



THE SINGARENI COLLIERIES COMPANY LIMITED
(A GOVERNMENT COMPANY)
RAMAGUNDAM AREA-II

Ref. No. RG. II/ENV/3B/2023/ 110

Date: 15.09.2023

To
The Member Secretary,
T.S. Pollution Control Board,
Paryavaran Bhavan,
A-3, Industrial Estate, Sanatnagar,
Hyderabad-500018

Dear Sir,

Sub: Environmental Statement Pertaining to Ramagundam Opencast- III
Expansion-II Coal Mine Project of RG-II Area of SCCL, in Form -V
(Rule no 14 of E P R' 1986) for the year 2022-23-Reg.

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With reference to the above cited subject, please find enclosed here with the
Environmental Statement in Form -V pertaining to Ramagundam Opencast-III Expansion-II
Coal Mine Project of RG-II Area of SCCL for the year 2022-2023.

Thanking you,

Yours faithfully,

Encl.: As above

Cc to:
General Manager (Environment),
The Environmental Engineer,
T.S.Pollution Control Board,
R/O.Ramagundam



[Handwritten Signature]
General Manager
Ramagundam Area-II.
General Manager
Ramagundam Area-II

[Handwritten Signature]
Office of the General Manager
Environmental Engineer
T.S. Pollution Control Board
Ramagundam Area-II
H. No. 100, C. B. NTPC, ITS
Near Z.P. D. A. Road High School
JYO 11014074 - 505 215
Dist. Peddapalli (T.S.)



**THE SINGARENI COLLIERIES COMPANY LIMITED
(A GOVERNMENT COMPANY)**

**Ramagundam Opencast-III Expansion PH-II Coal Mine Project
Ramagundam Area-II**

Environmental Statement of Ramagundam Opencast-III Expansion Phase-II Coal Mine Project for the year 2022-2023.

Brief note about the Mine.

Ramagundam Opencast Project-III Expansion PH-II Coal Mine Project is one of the four opencast projects of Ramagundam region coal belt area of Singareni Collieries Company Ltd under the administrative control of General Manager RG II Area..

Ramagundam Opencast Project was started in 1989 and producing coal since 1990. The Technical Feasibility Report (TFR) of RG OC-III was prepared by CMPDI in September 1984 and based on this TFR, SCCL has prepared a FR in February 1988. The Feasibility Report was approved by Govt. of India in March' 1988 for a rated capacity of 2.75 MTPA with an average stripping ratio of 5.61 cu.m./T and at an estimated Initial capital investment of Rs. 256.94 crores. The existing RG OC-III Project was accorded with environmental clearance by MoEF, Vide letter No. J-11015/23/86-IA dated 17.02.1988 for a rated capacity of 2.75 MTPA, subsequently production was raised from 2.75MTPA to 4.30 MTPA with peak production of 5.0 MTPA and mine block area from 442.0 Ha to 756.71 Ha(surface) with total land requirement up to 1393.81 Ha.(existing 1018.55). Public hearing was conducted on 15 th Feb 2008 . Environmental Clearance is accorded by Ministry Of Environment and Forests in July 2008 for this extension project vide ltr.no J-11015/267/2007-IA.II(M) dated 31st July 2008, later again it has been proposed to extend the mine boundary towards south side annexing the property of underground mines i.e. GDK 8 and 8A inclines named as RG OC-III Extension Phase –II Project. The integrated project reserves in the extension area are 130.24 MT with an overburden of 796.88 M.Cu.m at a stripping ratio of 6.11 Cu.m/T. It is proposed now to increase the production capacity of the project from 5.0 MTPA to 6.8 MTPA with peak production and mine block area from 756.71 Ha to 1113.30 Ha(surface) with total land requirement up to 2070.10 Ha. Public hearing was conducted on 06th August 2014. **Environmental Clearance** is accorded by Ministry Of Environment and Forests for this extension project vide letter .No J-11015/43/2014-IA.II (M) dated 02 March 2021 for a peak production capacity of 8.16 MTPA, again **Environmental Clearance** is accorded by Ministry Of Environment and Forests for this extension project vide letter .No J-11015/43/2013-IA.II (M) dated 16 December 2022 for a peak production capacity of 9.52 MTPA

CFE granted vide Consent order No 03/TSPCB/CFE/RO-RGM/HO/2023 dated 27.04.2023.

CFO granted vide Consent order No 22052350863 dated 20.04.2022 and is valid up to 31.03.2026.

Topography

The site is geographically located between North Latitude 18⁰42'19" to 18⁰44'03" and East Longitudes 79⁰31'42" to 79⁰33'34", falls in the Survey of India Topo sheets 56 N/10 of Karimnagar District. The area is gently undulating and sloping towards the Godavari River in the north easterly direction. The terrain is dotted with hillocks and intervening sandy patches. The Project area is mostly a plain terrain and gently slopes towards northeast. The topographic elevation varies from 137.60 to 164.29 m above mean sea level; with a slope of 5.5 m/km. Sandy clay soil cover ranging in thickness from 1.8 to 3.0 m occurs. .

Drainage System

The area is gently undulating and sloping towards the Godavari River in north-easterly direction. The average topographic elevation of the area varies from 140 m to 200 m above mean Sea level with a slope of 5.5 m/km. The terrain is dotted with hillocks and intervening sandy patches. The block is mostly a plain terrain and sloping towards northeast by 10.8 m/km with its elevation varying 137.60 m. to 164.29 m. above MSL. However, reduce level of seams contours and surface contours are presented in the report with addition of 700 m with the mean sea level. The area is drained by south easterly flowing Godavari River and its North Easterly flowing perennial tributaries like Jallaram vagu and Bokkala vagu. The drainage is of dendritic with a density of 3.6 km/sq.km. The block area is drained by Jallaram vagu, which flows towards northeast and joins Godavari River.

Regional demography

As per 2010 census, the population of this area is 3, 41,923. The Study area falls in Kamanpur & Ramagundam revenue Mandal in Peddapalli district of Telangana state. There are no historical/protected monuments or sanctuaries in the study region. The study region has well-developed and extensive infrastructure facilities in place. Godavarikhani is the nearest commercial town for all activities, which is about 3-4 Kms away from the project site and has facilities like housing, hospital, drinking water facility, school and technical education etc. Emergency medical care and fire fighting facilities are available at the Godavarikhani, which are located about 4 km from the site.

Climate

The area experiences a typical tropical climate, with three distinct seasons - a hot summer from February to June with occasional thunder showers; a good rainy season between July and October; and a pleasant winter between November and January. The climate of the region is characterized as tropical. The climate and wind are governed by the annually changing monsoons and transition periods between them dividing the year into four seasons is given in Table

Seasons of the region

Season	Months	Characteristics
Summer	March-May	Hottest part of the year, occurrence of dust storms
South-West monsoon	June-Sep	Characterized by predominantly SW winds. Generally a strong and persistent wind prevails.
North-East monsoon	Oct-Nov	Characterized by predominantly NE winds. Fair weather with the variable winds.
Winter	Dec-Feb	Cool season of the year

Temperature, Rainfall and Relative humidity

December and January are the coolest months of the year, while June to October are the rainy months. Nearly 85% of the annual rainfall is received during the SW monsoon. May is the hottest month of the year. The maximum and minimum temperatures range 30° - 46° C and 15° - 26° C respectively. The average relative humidity of 64% may reach upto 80% during the rainy season. The average rainfall in the region is about 1340 mm.

Rivers, nallahs, tanks within 5 km radius of RG-II Area:

Godavari River, Janagaon irrigation tank, Sundilla irrigation tank, Jallaram tank, Yerra cheruvu and Jallaram vagu. Industrial activities other than RG-II mining activities within 10km radius:

SCCL: RG-II Area mines and Ramagundam opencast mines

- Other than SCCL: 2600 MW Power Plant of NTPC, 62.5 MW. Power Plant of TSGENCO, Nos. of Brick Kilns, Pottery Kilns, Tiles Kilns, Stone crushers, Godavarikhani bus Depot & bus station, Rajiv Gandhi Highway, SCCL Railway Sidings

Condition wise compliance status of CFO for RG OCP-III Expansion PH-II Project
CFO granted vide Consent order No 22052350863 dated 20.04.2022 and is valid up to 31.03.2026.

CFO Compliance report as on 31.03.2023

(Consent order No: 220523520863 dt.20.04.2022) Valid upto 31.03.2026.)

Product:- Coal (Opencast Mining) Permitted quantity:-5.0 MTPA with peak production of 8.16 MTPA Mine Lease Area: 2070.10Ha.

Outlets for discharge of Effluents:

Outlet No.	Description of Outlet	Max Daily Discharge in KLD	Point of disposal
1	Excess Mine water discharge	5094	After treatment in settling ponds ,shall be disposed to jallaram vagu after meeting standards stipulated in Schedule B
2	Washing of HEMM (Heavy Earth Moving Machinery)	800	After treatment, in ETP with Oil and Grease trap and sedimentation tank, shall be used for on land for gardening duly meeting the standards stipulated in Schedule B.
3	Domestic Effluent	360	Septic tank followed by soak Pit/STP for Colony

This consent order is valid for Mining lease area of 2070.10 Ha for the following capacity:

Sl no	Line of activity	Capacity
1	Coal Mining(Opencast)	8.16 MTPA(Peak)

Sl.N o.	Condition	Compliance
SCHEDULE - A		
1.	The applicant shall make applications through online for renewal of Consent (under Water & Air Acts) and Authorization under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts for obtaining Consent & HW Authorization of the Board. The applicant can also apply for Auto Renewal of the CFO at least 30 days before the expiry of this order as per the procedure and eligibility stipulated in the Board Circular dt.19.11.2015 & 08.12.2015 (available in Board's Website:..http:tspcb.cgg.gov.in/Pages/Circulars.aspx).	Agreed upon. The condition is noted and assured to abide the condition. CFO obtained from TSPCB vide consent order no. 220523520863, dated 20.04.2022 Valid up to October 31/03/2026.

2.	This order is issued in line with Board's CFE order dt 08.12.2021. Concealing the factual data or submission of false information/fabricated data and failure to comply with any of the conditions mentioned in this order may result in withdrawal of this order and attract action under the provisions of relevant pollution control Acts. The mine shall comply with all other conditions of CFE order dt.08.12.2021 is still applicable.	Agreed upon. The condition is noted and assured to abide the condition. Being Complied.
3.	Any person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules 1982, to such authority (hereinafter referred to as the Appellate Authority) constituted under Section 28 of the Water (Prevention and control of pollution) Act, 1974 and Section 31 of the Air (prevention and control of pollution) Act, 1981.	Not applicable. Till now no person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981.
4.	The mine may explore the possibility of tapping the solar energy for their energy requirements.	M/s SCCL so far 224 MW capacity Solar plants are synchronized and another 76 MW plant is under installation and exploring the possibility of tapping the solar energy for their energy requirements. In Ramagundam region 50 MW Solar power plants is synchronized and another 22 MW capacity is under installation. Further, SCCL is commissioned 5MW Solar Floating Power Plants on water bodies and 10 MW under installation in Telangana State.
5.	The Board reserves its right to modify above	Agreed upon.

	conditions or stipulate any further conditions and to take action including revoke of this order in the interest of protection of public health and environment.	The condition is noted and assured to abide the condition.																					
SCHEDULE - B																							
1.	<p>Total Water Consumption shall not exceed 5127.0 KLD.</p> <table border="1"> <thead> <tr> <th>Sl. No.</th> <th>Purpose</th> <th>Quantity (KLD)</th> </tr> </thead> <tbody> <tr> <td>01.</td> <td>Washing & Dust Suppression</td> <td>7000.0</td> </tr> <tr> <td>02.</td> <td>Gardening/Irrigation</td> <td>500.0</td> </tr> <tr> <td>03.</td> <td>Domestic & other industrial requirement</td> <td>500.0</td> </tr> <tr> <td>04</td> <td>Others</td> <td>290</td> </tr> <tr> <td></td> <td>Total:</td> <td>8290.0</td> </tr> </tbody> </table>	Sl. No.	Purpose	Quantity (KLD)	01.	Washing & Dust Suppression	7000.0	02.	Gardening/Irrigation	500.0	03.	Domestic & other industrial requirement	500.0	04	Others	290		Total:	8290.0	<p>Mine is having underground galleries, and the galleries are acted as settling ponds, water from underground pumped out as per requirement of use.</p> <p>A minimum quantity of mine discharge water is being used for various purposes such as drinking, washing, dust suppression, etc. (less than the quantities stipulated in CFO order 5127 KLD)</p>			
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2.	<p>The effluent discharged should not contain constituents in excess of the tolerance limit prescribed below.</p> <table border="1"> <thead> <tr> <th>Outlet No.</th> <th>Parameter</th> <th>Limiting standards</th> </tr> </thead> <tbody> <tr> <td rowspan="6">1&2</td> <td>pH</td> <td>6.5 - 8.5</td> </tr> <tr> <td>Total suspended solids(TSS)</td> <td>100mg/l</td> </tr> <tr> <td>Oil & Grease</td> <td>10mg/l</td> </tr> <tr> <td>BOD (3 days at 27° C)</td> <td>100mg/l</td> </tr> <tr> <td>Chemical Oxygen Demand (COD)</td> <td>250mg/l</td> </tr> <tr> <td>Total Dissolved Solids (TDS)</td> <td>2100mg/l</td> </tr> <tr> <td rowspan="2">3</td> <td>pH</td> <td>5.5 - 9.0</td> </tr> <tr> <td>Total suspended</td> <td>100mg/l</td> </tr> </tbody> </table>	Outlet No.	Parameter	Limiting standards	1&2	pH	6.5 - 8.5	Total suspended solids(TSS)	100mg/l	Oil & Grease	10mg/l	BOD (3 days at 27° C)	100mg/l	Chemical Oxygen Demand (COD)	250mg/l	Total Dissolved Solids (TDS)	2100mg/l	3	pH	5.5 - 9.0	Total suspended	100mg/l	<p>The quality of effluent is being monitored and all the parameters are within the prescribed limits. The monitoring reports are being submitted regularly along with quarterly/half yearly reports to RO,RGM and MoEF&CC.</p> <p>The latest Post project environmental monitoring(PPEM) for the period Nov 2022 to March 2023 is enclosed.</p>
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3.	<p>The mine should ensure segregation of Acid Mine Discharge (AMD) from abandoned mines, coal stocks, coal handling facilities, washeries & coal waste tips etc. and should adopt adequate treatment to achieve prescribed standards for the AMD as stipulated at S.No.2 prior to disposal. The plan of action for segregation of AMD, technology of the proposed treatment and mode of disposal should be submitted to Board.</p>	Being Followed															
4.	<p>The mine shall comply with ambient air quality standards of PM10 (Particulate matter size less than 10µm)-100 µg/m³, PM_{2.5} (Particulate matter size less than 2.5µ m) – 60 µg/m³, SO₂, -80 µg/m³, NO_x-80 µg/m³, outside the factory premises at the periphery of the industry.</p> <p>Standards for other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No. B-29016/20/90/PCI-I, dated 18.11.2009.</p> <p>Noise Levels: Day time – 6 AM to 10PM) – 75 dB(A) Night time – (10 PM to 6 AM)–70 dB(A)</p>	<p>Being Complied</p> <p>As per the Coal mine standards (commenced after 25.09.2000),GSR 742 (E),Dated 25.09.2000</p> <table border="1"> <thead> <tr> <th>Sl. NO</th> <th>Parameters</th> <th>Standards in µg/m³</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Particulate Matter (PM₁₀)</td> <td>250</td> </tr> <tr> <td>2</td> <td>Particulate Matter (PM_{2.5})</td> <td>--</td> </tr> <tr> <td>3</td> <td>SO₂</td> <td>120</td> </tr> <tr> <td>4</td> <td>NO_x</td> <td>120</td> </tr> </tbody> </table> <p>Noise Levels: Day time (6AM to 10PM)-75dB (A) Night time(10PM to 6 AM) –70dB(A)</p>	Sl. NO	Parameters	Standards in µg/m ³	1	Particulate Matter (PM ₁₀)	250	2	Particulate Matter (PM _{2.5})	--	3	SO ₂	120	4	NO _x	120
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		The AAQM and NOISE levels are within the prescribed standards. Reports enclosed
5.	The existing CFO order dt 07.12.2021 with a validity up to 2026 stands cancelled	Agreed upon. The conditions are noted and assured to abide the conditions.
6	The mine has paid CFO fee of Rs 30,00,000 for the period up to 31.03.2023	Agreed upon. The conditions are noted and assured to abide the conditions. Now the industry was paid CFO and CFE fees for the Capital investments of 1070.23 Cr as per EE TSPCB advise vide letter no RGM-20/PCB/RO-RGM 2023-125 dated 29.05.2023
7.	The mine shall pay balance consent fee annually as per rates notified in G.O.Ms.No.22. The payment of annual consent fee shall be made at the concerned RO for every financial year(i.e. April to March) within the stipulated time period i.e. 1 st quarter of every financial year(April to June) is mandatory for the industry/project, failing which, the validity of the Consent Order automatically stands cancelled and operation industry/project without valid consent attracts penal action under the provision of Water Act, Air Act & Hazardous and Other Wastes (Management & Tran boundary Movement) Rules, 2016.	Agreed upon. The conditions are noted and assured to abide the conditions.
8.	The mine either paying annual fee or total fee for Consented period, shall pay the balance fee as per the revised rates as applicable from time to time.	Agreed upon. The conditions are noted and assured to abide the conditions.
9.	The mine shall not produce beyond the permitted capacity as mentioned in this order, without obtaining prior CFE & CFO of the Board. The mining capacity of the coal also shall not be increased more than IBM approved capacity.	Being complied Agreed upon. The condition is noted and assured to abide the condition
10	The industry shall install and maintain CC	Agreed upon.

	cameras to ensure that no coal transporting lorries shall pass without complete covering the tarpaulins	The conditions are noted and assured to abide the conditions.
11.	The mine shall provide & maintain water meters for recording water consumption for industrial and domestic purposes and also maintain daily records.	<p>Agreed upon.</p> <p>The conditions are noted and assured to abide the conditions. SCCL has provided 5 no of mechanical Flow meters at the pumping stations and the procurement of digital flow meters is under process.</p> <p>The Industry assures to fix flow meters for recording water consumption for industrial and domestic purposes separately and also maintain daily records.</p>
12.	The mine shall maintain the sand filter properly for removal of suspended solids from mine discharge water.	Being complied
13.	The mine shall analyze the quality of excess mine discharge water being disposed outside and submit the reports to the RO, Ramagundam. The mine also shall adopt necessary treatment for excess mine discharged water, if required, to meet the discharge standards.	<p>Agreed upon.</p> <p>The conditions are noted and assured to abide the conditions. Artificial ground water recharge measures for augmentation of ground water are being carried out through existing 2 Summer Storage Tanks in an area of 30 acres near Pothana Colony. The dimensions of the summer storage tank are 444M length 130M width and 4M depth with a capacity of 51.3 Million Gallons and 550M length 116M width and 4M depth with a capacity of 56.14 Million Gallons</p> <p>Excess mine discharge water is sent to Jallaram Vagu only in rainy season because of overflow of tank. The analysis reports will submitted to the RO RGM every quarter</p>
14.	The mine shall not produce beyond the permitted capacity as mentioned in this order, without obtaining prior CFE & CFO of	<p>Being complied</p> <p>Agreed upon.</p> <p>The condition is noted and assured</p>

	the Board. The mining capacity of the coal also shall not be increased more than IBM approved capacity.	to abide the condition
15.	The mine shall maintain separate water meters for recording consumption for various purposes and also maintain daily records.	Agreed upon. Being complied
16.	The mine shall provide fixed water sprinkling along the permanent haul roads of the mine within three months. .	Being complied Fixed type water sprinklers are arranged and maintained for along permanent main haul roads. In addition to this fixed point water sprinkling, water sprinkling with mobile water tankers, mist spray machine are used for controlling of dust pollution. Fog canons also used at surface coal yard to reduce the dust pollution.
17.	The mine shall provide fixed water spraying system properly by adopting preventive maintenance scheduled to avoid fugitive emissions.	Coal handling plant is being operated with effective control measures such as mist spray arrangements at transfer, loading and unloading points, along belt conveyor, fixed point water sprinkling, water sprinkling with mobile water sprinkler, mist spray machine etc. SCCL has taken up extensive plantation in the vacant lands and all along the approach roads to the RG OC-III Expansion Ph-II Project. Avenue plantation with native species was raised all along the approach roads. Thick Plantation has been done along the periphery of the mining Area. The existing greenbelt along

		approach roads have been further strengthened using for 3-tier plantation.
18	The mine shall carryout water spraying on haul roads to avoid fugitive dust emissions due vehicular movement.	Agreed upon. Being complied
19	The mine shall commission one CAAQM station within six months and connected to the TSPCB server as per CPCB directions, as committed.	Complied
20	The mine shall install 3 fixed AAQM stations in core area for conducting AAQ monitoring and submit report to the RO, Ramagundam.	Complied
21	The industry should comply with standards applicable to coal mining for core zone as per GSR 742 (E) dates 25 th September 2000 issued by MOEF&CC and also comply with National Ambient Air Quality Standards (NAAQMS) in the buffer zone.	Agreed upon. Being complied The Ambient Air Quality monitoring in the core zone is being carried out to ensure the Coal Industry Standards notified vide GSR 742 (E), dated 25 th September, 2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data are being regularly reported to the Ministry/ Regional Office and to the
22	The mine shall clean the roads regularly by procuring mechanical sweeping machine within five months to avoid fugitive emissions as committed.	Agreed upon. Being complied
23	The mine shall maintain water mist sprayers at coal bunkers to control fugitive emissions	Being complied Coal handling plant is being operated with effective control measures such as mist spray arrangements at transfer, loading and unloading points, along belt conveyor, fixed point water sprinkling, water sprinkling with mobile water sprinkler, mist spray

		machine etc.
24	The mine shall take effective measures such as covering coal transport vehicles with tarpaulins, mechanical sweeping of roads, etc to avoid fugitive emissions.	Being complied Transportation of coal is being done by covered with <u>tarpaulin for trucks</u> by road mode, to the extent permitted.
25	The mine shall use at least 25% of fly ash on volume basis of the total materials used for external dump of overburden and same percentage in upper benches of back filling of opencast mine, as per Fly Ash Notification.	Fly ash generated from NTPC, Ramagundam is being utilized by other industries for fly ash brick manufacturing, cement industries etc. If situation arises, the possibilities will be explored to use fly ash in external dump as suggested. It is proposed to utilize final void of Medipalli OCP of SCCL for fly ash filling.
26	The mine shall comply with MOEF Notification No GSR 02 (E)dt 02.01.2014 for supply of coal ash content not exceeding 34% to total based Thermal Power plants.	Being complied
27	The personnel working in dusty areas should wear protective/respiratory devices and they should also be provided with adequate training and information on safety and health aspects.	Being complied Persons including outsourced employees being deployed in open atmosphere in mining operations are being provided with dust masks and adequate training and information on safety and health aspects is being imparted.
28	Blasting should be sequential in such a manner as to achieve minimum vibration.	Being complied Controlled blasting technique with NONELS is being carried out in order to mitigate ground vibrations, fly rock, noise and air blast etc., as per the guidelines prescribed by the DGMS.
29	The mine shall comply with the following for	

	<p>controlling air pollution.</p> <ul style="list-style-type: none"> ➤ To avoid dust generation from drilling operations, Wet drilling should be done. ➤ Use of appropriate explosives for controlled blasting and avoiding over charging of blast holes. ➤ The volume of dust rising from dumps by the action of wind should be controlled significantly by planting grasses on slopes and plants on dumps soon after their formation. ➤ To overcome the problems of dust generation from mine haul road, the following steps should be taken. <ul style="list-style-type: none"> 1.Black topping of permanent roads like routes to coal to coal handling plant, permanent internal roads etc. 2. Water spraying on haul roads and permanent transport routes at required frequencies. Provision should be made for procurement of six water sprinklers for this purpose. 3. Avenue plantation along roads should be adopted. ➤ Effective dust suppression measures are proposed to be taken up at pit head coal handling plant(CHP),The crusher house should be enclosed to the extent possible and dust suppression arrangements should be provided at suitable locations in the CHP. All the Conveyors, screen, Crushers etc., should be provided with covers to avoid fugitive dust during operation. Some of the measures proposed to be at CHP in order to control dust emission include: <p>Height of fall to be minimized at all coal transfer points. Internal lining of Chutes and bins should be done to take care of abrasion &dust.</p>	<p>Being complied</p> <p>Being complied</p> <p>Complied</p> <p>Being complied</p> <p>Internal lining of chutes and bins are done for abrasion & dust.</p>
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30	Dumping of overburden, if done, shall use the retreating pyramid bench formation with concurrent, physical and biological reclamation. Dumping should be contoured and provided with relief control and stabilized. Dump tops should be compacted, leveled and be properly drained.	Being complied
31	Soil binding and nitrogen fixing plants should plant in the Mining Lease Area. Biological reclamation should be done in two phase the first phase should be plant appropriate quick growing grass and shrubs and the second phase should grow slower native shrubs and trees.	Being complied
32	The mine shall develop and maintain greenbelt as per norms.	Complied.
33	The mine shall develop greenbelt along the haul roads and around the mine exhaust system to control air pollution	Complied.
34	Ground water table levels should be monitored every season. Any lowering of the ground water table in comparison to the previous season should be reported to the Board immediately. Discarded pits should be allowed to fill with water.	Being complied.
35	Vehicles should be well maintained and engine idling should be minimized. Vehicle cabs should be made dust-proof.	Being complied. Vehicular emissions are being kept under control and they are regularly monitored. The latest vehicular emissions test for HEMM was conducted during the period from 02.02.2023 to 20.02.2023. All the vehicles engaged in mining and allied activities are being operated after obtaining 'PUC' certificate from the authorized pollution testing center
36	All waste material should be accommodated within the Mining Lease Area.	Being complied.
37	The natural drainage of water should be maintained. Dump sites should not cross any streams, water flow from the Mining Lease Area, even during the monsoon,	Being complied.

	should be free of suspended matter and conform to prescribed water quality standards.	
38	Check dams and filter beds should be constructed to protect from streams runoffs.	Being complied.
39	The mine shall comply with the directions issued by the Board from time to time.	Agreed upon. The conditions are noted and assured to abide the conditions.
40	The mine shall explore the possibility for usage of ash instead of sand stowing operations	Fly ash generated from NTPC, Ramagundam is being utilized by other industries for fly ash brick manufacturing, cement industries etc. In the Underground mines of Ramagundam region bottom ash is used as stowing material.
41	The mine shall take effective measures such as covering coal transport vehicles with tarpaulins, water sprinkling, etc., to avoid fugitive emissions.	Being complied.
42	The mine shall maintain water mist sprayers at coal bunkers, at coal handling plant to control fugitive emissions.	Being Followed
43	The mine should adopt eco-friendly mining practices. The maximum charges used for blasting should be limited to ensure vibrations created in the neighborhood area are within acceptable limits.	Being complied. Controlled blasting technique with NONELS is being carried out in order to mitigate ground vibrations, fly rock, noise and air blast etc., as per the guidelines prescribed by the DGMS.
44	The mine should adopt blasting technique using shock tube and delay detonators. Dust collectors are to be provided for the drilling equipment. Mine should adopt fugitive dust control measure like water sprinkling near loading areas.	Being complied. Controlled blasting is being done with the use of delay detonators and blasting operations are being conducted in day time only. NONELs are being used to control

		<p>ground vibrations and noise. Measures like optimum charge per delay, sufficient free-face, sequence of blasting, proper stemming, optimum drilling & blasting pattern, etc., are being taken to reduce the ground vibrations.</p> <p>Continuous mist spray arrangements were provided at all crushers and coal transfer points for effective dust suppression. Mobile mist sprayer/ dust fighter was installed in the CHP for controlling air borne dust. Water spraying lines are laid along the conveyor belt, haul roads and at coal face.</p> <p>23 no. of mobile water sprinklers are being deployed for sprinkling of water along haul roads, on dumps at loading and unloading areas etc</p> <ol style="list-style-type: none"> 1) 80 KL- capacity – 02 no. 2) 70 KL capacity -01 no 3) 28 KL: capacity - 10 no 4) 10 KL: capacity - 01 no. 5) 20 KL capacity – 09 no. water sprinklers are provided to control the dust emitted from the movement of HEMM. <p>Wet Drilling arrangement is provided to all the drills.</p>
45	<p>The mine should submit the detailed mine closure plan with a timeframe and pattern of reclamation in each period. The ultimate plan should show finished ground contours that will be reforested and the area that will be left open.</p>	<p>Being complied</p> <p>All the recommendations will be complied at final closure stage.</p> <p>At final closure stage, the final mine void depth will be as per the approved Mine Closure Plan, and in case it exceeds 40m, adequate engineering interventions will be provided for sustenance of aquatic life therein.</p> <p>The remaining area will be</p>

		backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be diverted.
46	All waste material should be accommodated within the Mining Lease Area.	Agreed upon. The condition is noted and assured to abide the condition. Dumping of OB will be carried as per the dumping strategy envisaged in the approved EIA/EMP and concurrent and final reclamation will also be taken up as per the reclamation programme envisaged in the EIA/EMP. The estimated total OB is being dumped at earmarked dump sites only.
47	The natural drainage of water should be maintained. Dump sites should not cross any streams, water flow from the Mining Lease Area, even during the monsoon, should be free of suspended matter and conform to prescribed water quality standards.	Being complied. The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of water bodies in the area has been prepared and being implemented. There are no diversions of natural water courses involved in the project. The construction of embankment to prevent any danger against inrush of surface water into the mine is done as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.
48	Soil binding and nitrogen fixing plants should be planted in the Mining Lease Area.	Being complied. Plantation is being taken up in mine

	<p>Biological reclamation should be done in two phases, the first phase should be plant appropriate quick growing grass and shrubs and the second phase should be slower growing native shrubs and trees.</p>	<p>lease area by planting native soil binding and nitrogen fixing plants.</p>
49	<p>The mine should undertake suitable artificial recharge measures in the project area for augmentation of ground water resources. Ground water table levels should be monitored every season. Any lowering of the ground water table in comparison to the previous season should be reported to the Board immediately. Discarded pits should be allowed to fill with water.</p>	<p>Being complied.</p> <p>Artificial ground water recharge measures for augmentation of ground water are being carried out through existing 2 Summer Storage Tanks in an area of 30 acres near Pothana Colony. The dimensions of the summer storage tank are 444M length 130M width and 4M depth with a capacity of 51.3 Million Gallons and 550M length 116M width and 4M depth with a capacity of 56.14 Million Gallons</p> <p>Regular monitoring of ground water levels and quality is being carried out in and around the mine lease area by establishing a network of existing wells (10 nos.) and by constructing new piezometers (3nos.)</p> <p>The monitoring of ground water levels is being done four times a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons.</p> <p>Data thus collected is being submitted to the MoEF& CC and to the State Pollution Control Board along with half-yearly monitoring reports.</p> <p>The pre monsoon and post monsoon reports are being</p>

		<p>submitted to RO, TSPCB regularly.</p> <p>The latest report sent vide ref no RG-II/ENV/32/2022/338 dated 14.01.2023.</p>
50	<p>The mine shall install continuous the Ambient Air Quality in the core zone as well as in the buffer zone for monitoring of RSPM, SPM, NO_x and SO₂. The location of ambient air quality stations shall be decided based on metrological data, topographical features and environmentally and ecologically sensitive targets and the frequency of monitoring shall be undertaken in consultation with Regional office of the Board.</p>	<p>Being complied</p> <p>One CAAQM station is established in the core zone near Penchikalpet (V) and another CAAQMS is established in the buffer zone near Pannur (V) for monitoring of pollutants, namely PM₁₀, PM_{2.5}, SO₂ and NO_x and the same is linked to the server of TSPCB.</p> <p>And also Air monitoring stations, 4 in Core zone and 4 in Buffer zone is approved by with the RO, RGM TSPCB. Ambient air quality parameters such as PM₁₀, PM_{2.5}, SO₂ and NO_x are being monitored at regular intervals at the above stations.</p> <p>The latest HYMR submitted to the MoEF&CC/RO vide letter no RGM/ENV/03/39 dated 25.05.2023.</p>
51	<p>The applicant should submit Environment statement in Form V before 30th September of every year as per Rule No.14 of E(P) Rules, 1986 & amendments thereof.</p>	<p>Being complied</p> <p>The Environmental statement for each financial year ending 31 March 2022 in Form-V is being submitted vide ref no RG-II/ENV/3B/2022/291 dated 29.09.2022 by the project authority to the State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, and also uploaded on the company's website along with the status of compliance of EC</p>

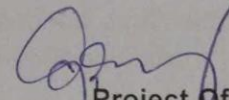
		conditions
52	All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991, should be followed.	Being followed. Agreed upon. The condition is noted and assured to abide the condition.
53	The conditions stipulated in this order are without any prejudice to rights and contentions of this Board in any Hon'ble court of Law.	Agreed upon. The condition is noted and assured to abide the condition.

@@@

**Project Officer,
RGOC-III (EP) PH-II,
RG-II Area, SCCL.**

		conditions
52	All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991, should be followed.	Being followed. Agreed upon. The condition is noted and assured to abide the condition.
53	The conditions stipulated in this order are without any prejudice to rights and contentions of this Board in any Hon'ble court of Law.	Agreed upon. The condition is noted and assured to abide the condition.

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Project Officer,
RGOC-III (EP) PH-II,
RG-II Area, SCCL.
Project Officer
RG OCP-III Exp-II Project





THE SINGARENI COLLIERIES COMPANY LIMITED
(A GOVERNMENT COMPANY)
RG OCP III(EP) PH-II PROJECT.

FORM-V
(RULE NO.14 OF EPR 1986)

**Environmental statement of Ramagundam Opencast-III Expansion Ph-II Coal Mine
Project For the year 2022-2023**

PART-A

General

Sl. No	Item	Details
1	Name & address of the Owner/ Occupier of the industry/operation or process.	Sri S.Madhusudan, Project Officer, Ramagundam Opencast-III(EP) The Singareni Collieries Company Ltd., P.O.Maredupaka, Ramagundam. Dist; Peddapalli State:Telangana Pin 505214. Tele phone:08728-230103 Fax-08728-231144
2	Industry category	Coal Mines (Red - Non Hazardous)
3	Production capacity/year	6.3 Million tones / year Normative 9.52 Million tones / year Peak
4	Year of establishment	1989
5	CFO	CFO obtained from TSPCB vide co consent order no. 220523520863 dated 20.04.2022 Valid up to 31/03/2026.
6	Date of last Environmental statement submitted	The Environmental statement for each financial year ending 31 March 2021 in Form-V is being submitted vide ref no RG-II /ENV/3B/2022/291 dated 29.09.2022

Sl.	Item	2021-22	2022-23
1	Total coal production (in Lakh tonnes)	81.56	81.59
2	Output per man shift	16.47	13.26
3	Total Overburden removed (in Lb.Cm)	499.22	459.24
4	Total men on roll	2298	2228

PART-B

WATER AND RAW MATERIAL CONSUMPTION

➤ Water Consumption per 1000 Tonnes Output

Sl. no	Description	Unit	2021-22	2022-23
1	Name of the Product		Coal	Coal
2	Water consumed for industrial purpose	Kilo liters	450	470
3	Water consumed for domestic use	do	8.1	22.36
4	Water used for plantations/parks	do	14.5	22.36
5	Total water consumed per 1000 Tons of coal out put	do	550	580

Sl. no	➤ <u>Raw Material Consumption:</u> Item	Unit	2021-22	2022-23
1	a) Explosives for OB (per m ³ of OB) b) Explosives for Coal(per tonne of Coal) c) Overall consumption (per tonne of Coal)	Kgs	0.57 0.15 3.64	0.59 0.15 3.45
2	Lubricant Oils (per 100 tons of coal) a) Engine oil b) Gear oil c) Transmission oil d) Hydraulic oil e) Transformer oil f) Brake oil	Litre	1.46 2.23 2.08 2.15 0.33 0.06	1.87 0.15 2.74 0.24 Nil Nil
3	Grease of all grades (per 100 tones of coal)	Kgs	2.21	0.71
4	Diesel oil	Litre	3.86	3.40
5	Electric power (per 100 tones of coal) a) For Industrial use b) <u>For Domestic use</u>	kvAh	347.62 4.008	568.93 12.37

Note: Raw material consumption like explosives, diesel oil, electric power and others are depend up on the stripping ratio, depth of coal reserves under earth cover, inclination of the seams, nature of rock strata, distance of coal handling plant from the mine, method of working and technology adopted etc., hence raw material consumption varies from mine to mine and time to time.

PART-C

POLLUTION GENERATED:

➤ AIR POLLUTION SOURCES

Main sources of air pollution are drilling and blasting operations, loading and unloading operations of coal and over burden, exhausting gases from the Heavy Earth Moving Machinery (HEMM), coal transportation vehicles, coal handling operations at the coal handling plants, coal heaps and OB dumps. The ambient air quality status in and around the mining area during the year 2022-23 is furnished in **Annexure-I** enclosed herewith.

➤ AIR POLLUTION CONTROL MEASURES:

I. Dust Pollution Control :

1. Water spraying over haul roads, dump yards and in Coal handling Plant is being done by Twenty three number of mobile water sprinklers are being deployed for sprinkling of water along haul roads, on dumps at loading and unloading areas are being used for controlling of air borne dust. Separate water spraying lines are laid around the coal stacking yards, conveyor belt and at coalface in the quarry etc.

80 KL capacity: 02

70KL capacity: 01

28KL capacity: 10

10KL capacity: 01

20KL capacity: 09

2. All approach roads at the Mine has been black topped.

4. Wet drilling is in practice.

5. Saplings planted along the conveyor belts, around coalbunkers, coal dump yard and along coal transportation route.

6. Mist spraying arrangements made at coal crushers and coal discharge points along the conveyors.

II. Gaseous Pollution Control:

1. Regular maintenance of Heavy Earth Moving Machinery (HEMM) and other vehicles is being carried out to control noxious gases in the exhaust emissions.

2. Proper blasting pattern with optimum explosive charge and use of delay action detonators is being adopted to control emission of noxious gases and dust while blasting.

3. Free supply of LPG gas to all the employees to discourage burning of coal for domestic use.

III. WATER POLLUTION CONTROL MEASURES:

- One ETP of 2.5 Lakh liters capacity is provided at Base workshop to trap of oil and grease before letting out on surface.
- Another ETP of 50,000 liters capacity is provided at CHP to treat effluents before letting out on surface.
- Rock toe walls of 2 x 355 m length are constructed around dump yards to prevent the silt into the run-off water.
- Garland drains and catch drains are provided for safe disposal of run-off water.
- Rock fill dams 2 No. in the garland drains and settling ponds 4 No. are provided to reduce the siltation and suspended solids in run-off water.
- Workshop effluent is treated in 'oil and grease trap' before letting out on surface.

➤ **Statutory Clearances:**

A. Mining Plan Approval	1. GOI-MOC-No. 13016/2/2006-CA-II dated 8.4.2008 2. Mining Plan (I Revision) & Mine Closure Plan of RG OC-III Expansion Project was approved vide Lr.No.13016/3/2009-CA-II, dated 19.11.2014.
B. Ground Water Clearance	Lr.No: 128/SCCL/2019/491 dt.25.06.2022 Memo no 2182/Hg II/2018-2 dated 23.06.2022.
C. Consent for Establishment	03/TSPCB/CFE/RO-RGM/HO/2023 dated 27.04.2023.
D. Consent for Operation	CFO order No.2202350863 dated 20.04.2022, Valid up to 31.03.2026.
E. Forest Clearance	Not Applicable, No forest land involved in the project.
F. Mining Lease	The project forms part of South Godavari Mining Lease and South Godavari.

➤ **LAND MANAGEMENT (As on 31.03.2023):**

Depth:		
A.	Minimum Depth	25 m
B.	Maximum Depth	280 m
C.	Present working depth	170 m
Reserves:		
A.	Total Geological Reserves	223.94 MT
B.	Total Extractable Reserves	106.58 MT

C.	Reserves already Extracted	36.91MT
D.	Balance Reserves	69.67 MT
E.	Coal production during year 2022-23	8.15 MT
Over Burden:		
A.	Total OB	841.32 MM ³
B.	OB extracted since inception	230.25Mm ³
C.	OB removed in last year 2021-22	24.25 Mm ³
D.	Stripping Ratio	1 in 6.238
Top Soil:		
A.	Total Topsoil	3.75 MM ³
B.	Topsoil extracted since inception	2.161 Mm ³
C.	Topsoil removed in year 2022-23	0.10 Mm ³
Land Requirement:		
A.	Total Requirement	2070 10 Ha.
B.	Forestland involved	Nil
C.	Non-forestland	2070.10 Ha.

Activity-wise Requirement	Land	As per EMP	Actual
A. Quarry Area		1229.41 Ha.	913.72 Ha.
B. External OB Dumps		475.50 Ha.	327.26 Ha.
C. Infrastructures		71.19 Ha.	51.40Ha.
D. Others		294.00 Ha.	248.76 Ha.
E. Total		2070.10 Ha.	1541.14 Ha.

➤ **Soil erosion control measures.**

- Rock fill dams/Check dams(storage tanks) are constructed in the garland canals.
- Four Nos. of settling ponds also constructed for the settlement of the silt.
- 600 meter length Stone pitching done along the slope of the Jallaram diverted nallah.

➤ **NOISE CONTROL:**

- Noise levels recorded at different locations in and around the project which under the statutory limits.
- ii. Earplugs have been provided to the Operators exposed to high noise levels.
- iii. Raising of plantation in vacant lands to attenuate noise level.
- iv. Regular maintenance of vehicles and heavy earth moving equipment to minimize the noise level.
- Noise levels recorded at different locations during last six months is furnished.

PART-D

HAZARDOUS WASTES: Not applicable

PART-E

SOLID WASTES

The solid wastes generated are overburden materials excavated from the quarry and some iron scrap and other used materials like scrap tires etc is sent stores. Iron scrap generated consists of old worn out parts of different machines, body chassis of dumpers, trucks, bearings, old wire ropes, flat & iron scrap etc. Some of these materials are used at the unit level for some or other appropriate purpose with some alterations. The remaining scrap is sold out once in a while by tender auction. Old tires of dumpers, trucks and old batteries are stocked in the stores and sold out periodically to TSPCB authorized agencies by tender auction. Old conveyor belt is used within unit for chute plate liners and also used for making detonator canisters bags and for coursing of air in underground workings.

PART – F

OVERBURDEN MATERIALS

In the process of coal extraction overlying earth cover is removed to expose the coal seam by blasting. The blasted material consists of top soil, sand, broken rock material, clay and shale. This blasted material is loaded into dumpers by shovels and transported to dump yards. In the initial stages until sufficient de coaled area is available the overburden material removed is dumped in external dump yards and after some advancement of quarry the material is dumped in the de coaled area. The topsoil removed is preserved for future use and some soil is spread on completed dump decks and slopes. Saplings of different plant species are being planted over these dumps after proper sloping and leveling.

Total Over burden material excavated during the year 2022-23 is 459.20 Lb.CM and dumped in the internal, external dump yards and de-coaled area.

PART-G

Impact of pollution control measures taken on conservation of natural resources and on the cost of production

1. Water spraying over haul roads, dump yards and in Coal handling Plant is being done by Twenty three number of mobile water sprinklers are being deployed for sprinkling of water along haul roads, on dumps at loading and unloading areas are being used for controlling of air borne dust. Separate water spraying lines are laid around the coal stacking yards, conveyor belt and at coalface in the quarry etc.

80 KL capacity: 02

70KL capacity : 01

28KL capacity : 10

10KL capacity : 01

0KL capacity : 09

2. Overburden dumps are covered with top soil and leveled and compacted before planting.
- 3 De-silting of garland drains, settling ponds were done to preserve natural drainage system.
- 4 Nonels are being used to control blast vibrations.
- 5 Total 2 No's of ETPs are being maintained to separate the oil and grease in work shop and
- 6 .CHP. For this Rs.8.0 lakhs is spent on maintenance and ETP for year 21-22.
Expenditure incurred on post environment monitoring is Rs. **10, 09,386.20**
7. About Rs. 32 lakhs is spent on de-silting of garland drains, settling ponds.
8. Nonels are being used to control blast vibrations.
9. Expenditure incurred on Water quality monitoring is Rs.4.00 Lakhs.
10. To control erosion and water pollution bio engineering structures like rock toe walls, rock fill dams, garland drains, masonry drains on OB dumps slops etc, were made on and around OB dumps .

P A R T -H

Additional measures / investment proposals for environmental protection and control of pollution

1. Total Planted in 35 Ha during the year 2022-23 In O.B.dump and slopes and in other vacant area.
2. Organizing family planning and health camps for the welfare of the workers and other public
3. Stabilization of OB dump slopes with seed sowing, planting of Agave suckers, vattiveru etc.

PART-I

Any other particulars for improving the quality of environment

1. Health check up and family planning operation camps were organized during the year for the welfare of workers and general public.
2. Observation of Environmental Awareness week in the month of June every year
3. Organizing the awareness programs on Environment and Health during the month of June every year as part of World Environmental Day/World Environmental Protection Day celebrations.

**Project Officer,
RGOC-III (EP) PH-II,
RG-II Area, SCCL.**

PART-H

Additional measures / investment proposals for environmental protection and control of pollution

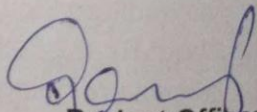
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2. Organizing family planning and health camps for the welfare of the workers and other public
3. Stabilization of OB dump slopes with seed sowing, planting of Agave suckers, vattiveru etc.

PART-I

Any other particulars for improving the quality of environment

1. Health check up and family planning operation camps were organized during the year for the welfare of workers and general public.
2. Observation of Environmental Awareness week in the month of June every year
3. Organizing the awareness programs on Environment and Health during the month of June every year as part of World Environmental Day/World Environmental Protection Day celebrations.




Project Officer,
RGOC-III (EP) PH-II,
RG-II Area, SCCL.
Project Officer
RG OCP-III Exp-II Project

Ambient Air Quality Results

Readings from April 2022 to March 2023

Ambient Air Quality at RG OCP-III KRUSHI BHAVAN (CA4)

S.No.	Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
Coal mine standards (Commenced after 25.09.2000) GSR 742(E), Dated 25.09.2000		250	*	120	120
1	07.04.2022	148	45.5	9.7	15.4
2	25.04.2022	191	58.6	10.7	13.5
3	09.05.2022	175	53.5	13.8	22.1
4	23.05.2022	148	50.9	11.7	15.6
5	11.06.2022	122	51.3	11.5	15.1
6	27.06.2022	106	40.1	10.1	13.4
7	07.07.2022	84	42.7	11.9	14.4
8	25.07.2022	76	37.5	8.1	12.8
9	08.08.2022	109	43.4	10.0	13.4
10	25.08.2022	115	42.7	9.6	15.3
11	14.09.2022	139	56.1	8.8	12.6
12	29.09.2022	158	52.2	9.6	14.0
13	13.10.2022	172	61.9	11.3	15.2
14	28.10.2022	164	51.9	9.1	14.4
15	14.11.2022	167	59.5	11.1	15.2
16	29.11.2022	176	59.7	13.7	16.2
17	14.12.2022	173	56.4	11.0	14.9
18	29.12.2022	159	52.5	10.9	13.2
19	13.01.2023	187	59.6	10.1	14.4
20	30.01.2023	182	59.2	9.8	14.1
21	14.02.2023	150	59.6	11.5	16.0
22	27.02.2023	172	62.5	9.8	14.6
23	13.03.2023	164	62.2	13.4	17.8
24	28.03.2023	186	64.4	11.2	13.7
Minimum		76.0	37.5	8.1	12.6
Average		151.0	53.5	10.8	14.9
98 percentile		189.2	63.5	13.8	20.1
Maximum		191	64.4	13.8	22.1

*No PM_{2.5} standard is specified for Core Zone

Ambient Air Quality at RG- OCP III Base Work Shop(CA 5)

S.No.	Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
Coal mine standards, GSR 742(E), Dated 25.09.2000		250	-	120	120
1	08.04.2022	182	54.6	12.9	16.2
2	26.04.2022	172	52.5	10.1	15.7
3	10.05.2022	193	59.2	15.1	19.4
4	24.05.2022	176	55.7	12.8	16.4
5	13.06.2022	146	47.9	11.7	12.9
6	28.06.2022	119	44.3	10.1	13.2
7	08.07.2022	71	38.2	8.8	13.7
8	26.07.2022	89	40.9	7.6	12.2
9	09.08.2022	134	40.6	8.7	15.0
10	26.08.2022	124	46.6	9.2	15.1
11	14.09.2022	156	59.7	11.7	14.8
12	29.09.2022	169	63.5	10.4	13.8
13	13.10.2022	180	70.4	9.3	15.3
14	28.10.2022	216	58.1	9.8	15.1
15	14.11.2022	182	62.4	11.7	15.1
16	29.11.2022	219	74.9	11.1	16.6
17	14.12.2022	154	61.5	9.6	13.9
18	29.12.2022	182	65.4	9.7	14.4
19	13.01.2023	190	57.4	10.6	14.2
20	30.01.2023	209	65.7	11.2	16.6
21	14.02.2023	176	69.4	9.3	14.1
22	27.02.2023	185	52.8	11.9	17.3
23	13.03.2023	196	72.8	10.1	14.3
24	28.03.2023	192	69.2	9.3	13.4
Minimum		71.0	38.2	7.6	12.2
Average		167.2	57.7	10.5	14.9
98 percentile		217.6	73.9	14.1	18.4
Maximum		219	74.9	15.1	19.4

Ambient Air Quality at RG-OC-III CHP (CA7)

S.No.	Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
NAAQ Standards, CPCB Dated: 18.11.2009		250	--	120	120
1	08.04.2022	173	59.6	10.5	15.9
2	26.04.2022	215	65.2	12.1	16.2
3	10.05.2022	192	60.8	11.1	16.8
4	24.05.2022	164	56.3	9.5	13.9
5	13.06.2022	156	56.5	10.6	13.2
6	28.06.2022	124	47.2	10.6	13.0
7	08.07.2022	86	42.4	10.4	13.9
8	23.07.2022	96	42.7	9.2	11.9
9	09.08.2022	86	46.2	7.6	12.7
10	26.08.2022	130	51.5	11.9	15.9
11	15.09.2022	169	62.2	11.4	14.2
12	30.09.2022	176	61.8	9.5	13.5
13	14.10.2022	181	68.2	9.2	15.0
14	29.10.2022	234	62.8	11.0	14.7
15	15.11.2022	216	70.4	10.7	14.0
16	30.11.2022	182	68.4	12.6	16.8
17	15.12.2022	193	52.6	10.4	15.1
18	30.12.2022	209	67.6	11.4	13.1
19	14.01.2023	214	67.8	11.7	14.9
20	31.01.2023	212	68.5	12.6	17.7
21	15.02.2023	185	74.2	10.2	16.4
22	26.02.2023	206	76.5	10.7	17.3
23	14.03.2023	176	69.9	11.9	14.1
24	29.03.2023	162	62.6	10.7	14.3
Minimum		86.0	42.4	7.6	11.9
Average		172.4	60.9	10.7	14.8
98 percentile		225.7	75.4	12.6	17.5
Maximum		234	76.5	12.6	17.7

Off-Loading Camp (RVR Company) (CA 6)

S.No.	Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
Coal mine standards (Commenced prior to 25.09.2000) GSR 742(E), Dated 25.09.2000		250	-	120	120
1	09.04.2022	109	42.4	11.7	17.3
2	23.04.2022	146	48.4	10.9	13.6
3	11.05.2022	128	45.6	9.0	13.4
4	24.05.2022	158	50.5	10.5	14.8
5	14.06.2022	137	40.7	10.1	13.6
6	29.06.2022	94	38.6	8.1	11.4
7	09.07.2022	75	35.2	11.5	14.1
8	23.07.2022	72	36.4	8.2	13.7
9	10.08.2022	102	38.8	8.5	12.6
10	26.08.2022	92	37.9	9.8	13.5
Min		72.0	35.2	8.1	11.4
Average		111.3	41.5	9.8	13.8
98per		155.8	50.1	11.7	16.9
Max		158	50.5	11.7	17.3

RG OPEN CAST –III EXPANSION –II PROJECT (Stores)

S.No.	Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
Coal mine standards, GSR 742(E), Dated 25.09.2000		300	-	120	120
1	15.09.2022	122	45.5	9.6	12.7
2	30.09.2022	117	42.6	8.1	14.6
3	14.10.2022	162	62.1	9.6	14.4
4	29.10.2022	172	53.6	9.2	13.3
5	15.11.2022	159	64.5	10.0	13.5
6	30.11.2022	168	65.5	14.7	17.6
7	15.12.2022	162	45.4	11.0	14.3
8	30.12.2022	162	59.2	10.6	14.4
9	14.01.2023	152	42.2	11.4	15.4
10	31.01.2023	176	52.3	11.7	16.6
11	15.02.2023	180	58.8	10.6	14.0
12	26.02.2023	172	67.2	10.6	13.7
13	14.03.2023	152	63.6	9.5	15.1
14	29.03.2023	124	54.4	13.4	17.1
98 Percentile		179.0	66.8	14.4	17.5
minimum		117.0	42.2	8.1	12.7
maximum		180.0	67.2	14.7	17.6
average		155.7	55.5	10.7	14.8

Ambient Air Quality at Laxmipuram Village (BA1)

S.No.	Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
NAAQ Standards, CPCB dated: 18.11.2009		100	60	80	80
1	09.04.2022	72	39.5	7.8	11.4
2	27.04.2022	58	32.8	8.1	13.0
3	11.05.2022	66	36.2	10.2	14.1
4	25.05.2022	76	39.4	9.6	12.5
5	14.06.2022	54	29.3	9.0	12.2
6	29.06.2022	56	30.6	8.0	12.4
7	09.07.2022	42	24.6	8.3	12.7
8	23.07.2022	48	26.9	8.3	11.4
9	10.08.2022	59	33.5	8.7	10.8
10	27.08.2022	48	28.4	8.7	13.0
11	15.09.2022	72	38.9	8.8	12.5
12	30.09.2022	64	35.8	8.5	13.9
13	14.10.2022	66	39.6	9.0	12.8
14	29.10.2022	75	39.8	8.1	12.0
15	15.11.2022	82	45.1	8.6	12.4
16	30.11.2022	64	35.2	8.3	13.8
17	15.12.2022	82	47.4	8.7	13.0
18	30.12.2022	59	33.5	9.7	12.1
19	14.01.2023	75	38.7	7.3	12.9
20	31.01.2023	84	44.7	7.3	11.8
21	15.02.2023	74	39.7	9.0	12.9
22	26.02.2023	86	46.7	8.7	14.1
23	14.03.2023	80	44.6	9.5	11.9
24	29.03.2023	76	39.4	10.1	13.0
Minimum		42.0	24.6	7.3	10.8
Average		67.4	37.1	8.7	12.6
98 percentile		85.1	47.1	10.2	14.1
Maximum		86.0	47.4	10.2	14.1

Ambient Air Quality at Pothana Colony (BA4)

S.No.	Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
NAAQ Standards, CPCB dated: 18.11.2009		100	60	80	80
1	07.04.2022	54	29.2	10.2	12.7
2	25.04.2022	78	39.2	9.0	14.1
3	09.05.2022	68	39.6	8.6	11.3
4	23.05.2022	60	33.8	8.3	12.0
5	13.06.2022	58	29.4	9.0	13.0
6	28.06.2022	48	26.7	9.1	12.7
7	09.07.2022	42	25.3	11.5	14.4
8	26.07.2022	47	27.4	9.3	13.6
9	10.08.2022	57	29.2	10.5	14.1
10	25.08.2022	45	26.5	7.4	12.7
11	14.09.2022	64	39.4	8.7	12.5
12	29.09.2022	70	38.7	8.5	12.5
13	13.10.2022	60	39.7	8.3	14.2
14	28.10.2022	59	32.7	11.7	15.0
15	14.11.2022	58	33.4	9.3	13.3
16	29.11.2022	78	39.8	10.8	13.0
17	14.12.2022	62	35.6	8.7	12.0
18	29.12.2022	59	34.5	10.0	14.8
19	13.01.2023	54	28.7	9.1	13.2
20	30.01.2023	75	38.8	9.8	11.0
21	14.02.2023	52	29.7	8.6	13.7
22	26.02.2023	86	46.7	8.7	14.1
23	13.03.2023	66	38.4	9.3	11.5
24	28.03.2023	64	34.5	9.5	13.8
Minimum		42.0	25.3	7.4	11.0
Average		61.0	34.0	9.3	13.1
98 percentile		82.3	43.5	11.6	14.9
Maximum		86.0	46.7	11.7	15

Ambient Air Quality at Penchikalpet Village (BA5)

S.No.	Date of Sampling	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
NAAQ Standards, CPCB dated: 18.11.2009		100	60	80	80
1	07.04.2022	57	32.9	8.8	11.5
2	25.04.2022	62	34.4	9.3	14.6
3	09.05.2022	62	35.7	8.7	12.5
4	23.05.2022	68	40.5	9.2	12.7
5	13.06.2022	70	39.4	9.7	12.8
6	28.06.2022	52	28.3	8.2	11.2
7	08.07.2022	53	29.4	10.2	12.5
8	26.07.2022	45	25.5	8.8	13.7
9	09.08.2022	49	26.4	8.8	14.1
10	25.08.2022	47	29.4	8.1	13.9
11	14.09.2022	55	29.5	8.0	13.4
12	29.09.2022	52	29.4	8.1	13.2
13	13.10.2022	75	46.2	9.3	14.5
14	28.10.2022	56	30.2	10.6	14.3
15	14.11.2022	51	29.5	8.7	12.3
16	29.11.2022	66	38.4	8.6	14.6
17	14.12.2022	72	39.2	8.5	12.9
18	29.12.2022	61	37.7	8.6	12.0
19	13.01.2023	71	37.5	8.8	11.9
20	30.01.2023	78	42.6	8.8	13.0
21	14.02.2023	75	41.4	10.1	14.1
22	27.02.2023	77	38.9	10.0	13.4
23	13.03.2023	54	29.6	9.2	13.7
24	28.03.2023	58	30.4	8.0	13.2
Minimum		45.0	25.5	8.0	11.2
Average		61.1	34.3	9.0	13.2
98 percentile		77.5	44.5	10.4	14.6
Maximum		78	46.2	10.6	14.6

Ambient Air Quality at Dubbapalli Village (BA13)

S.No.	Date of Sampling	PM₁₀ (µg/m³)	PM_{2.5} (µg/m³)	SO₂ (µg/m³)	NO₂ (µg/m³)
NAAQ Standards, CPCB dated: 18.11.2009		100	60	80	80
1	06.04.2022	78	39.4	9.5	14.2
2	21.04.2022	82	40.6	9.6	14.2
3	06.05.2022	82	46.1	10.2	16.9
4	20.05.2022	71	37.1	9.8	16.7
5	06.06.2022	63	32.1	7.2	16.1
6	21.06.2022	68	32.2	12.5	19.2
7	06.07.2022	30	16.9	7.2	11.7
8	21.07.2022	45	17.2	7.2	13.4
9	05.08.2022	81	43.6	8.5	14.6
10	22.08.2022	76	41.0	12.1	17.1
11	05.09.2022	74	38.4	11.7	18.1
12	20.09.2022	73	36.9	10.9	14.6
98 Percentile		82.0	45.6	12.4	19.0
minimum		30.0	16.9	7.2	11.7
maximum		82.0	46.1	12.5	19.2
average		68.6	35.1	9.7	15.6

Ambient Air Quality at Singireddypalli Village (BA1)

S.No.	Date of Sampling	PM₁₀ (µg/m³)	PM_{2.5} (µg/m³)	SO₂ (µg/m³)	NO₂ (µg/m³)
NAAQ Standards, CPCB dated: 18.11.2009		100	60	80	80
1.	12.10.2022	59	32.4	9.7	13.5
2.	27.10.2022	62	37.4	9.7	13.7
3.	12.11.2022	76	39.2	8.4	13.7
4.	28.11.2022	70	38.5	10.6	15.1
5.	13.12.2022	72	38.5	9.5	13.1
6.	28.12.2022	65	34.2	9.7	13.6
7.	12.01.2023	86	45.2	9.5	12.7
8.	28.01.2023	76	38.9	9.8	12.6
9.	13.02.2023	62	34.5	10.2	12.9
10.	26.02.2023	78	42.8	10.6	14.3
11.	11.03.2023	56	31.8	9.5	14.3
12.	27.03.2023	82	45.6	8.7	13.3
98 Percentile		85.1	45.5	10.6	14.9
minimum		56.0	31.8	8.4	12.6
maximum		86.0	45.6	10.6	15.1
average		70.3	38.3	9.7	13.6

**Characteristics of Effluents OCP-III Mine Discharge (EW1)
Readings from April 2022 to March 2023**

S.No.	Date of Sampling	pH (at 25°C)	Total Suspended Solids at 105 °C	TDS at 180°C	Chemical Oxygen Demand	BOD	Oil & Grease
	Unit	--	mg/L	mg/L	mg/L	mg/L	mg/L
	Test Method	4500- H*B	2540-D	2540-C	5220-D	IS 3025	5520-B
	MoEF GSR 742 (E) and GSR 801(E) Effluent Standards for coal mines	5.5 to 9.0	100	--	250	30	10
1	14.04.2022	6.9	52	977	20	2.6	1.8
2	28.04.2022	6.8	34	752	39	4.2	1
3	13.05.2022	8.1	26	906	23	2.4	1
4	30.05.2022	7.3	29	856	27	3.1	1.4
5	15.06.2022	8.1	24	980	15	2.4	1.2
6	15.06.2022	7.9	40	831	23	2.6	1
7	15.07.2022	8.2	26	1047	19	2.2	1
8	30.07.2022	7.8	32	911	15	3.1	1.4
9	12.08.2022	7.3	49	1056	23	4.2	1
10	30.08.2022	8.1	29	967	27	3.1	1.4
11	15.09.2022	7.9	31	1024	23	2.6	1
12	30.09.2022	7.9	24	984	31	4.2	1.2
13	15.10.2022	7.7	29	845	27	3	1
14	30.10.2022	7.6	34	791	20	2.5	<1
15	15.11.2022	8.1	41	887	31	3.6	1.2
16	30.11.2022	7.9	26	923	28	4	1
17	15.12.2022	7.3	37	920	35	4	1.4
18	30.12.2022	7.6	30	787	39	4.4	1.4
19	13.01.2023	7.9	39	836	32	3.6	1.2
20	31.01.2023	7.7	26	906	27	3	1.6
21	15.02.2023	8.2	34	879	31	2.6	1.2
22	28.02.2023	7.9	29	945	23	3.6	1.6
23	15.03.2023	7.7	24	987	32	3.2	1.4
24	31.03.2023	7.8	39	896	36	4.1	1.2
	Minimum	6.8	24.0	752.0	15.0	2.2	1.0
	Average	7.7	32.7	912.2	26.9	3.3	1.2
	98 percentile	8.2	50.6	1051.9	39.0	4.3	1.7
	Maximum	8.2	52	1056	39	4.4	1.8

Characteristics of Effluents –RG OCP III CHP ETP Outlet (EW 2)

S.No.	Date of Sampling	pH (at 25°C)	Total Suspended Solids at 105 °C	TDS at 180°C	Chemical Oxygen Demand	BOD	Oil & Grease
	Unit	--	mg/L	mg/L	mg/L	mg/L	mg/L
	Test Method	4500- H ⁺ B	2540-D	2540-C	5220-D	IS 3025	5520-B
	MoEF GSR 742 (E) and GSR 801(E) Effluent Standards for coal mines	5.5 to 9.0	100	--	250	30	10
1	14.04.2022	6.8	41	890	16	2.4	1
2	28.04.2022	6.9	78	996	27	3.2	1.4
3	13.05.2022	8.0	58	861	23	2.4	<1
4	30.05.2022	7.5	49	912	19	2.2	1
5	15.06.2022	7.7	61	783	23	3.1	<1
6	15.06.2022	8.1	74	924	19	2.2	<1
7	15.07.2022	8.0	51	994	15	2.0	<1
8	30.07.2022	8.2	62	820	23	3.6	1
9	12.08.2022	7.9	70	753	27	4.2	1
10	30.08.2022	8.0	47	994	23	2.6	<1
11	15.09.2022	7.8	42	891	19	2.2	<1
12	30.09.2022	8.1	49	910	23	2.8	<1
13	15.10.2022	7.6	34	871	27	3.6	<1
14	30.10.2022	7.9	29	674	20	1.6	1
15	15.11.2022	7.7	74	712	31	3.6	1
16	30.11.2022	7.9	53	597	28	2.6	<1
17	15.12.2022	7.6	42	1012	23	2.6	<1
18	30.12.2022	8.1	49	1245	19	2.1	<1
19	13.01.2023	8.1	41	866	24	2.1	<1
20	31.01.2023	7.9	47	984	27	3	<1
21	15.02.2023	7.7	36	1042	23	2.6	<1
22	28.02.2023	7.6	31	1142	19	2.6	1
23	15.03.2023	7.7	26	978	24	2.7	1
24	31.03.2023	7.5	59	890	28	2.7	<1
	Minimum	6.8	26.0	597.0	15.0	1.6	1.0
	Average	7.8	50.1	905.9	22.9	2.7	1.0
	98 percentile	8.2	76.2	1197.6	29.6	3.9	1.3
	Maximum	8.2	78	1245	31	4.2	1.4

Characteristics of Effluents –RG OCP III BWS ETP Outlet (EW 3)

S.No.	Date of Sampling	pH (at 25°C)	Total Suspended Solids at 105 °C	TDS at 180°C	Chemical Oxygen Demand	BOD	Oil & Grease
	Unit	--	mg/L	mg/L	mg/L	mg/L	mg/L
	Test Method	4500- H ⁺ B	2540-D	2540-C	5220-D	IS 3025	5520-B
	MoEF GSR 742 (E) and GSR 801(E) Effluent Standards for coal mines	5.5 to 9.0	100	--	250	30	10
1	14.04.2022	7.2	77	997	64	12.4	5
2	28.04.2022	7.7	84	1012	54	14.4	4.6
3	13.05.2022	8.3	73	1083	51	14.2	3.6
4	30.05.2022	7.9	61	1102	43	13.1	4
5	15.06.2022	8.4	82	992	79	13.1	4.6
6	15.06.2022	8.2	90	1146	67	14.2	4
7	15.07.2022	7.9	72	1245	55	12.2	3.4
8	30.07.2022	8.1	81	1044	61	14.4	4.2
9	12.08.2022	7.6	88	1130	75	17.1	4.2
10	30.08.2022	8.3	71	1181	71	18.4	4.8
11	15.09.2022	7.8	79	1477	81	22.4	5
12	30.09.2022	7.8	55	1070	55	10.2	3
13	15.10.2022	8.1	68	1125	51	12.2	3.6
14	30.10.2022	7.9	49	1247	56	13.2	3.2
15	15.11.2022	7.8	61	1042	63	18.2	3.8
16	30.11.2022	8.1	78	991	60	8.2	3
17	15.12.2022	7.9	66	1178	51	13.2	3.4
18	30.12.2022	8.2	73	1083	55	11.9	3.6
19	13.01.2023	8.2	80	987	64	14.3	3.8
20	31.01.2023	7.6	58	1125	67	15	3.2
21	15.02.2023	7.8	67	1254	59	13.2	3.6
22	28.02.2023	8.1	74	1091	51	14.4	3.6
23	15.03.2023	7.9	82	1148	68	11.4	3.2
24	31.03.2023	7.7	91	995	56	12.3	3.6
	Minimum	7.2	49.0	987.0	43.0	8.2	3.0
	Average	7.9	73.3	1114.4	60.7	13.9	3.8
	98 percentile	8.4	90.5	1374.4	80.1	20.6	5.0
	Maximum	8.4	91	1477	81	22.4	5

Characteristics of Effluents –STP Pothana Colony (EW 5)

S.No.	Date of Sampling	pH (at 25°C)	Total Suspended Solids at 105 °C	TDS at 180°C	Chemical Oxygen Demand	BOD	Oil & Grease
Unit		--	mg/L	mg/L	mg/L	mg/L	mg/L
Test Method		4500- H*B	2540-D	2540-C	5220-D	IS 3025	5520-B
MoEF GSR 742 (E) and GSR 801(E) Effluent Standards for coal mines		5.5 to 9.0	100	--	250	30	10
1	14.04.2022	7.9	43	9 10	52	9.2	<1
2	28.04.2022	6.6	48	1074	59	9.1	1
3	13.05.2022	7.3	58	981	31	9.2	1
4	30.05.2022	8.1	44	874	33	8.6	<1
5	15.06.2022	7.6	55	776	31	10.2	1.4
6	15.06.2022	6.8	42	872	43	12.4	1.2
7	15.07.2022	6.6	36	1254	31	5.3	<1
8	30.07.2022	7.8	54	1055	38	8.2	<1
9	12.08.2022	6.8	67	1365	43	5.1	<1
10	30.08.2022	7.2	41	1231	31	6.4	1
11	15.09.2022	6.8	29	1018	27	3.1	<1
12	30.09.2022	6.8	33	971	35	3.6	<1
13	15.10.2022	6.9	19	816	23	4.6	<1
14	30.10.2022	7.8	37	669	28	3.6	<1
15	15.11.2022	6.8	26	946	35	6.6	<1
16	30.11.2022	7.9	42	1092	32	9.6	<1
17	15.12.2022	6.8	33	991	27	3.6	<1
18	30.12.2022	6.9	54	1254	31	4.4	<1
19	13.01.2023	7.8	29	1013	28	7.1	<1
20	31.01.2023	8.1	31	981	52	16	1.4
21	15.02.2023	7.9	24	1178	27	6.2	<1
22	28.02.2023	8.2	37	1059	31	9.6	1
23	15.03.2023	7.6	55	1124	48	8.2	1
24	31.03.2023	6.9	63	1019	36	7.3	1
Minimum		6.6	19.0	669.0	23.0	3.1	1.0
Average		7.3	41.7	1021.8	35.5	7.4	1.1
98 percentile		8.2	65.2	1313.9	55.8	14.3	1.4
Maximum		8.2	67.0	1365	59	16	1.4

Noise Quality Data
Sampling Period: April 2022 to March 2023

Name of the Location	Date of Sampling	Noise levels in dB (A)		
		Leq Day	Leq Night	
GSR 742 (E) Standards		75	70	
OCP III Krushi Bhavan (CN1)	09.04.2022	50.9	42.2	
	27.04.2022	48.5	39.5	
	11.05.2022	55.6	48.1	
	25.05.2022	45.7	34.8	
	13.06.2022	53.4	42.0	
	28.06.2022	58.5	45.8	
	08.07.2022	43.2	37.7	
	23.07.2022	45.7	32.7	
	09.08.2022	41.4	33.1	
	27.08.2022	58.0	40.3	
	13.09.2022	50.0	41.2	
	28.09.2022	48.8	37.8	
	12.10.2022	59.9	49.0	
	27.10.2022	50.4	42.3	
	12.11.2022	57.9	44.5	
	28.11.2022	68.9	52.8	
	13.12.2022	53.6	44.2	
	28.12.2022	55.4	45.2	
	12.01.2023	58.9	48.6	
	28.01.2023	60.0	50.5	
	13.02.2023	48.2	35.8	
	25.02.2023	50.9	46.0	
	11.03.2023	50.0	42.5	
	27.03.2023	56.3	48.4	
		Minimum	41.4	32.7
		Average	52.9	42.7
	98percentile	64.8	51.7	
	Maximum	68.9	52.8	

OCP III Base Workshop(CN2)

	Date of Sampling GSR 742 (E) Standards	Noise levels in dB (A)	
		Leq Day	Leq Night
S.NO.	DATE	75	70
1	07.04.2022	53.4	48.7
2	25.04.2022	54.7	44.0
3	09.05.2022	57.2	49.5
4	23.05.2022	58.5	43.6
5	13.06.2022	57.2	45.9
6	28.06.2022	57.1	47.9
7	08.07.2022	47.3	37.1
8	25.07.2022	42.2	33.3
9	09.08.2022	59.8	44.8
10	25.08.2022	56.6	48.9
Min		42.2	33.3
Average		54.4	44.4
98per		59.6	49.4
Max		59.8	49.5

Name of the Location	Date of Sampling	Noise levels in dB (A)	
		Leq Day	Leq Night
GSR 742 (E) Standards		75	70
RG OPEN CAST –III EXPANSION –II PROJECT (CHP) CN2	14.09.2022	57.5	47.7
	29.09.2022	60.0	46.7
	13.10.2022	66.0	48.6
	28.10.2022	62.7	52.5
	14.11.2022	67.4	53.6
	29.11.2022	69.8	57.0
	14.12.2022	58.2	53.4
	29.12.2022	62.6	56.8
	13.01.2023	57.1	48.7
	30.01.2023	57.5	43.2
	14.02.2023	62.4	49.6
	27.02.2023	55.7	41.2
	13.03.2023	58.9	47.0
	28.03.2023	61.0	52.0
	98 Percentile	69.2	56.9
	minimum	55.7	41.2
	maximum	70.0	57.0
	average	61.2	49.9

Name of the Location	Date of Sampling	Noise levels in dB (A)	
		Leq Day	Leq Night
GSR 742 (E) Standards		75	70
Pothana Colony BN1	07.04.2022	36.6	28.4
	25.04.2022	42.1	35.5
	09.05.2022	44.7	35.3
	23.05.2022	35.3	28.6
	11.06.2022	39.3	29.6
	27.06.2022	43.1	31.0
	07.07.2022	41.3	26.6
	23.07.2022	36.8	29.8
	08.08.2022	39.3	29.2
	25.08.2022	39.1	27.0
	13.09.2022	41.6	35.8
	28.09.2022	45.4	34.8
	98 Percentile	45.2	35.7
	Minimum	35.3	26.6
	Maximum	45.4	35.8
Average	40.4	31.0	

Name of the Location	Date of Sampling	Noise levels in dB (A)	
		Leq Day	Leq Night
GSR 742 (E) Standards		75	70
As per new work order Allur Village BN3	14.10.2022	42.4	32.7
	29.10.2022	37.9	27.4
	15.11.2022	46.6	33.8
	30.11.2022	41.4	30.3
	15.12.2022	38.2	28.6
	30.12.2022	37.9	29.5
	14.01.2023	40.9	31.5
	31.01.2023	47.1	34.9
	15.02.2023	37.4	29.2
	26.02.2023	38.1	28.2
	14.03.2023	46.0	33.7
	29.03.2023	49.3	36.5
	98 Percentile	48.8	36.1
	minimum	37.4	27.4
	maximum	49.3	36.5
average	41.9	31.4	

Name of the Location	Date of Sampling	Noise levels in dB (A)	
		Leq Day	Leq Night
GSR 742 (E) Standards		75	70
As per new work order Singireddypalli BN4	14.10.2022	48.3	35.8
	29.10.2022	39.4	27.1
	15.11.2022	42.6	30.9
	30.11.2022	45.4	31.8
	15.12.2022	39.9	26.3
	30.12.2022	35.3	27.2
	14.01.2023	49.4	35.7
	31.01.2023	47.1	38.5
	15.02.2023	41.8	34.8
	26.02.2023	39.3	35.4
	14.03.2023	38.1	23.6
	29.03.2023	41.6	26.4
	98 Percentile	49.2	37.9
	Min	35.3	23.6
	Max	49.4	38.5
Average	42.4	31.1	