
 <p><b>5 DECADES OF UNEARTHING ENERGY</b></p>	<p>वेस्टर्न कोलफील्ड्स लिमिटेड Western Coalfields Limited (मिनीरत्न कंपनी) (A Miniratna Company) (A Subsidiary of Coal India Limited)</p>	 <p>ANGARA- Official mascot of Coal India Limited</p>
<p>उपक्षेत्रीय प्रबंधक कार्यालय, घोरावाडी कोलियरी नं.2 -तानसी उपक्षेत्र, पो. घोरावाडी, जिला-छिन्दवाड़ा(म.प.) ४८०५५५ CIN- U10100MH1975GOI018626</p>	<p>OFFICE OF THE SUB AREA MANAGER, GHORAWARI-TANDSI SUB AREA, PO- Ghorawari, Distt. Chhindwara (MP) 4805 5</p>	
<p>पंजी.कार्या.:कोल इस्टेट, सिविल लाइन्स, नागपुर -४४०००१ सन्दर्भ:- वेकोलि/कन्हान/घोरा ता उ क्षेत्र/उप क्षेत्र /2026/201</p>	<p>Regd. Office: Coal Estate, Civil lines, Nagpur-440001 दिनांक- 25.05.2026</p>	

प्रति,


1. Regional Officer,  
Integrated Regional Officer(Bhopal),MOEF&CC,  
Kendriya Paryavarn Bhavan, Link Road No.3,  
E-5,Ravishankar Nagar, Bhopal-462016(M.P)

2. Director (Monitoring Cell), MOEF&CC,  
Indira Paryavarn Bhayan,Jorbag Road,Aligunj,  
New Delhi-110003

**विषय:** Submission of Six Monthly EC Compliance Report of Tandsi UG Mine (EC letter no J-11015/64/82/-1A.II(M) dated 11.12.1991 For production Capacity 0.9 MTPA in Area of 611.80 HA) for the period of Oct-2025 to March 2026 .

महोदय,

Reference to the above subject, please find enclosed herewith Six Monthly EC Compliance Report of Tandsi UG Mine of Kanhan Area, WCL for the period of Oct-2025 to March 2026 for kind perusal.

  
उपक्षेत्रीय प्रबंधक  
घोरावाडी तानसी उपक्षेत्र

प्रतिलिपि:

1. महाप्रबंधक (माइनिंग)/विभागाध्यक्ष (पर्यावरण) वेकोलि मुख्यालय, नागपुर
2. क्षेत्रीय महाप्रबंधक, कन्हान क्षेत्र
3. क्षेत्रीय नोडल अधिकारी(पर्यावरण), कन्हान क्षेत्र

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**WORLD  
ENVIRONMENT  
DAY**



**SIX MONTHLY COMPLIANCE REPORT OF  
ENVIRONMENTAL CLEARANCE**

**TANDSI UG MINE**

**(0.90 MTPA IN AREA OF 611.80 HA)**

**EC NO. - J-11015/64/82/IA/II**

**DATED 11.12.1991**



**WESTERN COALFIELDS LIMITED  
KANHAN AREA  
PO: DUNGARIA, CHHINDWARA (MP)-480553**

**PERIOD - OCT-2025 TO MARCH-2026**



# Western Coalfields Ltd.



Present Status  
Kanhana Area  
**Tandsi U/G**  
(0.9 MTPA)

S. No.	Contents
1.	Data Sheet
2.	EC Letter (0.90 MTPA )
3.	Additional Letter from MoEF & CC (0.90 MTPA)
4.	Compliance Status of Environmental Clearance Condition
5.	Environmental Management at Tandsi UG mine Air Pollution & Water Pollution Control Measures
6.	Consent to Operate (CTO) letter obtained from MPPCB
7.	Details of Coal Production in Last Five Years
8.	Environment Monitoring reports for the period October-2025 to March-2026.
9.	Groundwater Monitoring reports for period October-2025 to March-2026.
10.	Copy of Approval letter along with Approved Mine Closure Plan

**Monitoring Implementation of Environmental Safeguards**  
**Ministry of Environment & Forest**  
**Western Regional, Regional Office, Bhopal**

**DATA SHEET**

<b>Sr. No.</b>	<b>Particulars</b>	<b>Details</b>
1	Project type: River Valley/Mining/Industry/Thermal/Nuclear/Other (Specify)	Coal Mining
2	Name of Project	Tandsi Project (Underground Coal Mine)
3	Environmental Clearance Letter (s) OM No. & Date	MOEF No: (i) EC letter No.: J-11015/64/82.IA-II Dated 11.12.1991 (ii) Clarification regarding production capacity issued vide MoEFCC letter no.J-15012/4112005-IA-II(M) DT.13/09/2005
4	Location: a. Districts b. State (S) c. Location: Latitude Longitude	Chhindwara Madhya Pradesh N-22°10' 26'' to 22°11' 51'' E-78°17' 38'' to 78°21' 11''
5	Address for Correspondence: a. Address of the Concerned Project Chief Engineer (With Pin Code & telephone /telex/fax numbers) b. Address of Executive/Project Engineer/Manager (With Pin Code & telephone /telex/fax numbers)	General Manager, WCL Kanhan Area, PO-Dungaria, Dist-Chhindwara (MP) Pin- 480553 Ph- 07160-231245-48 07160-230504 Sub Area Manager, Tandsi, WCL, Kanhan Area, PO: Rampur, Dist-Chhindwara (MP) 480555 Ph- 07160-267055 Fax- 07160-267022
6	a) Salient Features of the Project	i) Production Capacity: 0.90MTPA EC area-611.80 Ha Forest : 317 Ha. Agriculture/Tenancy Land : 41.70 Ha. Other land: 253.10 Ha Total:611.80 Ha Surface rights-143.0 Ha Mining Rights- 611.80 Ha

	<p>b) Salient Features of the Environmental Management Plans</p>	<p>ii) Method of mining: - B &amp; P with Caving</p> <p>(i)PH held on – not applicable as proposal for EC and CTE was Prior to EIA notification in 1994</p> <p>(ii) Environment Clearance for 0.90 M.T.P.A. by MOEF in 1991</p> <p>(iii) Application for EC re-validation for Tandsi UG mine was made in accordance to Ministry’s Notification dated 06/04/2018. The reply received stated that “<b>Ministry’s Notification dated 06/04/2018 is not applicable to the project</b>”.(Copy of same is attached as Annexure -1)</p> <p>iii) <b>Pollution Control Measures:</b></p> <p>A) <b>Air Pollution Control Measures:</b></p> <p>(a) Water is sprinkled on coal face before drilling. Water is also sprinkled on transportation roads and on coal stocks.</p> <p>(b) 35 Nos. of fixed type sprinklers are provided for sprinkling water at coal stock yard, weighbridge and coal transportation road.</p> <p>B) <b>Water Pollution Control Measures:</b> Mine Water is retained in the mine sump before discharge to the nearby surface water settling tank. Water is reused for roof-bolting in UG works and dust suppression by sprinklers</p> <p>C) <b>Noise Pollution Control Measures:</b> Development of green belt in between industrial complex &amp; residential area, ear plugs &amp; helmets are issued to the workers.</p> <p>D) <b>Control of ground water depletion</b> Roof top rainwater harvesting structures constructed at Manager Office &amp; Workshop Tandsi UG mine.</p> <p>E) <b>Disaster Management Plan</b> Emergency Response Plan for ensuring safety against any accidents/disaster.</p> <p>F) <b>Progressive Mine Closure Plan.</b></p> <p>G) <b>Monitoring &amp; Management Organization;</b> for smooth working &amp; handling of environment related jobs following organization is provided</p>						
		<table border="1"> <thead> <tr> <th data-bbox="879 1901 951 1966">SN</th> <th data-bbox="951 1901 1179 1966">Measures /Action</th> <th data-bbox="1179 1901 1522 1966">Agency Responsible</th> </tr> </thead> <tbody> <tr> <td data-bbox="879 1966 951 2074">1</td> <td data-bbox="951 1966 1179 2074">Environmental Control</td> <td data-bbox="1179 1966 1522 2074">1. General Manager, Kanhan Area. 2. GM(O), Kanhan</td> </tr> </tbody> </table>	SN	Measures /Action	Agency Responsible	1	Environmental Control	1. General Manager, Kanhan Area. 2. GM(O), Kanhan
SN	Measures /Action	Agency Responsible						
1	Environmental Control	1. General Manager, Kanhan Area. 2. GM(O), Kanhan						

				<p>Area.</p> <p>3. Area Nodal Officer, (Env.), Kanhan Area.</p> <p>4. Sub Area Manager, Tandsi.</p> <p>5. Staff Officer (C), Kanhan Area.</p> <p>6. Environmental Cell (WCL H.Q.)</p>
		2	Environmental Monitoring at Area level	<p>1. General Manager, Kanhan Area.</p> <p>2. GM(O), K.A</p> <p>3. Area Nodal Officer, (Env.), Kanhan Area.</p> <p>4. Sub Area Manager, Tandsi</p> <p>5. Staff Officer (C), Kanhan Area.</p> <p>6. Environmental Cell (WCL H.Q.)</p> <p>7. Environmental Laboratory of CMPDI RI-IV</p>
		3	Environmental Monitoring at mine level	<p>1. Sub Area Manager, Tandsi</p> <p>2. Area Nodal Officer, (Env.), Kanhan Area</p> <p>3. Nodal Officer, Tandsi.</p>
7	<p>Breakup of the Project Area:</p> <p>a) Submergence Area: Forest &amp; Non-Forest.</p> <p>b) Others.</p>	<p>Nil</p> <p>EC area-611.80 Ha</p> <p>Forest : 317 Ha.</p> <p>Agriculture/Tenancy Land : 41.70 Ha.</p> <p>Other land: 253.10 Ha</p> <p>Total:611.80 Ha</p> <p>Surface rights-143.0 Ha</p> <p>Mining Rights- 611.80 Ha</p>		
8	<p>Breakup of the Project affected population with enumeration of those losing house/dwelling units only agricultural land only both dwelling units &amp; agriculture land &amp; landless laborers / artisans</p> <p>a) SC, ST / Adivasis</p> <p>b) Others</p> <p>c) (Please indicate whether these figures are based on any scientific and systematic survey carried out or any provisional figures, if a survey is carried out give details &amp; year of survey)</p>	<p>a) N.A/69/NA</p> <p>b) N.A.</p>		

9	<p>Financial Details</p> <p>a) Project cost as originally planned &amp; subsequent revised estimate and the year of price reference.</p> <p>b) Allocation made for environmental management plans with item wise &amp; year wise break up.</p> <p>c) Benefit cost ratio/internal rate of items of refund &amp; year of assessment</p> <p>d) Whether (c) includes the cost of environmental management as shown in above.</p> <p>e) Actual expenditure incurred on the environmental management plans so far</p>	<p>a)Rs.47.46 Crores as per approved P.R. (updated Nov.2000)</p> <p>b) Allocation has been made for various activities</p> <p>i) Plantation</p> <p>ii) Environmental Monitoring</p> <p>iii) Socio-economic welfare measures</p> <p>iv) Air &amp; Water pollution control measures, compliance of statutory obligation like consent fee, water cess payment, authorizations under different legislations.</p> <p>Details given in Part-III.</p> <p>-</p> <p>Yes</p> <p>Rs.683.242Lakhs</p>
10	<p>Forest land requirement:</p> <p>a) The status of approval for diversion of forest land for non-forestry land</p> <p>b) The status of clearing/felling</p> <p>c) The status of compensatory afforestation, if any</p> <p>d) Comments on the viability &amp; sustainability compensatory afforestation programme in the light of actual field experience so far.</p>	<p>Forest clearance obtained vide letter no: 0-145/86/7c, dated 15.11.91 from Under Secretary, Govt. Of India.</p>
11	<p>The status of clear felling in non-forest areas (such as submergence area of reservoir, approach road etc.) if any with quantitative information required.</p>	<p>N.A.</p>
12	<p>Status of construction (Actual &amp; or Planed)</p> <p>a) Date of commencement (Actual &amp; or Planed)</p> <p>b) Date of completion (Actual &amp; or Planed)</p>	<p>a) Existing Mine, already commenced.</p> <p>b) Tandsi UG was running mine Since Nov.1993 and permanently closed on March 2024. (operated target capacity 0.9 MTPA)</p>
13	<p>Reason for delay, if project is yet to start</p>	<p>N.A.</p>
14	<p>Date of site visit</p> <p>a) Date on which the project was monitored by the regional office on previous occasions if any site visit.</p> <p>b) Date of site visits for the Monitoring report.</p>	<p>29.10.2023</p>
15	<p>Details of corresponding with project authorities for obtaining act on plans / information on status of compliance to safeguards other than the routine letters for</p>	<p>N.A.</p>

	logistic support for site visits) (the first monitoring report may contains the details of all the letters issued so far, but the later report may cover only the letter issued subsequently)	
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**WESTERN COALFIELDS LIMITED**  
**Six Monthly Environmental Monitoring Report**  
**Project of Kanhan Area for the period**  
**October-2024 to March-2025**  
**Tandsi UG**  
**PART –I**

Name of Project:	Tandsi Project {Underground Coal Mine}
Location And Address:	PO – Rampur Bhata Tehsil – Junnardeo Distt. – Chhindwara (M.P) Pin 480555
Address For Correspondance:	Sub Area Manager, Tandsi Sub Area, WCLKanhan Area PO – Rampur Bhata Tahsil – Junnardeo Distt. –Chhindwara. (M.P) Pin 480 555
M.O.E.F. Clearence Letter No.& Date:	J-11015/64/82/IA/II; Dt. 11/12/1991
M.O.E.F. Additional Director Letter No & Date:	J-15012/41/2005-JA. II (M); Dt. 13.09.2005
Period Of Status Report:	October 2025 To March 2026
Year Of Last Report Submission:	October 2025 To <sup>1</sup> March 2026
Year Of Commencement Of Project Work:	November 1993

**STATUS OF LAND ACQUISITION:**

TYPE OF LAND	REQUIRED AS PER EMP. (HA)	ACTUALY ACQUIRED AS ON DATE
Forest	317.00 Ha	299.40 Ha
Agriculture Tenancy Land	41.70 Ha	41.66 Ha
Others TandsiExvt. Land (T)	253.10 Ha	104.12 Ha
<b>TOTAL</b>	<b>611.80 Ha</b>	<b>445.18 Ha</b>

**STATUS OF LEGAL COMPLIANCES:**

Consent under Water (prevention and control of pollution)Act , 1974	Consent no. AW 56981 dated 01/11/22 valid upto31/10/24. CTO renewal has been discontinued since Mine permanently closed in March 2024.
Consent under Air (prevention & control of pollution) Act, 1981	Consent no. AW 56981 dated 01/11/22 valid upto31/10/24. CTO renewal has been discontinued since Mine permanently closed in March 2024.
Environment (Protection) act. 1986:	Environment audit report 2024-25 submitted online on MPPCB XGN portal.
Forest (Conservation) act1980:	Forest clearance obtained vide letter no: 0-145/86/7c, dated 15.11.91 from Under Secretary, Govt.Of India.

**PART –II**  
**STATUS OF ENVIRONMENT**

**AIR POLLUTION CONTROL:**

a. No Ambient Air Monitoring stations	Four Nos.
b. Name of Location (*) :-	(1) Workshop (Ktua-1) (2) Jet Hostel (Ktua-2) (3) Lamp Room (Ktua-3) (4) Colony (Ktua-4)
c. Ambient Air Quality Status for the parameters prescribed by status Pollution Control boards (average 95 % time weighted Values )**	Monitoring reports enclosed for period October'25 to Mar'26.

**WATER POLLUTION CONTROL:**

a. No. of stations and frequency of monitoring :-there is only one station i.e. Mine discharge point and frequency of monitoring is once in a fortnight as per GSR 742 (E).

b. Description of location (\*) :-Mine water discharge is monitored during operational stage of the mine.

Quantity of effluent discharged to local water course from each source in cubic meter per day: - nil

**NOISE POLLUTION CONTROL:**

a. No. of noise monitoring stations: - 2 (Two)

b. Description of location (\*) and db (a) value \*\*: -

- |                                |
|--------------------------------|
| 1. Near fan house<br>2. Colony |
|--------------------------------|

(\*) location of sampling stations are to be delineated on the working mine plan.

\*\* Detailed report monitoring of noise as per statute to be enclosed

## PART –III

### STATUS OF IMPLEMENTATION OF PROVISIONS OF EMP

#### LAND USE STATUS:

S.N	Particulars	As per EMP	Current Year	Progressive
1)	Area excavated (ha)	NA	Not applicable as this is an U/G mine	
2)	Top soil removed	NA	Not applicable as this is an U/G mine	
3)	OB removed	NA	Not applicable as this is an U/G mine	
4)	OB backfilled	NA	Not applicable as this is an U/G mine	
5)	OB Dumped (mm <sup>3</sup> )	NA	Not applicable as this is an U/G mine	
6)	Area recovered for Reclamation ( Physical Reclamation)	NA	Not applicable as this is an U/G mine	
	Area reclaimed biologically (Tree plantation on backfilled area)	NA	Not Applicable as this is an U/G mine	

#### PRODUCTION:

Targeted Capacity:	0.90 MTPA
Present Capacity:	0.90 MTPA

#### AFFORESTATION :

Sr. no.	Particulars	Current year	Progressive
1	OB dumps & embankments:	Not applicable for underground mine	
2	Safety zones:		
3	Back filled areas:		
4	Other area:		
Area under plantation (progressive):		34.35 ha (approx.)	
Nos. Of plants per hectare:		2500 plants per ha.	
Species planted:		Sagon, eucalyptus	

## **REHABILITATION AND RESETTLEMENT:**

<b>Sr.no.</b>	<b>Particulars</b>	<b>SC</b>	<b>ST (pro.)</b>	<b>Others</b>
1	No. of land oustees:	Nil	69	Nil
2	No. Of land oustees rehabilitated	Nil	Nil	Nil
3	No. Of paps/pars to be resettled:	Na	Na	Na
4	No. Of papas/pafs resettled:	Na	Na	Na
5	Area of new site (ha)	Na	Na	Na
6	Status of development:	Na	Na	Na
7	Civic amenities provided at new settlement site:	Na	Na	Na
8	Compensation	Na	3.31 lakhs	Na

## **ORGANISATION SET UP AT PROJECT LEVEL**

- 1. Shri S.K. Kanth, Sub-Area Manager/ Chief Manager (Mining), Tandsi Sub-area**
- 2. Shri Rajul Singh, Manager (Mining), Tandsi UG Mine**
- 3. Shri Rajul Singh, Nodal Officer (Environment), Tandsi Sub-area**

## **EXPENDITURE LAST THREE YEARS:**

### **CAPITAL: -**

<b>S.No.</b>	<b>Account Head</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>
1	Air Pollution Control	Nil	Nil	Nil
2	Water Pollution Control	Nil	Nil	Nil
3	Others	Nil	Nil	Nil
	<b>Total</b>	Nil	Nil	Nil

### **REVENUE: -**

<b>S.No.</b>	<b>Account Head</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>
1	Monitoring Air, Water & Noise	41.54 lakhs	34.24 lakhs	35.82 lakhs
2	Legal Expenses Consent	Nil	Nil	Nil
3	Others (Eco Development)	Nil	Nil	Nil
4	Water Cess/Payment	20.95 lakhs	32.82 lakhs	21.79 lakhs

	to CGWA for obtaining NOC			
5	Repair & Maintenance of Fixed Water Sprinklers	Nil	Nil	Nil
	<b>Total</b>	<b>62.49 lakhs</b>	<b>62.49 lakhs</b>	<b>57.61 lakhs</b>



proposed mining block. The cracks, if any developed at any time, should be filled up as early as possible.

- (vii) Township should be constructed on non-forest land.
- (viii) A separate Cell for environmental management in the mine should be set up with suitably qualified people, who will directly report to the Chief Executive. The laboratory facility should be provided to take samples of different environmental parameters.
- (ix) The progress report on the implementation of various environmental control measures and the status of environmental quality shall be submitted to this Ministry quarterly.
- (x) The Ministry or any other competent authority may stipulate any further conditions at any stage.
- (xi) The Ministry may revoke the clearance if the implementation of the stipulated conditions is not satisfactory.
- (xii) The above conditions will be enforced, inter alia under the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and the Environment (Protection) Act, 1986.

( S.K. DAS )  
SCIENTIST 'SE'

The Secretary,  
Department of Coal,  
Shastri Bhavan,  
New Delhi-110001

Copy for information and necessary action to:-

1. Chairman-cum-Managing Director, WCL Coal Estate, Civil Lines, Nagpur-440001.
2. Shri A.K. Chattarjee, Chief Conservator of Forests, Regional Office, E-3/24C, Arera Colony, BHOPAL-462016.
3. Shri D.S. Tiwari, Chairman, Madhya Pradesh Pradushan Niwaran Mandal Paryavaran Parisar, Sector E-3 Arera Colony, Nr. Habibganj Police St. Bhopal-462016.

( S.K. DAS )  
SCIENTIST 'SE'

No.J-15012/41/2005-JA II(M)  
Government of India  
Ministry of Environment & Forests

Paryavaran Bhawan,  
CGO Complex, Lodi Road,  
New Delhi --110003.

Dated: 13<sup>th</sup> September 2005

Shri M.K. Shukla,  
Chief General Manager (Env. Eng.),  
M/s Coal India Ltd.,  
Core 1, 4<sup>th</sup> Floor, SCOPE Minar,  
Laxmi Nagar District Centre,  
Delhi - 110092.


Sub: Clarification indicating environmental clearance for Tandsi UGP of M/s  
Western Coalfields Ltd. - reg.

Sir,

This is with reference to your letter dated 23.06.2005 on the above referred subject. The undersigned has been directed to confirm that the production capacity of the aforesaid mine project was approved at 0.9 million tonnes per annum (MTPA) in the environmental clearance accorded vide this Ministry's letter dated 11.12.1991.

This issues with the approval of the competent authority.

Yours faithfully,

  
(Dr. F. Chandini)  
Additional Director

## PART –IV

### STATUS OF COMPLIANCE OF EMP CONDITIONS GIVEN IN ENVIRONMENTAL CLEARANCE LETTER

MOEF LETTER NO. : NO. J-11015/64/82/IAO-II/ dated 11.12.1991

MOEF Additional Letter Reference :J-15012/41/2005-JA.II (M)dated 13.09.2005

S.NO.	CONDITIONS	COMPLAINCE STATUS
1	The levels of SPM concentration should not exceed 500 micrograms /cum .The emission of SO <sub>2</sub> , NO <sub>x</sub> , and CO should be maintained below the level prescribed by the competent authority	The levels of SPM are within the permissible limit, as per the Environmental Monitoring report for Oct-2025 to March-2026 of CMPDIL, Nagpur (Copy enclosed). Regular monitoring of PM <sub>10</sub> , SPM, SO <sub>x</sub> and NO <sub>x</sub> is carried out once in every fortnight as per GSR 742 (E) dated 25.09.2000 Mine permanently closed since March 2024.
2	The quality of effluent finally discharged into the main drainage system should conform to the standard prescribed under GSR919 (E) Dated 12.9.88	Monitoring of mine water discharge is carried out as per GSR 742 (E) dated 25.09.2000. The quality of mine water discharge meets the norms prescribed in the above notification. Mine permanently closed since March 2024.
3	A silencer shall be installed in the main mine fan and to prevent noise pollution .The CHP installation should use polymers including rubber and polyurethrene to reduce noise levels .The noise levels should not exceed 40dbA at a distance of 100 meter from the source.	An evase has been provided at the ventilation outlet of the mine. Mine permanently closed since March 2024. Moreover as per the Report on Environmental Monitoring for period of Oct 25 to Mar 26 CMPDIL, Nagpur (Copy enclosed), the noise level data of this mine is found to be within prescribed limits.
4	No change of methodology of working and scope of the working should be made without the prior approval of this Ministry.	No change of methodology of working and scope of the working has been made.
5	Regular monitoring of various environmental quality parameters including air and water quality shall be carried out and the results of the monitoring shall be recorded and should be furnished to the State Pollution Control Board as well as to the Ministry Quarterly.	Being complied. Regular Air, Water and Noise quality monitoring is undertaken as per GSR 742 (E). Results of environmental monitoring are regularly communicated to MPPPCB and MoEF, Bhopal along with six monthly EC compliance.
6	The project proponent should check up the development of cracks if any due to subsidence regularly in the proposed mining block. The cracks, if any developed at any time should be filled up as early as possible.	Being complied. Subsidence monitoring is regularly carried out to check for cracks.
7	Township should be constructed on non-forest land.	The township has been constructed on Non coal bearing land.

8	A separate cell for environmental management in the mine should be set up with suitable qualified people, who will directly report to the Chief executive .The laboratory facilities should be provided to take samples of different environmental parameters.	An environment management cell exists at the project level, which is headed by the Sub Area Manager of the project and assisted by Nodal Officer (Env). An environmental management cell also exists at the Area, which is under the overall control of the Area General Manager. This cell is manned by the General Manager (Operation), assisted by Area Nodal Officer (Env) and Staff Officer (Civil)
9	The progress report on the implementation of various environmental control measures and the status of environmental quality shall be submitted to this ministry quarterly.	Environmental Monitoring reports are submitted along with six monthly EC compliance reports. Report on compliance to EC conditions is also submitted to MoEF & CC on a regular basis.
10	The Ministry or any other competent authority may stipulate any further conditions at any stage.	Noted.
11	The Ministry may revoke the clearance if the implementation of the stipulated conditions is not satisfactory.	Noted.
12	The above conditions will be enforced, inter alia under the Water (Prevention & Control of pollution) Act 1974, Air (Prevention &Control of pollution ) Act 1981,and the Environment (Protection) Act 1986.	Noted

# **ENVIRONMENTAL MANAGEMENT AT TANDSI UG MINE**

## **Air Pollution Control Measures**

- i. 35 Nos. of Fixed Water Sprinklers provided around coal stock yard and coal transport road.
- ii. Mobile water tanker (Capacity -4500 Litres) provided for dust suppression on coal transport roads, as per requirement.
- iii. 07 Nos of sprinklers provided over conveyer belt and bunker
- iv. 200 nos plants have been planted in mine lease area of mine in FY 2021-22
- v. 10000 no. of plants planted in FY 2024-25.





Tandsi UG Mine Incline



**Karanjpani, Madhya Pradesh, India**  
**Unnamed Road, Karanjpani, Madhya Pradesh 480555, India**  
**Lat 22.171337°**  
**Long 78.320367°**  
**20/10/22 01:03 PM GMT +05:30**

Fixed sprinklers installed at conveyor belt in the mine



Covered Conveyor belt with water sprinkling arrangement



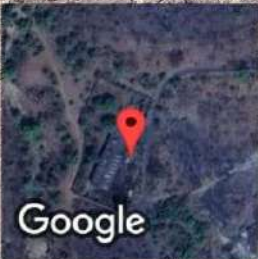
**GPS Map Camera**  
Nonkhadak, Madhya Pradesh, India  
58CC+PWX, Nonkhadak, Madhya Pradesh 480555, India  
Lat 22.172054°  
Long 78.323556°  
29/10/23 01:22 PM GMT +05:30

**Fixed Sprinklers around coal stockyard and along coal transport road**



Black Topped Transportation Road at Tandsi UG

 **GPS Map Camera**



Karanjpani, Madhya Pradesh, India  
58CC+PWX, Karanjpani, Madhya Pradesh 480555, India  
Lat 22.172051°  
Long 78.318862°  
18/05/24 12:27 PM GMT +05:30



Plantation carried out in mine lease area

 **GPS Map Camera**



Google

**Rampur, Madhya Pradesh, India**  
588M+QJ8, Rampur Road, Rampur, Nonkhadak, Madhya Pradesh 480555, India  
Lat 22.166293°  
Long 78.3342°  
18/05/24 01:51 PM GMT +05:30

Plantation carried out in the Mine lease area



 **GPS Map Camera**



Google

**Nonkhadak, Madhya Pradesh, India**  
589J+C2, Nonkhadak, Madhya Pradesh 480555, India  
Lat 22.16799°  
Long 78.329883°  
18/05/24 01:53 PM GMT +05:30



[TownshipTandsi UG](#)

**Water Pollution Control and Water Conservation Measures**

- i. Underground Sump for settling of subsurface mine water
- ii. Settling tank of capacity 297 m<sup>3</sup> for settling of mine water discharge
- iii. Recycle of settled mine water for Underground roof-bolting/ fixed water sprinklers/ mobile



Sedimentation Tank Capacity-297 m<sup>3</sup>  
installed at Tandsi UG

 **GPS Map Camera**



Google

Karanjpani, Madhya Pradesh, India  
58CC+PWX, Karanjpani, Madhya Pradesh 480555, India  
Lat 22.171493°  
Long 78.319015°  
18/05/24 12:30 PM GMT +05:30





**Rainwater Harvesting Arrangement  
Tandsi UG Mine  
WCL Kanhan Area**



**Rainwater Harvesting  
Arrangement, Tandsi UG Mine,  
WCL Kanhan Area**

**Copy of Consent to Operate issued by MPPCB**



## Consent Order

M.P. Pollution Control Board  
E-5, Arera Colony  
Paryavaran Parisar, Bhopal - 16 MP  
Tele : 0755-2466191, Fax-0755-2463742

RED-LARGE

CCA-Renewal

CONSENT NO: \*\*\*

PCB ID: 16000

Outward No:116766,01/11/2022

Consent No:AW-56981

To,

The Occupier,  
M/s. Tandsi U'g Coal Mine - WCL Kanhan Area Chhindwara,  
Aera- 611.08 Hct., Vill : Rampur, Teh : Jamai ,  
Dist : Chhindwara (M.P.) Latitude : 22.1718 Longitude : 78.3226

Subject: Grant of Renewal of Consent under section 25 of the Water (Prevention & Control of Pollution) Act,1974 under section 21 of the Air (Prevention & Control of Pollution) Act,1981

Ref: Renewal of Consent Application R. No. 1212227 Dt. 27/09/2022 and last communication received on Dt.21/10/2022

With reference to your above application for Renewal of Consent has been considered under the aforesaid Acts and existing rules therein. The M. P. Pollution Control Board has agreed to grant consent up to 31/10/2024, subject to the fulfillment of the terms & conditions, enclosed with this letter and-

**SUBJECT TO THE FOLLOWING CONDITIONS :**

- Location: Vill : Rampur, Teh : Jamai , Dist : Chhindwara (M.P.)
- Mining Lease area: 611.08 Hact
- Product & Production Capacity:

Activity / Product	Qty / year
Mining of Coal	0.9 Million Ton Per Year.

- For any change in above industry shall obtain fresh consent from the Board.
- PP shall ensure that mining done in sanctioned lease area as per valid mining plan duly approved by the competent Authority & in compliance of conditions laid in EC granted by MoEF & CC vide J-11015/64/82-IA-II Dated 11.12.1991. Mine is having EC of 1991 which is prior to EIA notification 1994 & no capacity is mentioned in EC, hence mine management shall obtain a clarification from MOEFCC that it is applicable for present production capacity.
- Mine management shall plan for installation of sewerage network with proper STP in time bound manner for the domestic effluent generated from the colony area. PP shall provide wind breaking wall and fog forming water sprinklers in coal loading/unloading area for better control of Air pollution.
- Management shall ensure timely repair and maintenance of its damaged coverings of transfer points and proper maintenance of conveyor belt to avoid any leakages/spillage of the coal dust. Mine management shall ensure proper maintenance of STP / ETP so as to treat and properly utilize the treated effluent.
- As directed in the Fly Ash Utilisation Notification Issued by MoEF & CC, GOI on dt 31.12.2021; The PP shall initiate all necessary actions from the project level to ensure time bound compliances listed in the notification to start utilisation of fly ash in the OB dumps without delay. As per the notification, the fly ash generated since First Jan. 2022 is to be utilised on priority.

The Validity of the consent is up to 31/10/2024 and has to be renewed before expiry of consent validity. Online application through XGN with annual license fees in this regard shall be submitted to this office 6 months before expiry of the consent/Authorization. Board reserves the right to amend/cancel / revoke the above condition in part or whole as and when required.

**Enclosures:-**

- \* Conditions under Water Act
- \* Conditions under Air Act
- \* General conditions

CC to :-

- District Mining Officer, (Mining Section), Collector office, Chhindwara Dist. Chhindwara (M.P.) for information.
- M.P. State Mining Corporation, Arera Hills, Jail Road, Bhopal (M.P.) for necessary action please.
- Regional officer, Regional office, MPPCB, Chhindwara (M.P.)

By the order of Chairman, MPPCB



(Organic Authentication on AADHAR from UIDAI Server)  
TPAV # 4MV9R8UAFC

Signature Not Verified  
Digitally Signed by : A. A.  
Mishra, Member Secretary  
Date: 01/11/2022 04:06:35 PM

  
ACHYUT ANAND MISHRA  
Member Secretary



## Consent Order

M.P. Pollution Control Board  
E-5, Arera Colony  
Paryavaran Parisar, Bhopal - 16 MP  
Tele : 0755-2466191, Fax-0755-2463742

### **CONDITIONS PERTAINING TO WATER (PREVENTION & CONTROL OF POLLUTION) ACT 1974 :-**

1. The daily quantity of Mine water shall not exceed 585.0 kld, and the daily quantity of sewage shall not exceed 435.00 KL/day. Mine water & Sewage to be treated & reused inside mining lease area of 611.08 Hact. Mine management shall plan for installation of sewerage network with proper STP in time bound manner for the domestic effluent generated from the colony area.

#### 2. Trade Effluent Treatment:-

The applicant shall provide comprehensive effluent treatment system as per the proposal submitted to the Board and maintain the same properly to achieve following standards-

pH	Between	5.5 - 9.0	TDS	Not exceed	2100 mg/l.
Suspended Solids	Not exceed	100 mg/l.	Chlorides	Not exceed	1000 mg/l.
BOD 3 Days 27°C	Not exceed	30 mg/l.			
COD	Not exceed	250 mg/l.			
Oil and grease	Not exceed	10 mg/l.			

For other parameters general standards of discharge as notified under EP Act 1986 shall be applicable.

3. Sewage Treatment :- The applicant shall provide comprehensive sewage treatment system as per the proposal submitted to the Board and maintain the same properly to achieve following standards-

pH	Between	5.5 - 9.0
Suspended Solids	Not exceed	100 mg/l.
BOD , Days 27°C	Not exceed	30 mg/l.
COD	Not exceed	250 mg/l.
Oil and grease	Not exceed	10 mg/l.
pH	Between	5.5 - 9.0

Sr	Water Code (Qty in klpd - Kilo Ltr per Day)	WC : 210.000	WWG : 64.000	Water Source	Remark
1	Domestic	535.000	435.000	Mine water	Mine water & sewage to be treated & used within mine lease area for industrial/ domestic/ plantation purposes.
2	Spray in Mines	735.000	585.000	Mine water	

4. The effluent shall be treated up to prescribed Standards and reuse in the process, for cooling and for green belt devolvement/gardening within premises. Hence zero discharge condition shall be practiced. In no case treated effluent shall be discharged outside of industry/unit premises.

5. Any change in production capacity, process, raw material used etc. and for any enhancement of the above prior permission of the Board shall be obtained. All authorized discharges shall be consistent with terms and conditions of this consent. Facility expansions, production increases or process modifications which result new or increased discharges of pollutants must be reported by submission of a fresh consent application for prior permission of the Board

6. All treatment/control facilities/systems installed or used by the applicant shall be regularly maintained in good working order and operate effectively/efficiently to achieve compliance of the terms and conditions of this consent

7. The specific effluent limitations and pollution control systems applicable to the discharge permitted herein are set forth as above conditions.

#### 8. Compilation of Monitoring data-

i. Samples and measurements taken to meet the monitoring requirements specified above shall be representative of the volume and nature of monitored discharge.

ii. Following promulgation of guidelines establishing test procedures for the analysis of pollutants, all sampling and analytical methods used to meet the monitoring requirements specified above shall conform to such guidelines unless otherwise specified sampling and analytical methods shall conform to the latest edition of the Indian Standard specifications and where it is not specified the guidelines as per standard methods for the examination of Water and Waste latest edition of the American Public Health Association, New York U.S.A. shall be used.

iii. The applicant shall take samples and measurement to meet the monthly requirements specified above and report online through XGN the same to the Board.

**Consent No:AW-56981**



## Consent Order

M.P. Pollution Control Board  
E-5, Arera Colony  
Paryavaran Parisar, Bhopal - 16 MP  
Tele : 0755-2466191, Fax-0755-2463742

### **9. Recording of Monitoring Activities & Results-**

- i. The applicant shall make and maintain online records of all information resulting from monitoring activities by this Consent.
- ii. The applicant shall record for each measurement of samples taken pursuant to the requirements of this Consent as follows:
  - (i) The date, exact place and time of sampling
  - (ii) The dates on which analysis were performed
  - (iii) Who performed the analysis?
  - (iv) The analytical techniques or methods used and
  - (v) The result of all required analysis
- iii. If the applicant monitors any Pollutant more frequently as is by this Consent he shall include the results of such monitoring in the calculation and reporting of values required in the discharge monitoring reports which may be prescribed by the Board. Such increased frequency shall be indicated on the Discharge Monitoring Report Form.
- iv. The applicant shall retain for a minimum of 3 years all records of monitoring activities including all records of Calibration and maintenance of instrumentation and original strip chart regarding continuous monitoring instrumentation. The period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the applicant or when requested by Central or State Board or the court.

### **10. Reporting of Monitoring Results:-**

Monitoring Information required by this Consent shall be summarized and reported by submitting a Discharge Monitoring report on line to the Board.

### **11. Limitation of discharge of oil Hazardous Substance in harmful quantities:-**

The applicant shall not discharge oil or other hazardous substances in quantities defined as harmful in relevant regulations into natural water course. Nothing in this Consent shall be deemed to preclude the institution of any legal action nor relieve the applicant from any responsibilities, liabilities, or penalties to which the applicant is or may be subject to clauses.

### **12. Limitation of visible floating solids and foam:**

During the period beginning date of issuance the applicant shall not discharge floating solids or visible foam.

### **13. Disposal of Collected Solid waste/sludge-**

All hazardous waste/sludge shall be disposed of as per the Authorization issued under Hazardous & other waste (M&TM) Rules 2016. And/other Solids Sludges, dirt, silt or other pollutant separated from or resulting from treatment shall be disposed of in such a manner as to prevent any pollutant from such materials from entering any such water. Any live fish, Shall fish or other animal collected or trapped as a result of intake water screening or treatment may be returned to eaters body habitat.

### **14. Provision for Electric Power Failure-**

The applicant shall assure to the consent issuing authority that the applicant has installed or provided for an alternative electric power source sufficient to operate all facilities utilized by the applicant to maintain compliance with the terms and conditions of the Consent.

### **15. Prohibition of Bypass system of treatment facilities-**

The diversion or by-pass of any discharge from facilities utilized by the applicant to maintain compliance with the terms and conditions of this Consent is prohibited except :

- i. where unavoidable to prevent loss of life or severe property damage, or
- ii. Where excessive storm drainage or run off would damage any facilities necessary for compliance with the terms and conditions of this Consent. The applicant shall immediately notify the consent issuing authorities in writing of each such diversion or by-pass in accordance with the procedure specified above for reporting non-compliance.

16. Industry/Institute/mine management shall submit the information online through XGN in reference to compliance of consent conditions.

17. The mine management shall maintain zero discharge conditions as far as possible. The Mine shall optimize the water abstraction from the surface water source, if any, by utilizing the mine discharge for spraying on haul roads, mine area and loading - unloading area, for sanitary purposes by providing separate supply lines, dust suppression and for plantation in order to ensure zero discharge. The treated domestic effluent shall also be utilized accordingly and zero discharge conditions shall be maintained.

18. The mine water should be treated in siltation ponds. The quality of siltation pond water shall be regularly monitored and mitigation measure taken.

**Consent No:AW-56981**



## Consent Order

M.P. Pollution Control Board  
E-5, Arera Colony  
Paryavaran Parisar, Bhopal - 16 MP  
Tele : 0755-2466191, Fax-0755-2463742

19. Rain water harvesting shall be undertaken to recharge ground water source and status of implementation submitted to the Board. Hydro-geological study of the area shall be reviewed annually. In case any adverse effect on ground water quality and quantity is observed, mining shall be stopped and resumed only after applying mitigating steps to restore the same.

20. Mine management shall comply with the conditions stipulated in the Environmental Clearance granted by MoEF&CC.

### **CONDITIONS PERTAINING TO AIR (PREVENTION & CONTROL OF POLLUTION) ACT 1981 :-**

1. The applicant shall provide comprehensive air pollution control system consisting of control equipments as per the proposal submitted to the Board with reference to generation of emission and same shall be operated & maintained continuously so as to achieve the level of pollutants to the following standards:-

Name of section	Capacity	Control equipment to be installed	SPM/RSPM/SO <sub>2</sub> /NO <sub>x</sub> (Time weighted Average) <sup>±</sup> (µg/Nm <sup>3</sup> )
Loading-unloading, Haul road, Transportation, CHP etc	Fugitive Emission	Dust Collector, Dust Suppressor, Green Belt, Water Sprinkler, Wind Breaking Wall	Annual average ; 430 / 215/80/80 24 hour average ; 600/300/120/120

2. Ambient air quality at the boundary of the industry/unit premises shall be monitored and reported to the Board regularly on quarterly basis. The Ambient air quality norms are prescribed in MoEF gazette notification no. GSR/826(E), dated:

16/11/09. Some of the parameters are as follows:

- Particulate Matter (less than 10 micron) - 100 µg/m<sup>3</sup> (PM<sub>10</sub> µg/m<sup>3</sup> 24 hrs. basis)
- Particulate Matter (less than 2.5 micron) - 60 µg/m<sup>3</sup> (PM<sub>2.5</sub> µg/m<sup>3</sup> 24 hrs. basis)
- Sulphur Dioxide [SO<sub>2</sub>] (24 hrs. Basis) - 80 µg/m<sup>3</sup>
- Nitrogen Oxides [NO<sub>x</sub>] (24 hrs. Basis) - 80 µg/m<sup>3</sup>
- Carbon Monoxide [CO] (8 hrs. Basis) - 2000 µg/m<sup>3</sup>

3. The industry shall take adequate measures for control of noise level generated from industrial activities within the premises less than 75 dB(A) during day time and 70 dB(A) during night time.

4. The industry/unit shall make the necessary arrangements for control of the fugitive emission from any source of emission/section/activities.

5. All other fugitive emission sources such as leakages, seepages, spillages etc shall be ensured to be plugged or sealed or made airtight to avoid the public nuisance.

6. All the internal roads shall be made pucca to control the fugitive emissions of particulate matter generated due to transportation and internal movements. Good housekeeping practices shall be adopted to avoid leakages, seepages, spillages etc.

7. Industry shall take effective steps for extensive tree plantation preferably in 03 rows of the local tree species with minimum spacing of 2X2 meters within or around the industry/unit premises for general improvement of environmental conditions and as stated in below.

8. Mine management shall strictly comply with the directions of the Hon'ble NGT in the matters concerning issues pertaining to coal mines and shall report accordingly

9. Mine management shall ensure the installation of CAAQMS stations at suitable locations to monitor ambient air quality in the leased area and its vicinity and shall provide its suitable unhindered connectivity with Environment Surveillance Centre of the MPPCB and transmit the data within 3 month's time.

10. Whenever the mine will be in operation coal crushing, conveyor system, haulage road, transfer points, coal loading and unloading in railway wagons / trucks should be provided with adequate number of high efficiency dust extraction / suppression / water sprinkling system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated. Dust control measures shall be adopted at coal transfer point of the machines as per the need.

11. Major approach roads and haul roads shall be metal topped; drills shall be wet operated to reduce the fugitive emission.

12. The mine management shall comply with the conditions stipulated in the Environmental Clearance granted by MoEF&CC.

**Consent No:AW-56981**



## Consent Order

M.P. Pollution Control Board  
E-5, Arera Colony  
Paryavaran Parisar, Bhopal - 16 MP  
Tele : 0755-2466191, Fax-0755-2463742

13. Sufficient number of water tanker for water sprinkling shall be provided for the control of fugitive emission from haul road.
14. PP shall provide wind breaking wall and fog forming water sprinklers in coal loading/unloading area for better control of Air pollution.

### **GENERAL CONDITIONS:**

#### **(1) MANAGEMENT & DISPOSAL OF FLY ASH**

MoEF &CC GOI has come up with recent notification dated 31.12.2021 regarding procedures & mandate to increase utilisation of fly ash generated by the thermal power plants through the Coal mines under extended producers responsibility. This notification No.SO 5481 (E)dated 31.12.2021 has been published suppressing the previous Fly Ash Utilisation Notification dt 14.09.199 as amended. Following paras no. 3 & 4 of part B at page no. 16 of the notification are reproduced for taking necessary action at your end ---

(3)  
It shall be obligatory on all mines located within 300 Kilometres radius of thermal power plant to undertake backfilling of ash in mine voids or mixing of ash with external overburden dumps under extended Producer Responsibility (EPR). All mine owners or operators (Government, Public and Private sector) within three Hundred kilometres (by road) from coal or lignite based thermal power plants, shall undertake measure to mix at least 25 percent of ash on weight to weight basis of the materials used for external dump of overburden, backfilling or stowing of mine (running or abandoned as the case may be) as per the guidelines of the Director General of Mines Safety (DGMS).

Provided that such thermal power stations shall facilitate the availability of required quality of ash by delivering ash free of cost and bearing the cost of transportation or transportation arrangement decided on mutually agreed terms and mixing of ash with overburden in mine voids and dumps shall be applicable for the overburden generated from the date of publication of this notification and the utilisation of ash in the said activities shall be carried out in accordance with guidelines laid down by the Central Pollution Control Board, Director General of Mines Safety and Indian Bureau of Mines.

Explanation- For the purpose of this sub paragraph, it is also clarified that the provisions of ash free of cost and free transportation shall be applicable, if thermal power plants serve a notice on the mine owner for the same and the mandate of using 25 percent of ash for mixing with overburden dump and filling up of mine voids shall not be applicable unless a notice is served on the mine owner by thermal power plant.

(4)  
(i) All mine owners shall get mine closure plans (progressive and final) to accommodate ash in the mine voids and the concerned authority shall approve mine plans for disposal of ash in mine voids and mixing of ash with overburden dumps. The Ministry of Environment Forest and Climates Change (MOEFCC) has issued guidelines on 28th August, 2019 regarding exemption of requirement of Environment Clearance of thermal power plants and coal mines along with the guidelines to be followed for such disposal.

(ii) The Ministry in consultation with Central Pollution Control Board (CPCB), Director General of Mine Safety (DGMS) and Indian Bureau of Mines (IBM) may issue further guidelines time to time to facilitate ash disposal in mine voids and mixing with overburden dumps and it shall be the responsibility of mine owners to get the necessary amendments of modification in the permission issued by various regulatory authorities within one year from the date of identification of such mines.

**Consent No:AW-56981**



## Consent Order

M.P. Pollution Control Board  
E-5, Arera Colony  
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2. The non hazardous solid waste arising in the industry/unit/unit premises sweeping, etc. be disposed off scientifically so as not to cause any nuisance/pollution. The applicant shall take necessary permission from civic authorities for disposal to dumping site. If required.

Non Hazardous Solid wastes:-

Type of waste	Quantity	Disposal
Scrap/ Plastic packing material wood, card board, gunny bags; etc		Sale to authorized party/As Per CPCB. MoEF Guide lines / Others.

3. Adequate & effective precautionary measures shall be taken before and during operation, maintenance and cleaning of pollution control system to avoid any accidental hazard.

4. Extensive tree plantation shall be carried out in open areas available within and around the mine premises and also overburden dumps in consultation with expert agency. Good housekeeping practice shall be adopted.

5. The Mine shall improve their existing pollution control facilities and maintain the same properly so that the emission could be maintained within the prescribed standards.

6. Adequate & effective precautionary measures shall be taken before and during operation, maintenance and cleaning of pollution control system to avoid any accidental hazard.

7. Controlled blasting should be practiced with the use of delay detonators and only during daytime. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders should be implemented.

8. Vehicular emissions should be kept under control and regularly monitored for compliance of emission norms. Vehicles used for transporting the mineral should be covered with tarpaulins and optimally loaded.

9. Mine management shall submit environmental statement for the previous year ending 31st March on or before 30th September every year to the Board.

10. Mine management shall comply with the OM issued by GOI/MoeF& CC dated 26.08.2015 and report the compliance to this office.

11. This consent / authorisation is transferable in nature, in case of any change in ownership / management, the new owner / partner / directors / proprietor shall immediately apply for the consent with new requisite information.

12. The issuance of this Consent does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorise any invasion of personal rights, nor any infringement of Central, State or local laws or regulations.

13. This consent is granted in respect of Water pollution control Act 1974 or Air Pollution Control act, 1981 or Authorization under the provisions of Hazardous and other Waste (Management & Transboundary movement) Rules 2016 only and does not relate to any other Department/Agencies. License required from other Department/Agencies have to be obtained by the unit separately and have to comply separately as per there Act / Rules.

14. Balance consent/authorisation fee, if any shall be recoverable by the Board even at a later date.

15. The applicant shall submit such information, forms and fees as required by the board not later than 180 day prior to the date of expiration of this consent/authorisation

16. Knowingly making any false statement for obtaining consent or compliance of consent conditions shall result in the imposition of criminal penalties as provided under the section 42(g) of the Water Act or section 38 (g) of the Air Act.

**Consent No:AW-56981**



## Consent Order

M.P. Pollution Control Board  
E-5, Arera Colony  
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17. After notice and opportunity for the hearing, this consent may be modified, suspended or revoked by the Board in whole or in part during its term for cause including, but not limited to, the following :

- (a) Violation of any terms and conditions of this Consent.
- (b) Obtaining this Consent by misrepresentation of failure to disclose fully all relevant facts.
- (c) A change in any condition that requires temporary or permanent reduction or elimination of the authorized discharge.

Consent/authorization as required under the Water (Prevention & Control of Pollution) Act,1974 , The Air (Prevention & Control of Pollution) Act,1981 is granted to your industry subject to fulfillment of all the conditions mentioned above. For renewal purpose you shall have to make an application to this Board through XGN at least Six months before the date of expiry of this consent/authorisation. The applicant without valid consent (for operation) of the Board shall not bring in to use any outlet for the discharge of effluent and gaseous emission.

For and on behalf of  
M.P. Pollution Control Board

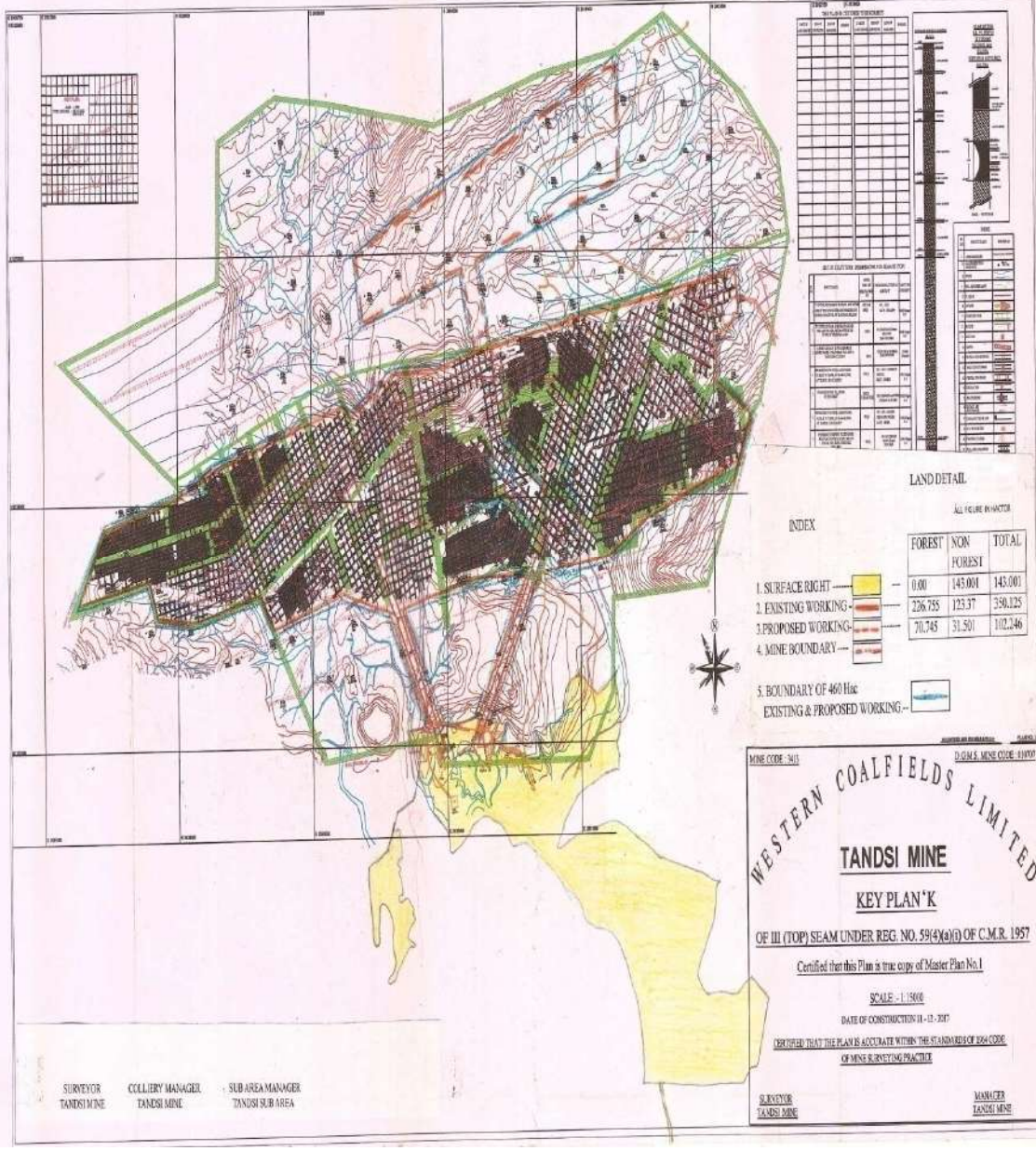
By the order of Chairman, MPPCB

ACHYUT ANAND MISHRA  
Member Secretary

 eSign  
Digitally signed with Aadhaar

(Organic Authentication on AADHAR from UIDAI Server)  
TPAV # 4MW9R8UAFc

Consent No:AW-56981



**INDEX**

NO.	DESCRIPTION	AREA (HAC)
1	SURFACE RIGHT	0.00
2	EXISTING WORKING	226.755
3	PROPOSED WORKING	70.745
4	MINE BOUNDARY	31.501
5	BOUNDARY OF 460 Hac EXISTING & PROPOSED WORKING	112.246

**LAND DETAIL**

ALL FIGURE IN HACTAR

	FOREST	NON FOREST	TOTAL
1. SURFACE RIGHT	0.00	143.001	143.001
2. EXISTING WORKING	226.755	123.37	350.125
3. PROPOSED WORKING	70.745	31.501	102.246

**WESTERN COALFIELDS LIMITED**

**TANDSI MINE**

**KEY PLAN 'K**

OF III (TOP) SEAM UNDER REG. NO. 59(4)(a)(i) OF C.M.R. 1957

Certified that this Plan is true copy of Master Plan No. 1

SCALE - 1:5000

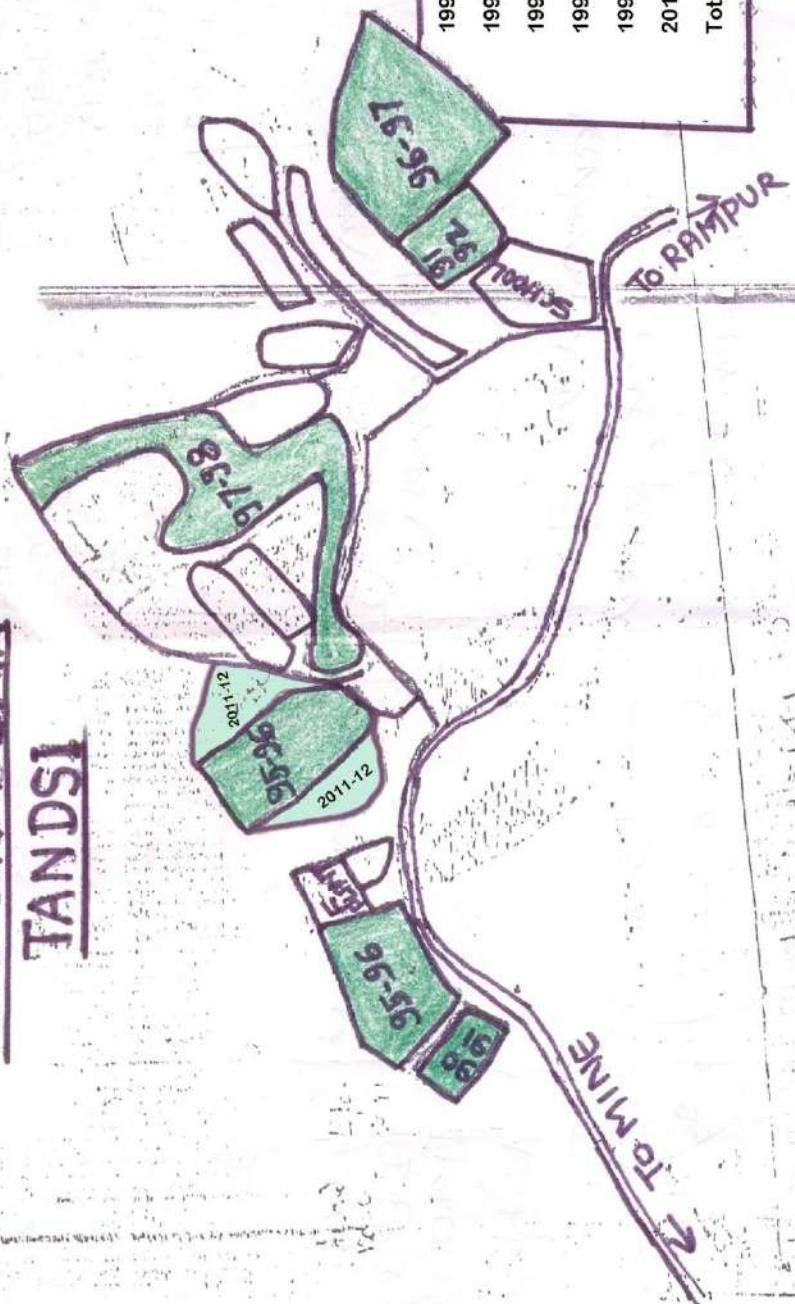
DATE OF CONSTRUCTION 11-12-2017

CERTIFIED THAT THE PLAN IS ACCURATE WITHIN THE STANDARDS OF IMA CODE OF MINE SURVEYING PRACTICE

SURVEYOR: TANDSI MINE      MANAGER: TANDSI MINE

SURVEYOR: TANDSI MINE      COLLIERY MANAGER: TANDSI MINE      SUB AREA MANAGER: TANDSI SUB AREA

# MASTER PLAN TANDSI



1990-91 = 10000 Nos. Plants
1991-92 = 10000 Nos. Plants
1995-96 = 20000 Nos. Plants
1996-97 = 25000 Nos. Plants
1997-98 = 15000 Nos. Plants
2011-12 = 5900 Nos. Plants
<b>Total = 85,900 Nos. Plants</b>

**TREE PLANTATION**  
**TANDSI PROJECT**  
**TAH - JUNNORDEO**  
**DIST - CHHINDWARA**

S. D. ...  
 EX-10  
 S. E. (C)  
 S. E. (C)

**YEARWISE PRODUCTION DETAILS FOR THE LAST FIVE YEARS OF**  
**TANDSI UNDERGROUND COAL MINE PROJECT**

<b>FINANCIAL YEAR</b>	<b>PRODUCTION IN TE.</b>
<b>2018-19</b>	<b>187000</b>
<b>2019-20</b>	<b>177500</b>
<b>2020-21</b>	<b>181000</b>
<b>2021-22</b>	<b>157500</b>
<b>2022-23</b>	<b>94000</b>
<b>2023-24</b>	<b>35505</b>
<b>2024-25</b>	<b>Nil</b> <b>(Mine is not in operation since Apr-2024)</b>
<b>2025-26</b>	<b>Nil</b>





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The information given in this report is not to be communicated either directly or indirectly to the press or to any person not holding an official position in the CIL / Government

# ENVIRONMENTAL MONITORING REPORT

## TANDSI UG

KANHAN AREA

WESTERN COALFIELDS LTD.


JOB NO. 4094423067



APRIL 2025

Environment Laboratory  
NABL Accredited vide Cert. No. TC-7102  
CMPDI  
REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

AN ISO 9001:2015 COMPANY

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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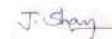
TEST REPORT NO.	RIN/TR/APRIL-25/74	DATE OF ISSUE	25-05-2025
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 Part-4, PM-10: IS-5182 Part 23, PM2.5: IS 5182 Part 24, NO2: IS 5182 Part-06, SO2:IS 5182 Part-2		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:	16-04-25 TO 15-05-25	

WORKSHOP  KTUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
08-04-2025	09-04-2025	330	213	59	23	18	Clear sky / Calm
27-04-2025	28-04-2025	318	220	54	20	16	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	


LAMP ROOM  KTUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
08-04-2025	09-04-2025	301	202	57	17	13	Clear sky / Calm
27-04-2025	28-04-2025	291	194	53	15	12	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

COLONY NEAR HEALTH CENTER  KTUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
08-04-2025	09-04-2025	87	26	8	BDL	Clear sky / Calm	
27-04-2025	28-04-2025	92	30	11	BDL	Clear sky / Calm	
NAAQS, 2009		100	60	80	80		

JET HOSTEL  KTUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
08-04-2025	09-04-2025	86	28	9	BDL	Clear sky / Calm	
27-04-2025	28-04-2025	90	32	10	BDL	Clear sky / Calm	
NAAQS, 2009		100	60	80	80		



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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT
SAMPLING METHOD	LSOP 6

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
		20	20
APRIL'25	08-04-2025	70.5	67.2
APRIL'25	25-04-2025	69.8	67.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
		20	20
APRIL'25	08-04-2025	41.7	38.5
APRIL'25	25-04-2025	42.2	39.1
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

  
 Yogesh Pidurkar  
 Reviewed by

  
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# ENVIRONMENTAL MONITORING REPORT

## TANDSI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4094423067



JUNE 2025




NABL Accredited vide Cert. No. TC-7102

Environment Laboratory

CMPDI  
REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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TEST REPORT NO.	RIN/TR/JUNE-25/74	DATE OF ISSUE	7/25/2025
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 (Part-4), PM-10: IS-5182 (Part 23), PM2.5: IS 5182 (Part 24), NO2: IS 5182 (Part-06), SO2:IS 5182 (Part-2)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		16-06-25 TO 15-07-25

<b>WORKSHOP KTUA1</b>							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
6/11/2025	6/12/2025	290	181	56	17	14	Clear sky / Calm
6/21/2025	6/22/2025	277	172	52	16	13	Cloudy sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

<b>LAMP ROOM KTUA2</b>							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
6/11/2025	6/12/2025	280	168	54	14	12	Clear sky / Calm
6/21/2025	6/22/2025	265	152	47	12	10	Cloudy sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

<b>COLONY NEAR HEALTH CENTER KTUA3</b>							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
		PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
FROM	TO	5	2	6	10		
6/11/2025	6/12/2025	88	35	9	BDL	Clear sky / Calm	
6/21/2025	6/22/2025	79	28	8	BDL	Cloudy sky / Calm	
NAAQS, 2009		<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>		

<b>JET HOSTEL KTUA4</b>							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
		PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
FROM	TO	5	2	6	10		
6/11/2025	6/12/2025	84	32	9	BDL	Clear sky / Calm	
6/21/2025	6/22/2025	76	26	7	BDL	Cloudy sky / Calm	
NAAQS, 2009		<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>		

*J. Shrivastava*

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT
SAMPLING METHOD	LSOP 6

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JUNE'25	6/8/2025	71.8	70.0
JUNE'25	6/23/2025	70.9	68.1
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE	NOISE LEVEL IN dB(A)	
	COLLECTION	DAY TIME	NIGHT TIME
	DETECTION LIMIT	20	20
JUNE'25	6/8/2025	43.3	41.5
JUNE'25	6/23/2025	44.2	42.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

  
Yogesh Pidurkar  
Reviewed by

  
Amol Kamble  
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## ENVIRONMENTAL MONITORING REPORT

# TANDSI UG

KANHAN AREA

WESTERN COALFIELDS LTD.


JOB NO. 4094423067



JULY 2025

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TEST REPORT NO.	RIN/TR/JULY-25/74	DATE OF ISSUE	25-08-2025
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 (Part-4), PM-10: IS-5182 (Part 23), PM2.5: IS 5182 (Part 24), NO2: IS 5182 (Part-06), SO2: IS 5182 (Part-2)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		16-07-25 TO 15-08-25

<b>WORKSHOP KTUA1</b>							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
11-07-2025	12-07-2025	281	174	54	19	15	Cloudy sky / Calm
26-07-2025	27-07-2025	266	162	50	16	14	Rainy sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	


<b>LAMP ROOM KTUA2</b>							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
11-07-2025	12-07-2025	277	165	52	17	13	Cloudy sky / Calm
26-07-2025	27-07-2025	258	146	43	14	12	Rainy sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		600	300	-	120	120	

<b>COLONY NEAR HEALTH CENTER KTUA3</b>							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
		PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
FROM	TO	5	2	6	10		
11-07-2025	12-07-2025	85	33	8	BDL	Cloudy sky / Calm	
21-07-2025	22-07-2025	80	29	7	BDL	Cloudy sky / Calm	
NAAQS, 2009		100	60	80	80		

<b>JET HOSTEL KTUA4</b>							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
		PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
FROM	TO	5	2	6	10		
11-07-2025	12-07-2025	82	31	8	BDL	Cloudy sky / Calm	
21-07-2025	22-07-2025	77	27	6	BDL	Cloudy sky / Calm	
NAAQS, 2009		100	60	80	80		



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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT
SAMPLING METHOD	LSOP 6

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
	JULY'25	12-07-2025	64.2
JULY'25	26-07-2025	63.4	60.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
	JULY'25	12-07-2025	44.2
JULY'25	26-07-2025	41.7	39.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

  
Yogesh Pidurkar  
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Amol Kamble  
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# ENVIRONMENTAL MONITORING REPORT

## TANDSI UG

KANHAN AREA

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JOB NO. 4094423067



APRIL 2025

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TEST REPORT NO.	RIN/TR/APRIL-25/74	DATE OF ISSUE	25-05-2025
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 Part-4, PM-10: IS-5182 Part 23, PM2.5: IS 5182 Part 24, NO2: IS 5182 Part-06, SO2:IS 5182 Part-2		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		16-04-25 TO 15-05-25

WORKSHOP  KTUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
08-04-2025	09-04-2025	330	213	59	23	18	Clear sky / Calm
27-04-2025	28-04-2025	318	220	54	20	16	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	


LAMP ROOM  KTUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
		SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
FROM	TO	5	5	2	6	10	
08-04-2025	09-04-2025	301	202	57	17	13	Clear sky / Calm
27-04-2025	28-04-2025	291	194	53	15	12	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25 <sup>TH</sup> September 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

COLONY NEAR HEALTH CENTER  KTUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
		PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
FROM	TO	5	2	6	10		
08-04-2025	09-04-2025	87	26	8	BDL	Clear sky / Calm	
27-04-2025	28-04-2025	92	30	11	BDL	Clear sky / Calm	
NAAQS, 2009		<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>		

JET HOSTEL  KTUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
		PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
FROM	TO	5	2	6	10		
08-04-2025	09-04-2025	86	28	9	BDL	Clear sky / Calm	
27-04-2025	28-04-2025	90	32	10	BDL	Clear sky / Calm	
NAAQS, 2009		<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>		

*J. Chay*

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT
SAMPLING METHOD	LSOP 6

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
		20	20
APRIL'25	08-04-2025	70.5	67.2
APRIL'25	25-04-2025	69.8	67.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
		20	20
APRIL'25	08-04-2025	41.7	38.5
APRIL'25	25-04-2025	42.2	39.1
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

  
 Yogesh Pidurkar  
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 Amol Kamble  
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## ENVIRONMENTAL MONITORING REPORT

# TANDSI UG

KANHAN AREA

**WESTERN COALFIELDS LTD.**

JOB NO. 4094423067



OCTOBER 2025

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TEST REPORT NO.	RIN/TR/OCT-25/74	DATE OF ISSUE	25.11.2025
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 (Part-4), PM-10: IS-5182 (Part 23), PM2.5: IS 5182 (Part 24), NO2: IS 5182 (Part-06), SO2: IS 5182 (Part-2)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		16-10-25 TO 15-11-25

WORKSHOP KTUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10.10.2025	11.10.2025	5	5	2	6	10	Cloudy sky / Light breeze
25.10.2025	26.10.2025	335	186	53	23	17	
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH OCTember 2000		600	300	-	120	120	Clear sky / Calm

LAMP ROOM KTUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
10.10.2025	11.10.2025	5	5	2	6	10	Cloudy sky / Light breeze
25.10.2025	26.10.2025	319	165	50	21	16	
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH OCTember 2000		600	300	-	120	120	Clear sky / Calm

COLONY NEAR HEALTH CENTER KTUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
05.10.2025	06.10.2025	5	2	6	10	Cloudy sky / Light breeze	
25.10.2025	26.10.2025	80	30	13	10		
NAAQS, 2009		100	60	80	80	Clear sky / Calm	

JET HOSTEL KTUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
10.10.2025	11.10.2025	5	2	6	10	Cloudy sky / Light breeze	
25.10.2025	26.10.2025	75	29	12	BDL		
NAAQS, 2009		100	60	80	80	Clear sky / Calm	

*J. Singh*

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT
SAMPLING METHOD	LSOP 6

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
	OCT'25	11.10.2025	67.2
OCT'25	29.10.2025	60.3	58.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
	OCT'25	11.10.2025	43.3
OCT'25	29.10.2025	43.2	40.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

  
Yogesh Pidurkar  
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Amol Kamble  
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## ENVIRONMENTAL MONITORING REPORT

### TANDSI UG

KANHAN AREA

WESTERN COALFIELDS LTD.


JOB NO. 4094423067



NOVEMBER 2025

Environment Laboratory  
NABL Accredited vide Cert. No. TC-7102  
CMPDI  
REGIONAL INSTITUTE-IV, KASTURBA NAGAR,  
JARIPATKA, NAGPUR, PIN – 440 014

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/NOV-25/74	DATE OF ISSUE	24-12-2025
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 (Part-4), PM-10: IS-5182 (Part 23), PM2.5: IS 5182 (Part 24), NO2: IS 5182 (Part-06), SO2:IS 5182 (Part-2)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		16-11-25 TO 15-12-25

WORKSHOP  KTUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
14-11-2025	15-11-2025	267	163	45	15	13	Clear sky / Calm
22-11-2025	23-11-2025	279	170	40	17	14	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH NOVember 2000		600	300	-	120	120	


LAMP ROOM  KTUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
14-11-2025	15-11-2025	281	182	52	19	16	Clear sky / Calm
22-11-2025	23-11-2025	270	169	48	16	14	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH NOVember 2000		600	300	-	120	120	

COLONY NEAR HEALTH CENTER  KTUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
14-11-2025	15-11-2025	77	28	12	BDL	Clear sky / Calm	
22-11-2025	23-11-2025	68	24	10	BDL	Clear sky / Calm	
NAAQS, 2009		100	60	80	80		

JET HOSTEL  KTUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
14-11-2025	15-11-2025	81	30	13	BDL	Clear sky / Calm	
22-11-2025	23-11-2025	75	27	11	BDL	Clear sky / Calm	
NAAQS, 2009		100	60	80	80		

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT
SAMPLING METHOD	LSOP 6

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
NOV'25	11-11-2025	60.2	58.3
NOV'25	26-11-2025	63.2	60.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
NOV'25	11-11-2025	43.4	40.7
NOV'25	26-11-2025	44.2	42.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

  
Yogesh Pidurkar  
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## ENVIRONMENTAL MONITORING REPORT

### TANDSI UG

KANHAN AREA

WESTERN COALFIELDS LTD.

JOB NO. 4094423067



DECEMBER 2025

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/DEC-25/74	DATE OF ISSUE	25-01-2026
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 (Part-4), PM-10: IS-5182 (Part 23), PM2.5: IS 5182 (Part 24), NO2: IS 5182 (Part-06), SO2: IS 5182 (Part-2)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		16-12-25 TO 15-01-26

WORKSHOP   KTUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
06-12-2025	07-12-2025	256	154	44	17	13	Clear sky / Calm
22-12-2025	23-12-2025	260	167	42	14	12	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH DECember 2000		600	300	-	120	120	


LAMP ROOM   KTUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
06-12-2025	07-12-2025	283	180	48	22	15	Clear sky / Calm
22-12-2025	23-12-2025	271	175	46	20	13	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH DECember 2000		600	300	-	120	120	

COLONY NEAR HEALTH CENTER   KTUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
06-12-2025	07-12-2025	84	36	18	BDL	Clear sky / Calm	
22-12-2025	23-12-2025	78	26	14	BDL	Clear sky / Calm	
NAAQS, 2009		100	60	80	80		

JET HOSTEL   KTUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
06-12-2025	07-12-2025	79	28	15	BDL	Clear sky / Calm	
22-12-2025	23-12-2025	82	32	16	BDL	Clear sky / Calm	
NAAQS, 2009		100	60	80	80		



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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT
SAMPLING METHOD	LSOP 6

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
DEC'25	12-12-2025	70.6	68.9
DEC'25	29-12-2025	67.4	65.6
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
DEC'25	12-12-2025	43.2	40.2
DEC'25	29-12-2025	43.2	41.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

  
Yogesh Pidurkar  
Reviewed by

  
Amol Kamble  
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## ENVIRONMENTAL MONITORING REPORT

### TANDSI UG

KANHAN AREA

WESTERN COALFIELDS LTD.


JOB NO. 4094423067



JANUARY 2026

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/JAN-26/74	DATE OF ISSUE	25-02-2026
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 (Part-4), PM-10: IS-5182 (Part 23), PM2.5: IS 5182 (Part 24), NO2: IS 5182 (Part-06), SO2:IS 5182 (Part-2)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		16-01-26 TO 15-02-26

WORKSHOP  KTUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
14-01-2026	15-01-2026	278	166	38	19	15	Clear sky / Calm
23-01-2026	24-01-2026	289	172	44	17	14	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH DECember 2000		600	300	-	120	120	

LAMP ROOM  KTUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
14-01-2026	15-01-2026	269	153	40	16	13	Clear sky / Calm
23-01-2026	24-01-2026	255	148	42	18	15	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH DECember 2000		600	300	-	120	120	

COLONY NEAR HEALTH CENTER  KTUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
13-01-2026	14-01-2026	76	28	10	BDL	Clear sky / Calm	
23-01-2026	24-01-2026	80	30	11	BDL	Clear sky / Calm	
NAAQS, 2009		100	60	80	80		

JET HOSTEL  KTUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
14-01-2026	15-01-2026	85	32	12	BDL	Clear sky / Calm	
23-01-2026	24-01-2026	79	29	11	BDL	Clear sky / Calm	
NAAQS, 2009		100	60	80	80		



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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT
SAMPLING METHOD	LSOP 6

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
JAN'26	10-01-2026	62.4	59.7
JAN'26	29-01-2026	58.2	56.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
JAN'26	10-01-2026	43.4	41.6
JAN'26	29-01-2026	44.2	42.4
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

  
 Yogesh Pidurkar  
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## ENVIRONMENTAL MONITORING REPORT

### TANDSI UG

KANHAN AREA

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FEBRUARY 2026

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/FEB-26/74	DATE OF ISSUE	25-03-2026
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 (Part-4), PM-10: IS-5182 (Part 23), PM2.5: IS 5182 (Part 24), NO2: IS 5182 (Part-06), SO2: IS 5182 (Part-2)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		16-02-26 TO 15-03-26

WORKSHOP   KTUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
14-02-2026	15-02-2026	265	170	46	18	14	Clear sky / Calm
22-02-2026	23-02-2026	254	162	42	16	13	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH DECember 2000		600	300	-	120	120	


LAMP ROOM   KTUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
14-02-2026	15-02-2026	277	182	48	20	15	Clear sky / Calm
22-02-2026	23-02-2026	283	190	52	22	16	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH DECember 2000		600	300	-	120	120	

COLONY NEAR HEALTH CENTER   KTUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
13-02-2026	14-02-2026	78	29	12	BDL	Clear sky / Calm	
22-02-2026	23-02-2026	75	27	10	BDL	Clear sky / Calm	
NAAQS, 2009		100	60	80	80		

JET HOSTEL   KTUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
14-02-2026	15-02-2026	79	30	13	BDL	Clear sky / Calm	
22-02-2026	23-02-2026	76	28	11	BDL	Clear sky / Calm	
NAAQS, 2009		100	60	80	80		



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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT
SAMPLING METHOD	LSOP 6

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
FEB'26	13-02-2026	59.2	56.3
FEB'26	26-02-2026	57.3	54.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
FEB'26	13-02-2026	43.2	41.5
FEB'26	26-02-2026	43.4	41.8
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

  
Yogesh Pidurkar  
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## ENVIRONMENTAL MONITORING REPORT

### TANDSI UG

KANHAN AREA

**WESTERN COALFIELDS LTD.**


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MARCH 2026

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<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	 TC-7102
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TEST REPORT NO.	RIN/TR/MAR-26/74	DATE OF ISSUE	25-04-2026
NAME OF CUSTOMER	GM(ENV.), WCL(HQ), NAGPUR		
TEST REQUIRED	SPM: IS 5182 (Part-4), PM-10: IS-5182 (Part 23), PM2.5: IS 5182 (Part 24), NO2: IS 5182 (Part-06), SO2: IS 5182 (Part-2)		
SAMPLE DESCRIPTION	AIR SAMPLE	SAMPLING PLAN :	LQR 47
SAMPLING METHOD : LSOP 4	PERIOD OF PERFORMANCE OF LAB ACTIVITIES:		16-03-26 TO 15-04-26

WORKSHOP  KTUA1							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
13-03-2026	14-03-2026	285	186	44	16	14	Clear sky / Calm
27-03-2026	28-03-2026	293	198	50	18	16	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH DECember 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

LAMP ROOM  KTUA2							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )					ENVIRONMENT CONDITIONS (Sky/Wind)
FROM	TO	SPM	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>	
13-03-2026	14-03-2026	310	204	54	22	19	Clear sky / Calm
27-03-2026	28-03-2026	322	215	58	24	21	Clear sky / Calm
STANDARDS FOR COAL MINE, GSR 742(E), dt. 25TH DECember 2000		<b>600</b>	<b>300</b>	-	<b>120</b>	<b>120</b>	

COLONY NEAR HEALTH CENTER  KTUA3							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
13-03-2026	14-03-2026	82	33	12	BDL	Clear sky / Calm	
27-03-2026	28-03-2026	85	35	13	BDL	Clear sky / Calm	
NAAQS, 2009		<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>		

JET HOSTEL  KTUA4							
DATE(dd:mm:yy) OF SAMPLING		PARAMETERS (24 hourly values in $\mu\text{g}/\text{m}^3$ )				ENVIRONMENT CONDITIONS (Sky/Wind)	
FROM	TO	PM <sub>10</sub>	PM <sub>2.5</sub>	NO <sub>2</sub>	SO <sub>2</sub>		
13-03-2026	14-03-2026	84	34	14	BDL	Clear sky / Calm	
27-03-2026	28-03-2026	86	36	15	BDL	Clear sky / Calm	
NAAQS, 2009		<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>		



Analysed by

<b>Environment Laboratory CMPDI RI-IV, NAGPUR</b>	<b>Test Report</b>	
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**NOISE LEVEL MONITORING DATA**

SAMPLE DESCRIPTION	NOISE SAMPLE
Test Required	CPCB PROTOCOL FOR AMBIENT NOISE MEASUREMENT
SAMPLING METHOD	LSOP 6

FAN HOUSE:		KTUN1	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
MAR'26	11-03-2026	71.2	69.7
MAR'26	27-03-2026	70.5	69.1
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>75</b>	<b>70</b>

COLONY(TANDSI):		KTUN2	
MONTH	DATE OF SAMPLE COLLECTION	NOISE LEVEL IN dB(A)	
	DETECTION LIMIT	DAY TIME	NIGHT TIME
MAR'26	11-03-2026	43.7	40.8
MAR'26	27-03-2026	43.1	40.5
<b>NOISE POLLUTION (REGULATION AND CONTROL) RULES</b>		<b>55</b>	<b>45</b>

  
Yogesh Pidurkar  
Reviewed by

  
Amol Kamble  
Authorised by

1. This report cannot be reproduced in part or full without written of the management.
2. Laboratory activities are performed at the Laboratory permanent facility that is ground floor Environment Lab, CMPDI RI-IV, Nagpur.
3. This report refers to the values related to the items tested.

\*\*\*\*\* End of report \*\*\*\*\*

**REPORT ON**  
**MONITORING OF GROUND WATER LEVEL**  
**OF**  
**Tandsi UG Mine**  
**KANHAN AREA**  
**WESTERN COALFIELDS LTD.**



**PERIOD- MAY 2025 (PRE MONSOON), AUG 2025 (MONSOON), NOV 2025 (POST-MONSOON) & JAN 2026 (WINTER)**



**M/s Anacon Laboratories Pvt. Ltd., Nagpur**

**MoEF&CC (GOI) Recognized Laboratory**  
**ISO 9001:2015, ISO 14001:2015, ISO 45001:2018**  
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MIDC, Butibori, Nagpur – 441122  
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Website: [www.anaconlaboratories.com](http://www.anaconlaboratories.com)  
Report No. ANqr /PD/20A/2023/199

**2025-26**

## Certificate

Groundwater level monitoring has been conducted with due diligence, and a comprehensive report on the monitoring of groundwater levels in all observation wells has been prepared as per the scope of work outlined in work order no. वेकोलि/मुख्यालय/पर्यावरण/14-L/1122-1148, dated 19.04.2025 for the Jan 2026 (Winter) Period.

The report includes the monitoring of groundwater levels and water quality analysis of observation wells pertaining to Tandsi UG Mine, of the Kanhan area of Chhindwara district, M.P.

The groundwater level monitoring was meticulously carried out by Anacon Laboratories Pvt. Ltd., and the analysis of the samples was performed by Anacon Laboratories Pvt. Ltd., a NABL Accredited Laboratory. (NABL Certificate no. TC-12998)

Anacon Laboratories Pvt. Ltd. gratefully acknowledges the full cooperation rendered by the concerned WCL officials, which facilitated the timely completion of the project.



**Krupali Raut**  
(Geologist)



**Gyanchand Bohra**  
NABET Accredited EIA Expert  
for Hydrogeology & Geology

Nagpur  
Jan-2026



**(Dr. D. G. Garway)**  
**Head of Organization**  
Anacon Laboratories Pvt. Ltd., Nagpur

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I-TABLE	Tandsi UG Mine	PERIOD- MAY 2025 (PRE MONSOON), AUG 2025 (MONSOON), NOV 2025 (POST-MONSOON) & JAN 2026 (WINTER)	7
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## **INTRODUCTION**

Environment Department of Western Coalfield Limited (WCL), Nagpur has awarded the assignment engaged M/s Anacon Laboratories Pvt. Ltd, for conducting Ground water Monitoring (i.e. Borewell/Piezometer water level) for the year 2025-26 vide work order no. वेकोलि/मुख्यालय/पर्यावरण/14-L/1122-1148, dated 19.04.2025 for the Jan 2026 (Winter) Period

TANDSI UG Mine is located in Chhindwara district of Madhya Pradesh. All Mines are administered by Kanhan Area of Western Coalfields Limited. Ground water Level monitoring for all the mines have been done for the year 2025-26 i.e. **PERIOD- MAY 2025 (PRE MONSOON), AUG 2025 (MONSOON), NOV 2025 (POST MONSOON) & JAN 2026 (WINTER).**

## **GENERAL HYDROGEOLOGICAL CONDITION**

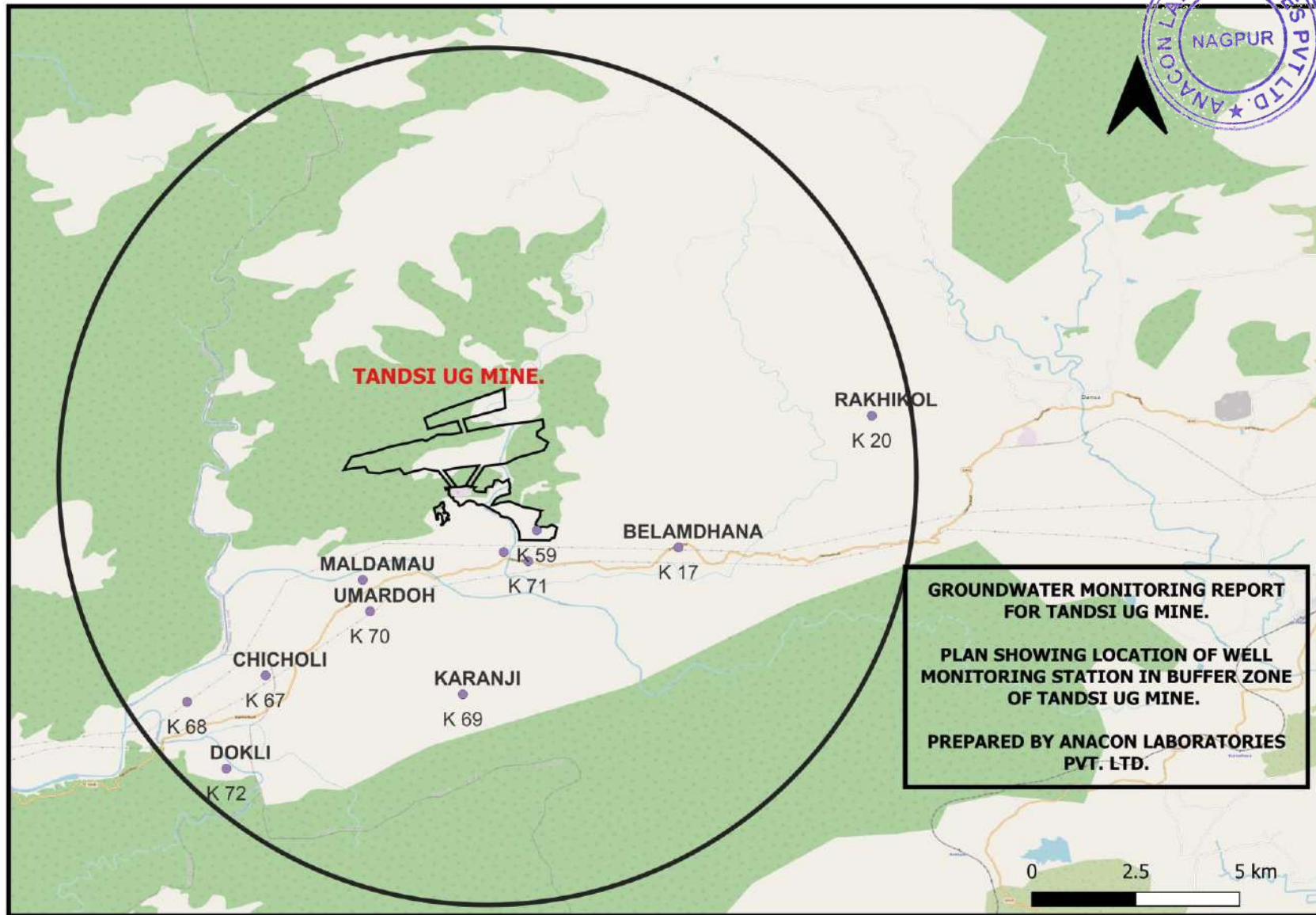
The major part of the district is occupied by Deccan Trap, consisting of different lava flows whose thickness ranges between 7 to 21 m. The recent alluvium deposits are found at places along the Pench and the Kanhan rivers with thickness varying from 5.00 to 20.00 m. Alluvium comprises clayey material with intercalated layers of sand and gravels. Archaeans are exposed in parts of Sausar, Bichhua, Chhindwara, Jamai and Mohkhed blocks whereas the Coal bearing lower Gondwanas in parts of Jamai, Parasia and Jamai blocks. The upper Gondwanas occupy parts of Harrai and Tamia blocks. Ground water occurs under phreatic and semi-confined to confined conditions. Alluvium, weathered granites/gneisses, lower Gondwana sandstones, weathered, fractured and jointed massive basalts and vesicular basalts form the major phreatic aquifers; and weathered, fractured granites are noticed as main water-bearing zones at deeper levels.



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**TANDSI UG MINE,  
KANHAN AREA  
WESTERN COALFIELDS LTD.**

**PERIOD- MAY 2025 (PRE MONSOON), AUG 2025 (MONSOON), NOV 2025 (POST MONSOON) & JAN  
2026 (WINTER)**



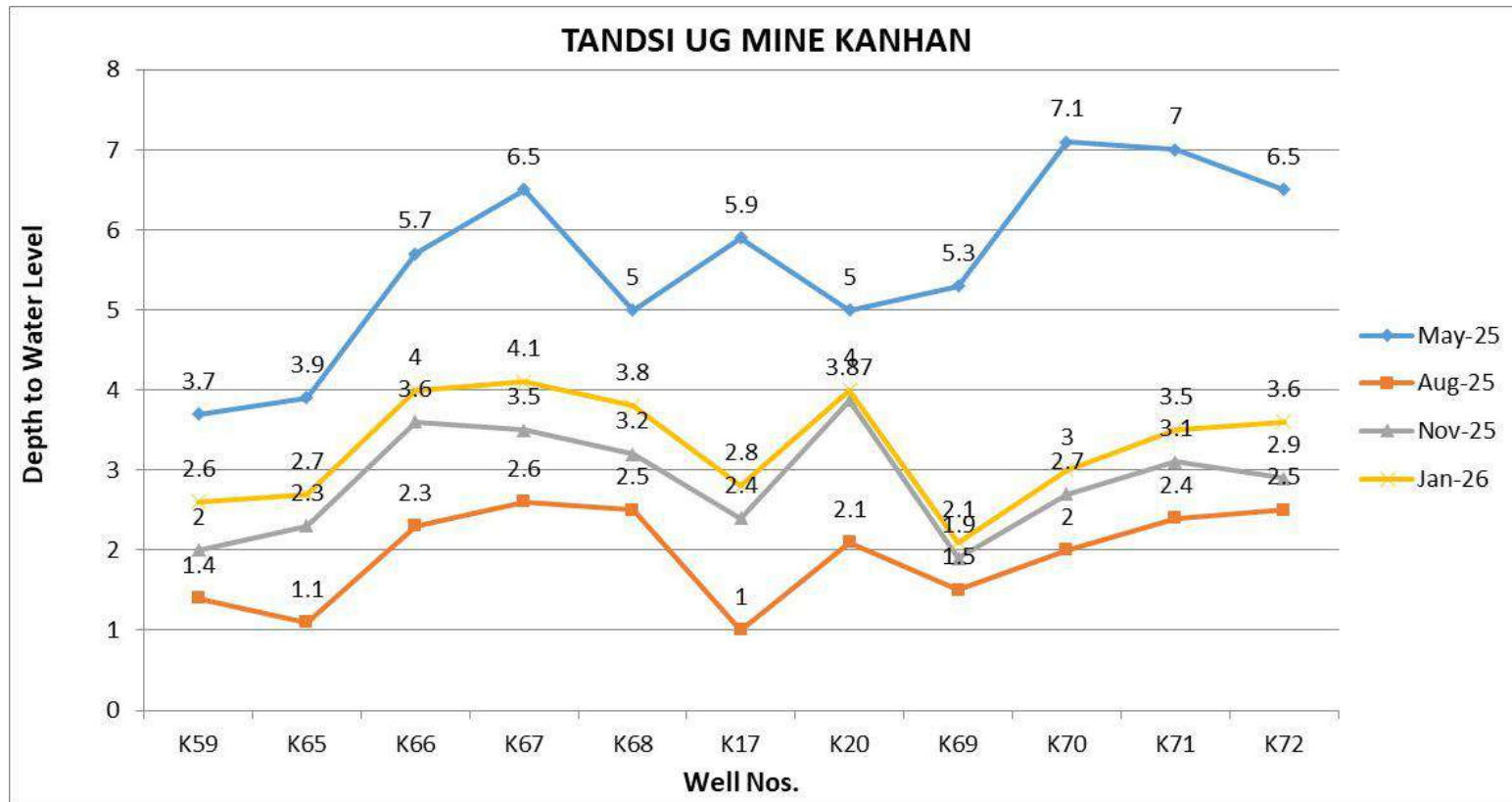
**FIGURE I: GROUND WATER MONITORING STATION (OBSERVATION WELLS IN AND AROUND OF TANDSI UG MINE)**

**TABLE-I: Ground Water level Monitoring data from dugwells/piezometers in buffer zone of TANDSI UG MINE KANHAN AREA**

SR. NO	Well No. B	Name of village	Well location	latitude	longitude	R.L. in m	Well Depth	Utility	Well dia.	Height of measuring point (m agl)	Depth to Water Level (m bgl)				G/F
											May-25	Aug-25	Nov-25	Jan-26	
1	K 59	TANDSI COLONY	Opp. Tel. Exch. Lowl	22°9'45.11"	78°20'20.15"	711	6.2	Domestic	4.1	0.6	3.70	1.40	2.00	2.60	Talchir
2	K 65	RAMPUR	Near house of parteh sir opp. Govt LP school	22°9'26.7849 248799706"	78°19'52.41022 62605459"	716	6.2	Domestic	2.3	0.8	3.90	1.10	2.30	2.70	Talchir
3	K 66	MALDAMAU	Out side village on Junction of village Road and main road	22°9'3.50764 156913641"	78°17'53.97979 88466819"	738	11.8	D/I	4.3	0.4	5.70	2.30	3.60	4.00	Talchir
4	K 67	CHICHOLI	On Distt boundary of Chindwara & Betul Wireless Tower	22°7'43.1667 353145826"	78°16'32.43803 21990327"	735	11.2	Irrigation	4.8	0	6.50	2.60	3.50	4.10	Talchir
5	K 68	KHAIRWANI	West of village on Sarni Road old well opp Ramnath Yadav	22°7'21.0396 508105518"	78°15'26.55317 28237306"	745	6.8	Irrigation	4.7	0.45	5.00	2.50	3.20	3.80	Talchir
6	K 17	BELAMDHANA	In the compound of premlal yadubansi	22°9'30.7065 865322969"	78°22'19.00679 30450528"	665	9.5	Domestic	4.6	0.8	5.90	1.00	2.40	2.80	Talchir
7	K 20	RAKHIKOL	Opposite managers office	22°11'21.444 3286656817"	78°25'1.336419 86914761"	705	7.9	Domestic	5.7	0.25	5.00	2.10	3.87	4.00	M/B sandstone
8	K 69	KARANJI	NEAR VILLAGE BUS STOP	22°7'27.33"	78°19'18.13"	753	8.9	DOMESTIC	8.9	0.15	5.30	1.50	1.90	2.10	Talchir
9	K 70	UMARDOH	NEAR SONU KIRANA STORE	22°8'37.08"	78°18'0.21"	670	11.5	D/I	4.6	0.5	7.10	2.00	2.70	3.00	Talchir
10	K 71	MALDAMAU (MOHAR SINGH)	NEAR TENDSY HOSPITAL	22°9'19.2"	78°20'13.06"	710	10.5	D/I	5.2	0.4	7.00	2.40	3.10	3.50	Talchir
11	K 72	DOKLI	CHHINDWADA MAIN ROAD	22°6'25.03"	78°15'59.54"	740	13.4	D/I	6.2	0.75	6.50	2.50	2.90	3.60	Talchir



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II-Figure:- Hydrograph of TANDSI UG MINE KANHAN AREA



**K17-BELAMDHANA**



**K20-RAKHIKOL**



**K59-TANDSI COLONY**



**K65-RAMPUR**



**K66-MALDAMAU**



**K68-KHAIRWANI**



**K69-KARANJI**



**K70-UMARDOH**



**K71-MALDAMAU (MOHAR SINGH)**



**K72- DOKLI**

**Mine wise details of Mine Closure Plan as Approved by WCL Board  
in 244th meeting held on 28th January 2013**

Sl. No.	Name of Project	Total Project area as per EC (ha)	Rate in lakhs /ha	Current value of Corpus Fund in Rs. Lakhs	WPI Base Year (164.80)	Balance Life Yrs as on 1.4.12	Annual Corpus in Rs. Lakhs	Starting year	Total amt in Escrow A/c with 5% escalation on every year (Rs. In Lakhs)
27	Mohan(Maori) UG	800.00	1.00	1017.28	July12	9	113.03	12-13	1246.33
28	Ambara UG	775.510	1.00	986.14	July12	9	109.57	12-13	1208.18
29	Jharna UG	713.00	1.00	906.65	July12	2	453.32	12-13	929.30
30	Damua OC	65.45	6.00	499.35	July12	5	99.87	12-13	551.84
31	New Majri-III UG	1342.54	1.00	1707.18	July12	2	853.59	12-13	1749.86
32	Rajur UG	1695.60	1.00	2156.13	July12	28	77.00	12-13	4497.28
33	Kumbharkahni UG	442.00	1.00	562.05	July12	9	62.45	12-13	688.61
34	Durgapur OC	1186.54	6.00	9052.86	July12	9	1005.87	12-13	11091.33
35	HLC-I & III UG	748.97	1.00	952.39	July12	31	30.72	12-13	2173.94
36	Mahakali UG	404.98	1.00	514.97	July12	33	15.61	12-13	1249.42
37	DRC UG	779.29	1.00	990.95	July12	71	13.96	12-13	8638.77
38	Mana & Nandgaon UG	606.52	1.00	771.25	July12	17	45.37	12-13	1172.32
39	CRC UG	194.30	1.00	247.07	July12	2	123.54	12-13	253.26

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**Chapter - 1**

**INTRODUCTION**

**1.1 About the Mine.**

Tandsi underground project is a part of Kanhan Area of Western Coalfields Limited, a subsidiary of Coal India Limited. Presently, working of both development and depillaring with caving is going on in the Seam III. Tandsi U/G Project is located in Chhindwara District (M.P) and is under administrative control of Kanhan Area of WCL. The project is about 40kms from Dungaria, the Area head quarter and is connected by road from Dungaria. The salient features of the Colliery are as under:

**1.1.1 Name of mine owner/company**

Project : Tandsi mine  
Area : Kanhan  
Company : Western Coalfields Limited  
Mine Owner : Director (T) (P&P), WCL

**1.1.2 Address for Communication with PIN and Phone nos.**

Project : Tandsi mine  
Post Office : Rampur via-Damua  
Tahsil : Junnardeo  
District : Chhindwara  
State : Madhya Pradesh  
PIN : 480555  
Telephone : (07160) 267055

**1.1.3 Location of mine**

Project : Tandsi mine  
Area : Kanhan  
Coalfields : Pench-Kanhan Valley Coalfield  
Latitude : 22° 10' to 22° 11' N  
Longitude : 78° 17' to 78° 21' E

**1.1.4 Date of start**

Date of start of development work : 1987  
Date of start of production : October 1993

**1.1.5 Total project area of the mine as per EMP: 611.80 Ha**

## **CMPDI**

### **1.1.6 Communication**

Tandsi Colliery is situated nearly 43 km from Junnardeo Railway Station. It is connected by Tar road from Chhindwara Sarni road. The project is about 40 km from Dungaria, the area head quarter is connected by road from Dungaria.

### **1.1.7 Topography of the area.**

The area of the mine is hilly & exhibits rugged topography. Elevation from MSL varies from 529m to 720m.

### **1.2 Reasons for Closure.**

The reason for closure of mine is exhaustion of coal from approved PR limits.

### **1.3 Need of mine closure planning**

- 1.3.1 Mining activities leave long lasting impacts on the landscape, ecology and on local inhabitants. These activities disturb the delicate environmental and social equilibrium that exists in its area of influence. Hence it becomes imperative on part of the mine operator to restore the equilibrium in the mine affected area that existed in the pre-mining period. Thus, any mining venture must have adequate closure plan, aimed at rehabilitation of disturbed area which should be acceptable to local community as well as regulatory authority.
- 1.3.2 Mine closure encompasses rehabilitation process designed to restore physical, chemical and biological quality disturbed by the mining activities. Mine closure is not just something that happens at the end of a mines life rather mine closure is an ongoing series of decision and activities beginning in the pre-mining stage of mine and ending with a sustainable site that can be returned to the community.
- 1.3.3 Thus, a Mine closure plan needs to define the liabilities, responsibilities and authorities of the different agencies like the mine management, other regulatory bodies, Central and State Governments after mine closure. Various objectives of the advance mine closure planning are as follows:
  - a. To allow productive and sustainable after-use of the site, this is acceptable to the mine owner and the regulatory authority.
  - b. To protect public health and safety.
  - c. To eliminate environmental damage and thereby encourage environmental sustainability.

## **CMPDI**

- d. To minimize adverse socio-economic impacts of mining activities.
- e. To protect the flora and fauna of the area affected by the mining.
- f. Effective use of the assets created in course of mining.

1.3.4 Primarily, the mine closure activities are planned in two stages the initial plan identifies and activities required to be executed as the mining operation progress after the inception of the project. These activities may undergo subtle changes depending upon the actual site condition during implementation. Finally, a detailed closure plan is to be prepared 4-5 years before the actual closure time of the mine depending upon the existing parameters at that point of time.

### **1.4 Mine closure planning strategy in respect of Tandsi UG Project based on existing set of parameters**

The life of the mine would be approximately 14 years from 1.04.2012, hence following activities are envisaged towards mine closure programmed in respect of Tandsi Colliery.

- a. Progressive mine closure activities will continue as envisaged in the approved project report and as enumerated in the various approvals, permits, consents etc for which adequate financial provision is available.
- b. Although, it is very difficult to foresee the likely impacts due to closure of the mining activities at the time of exhaustion of reserves within the project area of the project but in the present report, the same has been broadly estimated and some mitigating measures have been suggested accordingly. These suggested measures along with certain other measures, as deemed fit, at the time of closure of mining activity in the project shall be taken up.

### **1.5 Statutory Obligations**

The statutory obligations on part of the mine operator have been enumerated in various approvals, permits, consents etc. such as lease deed, approved Mining Plan. approval obtained from MoEF, approval/ consent from State Pollution Control Board and the other relevant statutes. Copies of the relevant approvals/clearances are enclosed.

All the applicable obligations are being strictly complied with and regular reports, wherever required is being sent to respective authorities.

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**CMPDI****Chapter - 2****MINE DESCRIPTION / MINING PARAMETERS****2.0 Geology in brief**

The No.III seam varies in the thickness between 2.5m to 3.5m, overlain by up to 50m of sand stone beds with occasional bands of mudstone and carbonaceous mudstone in the immediate 4 to 10m. The sandstone is described as fine-grained micaceous to medium grained with Uni-axial compressive strengths of 14-29Mpa and 10-20Mpa respectively.

However, on inspection of the exposed roof where roof falls have occurred, the immediate sandstone beds can be seen to be highly disturbed and interbedded.

The floor consists of sandstone beds, but with more frequent mudstone and carbonaceous mudstone bands,

**Fault and Structure:** - A number of major faults run East-West across the reserve with throw ranging from 10m to greater than 100m. This fault system could be associated with the dolerite dykes bounding the Northern section of the reserves, which run approximately parallel to the major fault system.

Sl. No	Fault	Amount of Throw in m
1	F2-F2	60-90 m
2	F4-F4	35-70m
3	F22-F22	82-160m
4	F23-F23	80m
5	F25-F25	20-45m

The seam dips to the northwest in the Western and Central section of the reserves. The depth of cover varies between 190m and 370m and can vary rapidly owing to the surface topography, especially where river valleys cut across the region.

SEAM	THICKNESS RANGE (m)		REMARKS
	MINIMUM	MAXIMUM	
SEAM III	0.85 (PKTN-104)	4.61 (PKTN-74)	In majority its range of thickness is in between 2.5m & 3.5m. Most potential seam Considered workable
PARTING	4.95 (PKTN-97)	18.28 (PKTN-107)	General sandstone with occasional thin shale/carbonaceous shale bands.
SEAM II	0.08 (PKTN-121)	1.25 (PKTN-105)	Impersistent, not considered workable.
PARTING	23.25 (PKTN-76)	37.51 (PKTN-10)	Predominantly constituted of sandstone with occasional bands of shale and carbonaceous shale.

**CMPDI**

SEAM I	0.23 (PKTN-55 & 103)	1.91 (PKTN-15)	Workable thickness of 1.5m and above in patches
--------	-------------------------	-------------------	---

**2.1 Brief description of Mining System.**

2.1.1 Presently work of both development and depillaring with caving method is going on in Seam III.

The seam wise status is as under:

Seam	South Block	North block
Seam III	Partly developed, depillared with Caving method Panel T-7 is in progress by CM & T5, T10, G Panel by LHD loading in to belt mechanized combination	Total virgin

**2.2 Seam-wise Mine Details**

Details about the seams which are virgin/being worked/have already been worked along with mine entry specifications, production figured and equipment population has been shown in the following tables:

**Table-1 seams being worked presently**

Sl. No.	Seam	Method of Mining	Production (2010-11)	Major equipments deployed(SDL)/LHD/CM/Haulage/Conveyor/Pumps
1	Seam III	Mechanized 'A' Development (1) T-7 (2)	500 TPD 200 TPD	CM, Conveyor & Pumps LHD/Conveyor & Pumps
		'B' Depillaring with caving	200 TPD 200 TPD	LHD/Conveyor & Pumps LHD/Conveyor & Pumps

**CMPDI**

		a) Pane I G		
		b) Pane I T5		

**Table-3 Mine entry details**

Pit/Inc	Depth/length	Dia(m)/X-Sec.Sq.m	Purpose	Usage	Present status
Inc.1	1065m	5 x 3.50	Return	Material Transportation	In operation
Inc.2	1065m	5 x 3.50	Intake	Belt/Men	In operation
Inc.3	985m	5 x 3.50	Return	Material Transportation	In operation. In operation.
Inc.4	985m	5 x 3.50	Intake	Belt/Men	In operation

**Table – 4 Performance of mine for last 5 years**

		2007-08	2008-09	2009-10	2010-11
Production	Mt	0.426500	0.501650	0.329650	0.303880
OMS	t	2.07	1.7	1.43	1.49
CPT	Rs/t	1473.74	1900.02	3563.86	2805.89
SPT	Rs/t	1401.14	1405.22	1486.98	2313.33
Profit/Loss	Rs/t	-72.60	-494.80	-2076.88	-492.56
Total Profit/Loss	Rs Lakhs	-305.37	-2482.16	-6846.43	-1496.79

**2.3 Mine boundary details**

North : Virgin Area  
 South : Incorp  
 East : Abandoned Rakhicoal colliery  
 West : Tandsi III Block virgin

**2.4 Surface Water bodies and their status**

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The Tambia River is running from North to South of Tandsi mine. This is the seasonal river. HFL of Tambia River is 509 and RL of Inc. No. 1 and Inc. No. 2 are 527 which are 18 m above HFL of Tambia River.

**2.5 Maximum depth of the UG workings**

The maximum depth of UG workings is 367.00m in SEAM III in North block.

**2.6 Coal processing / beneficiation operation**

There is Ground twin Bunker (Surface) with capacity of 100t each.

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**CMPDI**

**Chapter - 3**

**CLOSURE PLAN AND RELATED ACTIVITES**

It is very difficult to predict the various parameters which would be prevalent at the time of final mine closure (when the entire block reserve would get exhausted) and therefore a mine closure plan cannot be rigidly prepared at this point of time.

Nevertheless, the progressive mine closure activities will continue as envisaged in the approved project report and as enumerated in the various approvals, permits, consents etc.

Although, at this point of time, it is very difficult to foresee the likely impacts due to closure of the mining activities in the presently worked seams and other lower virgin seams, but the broad mine closure activities can be grouped under the following heads.

**3.1 Mined out Land & proposed final land use**

**3.1.1 Management of mined out area**

- a) As the project is an underground mining project, where development as well as depillaring with caving is going on .
- b) As regards the underground void which will remain at the time of closure of the Mine, they will get filled up gradually with water. The necessary precautions for the safety of the neighboring mine would be taken care of before closure of mine. Further, the water filled in UG voids will help in maintaining the water level in the nearby area.

**3.1.2 Details of past subsidence and reclamation of subsided land  
GROUND CONTROL EXPERIENCE DURING 2002**

The only production area now active at Tandsi, is in a westerly direction, away from drift No. 3. Presently no noticeable subsidence/ cracks are observed over depillared area.

**3.2 Water Regime management**

**3.2.1 Drainage pattern of the area (pre and post closure)**

**Existing drainage pattern**

## **CMPDI**

The Tambia River is running from North to South of Tandsi mine. This is a seasonal river.

HFL of Tambia River is 509 and RLs of Inc. No. 1 and Inc. No. 2 are 527 which are 18m above HFL of Tambia River. The Tambia River is main drainage channel of the area which flows from North to South at a distance of about 0.50 Km from west of the Incline mouth.

### **Post closure drainage pattern**

After closure of mine the natural profile of the entire project area would not get disturbed. Therefore the general drainage pattern would not get disturbed. The natural drainage profile of the entire project area would be kept in a manner which will facilitate the normal run-off.

### **3.2.2 Mine water discharge details**

#### **Existing mine water discharge details**

- a. Mine water is pumped in a water tank. Clean water coming out from the water tank is used for dust suppression and other industrial uses.
- b. Excess pumped out mine water is allowed to flow into the surface water bodies.
- c. Drains are provided around the coal stock to collect run-off for diverting into the natural water courses.

#### **Post closure Mine water discharge**

Once the reserve is exhausted, the entries into the mine would be securely sealed for safety purposes. Hence, there will not be any discharge from the mine. However, if for the safety of the future mine or any neighbor mine, pumping is required from the presently worked seams, then the arrangements for pumping will be kept intact and the water shall be discharged into the surface water bodies after passing the same through settling tank on the surface.

### **3.2.3 Water Quality Monitoring**

#### **Present Practice**

Fortnightly samples of mine water as well as Quarterly samples of drinking water are collected and tested. Results of water testing pertaining to a particular Quarter are obtained and compared with MoEF standard.

#### **Present status of water quality**



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17.	Selenium (mg/l)	BDL	BDL	0.01	No relaxation
18.	Arsenic (mg/l)	BDL	BDL	0.05	No relaxation
19.	Cadmium (mg/l)	BDL	BDL	0.01	No relaxation
20.	Lead (mg/l)	BDL	BDL	0.05	No relaxation
21.	Zinc (mg/l)	0.02	0.02	5	15
22.	Chromium (Cr <sup>6+</sup> ) (mg/l)	BDL	BDL	0.05	No relaxation
23.	Alkalinity (mg/l)	228	208	200	600
24.	Aluminium (mg/l)	BDL	BDL	0.03	0.2
25.	Boron (mg/l)	BDL	BDL	1	5
26.	Phenolic Compounds (mg/l)	BDL	BDL	0.001	0.002
27.	Coliform (MPN / 100 ml)	NIL	NIL	Shall be absent	-

(BDL – Below Detectable Limit)

**MINE WATER QUALITY****EFFLUENT WATER QUALITY MONITORING DATA**

NAME OF THE COMPANY : WCL YEAR : 2012  
NAME OF THE AREA : KANHAN Q.E. : JUN.  
NAME OF THE PROJECT : TANDSI UG

Name of the Location : Mine water discharge - KTUW-1

Month	Date of Sample collection	Analysis Results			
		pH	TSS (mg/l)	COD (mg/l)	O & G (mg/l)
APR. 2012	06.04.12	6.79	38	60	BDL
APR. 2012	22.04.12	7.76	24	40	BDL
MAY. 2012	08.05.12	7.63	14	20	BDL
MAY. 2012	19.05.12	7.70	34	60	BDL
JUN. 2012	04.06.12	7.68	26	40	BDL
JUN. 2012	21.06.12	7.62	28	40	BDL
<b>TLV as per Env.(Protection) Amendment rule 2000</b>		<b>5.5 - 9.0</b>	<b>100</b>	<b>250</b>	<b>10</b>

(BDL - Below Detectable Level- Value &lt; 1.0 mg/l)

**EFFLUENT WATER QUALITY MONITORING DATA**

NAME OF THE COMPANY : WCL YEAR : 2012  
NAME OF THE AREA : KANHAN DATE : 06.01.12  
NAME OF THE PROJECT : TANDSI UG

**CMPDI****1. Name of the Location : Mine water discharge**

Sl. No.	Parameters	Analysis Results	Standards for discharge Part A, Schedule VI
1	pH	7.71	5.5 – 9.0
2	Temperature (°C)	17.3	Te<Ts+5°C
3	Colour (Hz)	1	*
4	Odour	UNOBJECT	Unobjectionable
5	Turbidity (NTU)	1	*
6	Conductivity (µs/cm)	770	*
7	Total Suspended Solids (mg/l)	26	100
8	Oil & Grease (mg/l)	BDL	10
9	Dissolved Oxygen (mg/l)	6.19	*
10	C.O.D. (mg/l)	40	250
11	B.O.D. 3 days at 27°C (mg/l)	2	30
12	Total Residual Chlorine (mg/l)	BDL	1 (Max.)
13	Ammonical Nitrogen (mg/l)	0.18	50
14	Total kjeldahl Nitrogen (mg/l)	1.9	100
15	Free Ammonia (mg/l)	BDL	5.0
16	Arsenic (mg/l)	BDL	0.2
17	Lead (mg/l)	BDL	0.1
18	Hexavalent Chromium (mg/l)	BDL	0.1
19	Total Chromium (mg/l)	BDL	2
20	Copper (mg/l)	BDL	3
21	Zinc (mg/l)	BDL	5
22	Selenium (mg/l)	BDL	0.05
23	Nickel (mg/l)	BDL	3
24	Cadmium (mg/l)	BDL	2
25	Dissolved Phosphate (mg/l)	BDL	5
26	Sulphide (mg/l)	BDL	2
27	Iron (mg/l)	BDL	3
28	Manganese (mg/l)	BDL	2
29	Nitrate Nitrogen (mg/l)	2.4	10
30	Phenolics Compounds (mg/l)	BDL	1

1. BDL - Below Detectable Level, 2. \* - Limit not specified.

**Well Water Level monitoring report**

<b>KANHAN AREA, WCL</b>
<b>Ground water monitoring data of dugwells in Tandsi U/G mine buffer zone area</b>

**CMPDI**

Well No.	Name of village	Well location	Owner	Utility	Well dia (m)	Height of measuring point (m agl)	Well depth (m bmp)	DEPTH TO WATER TABLE, m (bmp)			
								May' 10	Aug' 10	Nov' 10	Jan' 11
16	PINDARAI	Centre of village H/O Premlal	Prem lal	Domestic	3.20	G.L.	7.55	NA	NA	NA	NA
17	BELAMDHAN A	In the compound of premlal yadubansi	Premalal Yadubansi	Domestic	8.60	0.55	10.35	7.35	5.45	4.85	6.95
18	BHARDAGARH	Locally Known on Thapakua In the Valley near school	G.P.	Domestic	3.60	0.78	4.05	1.37	0.04	0.67	2.07
20	RAKHIKOL	Opposite managers office	WCL	Domestic	3.35	0.85	7.10	3.65	1.05	2.55	3.35
60	TANDSI MASJID	In the Masjid complex	WCL	Domestic	2.80	0.45	3.70	1.25	1.05	1.45	ABDN
65	RAMPUR	Near house of parteh sir opp. Govt LP school	Pvt	Domestic	2.30	0.80	7.35	4.00	0.90	2.00	4.20
66	MALDAMAU	Out side village on Junction of village Road and main road	Pvt	D/I	6.25	0.70	6.35	3.90	0.90	1.00	4.70
67	CHICHOLI	On Distt boundary of Chindwara & Betul Wireless Tower	Pvt	Irrigation	4.65	G.L	11.70	8.55	6.70	3.50	8.20
68	KHAIRWANI	West of village on Sarni Road old well opp Ramnath Yadav	Pvt	Irrigation	6.00	0.45	6.50	Dry	0.95	1.65	Dry
Note - * - Modeled water level not approachable											

**Practice after the closure**

The above practice of monitoring of quality of water would be continued for a period 3 years after the cessation of mining activities. If required, corrective action/steps would be taken to mitigate any adverse effect on local water regime. The responsibility of maintaining the quality of drinking water will be entrusted on the State Authorities after 3 years of mine closure.

**3.3 Air quality management****3.3.1 Present practice**

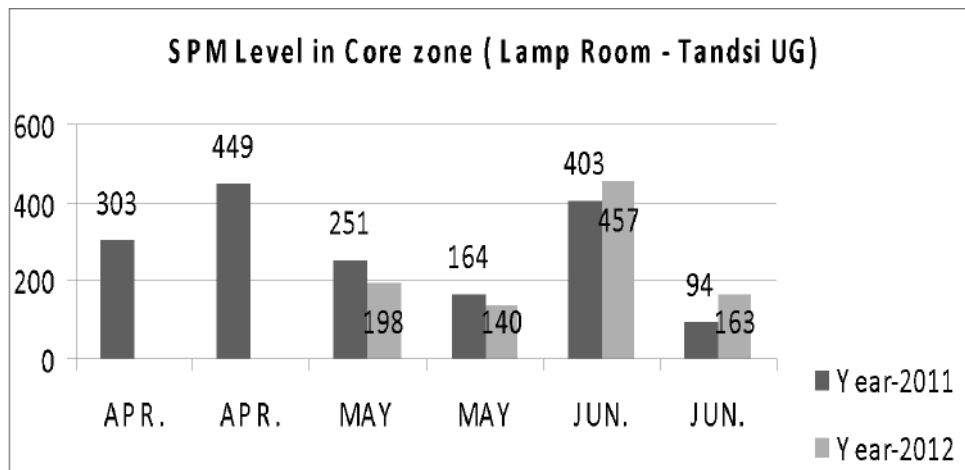


**CMPDI**

MAY. 2012	08.05.12 - 09.05.12	146	40	2	1
MAY. 2012	19.05.12 - 20.05.12	182	87	4	3
JUN. 2012	04.06.12 - 05.06.12	182	76	3	2
JUN. 2012	21.06.12 - 22.06.12	67	30	2	1
<b>PERMISSIBLE LIMIT</b>		<b>200</b>	<b>100</b>	<b>80</b>	<b>80</b>

3. Lamp Room		: KTUA-3				
( 24 hourly values in $\mu\text{g}/\text{m}^3$ )						
Month	Dates of Sampling		Parameters			
	From	To	SPM	PM-10	NO <sub>x</sub>	SO <sub>2</sub>
MAY. 2012	08.05.12	09.05.12	198	60	2	1
MAY. 2012	19.05.12	20.05.12	140	34	3	2
JUN. 2012	04.06.12	05.06.12	457	146	7	4
JUN. 2012	21.06.12	22.06.12	163	32	3	2
<b>TLV as per Env.(Protection) Amendment Rule 2000</b>			<b>600</b>	<b>300</b>	<b>120</b>	<b>120</b>
4. Colony		: KTUA-4				
( 24 hourly values in $\mu\text{g}/\text{m}^3$ )						
Month	Dates of Sampling		Parameters			
	From	To	SPM	PM-10	NO <sub>x</sub>	SO <sub>2</sub>
APR. 2012	06.04.12	07.04.12	97	38	2	2
APR. 2012	22.04.12	23.04.12	192	86	3	2
MAY. 2012	08.05.12	09.05.12	86	32	2	1
MAY. 2012	19.05.12	20.05.12	163	74	4	2
JUN. 2012	04.06.12	05.06.12	148	76	3	1
JUN. 2012	21.06.12	22.06.12	99	34	2	1
<b>PERMISSIBLE LIMIT</b>			<b>200</b>	<b>100</b>	<b>80</b>	<b>80</b>

**CMPDI**



**NOISE LEVEL DATA**

NAME OF THE COMPANY : WCL YEAR : 2012  
 NAME OF THE AREA : KANHAN Q.E. : JUN.  
 NAME OF THE PROJECT : TANDSI UG

Name of the Location : Near Fan House - KTUN-1

Month	Date of Data collection	Noise Level in dB(A)		Remarks
		Day Time	Night Time	
APR. 2012	08.04.12	72.1	67.6	
APR. 2012	22.04.12	69.5	66.7	
MAY. 2012	09.05.12	68.7	65.8	
MAY. 2012	22.05.12	69.8	66.6	
JUN. 2012	11.06.12	67.6	64.2	
JUN. 2012	22.06.12	71.5	67.2	
<b>Noise Level Standard as per Env. (Protection) Amendment rule 2000</b>		<b>75</b>	<b>70</b>	

Name of the Location : Colony - KTUN-2

Month	Date of Data collection	Noise Level in dB(A)		Remarks
		Day Time	Night Time	

**CMPDI**

APR. 2012 APR. 2012	08.04.12 22.04.12	51.3 52.7	43.1 42.4	
MAY. 2012 MAY. 2012	09.05.12 22.05.12	53.4 50.3	43.2 40.9	
JUN. 2012 JUN. 2012	11.06.12 22.06.12	49.2 50.1	39.9 41.2	
<b>Permissible Limit</b>		<b>55</b>	<b>45</b>	

**3.3.2 Practice after the closure of the mine**

a. As the sources of dust and fume generation would no longer be present, the present practice of arresting the air pollution, as enumerated above at Para – 3.3.1 would no longer be required after the closure of the mine.

However, water sprinkling would be done on the roads, which remain in use after the mine closure.

b. Quality of air would be monitored for a period of 3 years after the cessation of mining activities. Efforts would be made to bring the air quality to the pre-mining standard.

**3.5 Disposal of Buildings, Plants & Machineries**

**3.5.1 Infrastructure details**

Presently, the project has following infrastructure and it is most likely that these infrastructure will remain till the completion of the project.

**a. Surface bunkers with capacity**

Twin Bunker Capacity : 100t.

**b. Workshop – Size with major equipment**

Size : 50m x 40m  
Equipments

## **CMPDI**

Lathe	: 02Nos.
Power drill	: 01 Nos.
Shaper machine	: 01 Nos.
Coal rolled Threaded	: 01 Nos.

**c. Colony (number and type of quarters)**

Miners Quarters	: 212	B Type Quarters	: 30
Type-C	: 11	Triple Storey miners	: 623
Type-D	: 02	Old Types	: 06

**d. Water supply arrangement (source & facilities available like treatment plant and its capacity)**

Water pumped from the Tandsi mine is treated 1.0GLD filter plant at Tandsi. This filter water is supplied to 1 no. Overhead tank, the filtered water is supplied for drinking purpose.

**e. Details of non-residential building**

Office Building	: 01
Substation	: 05
Fan house	: 02
Workshop	: 01
Explosive service Magazine	: 01

### **3.5.2 Post closure disposal/re-use of the Buildings, Plants & Machineries**

**a. Disposal or reuse of Haulage , Ventilation fan , CHP, Workshop**

At the time of closure of the mine, it is expected that most of the equipment would complete its rated life and would be surveyed off as per the Company's guidelines. The surveyed off equipments would be auctioned. However, if some of the equipments would not have covered their rated life, they would be diverted to the neighboring projects for gainful utilization.

As regards CHP it would be linked to some other collieries. If the CHP is not found economical to be used, it will be dismantled and usable items would be dispatched to needy area/projects.

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### **b. Disposal or reuse of transmission lines and sub-station**

As per the electricity demand of the operating neighboring projects, an analysis would be made as to whether the existing sub-station and transmission lines could be gainfully used or not. If the scope of gainful utilization is not found, they will be dismantled and the usable items/spares/conductors etc. would be dispatched to needy Areas/projects.

### **c. Disposal or reuse of residential and non-residential buildings**

At the time of final closure, a list of surface buildings would be prepared in detail. Thereafter following steps would be taken in chronological order in respect of the available buildings.

- An assessment would be made to find that whether the available buildings can be used by the existing neighboring projects or any new project that might have come up in the vicinity.
- In case the listed assets cannot be utilized by the nearby project, efforts would be made to sale these assets after making the list available to potential purchasers and asking the interested purchasers to submit sealed bids.
- Thereafter the state agencies/local agencies may be asked to take possession of the buildings, if required by them.
- When there would be no takers, the buildings would be demolished and usable items would be recovered for future use. The clear land so obtained would be afforested or developed as park for the use of local people.

## **3.5 Safety and security arrangement**

- 3.5.1 However, once the reserve is exhausted, the entries into the mine would be securely sealed for safety purposes.
- 3.5.2 In case the mine entries remain unused for some time, they would be properly fenced to avoid any inadvertent entry of animals or human beings. Flags/Boards with warning signals shall be posted at vulnerable places to avoid chances of accidents.

## **3.6 Survey records of workings**

## **CMPDI**

All the mine workings areas, roads, ponds, tanks etc. shall be resurveyed and records shall be updated. Copy of such records shall also be submitted to the appropriate competent authorities, such as DGMS and State Authorities.

### **3.7 Disposal management of hazardous material**

At the time of closure, assessment would be made as to find whether there are any hazardous material that could cause problem. Such hazardous material e.g. explosives, chemicals, oil etc shall be appropriately disposed off.

### **3.8 Re-deployment of work force**

3.8.1 The current manpower of the project is 922 as on 31.03.2012 and the likely superannuation numbers are as under:

Year	2012	2013	2014	2015
Manpower to be superannuated	30	26	29	35

3.8.2 At present it is very difficult to assess the manpower of the project, which will remain at the time of final closure of mining activities, as there would be cases of superannuation as well as induction of fresh manpower.

3.8.3 However, at the time of final closure after exhaustion of entire mineable reserve, following steps would be taken for effective management of available manpower at the time of closure.

- a. First option of VRS would be given to the age group of + 50 years some may accept, others will be gainfully utilized in other projects.
- b. After exhausting the above option, the middle aged group workforce (between 40-50 years) would be transferred to the similar projects.
- c. If vacancy in similar nature projects gets exhausted, the relatively young workforce would be re- trained and re-deployed in other projects.

### **3.9 Emancipation from the community facilities**

3.9.1 The local communities are being provided many civic facilities, such as educational facilities, health facilities, and drinking water. At the time of final closure after exhaustion of entire mineable reserve, these facilities will be entrusted upon the local bodies/Trust of local people and state authorities so that same could continue even after the mine closure. If needed a lump sum amount would also be paid to the local bodies/Trust of local people/State bodies for proper upkeep and maintenance of various community facilities.

**CMPDI**

3.9.2 To ensure that no financial loss due to the closure of mining activity in the presently worked seam occurs to the local community engaged indirectly to the existing mine, following steps would be taken.

- It has been seen in the past that in the event of closure of a mine, the local people indirectly dependent on the mine switch over their economic/professional activities in the existing/new or expansion mines located in the nearby area. Local Management, if needed, extends some basic helps to them in such type of switching over. Hence, it is expected that in the instant case also the transition of the local people from one area to the other area for their sustenance would not be any problem.
- It is proposed that afforested land will be handed over to State Forest Department for the benefit of local ecosystem. The forest wealth can also be utilized by local people or tribal in the form of fruits and fodders

**3.10 PLANTATION DETAILS**

Sl. No.	Financial year	No. of Plants
1.	Up to July 2009-10	80000 Nos.
2.	2010-11	1000 Nos.
3.	2011-12	4900 Nos.

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**CMPDI**

**Chapter - 4**

**ECONOMIC REPURCUSSION OF CLOSURE OF MINE**

**4.1. Manpower of the project:** - The current manpower of the mine is 922 as on 31.03.2012.

**4.2. Assessment of income scenario of local people:** -

(a) Local employees will be redeployed in other projects of the company

(b) People engaged in indirect employment / ancillary activities will find no financial loss due to the mine closure as their activities will be shifted in the new or expansion mines located in the coalfield area. As such the direct and indirect manpower will not be affected due to mine closure.

(c) Resettlement / Redeployment of (a) & (b)

- Compensation for loosing employment or income.
- Vocational training for continuance / sustenance of income level:

Note: It is proposed that reclaimed and afforested land will be handed over to state Forest Dept for the benefit of local ecosystem as the surface rights are acquired from that dept. The forest wealth can also be utilized by local people or tribal in the form of fruits and fodders. The water reservoir in the mine voids will be utilized for irrigation, domestic drinking water or stabilizing the ground water regime. Landscaping during closure of mine will make the spot, a tourist attraction.

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**CMPDI**

**Chapter - 5**

**TIME SCHEDULING FOR ABANDONMENT**

The closure of mines evolves environmental, technical, social aspect and financial assurance for implementing the post closure activities as per guideline of ministry of coal. The post closure implementing activities will run for three years. Mine closure in terms of sealing of mine openings, shifting of machineries will be carried out after one year. The table given below indicates major activities along with time frame is suggestive only. However actual time frame will be finalized at appropriate time well before actual closure of mine.



**NOTE:** - The progressive mine closure will be done as per the provisions made out in the project report and as per the situation/ requirement that may arise in course of execution of the Project Report. The subsidence management of UG mine will be taken up whenever the cracks develop or the ground area subsides

**CMPDI**

## Chapter - 6

### MINE CLOSURE COST

- 6.1 The mine closure cost will cover the following activities for which a corpus fund will be created by opening an escrow account with the coal controller organization in nationalized bank. In case of mines having acid mine drainage, post closure acid mine drainage management cost shall also be included in the total closure cost. An amount @ Rs 1.00 lakhs per Ha of the project area will be deposited in this account for final mine closure. Progressive mine closure will be done with the fund provided in approved report.
- 6.2 The above rate has been taken from Circular No. 55011-01-2009-CPAM, Government of India, Ministry of Coal, Dated 27 August 2009 duly updated on 25 April 2012
- 6.3 Type of Mine : Under Ground mine      Life of mine(1.04.2012) 14 years  
Capacity of mine: 0.9 MTPA as per EMP  
Total project area of the mine as per EMP: 611.80 Ha  
The financial provision for closure of Tandsi Under ground mine comes to around Rs. 1088.90lakhs (based on July 2012 WPI(Provisional)) at the @ Rs 1 lakh/ Ha.
- 6.4 Mine closure cost break-up for Tandsi Under ground mine is hereunder;-

Sl. No	Activity	% of Total Mine Closure Cost	Amount (Rs Lakhs )
<b>A</b>	<b>Dismantling of structures</b>		
	Service Building	3.50%	38.11
	Residential Building	37.58%	409.21
	Industrial Structures like CHP, Workshop, Field Substation, Cap lamp room, Haulage, Fan Installation etc.	6.33%	68.93
<b>B.</b>	<b>Permanent sealing of mine entries (incline mouth and air shaft.)</b>		
	Sealing of incline mouths and air shafts.	2.32%	25.26
<b>C.</b>	<b>Subsidence Management.</b>	1.75%	19.06
<b>D.</b>	<b>Landscaping</b>		
	Landscaping of the clear land for improving its esthetic.	5.80%	63.16
<b>E.</b>	<b>Plantation</b>		
	Plantation over the cleared area obtained after dismantling and on other Barren Spaces.	10.00%	108.89
<b>F.</b>	<b>Monitoring / Testing of parameters for three years.</b>		

**CMPDI**

	Air Quality	3.83%	41.70
	Water Quality	3.34%	36.37
G.	<b>Entrepreneurship development (Vocational / Skill Development) Training for sustainable income of affected people.</b>	4.65%	50.63
H.	<b>Miscellaneous and other mitigative measures.</b>	11.60%	126.31
I.	<b>Man power cost for supervision</b>	9.30%	101.27
<b>TOTAL</b>		100%	1088.90

**Note-** The above cost expenditure will be met from the corpus fund deposited in the escrow account by the mine operator. However, the additional amount beyond the funds in escrow account will be provided by the mine operator after estimating the final mine closure cost (as per the mine closure guideline).

**6.5 Details of escrow fund**

The total project area is 611.80 Ha. So the corpus based on August, 2009 rate is 611.80 Lakh @ 1.0 Lakh Rs/Ha of project Area. The wholesale price Index in August, 2009 is 129.6 and the latest WPI(Provisional), for the month of July 2012 available in the website of Office of Economic Adviser, Ministry of Commerce, Government of India is 164.8. So the current value of corpus is Rs.  $611.80 \times 164.8 / 129.6$  Lakhs, which comes to Rs. 777.96 lakhs. This corpus is to be divided by the life of mine i.e. 14 years. So dividing by 14 years, the annual corpus comes to Rs 55.56 lakhs. This amount is to be deposited in escrow account every year with 5% escalation.

S.NO.	FINANCIAL YEAR	AMOUNTS IN LAKHS
1	2012-13	55.56
2	2013-14	58.34
3	2014-15	61.25
4	2015-16	64.32
5	2016-17	67.53
6	2017-18	70.91
7	2018-19	74.46
8	2019-20	78.18
9	2020-21	82.09
10	2021-22	86.19
11	2022-23	90.50
12	2023-24	95.03
13	2024-25	99.78
14	2025-26	104.77
	<b>Total</b>	<b>1088.90</b>

**CMPDI**

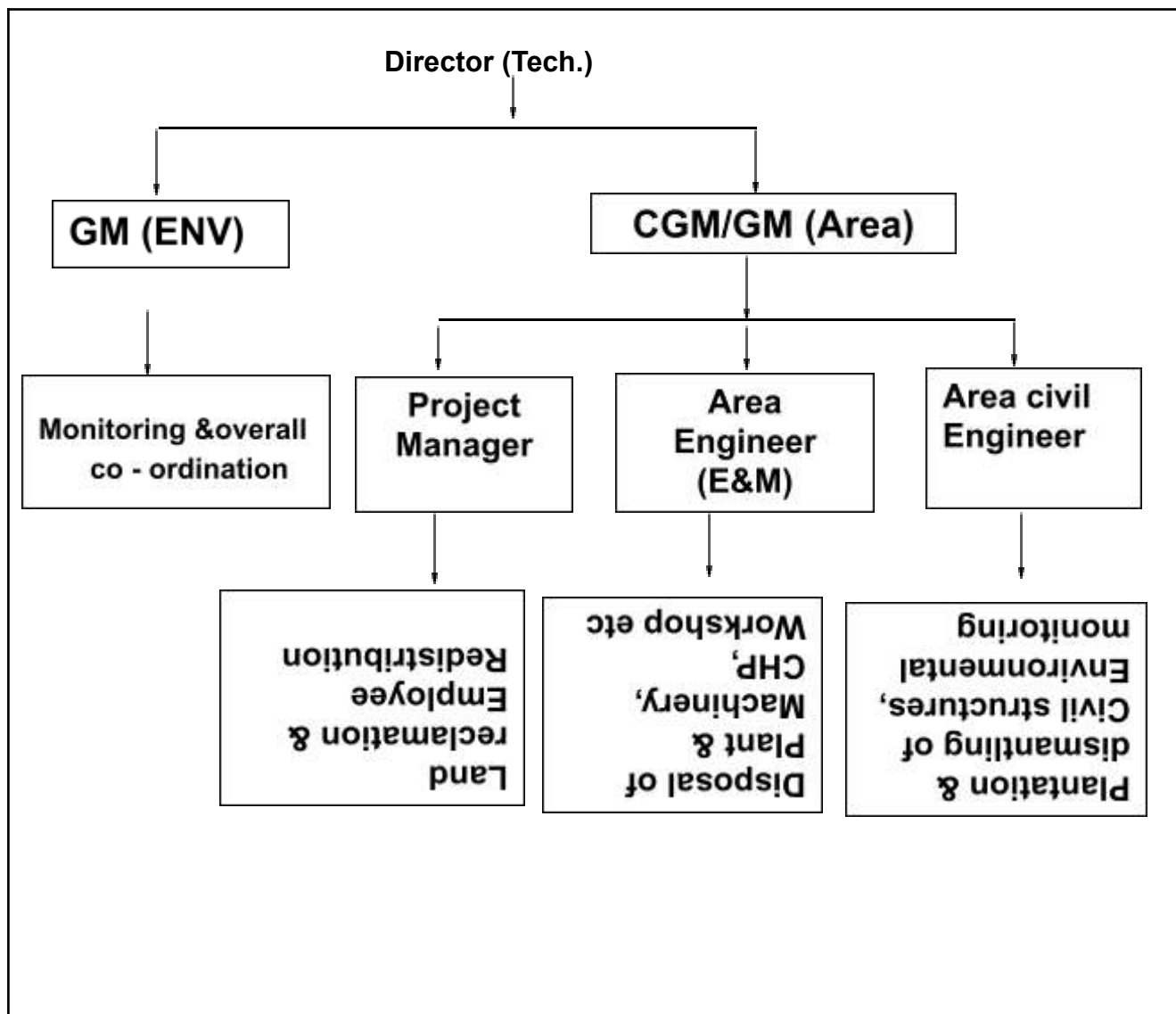
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**CMPDI**

**Chapter - 7**

**IMPLEMENTATION PROTOCOL**

For implementing the mine closure activities, the following organizational structure has been proposed:



Environmental monitoring for three years after closure of mine will be carried out to evaluate the environmental quality of the area. If need be, proper mitigative measures will be taken up after evaluating the environmental quality. The funds for this have been provided in the cost estimate. Before closure of the mine, Area GM will prepare survey and disposal report and the same will be submitted to DGMS for acceptance.

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