram UG Mine	40884250205	5.45%	3,17,40,000	45,35,398	-	54,20,000	56,90,000	-	19,97,074	2,00,567	4,87,81,905
36	The Singareni Collieries company Ltd.	KTK 5 Incline	40884329202	5.45%	5,12,70,000	1,04,47,733	-	4,30,000	5,70,000	-	34,31,638	3,36,816	6,58,16,555
37	The Singareni Collieries company Ltd.	Indaram Mining Lease	40884257688	5.45%	19,91,60,000	1,48,46,228	-	6,02,30,000	6,32,40,000	-	1,19,09,736	12,72,083	34,81,03,881
38	The Singareni Collieries company Ltd.	SFP OC II Expansion Project	40884333426	5.45%	49,42,90,000	9,96,82,458	-	5,22,80,000	9,69,00,000	-	3,13,94,631	31,59,570	78,13,87,519
39	The Singareni Collieries company Ltd.	Kasipet 2 Incline	40884252205	5.45%	81,30,000	9,16,173	-	18,80,000	19,70,000	-	5,09,573	51,051	1,33,48,699
40	The Singareni Collieries company Ltd.	Naini Coal Mine	38885061317	6.25%	5,53,60,000	71,23,823	-	1,77,00,000	2,90,80,000	-	35,00,596	1,56,014	11,76,13,805
41	The Singareni Collieries company Ltd.	Kotaram OCP	38885062344	6.25%	13,24,60,000	1,11,52,582	-	4,19,80,000	4,40,80,000	-	1,58,473	23,82,25,922	1,58,473
42	The Singareni Collieries company Ltd.	PV Narasimha Rao Opencast Mine	40127185227	5.30%	10,00,000	99,679	-	-	-	-	59,452	5,946	11,53,185
		<b>Total</b>			<b>12,58,32,88,000</b>	<b>2,96,56,88,689</b>	<b>1,87,24,03,067</b>	<b>1,64,80,60,000</b>	<b>1,79,21,20,000</b>		<b>86,76,74,910</b>	<b>7,85,78,712</b>	<b>18,41,52,49,820</b>

For State Bank of India  
**P. SUREVANI**  
 Deputy Manager (Accts.)  
 S.S. No. S-020644  
 Commercial Br.-04168, Kott. Hyderabad  
 Ph: 040-23465822 / 23466819





## ANNEXURE –XI

**POST PROJECT AMBIENT AIR QUALITY MONITORING DATA FOR THE PERIOD FROM APRIL–2024 TO SEPTEMBER–2024 FOR RK-5 INCLINE.**❖ Location of the Ambient Air Quality monitoring Station: **RK-5 Incline Site Office (CA1).**

Sl. No.	Station Name	Date of Sampling	Parameters ( µg/ Cu. Mtr.)					
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>		
<b>Coal mine standards, GSR 742(E), dtd.25.09.2000 &amp; NAAQS, dtd.18.11.2009</b>			<b>250</b>	<b>--</b>	<b>120</b>	<b>120</b>		
1.	RK-5 Incline Site Office(CA1)	06.04.2024	160	58.2	10.7	14.8		
		27.04.2024	134	50.7	11.1	14.7		
		14.05.2024	179	63.7	9.7	16.3		
		28.05.2024	162	69.4	10	14.3		
		12.06.2024	167	48.6	10.2	15.6		
		28.06.2024	172	59.5	10.6	13.8		
		12.07.2024	155	48.8	10.2	13.7		
		27.07.2024	137	48.3	12.1	15		
		13.08.2024	119	51.5	10.2	13.8		
		29.08.2024	118	48.1	9.7	14.2		
		12.09.2024	112	58.4	10.9	13.2		
		28.09.2024	124	57.1	9.7	13		
		<b>Minimum</b>			<b>112.0</b>	<b>48.1</b>	<b>9.7</b>	<b>13.0</b>
		<b>Maximum</b>			<b>179.0</b>	<b>69.4</b>	<b>12.1</b>	<b>16.3</b>
<b>Average</b>			<b>144.9</b>	<b>55.2</b>	<b>10.4</b>	<b>14.4</b>		
<b>98% tile</b>			<b>177.5</b>	<b>68.1</b>	<b>11.9</b>	<b>16.1</b>		

❖ Location of the Ambient Air Quality monitoring Station : **Mudigunta (BA1).**

SI.No	Station Name	Date of Sampling	Parameters ( $\mu\text{g/ Cu. Mtr.}$ )			
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>
<b>NAAQ Standards, CPCB dtd.18.11.2009</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>
2.	Mudigunta (BA1)	06.04.2024	66	35.9	8.3	13.9
		27.04.2024	66	35.6	9.6	12.5
		14.05.2024	78	39.8	10	14.8
		28.05.2024	73	38.2	8.7	12.8
		12.06.2024	65	34.3	9.2	15.4
		28.06.2024	78	39.5	10.1	13.9
		12.07.2024	66	35.7	8.7	13.5
		27.07.2024	58	31.7	8.8	12.9
		13.08.2024	51	28.2	9.7	14.2
		29.08.2024	52	28.4	9.5	12.8
		12.09.2024	55	29.5	9.3	12.1
		28.09.2024	64	34.4	9.5	12.7
	<b>Minimum</b>		<b>51.0</b>	<b>28.2</b>	<b>8.3</b>	<b>12.1</b>
	<b>Maximum</b>		<b>78.0</b>	<b>39.8</b>	<b>10.1</b>	<b>15.4</b>
<b>Average</b>		<b>64.3</b>	<b>34.3</b>	<b>9.3</b>	<b>13.5</b>	
<b>98% tile</b>		<b>78.0</b>	<b>39.7</b>	<b>10.1</b>	<b>15.3</b>	

❖ Location of the Ambient Air Quality monitoring Station : Krishna Colony.

Sl. No.	Station Name	Date of Sampling	Parameters (µg/ Cu. Mtr.)			
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>
<b>NAAQ Standards, CPCB dtd.18.11.2009</b>			<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>
3.	Krishna Colony (BA2)	06.04.2024	72	38.2	8	13.6
		26.04.2024	74	40.9	8.5	12
		11.05.2024	81	42.4	10.1	14.4
		27.05.2024	81	44.5	8	13.7
		11.06.2024	72	37.4	8.6	14.6
		27.06.2024	79	41.2	9.2	14.8
		11.07.2024	59	32.6	8.3	12.9
		26.07.2024	61	33.6	8.5	13.7
		12.08.2024	52	29.9	8.6	13.2
		28.08.2024	57	29.8	9.7	13.6
		11.09.2024	61	33.9	8.5	12.3
		27.09.2024	62	34.6	8.5	12.1
	<b>Minimum</b>		<b>52.0</b>	<b>29.8</b>	<b>8.0</b>	<b>12.0</b>
<b>Maximum</b>		<b>81.0</b>	<b>44.5</b>	<b>10.1</b>	<b>14.8</b>	
<b>Average</b>		<b>67.6</b>	<b>36.6</b>	<b>8.7</b>	<b>13.4</b>	
<b>98% tile</b>		<b>81.0</b>	<b>44.0</b>	<b>10.0</b>	<b>14.8</b>	

❖ Location of the Ambient Air Quality monitoring Station : **Kankur Village (BA3).**

Sl. No.	Station Name	Date of Sampling	Parameters (µg/Cu. Mtr.)			
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>
	<b>NAAQ Standards, CPCB dtd.18.11.2009</b>		<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>
4.	Kankur Village(BA3)	06.04.2024	79	39.7	10	14.6
		27.04.2024	68	36.4	8.7	12.2
		14.05.2024	68	36.6	8.7	14.1
		28.05.2024	72	39	9.6	13.9
		12.06.2024	67	36.2	8	13.8
		28.06.2024	69	38.7	8.6	13.1
		12.07.2024	74	39.4	10	12.8
		27.07.2024	55	29.4	8.7	13.7
		13.08.2024	58	30.3	8	13.8
		29.08.2024	61	33.2	8.8	12.4
		12.09.2024	59	29.7	9.3	12
		28.09.2024	57	29.8	8.3	12.3
		<b>Minimum</b>		<b>55.0</b>	<b>29.4</b>	<b>8.0</b>
	<b>Maximum</b>		<b>79.0</b>	<b>39.7</b>	<b>10.0</b>	<b>14.6</b>
	<b>Average</b>		<b>65.6</b>	<b>34.9</b>	<b>8.9</b>	<b>13.2</b>
	<b>98% tile</b>		<b>77.9</b>	<b>39.6</b>	<b>10.0</b>	<b>14.5</b>

❖ Location of the Ambient Air Quality monitoring Station: **Srirampur Colony(BA4).**

Sl. No.	Station Name	Date of Sampling	Parameters ( µg/Cu. Mtr.)			
			PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>
	<b>NAAQ Standards, CPCB dtd.18.11.2009</b>		<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>
5.	Srirampur colony(BA4)	09.04.2024	80	41.5	11.6	14.7
		25.04.2024	79	42.5	9.1	13.7
		10.05.2024	87	46.7	9.2	15.4
		25.05.2024	85	44.2	8.6	14.9
		10.06.2024	57	32.4	9.8	14.5
		26.06.2024	77	39.6	9.6	13.8
		10.07.2024	62	33.2	7.8	12.1
		25.07.2024	68	36.8	8	12.2
		10.08.2024	60	34.4	9.8	12.4
		27.08.2024	59	31.3	10.4	13.7
		10.09.2024	54	29.5	10.5	13.2
		26.09.2024	59	32.5	8.5	12
	<b>Minimum</b>		<b>54.00</b>	<b>29.50</b>	<b>7.80</b>	<b>12.00</b>
	<b>Maximum</b>		<b>87.00</b>	<b>46.70</b>	<b>11.60</b>	<b>15.40</b>
<b>Average</b>		<b>68.92</b>	<b>37.05</b>	<b>9.41</b>	<b>13.55</b>	
<b>98% tile</b>		<b>86.56</b>	<b>46.15</b>	<b>11.36</b>	<b>15.29</b>	

## NOISE LEVEL MONITORING DATA FOR THE PERIOD FROM APRIL, 2024 TO SEPTEMBER, 2024 AROUND RK-5 INCLINE

Fortnight	RK-5 Incline (CN1)			Kankur (BN1)			Mudigunta (BN3)		
	Date	L <sub>day</sub>	L <sub>night</sub>	Date	L <sub>day</sub>	L <sub>night</sub>	Date	L <sub>day</sub>	L <sub>night</sub>
<b>Apr-I</b>	08.04.2024	41	32.4	08.04.2024	47.2	33.8	08.04.2024	46.1	36.7
<b>Apr -II</b>	29.04.2024	47.2	32.8	28.04.2024	44.9	34.8	28.04.2024	41	28.9
<b>May -I</b>	15.05.2024	43.8	34.9	15.05.2024	42	30.2	15.05.2024	44.8	36.7
<b>May -II</b>	29.05.2024	53.4	41.2	29.05.2024	41.6	31.8	29.05.2024	44.8	36.2
<b>June-I</b>	13.06.2024	54.7	43.4	13.06.2024	47.9	36.5	12.06.2024	43.1	35.6
<b>June -II</b>	29.06.2024	58.5	43.1	29.06.2024	45.7	36.3	28.06.2024	45	32.5
<b>July-I</b>	13.07.2024	46.4	37.4	13.07.2024	46.9	32.5	12.07.2024	42.3	33.5
<b>July-II</b>	29.07.2024	49.3	37.4	29.07.2024	43.2	33.3	27.07.2024	45.1	29.3
<b>Aug-I</b>	14.08.2024	48.4	39.2	14.08.2024	48.3	34.3	13.08.2024	42.1	33.5
<b>Aug -II</b>	30.08.2024	57.2	41.7	30.08.2024	45.7	38.4	29.08.2024	45	31.1
<b>Sep-I</b>	14.09.2024	46.2	38.9	14.09.2024	39.4	26.7	14.09.2024	46.9	32.2
<b>Sep -II</b>	30.09.2024	48.5	37.4	30.09.2024	44.5	34.7	30.09.2024	47.4	32.2
	<b>Average</b>	<b>49.6</b>	<b>38.3</b>		<b>44.8</b>	<b>33.6</b>		<b>44.5</b>	<b>33.2</b>
<b>Limits</b>		<b>75</b>	<b>70</b>		<b>55</b>	<b>45</b>		<b>55</b>	<b>45</b>



**Revenue Expenditure incurred on Environment Management and Pollution Control Measures:**

Sl. No	Expenditure Head	Capital Expenditure (in Rs.)	Revenue Expenditure (in Rs.)		
		UP to 2024-25 (apr-sep)	Up to 2023-24	2024-25 (apr-sep)	Total
I	Air pollution (Prevention & control)	377600	112426695.1	320314.48	<b>112747009.6</b>
II	Water pollution (Prevention & Control)	0	3701988.31	266294.2	<b>3968282.51</b>
III	Land development	0	0	0	<b>0</b>
IV	Plantation	1168735	2943908.5	54740	<b>2998648.5</b>
V	Equipment for maintenance of environment protection	0	9695198.16	0	<b>9695198.16</b>
VI	Consultancy payments	714200	0	0	<b>0</b>
VII	OB Reclamation / Subsidence management	0	1041046	260850	<b>1301896</b>
VIII	Environment awareness / Environment education	0	30500	1500	<b>32000</b>
IX	Noise & Blasting vibration	0	343854.78	16336.32	<b>360191.1</b>
X	Others	0	1000	1000	<b>2000</b>
	<b>Total</b>	<b>2260535</b>	<b>130184191.2</b>	<b>921035</b>	<b>131105226</b>

पॉलिसी अनुसूची/ Policy Schedule-Public Liability Insurance Act	
पॉलिसी संख्या / <b>Policy Number:</b> <b>55020049241000034</b>	व्यवसाय स्रोत/ <i>Business Source:</i> 550200
जारीकर्ता कार्यालय/ <b>Issuing Office</b> कार्यालय कोड/ <i>Office Code:</i> 550200 कार्यालय पता/ <i>Office Address:</i> HYDERABAD <b>BUSINESS OFFICE II CSR Plaza,D No. 6-3-347/9/4,,2nd Floor,Dwarakapuri Colony,Punjagutta, - 500082.</b> राज्य कोड/ <b>State Code:</b> 36 , Telangana जीएसटीएन/ <b>GSTIN:</b> 36AAACN9967E6ZZ संपर्क संख्या/ <i>Contact Number:</i> 40 23401398 मोबाइल संख्या / <i>Mobile Number:</i> 0	<u>विक्रय चैनल विवरण/</u> <b>Sales Channel Details</b> कोड/ <i>Code:</i> 550200 नाम/ <i>Name:</i> Hyderabad Division II संपर्क संख्या/ <i>Contact Number:</i> सह दलाल कोड / <i>Co Broker Code:</i>
	<b>Customer Care Toll Free Number:</b> <b>1800 345 0330</b> <b>email:customer.support@nic.co.in</b>



ग्राहक का नाम/Customer Name: MS THE SINGARENI COLLIERIES CO LTD	ग्राहक आईडी/ Customer ID: 9510115064	पैन/ PAN: AAAC8873F
पता/ Address: CORPORATE FINANCE & ACCOUNTS DEPARTMENT, PO. KOTHAGUDEM COLLIERIES, BHADRACHALAM ROAD RLY STN(S C RLY), BHADRADRI KOTHAGUDEM DISTRICT, TELANGANA, शहर/City: KOTHAGUDEM, जिला/District: KHAMMAM, राज्य/State: TELANGANA, पिन/ PIN: 507101. सेल/Cell: 1111111111	फोन/ Phone: 1111111111	ई-मेल/ E-Mail: fad_crp@scclmines.com

पॉलिसी प्रभावी समय घंटे को <b>Policy Effective from 00:00 hours, on 30/04/2024</b> की मध्य रात्रि तक प्रभावी/ <b>to midnight of 29/04/2025 .</b>			
प्रीमियम /Premium	₹ 65,610.42	कवर नोट संख्या तथा तिथि/ Cover Note Number and Date	NA
सीजीएसटी/CGST	₹ 5,905.00	प्रस्ताव संख्या और तिथि /Proposal Number and Date	8800240506182484 दिनांक/Dt. 06/05/2024
एसजीएसटी/यूटीजीएसटी SGST/UTGST	₹ 5,905.00		
आईजीएसटी/GST	₹ 0.00		
कम:जीएसटी_टीडीएस / Less:GST_TDS	₹ 0.00		
वसूली योग्य स्टाम्प शुल्क / Recoverable Stamp Duty	₹ 0.00	रसीद संख्या और तिथि/ Receipt Number and Date	550200812410000167 दिनांक/Dt. 23/04/2024
कुल राशि/ <b>Total Amount*</b>	₹ 1,43,035.00	पिछली पॉलिसी संख्या तथा समाप्ति तिथि/ Previous Policy Number and Expiry Date	NA
(रूपए /Rupees One Lakh Forty Three Thousand Thirty Five केवल/Only.)			
* पर्यावरण राहत कोष /*Environment Relief Fund: ₹ 65,609.58			

#### Insurance Details:

<b>Policy Effective from 00:00 hours, on 30/04/2024 to midnight of 29/04/2025</b>	
PLI act Premium	29,126.37
Service tax	0.00
Recoverable stamp duty	0.00
ERF premium	29,126.37
<b>Total amount</b>	<b>58,252.74</b>

Retroactive date:	30/04/2023
Description of risk	PLI ACT POLICY -HAZAROUDS SUBSTANCES HANDLED & GROUP SUCH AS EXPLOSIVES, OIL, LUBRICANTS, GASES, TIMBER AND OTHER HAZARDOUS MATERIAL.
Paid up capital/Market Value of Asset/stock:	1,00,00,000.00
Liability:Any one accident(AOA):	5,00,00,000.00
Any one year(AOY):	15,00,00,000.00

पॉलिसी अनुसूची/ Policy Schedule-Public Liability Insurance Act	
पॉलिसी संख्या / <b>Policy Number:</b> <b>55020049241000034</b>	व्यवसाय स्रोत/ <i>Business Source:</i> 550200
जारीकर्ता कार्यालय/ <b>Issuing Office</b> कार्यालय कोड/ <i>Office Code:</i> 550200 कार्यालय पता/ <i>Office Address:</i> HYDERABAD <b>BUSINESS OFFICE II CSR Plaza,D No. 6-3-347/9/4,,2nd Floor,Dwarakapuri Colony,Punjagutta, - 500082.</b> राज्य कोड/ <b>State Code:</b> 36 , Telangana जीएसटीएन/ <b>GSTIN:</b> 36AAACN9967E6ZZ संपर्क संख्या/ <i>Contact Number:</i> 40 23401398 मोबाइल संख्या / <i>Mobile Number:</i> 0	विक्रय चैनल विवरण/ <b>Sales Channel Details</b> कोड/ <i>Code:</i> 550200 नाम/ <i>Name:</i> Hyderabad Division II संपर्क संख्या/ <i>Contact Number:</i> सह दलाल कोड / <i>Co Broker Code:</i>
	<b>Customer Care Toll Free Number:</b> <b>1800 345 0330</b> <b>email:customer.support@nic.co.in</b>
Ratio of AOA:AOY:	1:3
Sum Insured:	5,00,00,000.00
Annual turn over:	3,46,35,72,00,000.00



Clauses	As per Annexure.I
टिप्पणियां/ <b>Remarks:</b> PUBLIC LIABILITY INSURANCE ( ACT) POLICY	
VARIOUS TRANSPORT & STORAGE LOCATIONS OF SCCL ( ALL AREAS ) LIKE : KOTHAGUDEM, YELLANDU, MANUGURU, RAMAGUNDAM -I, RG-II, RG-III, BHOOPALPALLI, BELLAMPALLI, MANDAMARRI, SRIRAMPUR & CORPORATE , TELANGANA STATE.	
NUMBER OF WORKMEN EMPLOYEES :43672	
ESTIMATED ANNUAL TURNOVER PROPOSED : RS.346357200000/-	
AOA: 5 CRORES AOY : 15 CRORES ( 1:3) PAID UP CAPITAL >RS.1733.20 CRORES	

जिसकी गवाही में दिन/ माह /वर्ष को उपरोक्त उल्लिखित कार्यालय पते पर अधोहस्ताक्षरी को विधिवत अधिकृत किया जा रहा है उसके हाथ निर्धारित किए जाएं। यह अनुसूची, संलग्न पॉलिसी, खण्ड, पृष्ठांकन और पॉलिसी शब्दों, जो कंपनी वेबसाइट <https://nationalinsurance.nic.co.in> पर उपलब्ध है, को एक अनुबंध के रूप में एक साथ पढ़ा जाए तथा कोई भी शब्द या अभिव्यक्ति जिसके लिए यह विशिष्ट अर्थ पॉलिसी या अनुसूची के किसी भी हिस्से में संलग्न किया गया हो, एक ही अर्थ वहन करेगा चाहे जहाँ भी उल्लिखित हो। यह आश्वासन दिया जाता है कि प्रीमियम चेक की अस्वीकृति के मामले में, यह दस्तावेज स्वतः आरंभ से ही निरस्त मानी जाएगी । **IN WITNESS WHEREOF, the undersigned being duly authorized hereunto set his/ her hand at the office address mentioned above, this 06/May/2024.** This schedule, the attached policy, the clauses, the endorsements and policy wordings as available in the website <https://nationalinsurance.nic.co.in> shall be read together as one contract and any word or expression to which the specific meaning has been attached in any part of this policy or of the schedule shall bear the same meaning wherever it may appear. It is warranted that **IN CASE OF DISHONOUR OF THE PREMIUM CHEQUE, THIS DOCUMENT STANDS AUTOMATICALLY CANCELLED 'AB-INITIO'**

इंश्योरेन्सईंडियालिमिटेड ओम्बड्समैन का विवरण/Ombudsman Details: Office of the Insurance Ombudsman,6-2-46, 1st floor, ""Moin Court"", Lane Opp. Saleem Function Palace, A. C. Guard s, Lakdi-Ka-Pool, Hyderabad - 500 004. Tel.: 040 - 23312122  
Email: bimalokpal.hvderabad @cioins.co.in

स्टॉप ड्यूटी  
**Stamp  
Duty:**  
(₹ 0.50)

कृते नेशनल इंश्योरेन्स कंपनी लिमिटेड/  
**For and on behalf of National  
Insurance Company Limited**  
अधिकृत हस्ताक्षरकर्ता/ **Authorized Signatory**

## टैक्स इनवॉयस/TAX INVOICE

इनवॉयस क्र.सं./Invoice Serial No: 30602L4PE0000034

इनवॉयस तिथि/Invoice Date: 06/05/2024

## आपूर्तिकर्ता का विवरण/Details of Supplier:

नेशनल इन्श्योरेंस कंपनी लिमिटेड/National Insurance Company Limited.,  
HYDERABAD BUSINESS OFFICE II CSR Plaza,D No. 6-3-347/9/4,,2nd Floor,Dwarakapuri Colony,Punjagutta, - 500082  
राज्य/State : 36 , Telangana  
जीएसटीआएन नंबर/  
GSTIN No : 36AAACN9967E6ZZ

## प्राप्तकर्ता का विवरण/Details Of Receiver : MS THE SINGARENI COLLIERIES CO LTD

पता/Address : CORPORATE FINANCE & ACCOUNTS DEPARTMENT, PO. KOTHAGUEM COLLIERIES, BHADRACHALAM ROAD RLY STN(S C RLY),  
BHADRADRI KOTHAGUEM DISTRICT, TELANGANA  
शहर/City : KOTHAGUEM,  
ज़िला/District: KHAMMAM,  
राज्य/State: TELANGANA,  
पिन/PIN: 507101.

आपूर्ति का स्थान/Place Of  
Supply State : Telangana  
राज्य कोड/State Code : 36  
जीएसटीआईएन नंबर/GSTIN No : 36AAACT8873F1Z1

सैक कोड/SAC Code	सेवा का विवरण/ Description of Service	कुल/Total(₹)	छूट/ Disco unt	टैक्स योग्य/ मूल्य/ Taxable Value(₹)	सीजीएसटी की राशि/ CGST		एसजीएसटी/यूटीजीएसटी /SGST/UTGST		आईजीएसटी/IGST		Kerala Flood Cess राशि/ Amount(₹)
					दर/ Rate	राशि/Amount(₹)	दर/ Rate	राशि/ Amount(₹)	दर/ Rate	राशि/ Amount(₹)	
997139	Other non-life insurance services (excluding reinsurance services)	65,610	0%	65,610	9%	5,905	9%	5,905	0%	0	0
<b>TOTAL</b>		<b>65,610</b>		<b>65,610</b>		<b>5,905</b>		<b>5,905</b>		<b>0</b>	<b>0</b>

कुल इनवॉयस मूल्य (अंकों में )Total Invoice Value (In figures) : ₹ 1,43,035

कुल इनवॉयस मूल्य (शब्दों में)Total Invoice Value (In words) : रूपए/Rupees One Lakh Forty Three Thousand Thirty Five केवल/Only.

रिवर्स चार्ज के अधीन टैक्स की राशि/ Amount of Tax Subject to Reverse Charge : No

## E.&amp;.O.E

कृते नेशनल इन्श्योरेंस कंपनी लिमिटेड/  
For and on behalf of National Insurance Company  
Limited

अधिकृत हस्ताक्षरकर्ता/ Authorized Signatory

