

Inspection Report

**In compliance of Order dated 23.05.2023 passed in
O.A. No. 35 of 2023 (CZ); “RajamalGurjarVs. State of Madhya Pradesh
&Ors” by Hon’ble N.G.T., Bhopal.**



Date of Inspection: 6th July 2023

Submitted by:
Madhya Pradesh Pollution Control Board
Regional Office, Chhindwara

Inspection Report w.r.t. Order dated 23.05.2023 passed in O.A. No. 35 of 2023 in the matter of “RajamalGurjar Vs. State of Madhya Pradesh &Ors.” by the Hon’ble N.G.T., (C.Z.) Bhopal.

The current matter is related to causing of pollution by a Metal Cladding & Bonding unit namely ICEM Engineering Pvt. Ltd.at Village Ambhori, Tehsil Multai, District Betul (MP). The Head Office linked to the cladding unit is situated at Raghunath Nagar, Thana (W) Maharashtra in name of Anand Industries Compound. According to the petition, the impact of the cladding process is reported on majorly 6 villages namely Narkhed, Sherghad, Deogaon, Prabhatpattan, Somgarh and Mangonakala among others.

The process of the industry involves bonding of metal sheets using high explosives which are placed on the top layer of metal surfaces. An initiator or detonator initiates an explosion that generates a shock wave, causing the metal surfaces to deform and collide, creating metallurgical bond. The heat generated fuses the metal together, creating a strong bond.

In view of the above, Hon’ble NGT has constituted a Joint Committee for proper investigation consisting of:-

- i. District Magistrate/Collector, Betul (M.P.) or his representative
- ii. One representative from Directorate General of Mines Safety (DGMS), Bilaspur (Chhattisgarh)
- iii. One representative from Central Pollution Control Board (M.P.)
- iv. One representative from Madhya Pradesh Pollution Control Board (M.P.)

Introduction

Explosive welding or cladding is usually performed on relative thick plates by means of a large scale parallel plate set-up. Several explosive welding configurations were developed mainly in the nineteen sixties and seventies for their potential use in modern industrial applications. Explosive cladding is used to make special bimetallic heat exchanger tubes for the protection of electrodes that are used in electrolysis. Explosive line and seam welding are important

bonding techniques that allow the welding of both similar and dissimilar metal plates and sheets. In case of manufacturing of tubes, bonding occurs over a small overlapping fraction of the two surfaces which requires only a small amount of explosive (e.g. 5 g/m for line welds in thin ductile sheets). Explosive foil cladding is also used as an alternative coating technique. The process involved in the present unit includes bonding of two Metal sheets one of Mild Steel and one of Stainless Steel which include heavy cladding using 180-200 kg clad powder at a time.

Formation of Committee:

Madhya Pradesh Pollution Control Board being the Nodal Agency communicated the order with all concerned departments seeking nomination of committee members. After receipt of the nominations the committee formed consisting of the members below:-

1. Smt. Anamika Singh, Tehsildar, Multai as representative of District Magistrate/Collector, Betul (M.P.)
2. Shri Thirupathi Kamera, Deputy Director of mines safety, Directorate General of Mines Safety (DGMS), Chhindwara (M. P.)
3. Dr.Poulami C. Patil, Scientist B, Central Pollution Control Board (M.P.)
4. Shri K. N. Katare, Regional Officer, Madhya Pradesh Pollution Control Board Regional Office, Chhindwara

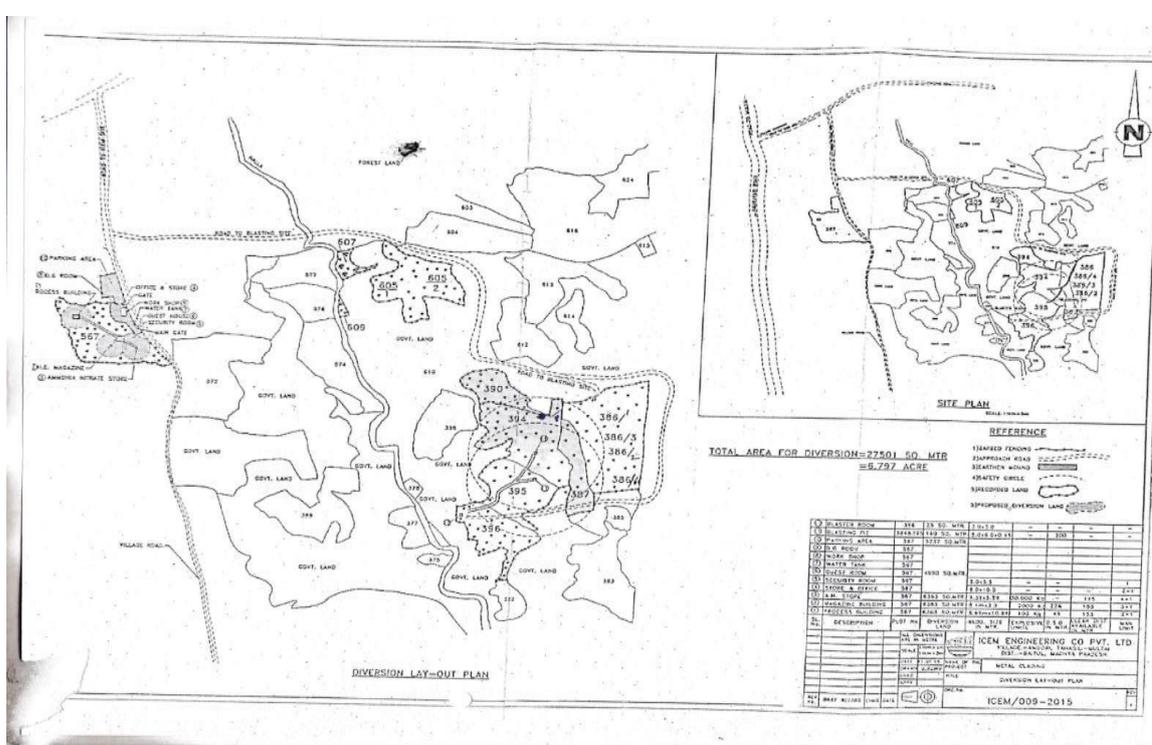
The joint committee visited the site on 06.07.2023 and conducted a detailed inspection of the cladding unit as well as the 06 villages around the cladding site mentioned in the petition. Shri R.K.Dubey, Nayab Tahsildar prabhat pattan ,Shri Sanjay Rajpoot, Chemist from MPPCB, Shri Sunil Kolhatkar, SLA from CPCB, also joined the committee as supporting staff.

Verification

- The unit has commenced its functions since the year 2015 and applied for consent to operate on 26.10.2018. the unit was granted consent to operate on 22.11.2018 under the category of Red Small industry with a validity till 31.10.2023 under section 25 of The Water (Prevention and Control of pollution) Act, 1974 and section 21 of the Air (Prevention and Control of Pollution) Act, 1981.
- Consent to Operate is issued for the below production capacity:-

Product	Production Capacity
Captive Power Generation by DG Sets	50 KWH/ 60 KVA
General Fabrication	15000 TPA
Manufacturing of metal clader powder (a mixture of Ammonium Nitrate, TNT & Salt)	180 TPA
Metal Cladding	15000 TPA

- During visit it was informed by the representative of the Industry that the unit is functioning in two parts as follows-
 1. Pre bonding shop, magazine, Ammonium Nitrate Store and process building in 13 acre of own land of industry.
 2. Metal cladding process is performed in 63 acre of own land of industry.
- The industry is located at Ambhori Village, Tehsil Multai at GPS Coordinates of 21.680737N & 78.288191E. The unit owns an area of 76 acre land. The geo map is attached herewith.



- The unit is having two storage sheds for separate storage of Ammonium Nitrate & Tri-Nitro Toluene (TNT) and one mixing area. Size of the sheds are as below:-
 1. Ammonium Nitrate storage area – 5.93m X 9.43m
 2. High Explosive storage area (TNT) – 3.95m X 8.17m
 3. Mixing area – 6.74m X 10.73m
- During the pre-processing of bonding the metal plates, a mixture of Ammonium Nitrate, TNT and salt is prepared in a ratio of 44:11:45 which is also known as clad powder.
- During verification of the documents, it was found that the unit has acquired license from the Petroleum & Explosive Safety Organization (PESO) for storage of 30000 Kg of Ammonium Nitrate at a time and 93600000 Kg per annum with validity till 31.03.2025. Several clauses are mentioned in the license.
- Similarly the unit has license from Petroleum & Explosive Safety Organization (PESO) for usage of 600MT metal cladding powder per annum with a validity of 31.03.2024.
- As per the conditions pertaining to CTO, the daily quantity of outfall limit of trade effluent is 0.050 KL/Day and the daily quantity of sewage outfall is restricted at 1.500 KL/Day

Observations

- No record maintenance log book for water discharge has been provided by the industry to the team. While inspection, it was observed that the red coloured effluent generated against floor washing and washing of mixer in which explosive clad powder is prepared, is discharged in the open area without any treatment. As per the consent conditions, the effluent generated from washing of mixer/ other containers are covered under Effluent Treatment. Sample of the effluent has been collected for detailed investigation-
 - Result of effluent sample is annexed as **Annexure -1**
 - Sewage water discharge report given by industry is annexed as **Annexure -2**
- No Septic tank/ soak pit was observed during visit, while as per CTO adequate facility of sewage treatment shall be made for domestic purpose.
- The metal cladding pit (cladding site) is situated at about 2 km from the preparation site, is surrounded by soil dump of 18m height. As per the conditions of the CTO Dust suppressor, green belt, water sprinkler and a soil dump of 12 m height is recommended to maintain acoustic condition. But as per actual no water sprinkler was observed, though the area is mainly surrounded by forest and agriculture land, lack of Green belt around the pit was observed.
- During inspection of villages no severe cases of cracks were found as reported in the petition.
- Ambient air quality monitoring was performed and the results of the prescribed parameters PM₁₀, PM_{2.5}, SO₂ and NO_x areas follows-
 - Result of Air Quality Monitoring Report is annexed as **Annexure -3**

ICEM Engineering co. Pvt. Ltd. Distt. Betul

Analysis Report of Air

S.N.	Name of location				Near Cladding Unit	Near Main Gate	Near Cladding Site
1	Parameter Analyzed	Unit	Test Method	Range of Testing	Result		
2	Nox- Amb	MICRO/M ³	IS:5182 (Part-6)	30-80 µg/M ³	9.53	10.8	13.34
3	RSPM (PM ₁₀ - Amb)	MICRO/M ³	IS:5182 (Part-XXIII)	60-100 µg/M ³	36.36	38.35	51.6
4	SO ₂ - Amb	MICRO/M ³	IS:5182 (Part-XXIII)	20-80 µg/M ³	1.25	2.91	2.5
5	RSPM (PM _{2.5} - Amb)	MICRO/M ³	IS:5182 (Part-XXIV)	40-60 µg/M ³	12.63	12.48	-

As per above all the parameter found within the prescribed limit

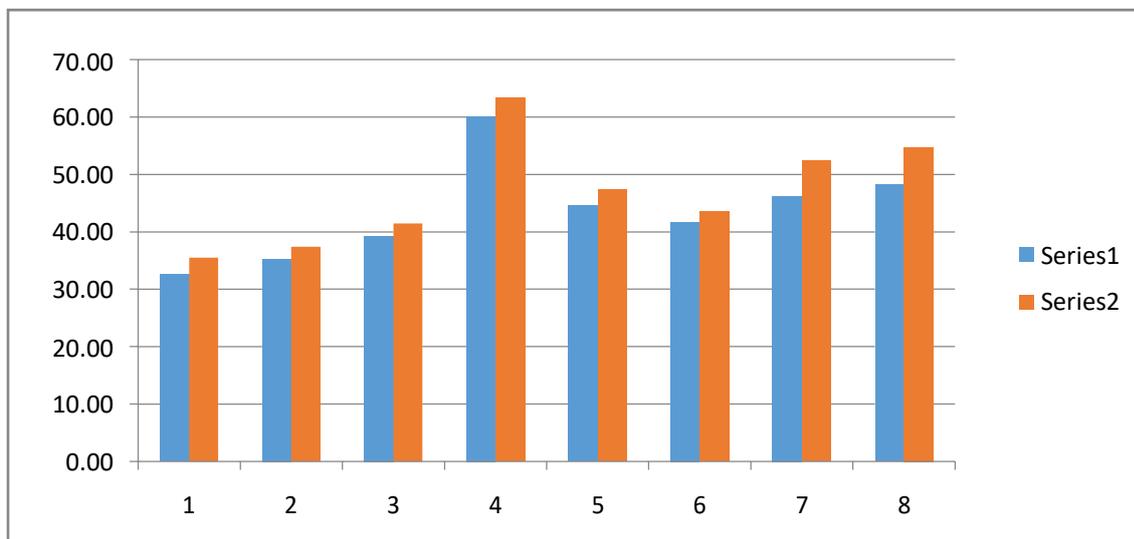
- Noise monitoring was also performed at the cladding site and at the nearest village Somgarh situated at an Aerial distance of 2.13 Kms. Samples collected during before cladding, during cladding and after cladding. The maximum result found at the nearest point from the cladding site i.e. at a distance of 200 m was recorded as 106 db and at the same time it was recorded as 63.4 db at village Somgarh. On an average 06 cladding take place per day using Approx 1100 kg of explosive (Approx. 170-200 kg at a time as per requirement). Result of noise are as follows -

- Result of Noise Monitoring Report is annexed as **Annexure -4**

ICEM ENGINEERING COMPANY PVT.LTD.VILLAGE SOMGARH TEH.MULTAI, DISTT.BEUL M.P							
Noise Level Meter							
Make				LT Lutron			
Modal				SL-4011			
Serial No.				C90698			
Calibration Result of noise Level Meter							
Calibration				94 dB at 1000 Hz		114 dB at 1000 Hz	
Sr. No.	Time Duration	Sound Parameters (DBA)					
		Leq	L ₁₀	L ₅₀	L ₆₀	L _{min}	L _{max}
1	12:00 TO 13:00 PM	34.07	-	-	-	32.62	35.52
2	13:00 TO 14:00 PM	36.40	-	-	-	35.36	37.43
3	14:00 TO 15:00 PM	40.37	-	-	-	39.28	41.45
4	15:00 TO 16:00 PM	61.76	-	-	-	60.12	63.40
5	16:00 TO 17:00 PM	45.98	-	-	-	44.58	47.38
6	17:00 TO 18:00	42.63	-	-	-	41.74	43.52
7	18:00 TO 19:00 PM	49.30	-	-	-	46.23	52.36
8	19:00 TO 20:00 PM	51.49	-	-	-	48.24	54.74
Average L equivalent dB(A)		45.25	-	-	-	43.52	46.98
Before cladding		During cladding			After cladding.		

Sampling Point	Village- Somgarh
Latitude	21.6514
Longitude	78.3216

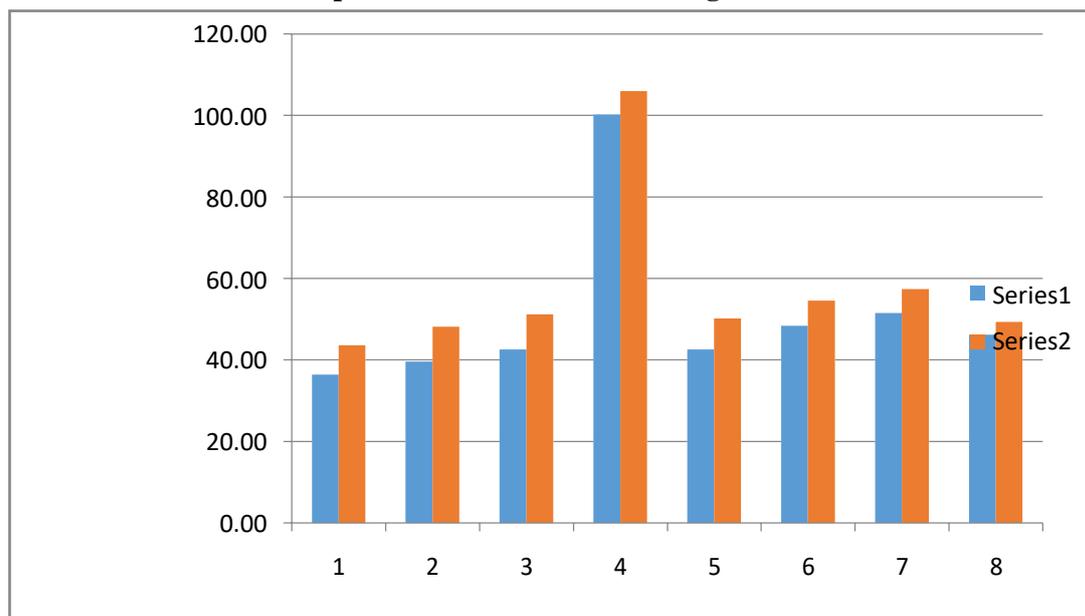
Graph Chart for Noise Monitoring



ICEM ENGINEERING COMPANY PVT.LTD.VILAGE-AMBHORI TEH.MULTAI,DISTT.BEUL M.P							
Noise Level Meter							
Make		LT Lutron					
Modal		SL-4011					
Serial No.		C90698					
Calibration Result of noise Level Meter							
Calibration		94 dB at 1000 Hz			114 dB at 1000 Hz		
Sr.	Time Duration	Sound Parameters (DBA)					
No.		Leq	L ₁₀	L ₅₀	L ₆₀	L _{min}	L _{max}
1	12:00 TO 13:00 PM	40.00	-	-	-	36.40	43.60
2	13:00 TO 14:00 PM	43.90	-	-	-	39.60	48.20
3	14:00 TO 15:00 PM	46.94	-	-	-	42.64	51.24
4	15:00 TO 16:00 PM	103.12	-	-	-	100.23	106.00
5	16:00 TO 17:00 PM	46.40	-	-	-	42.60	50.20
6	17:00 TO 18:00	51.51	-	-	-	48.41	54.61
7	18:00 TO 19:00 PM	54.47	-	-	-	51.53	57.40
8	19:00 TO 20:00 PM	47.79	-	-	-	46.24	49.34
Average L equvalent dB(A)		54.27	-	-	-	50.96	57.57
Before cladding		During cladding			After cladding.		

Name Sampling Point		200 meter from Cladding Site
Latitude		21.678697
Longitude		78.300465

Graph Chart for Noise Monitoring



As per above all the parameter were found within the prescribed limit

- As per CTO condition 75 db sound is permissible within the premises and as per the prescribed limit of ambient noise, the minimum level must be 70 db and maximum level must be 110 db as per WHO Guideline for noise level for industrial area.
 - WHO Guideline for noise level for industrial area is annexed as [annexure -5](#)
- During cladding 200 liters of water is poured on the top of the layer of explosive, for maintaining acoustic condition. It was observed that the effluent generated after cladding process was splashed nearby and it is drained with the help of two pipes to the open areas outside in an uncontrolled manner. It is recommended that the effluent must be collected and sent to the main site for proper treatment.
- An earthen reservoir (Wardha reservoir) is situated at about 4 km away from the cladding site. As per complainant, cracks were reported, but during visit no cracks were observed. Question also raised regarding the deterioration of water quality due to the Tremors of cladding. To investigate this water sample was collected from the reservoir. Analysis report is present on the tables.
 - Result of Wardha reservoir Water Monitoring Report is annexed as annexure -6
- During visit to the villages mentioned in the petition, the team interrogated local people about their problem in presence of SDM and Tehsildar, panchnama was also being submitted in support of the same. No specific problem was reported by the villagers. Copy of panchnama is being annexed as **Annexure - 7**
- It was also alleged in the petition that the ground water quality is also being affected by the frequency of cladding. In support of the

- same ground water samples were also collected from all 06 villages and the analysis result of the ground water is as follows-
 - Result of Ground Water Monitoring Report is annexed as **annexure -6**

- **Analysis Results of Effluent samples collected:-**

Name of location	Untreated Water Sample, near Cladding/Cladding Site	Untreated Water Sample, Outlet from Cladding Site Unit 1	Untreated Water Sample, Outlet from Cladding Site Unit 2	Untreated Waste Water collected from Explosive Preparation Site	Natural Water Sample of Wardha Dam	Limit as per CTO issued by MPPCB
Parameter Analysed						
pH	6.71	7.36	7.21	6.38	7.36	5.5 – 9.0
Chloride	37.6	23.7	25.7	26.73	12.87	1000 mg/l
Total Solids	416.0	314.0	324.0	539.0	281.0	-
Dissolved Solid	373.0	263.0	265.0	471.0	247.0	2100 mg/l
Suspended Solids	43.0	51.0	59.0	68.0	34.0	100 mg/l
B.O.D. (3 day's at 27 ⁰ C)	3.3	2.3	2.4	5.0	1.8	30 mg/l
C.O.D.	16.0	17.0	18.0	28.0	10.0	250 mg/l

As per above all the parameter found within the limit as prescribed

Analysis Results of ground water samples collected

Name of location	Hand Pump Water Sample Village-Prabhat Pattan, Multai, District-Betul	Hand Pump Water Sample Village-Songarh, Multai, District-Betul	Well Water Sample Village-Shergarh, Multai, District-Betul	Bore Well Water Sample near Durga Mandir, Village-Shergarh, Multai, District-Betul	Hand Pump Water Sample Village-Narkhed, Multai, District-Betul	Hand Pump Water Sample Village-Devgarh, Multai, District-Betul	Hand Pump Water Sample Village-Mangona, Multai, District-Betul	Limit as per CTO issued by MPPCB
Parameter Analysed								
Turbidity	2	4	2	2	4	4	2	5
Colour	Colour Less	Colour Less	Colour Less	Colour Less	Colour Less	Colour Less	Colour Less	-
Odour	Colour Less	Colour Less	Colour Less	Colour Less	Colour Less	Colour Less	Colour Less	Agreeable
Specific Conductivity	403	482	347	373	347	329	373	-
pH	7.6	7.7	7.6	7.4	7.45	7.4	7.4	6.5-8.5
Total Alkalinity	25	20	10	10	20	25	10	
Total Hardness (as CaCO ₃)	490	460	410	345	400	450	345	200
Calcium Hardness (as CaCO ₃)	420	400	305	305	315	355	395	-
Magnesium Hardness (as CaCO ₃)	70	60	105	50	75	95	50	-
Chloride	52	-	36	39	43	50	30	250
Total Solids	388	363	338	369	327	317	369	-
Dissolved Solid	336	315	293	308	289	282	308	500
Suspended Solids	52	48	45	61	38	35	61	-
Ammonical Nitrogen (as N)	0.2	0.18	0.2	0.16	0.22	0.18	0.16	0.5
Nitrite Nitrogen (as NO ₂)	0.28	0.26	0.4	0.2	0.38	0.22	0.2	-
Nitrate Nitrogen (NH ₂)	5.82	5.8	6.22	5.4	6.1	5.9	5.4	45
Fluoride	BDL	BDL	BDL	BDL	BDL	BDL	BDL	-
C.O.D.	12	16	12	20	20	20	20	-
Sulphate	18	16	22	12	24	14	12	-
Phosphate (as P)	0.22	0.2	0.26	0.14	0.3	0.18	0.14	-

Question also raised regarding the deterioration of water quality of wardha reservoir and ground water of villages mention in the petition but from above analysis all the parameter found within the prescribed limit.

Recommendations

- Industry shall arrange the industrial waste water and domestic waste water treatment plant and ensure ZLD(zero liquid discharge) in the premises.
- It is recommended to establish proper setup for treatment of the effluent generated from washing of clad mixture in the mixing area and after cladding from the cladding site also.
- The ash generated must be collected and stored in covered shed with pucca floor to prevent any environmental damage.
- DG set must be provided with proper vent at prescribed height.
- It is also recommended to install digital flow meter to regulate the use of ground water and to prevent discharge of untreated effluent.
- Record of each process must be maintained in form of log books.
- A seismograph analysis is also recommended during cladding.
- Regular monitoring of the parameters included in CTO and submission of quarterly report to MPPCB is also recommended.
- It is recommended to provide rain water harvesting system in the plant.
- For ground water uses NOC must be obtained from CGWA (Central Ground Water Authority).
- It is also recommended to install digital water meter to measure the flow of extracted ground water.
- Proper acoustic condition must be maintained. It is recommended for more plantations around the cladding side of those trees which are able to protect sound from penetrating.



Smt. Anamika Singh
Tehsildar Multai
Representative of District Magistrate-
Collector, Betul (M.P.)



Shri Thrupathi Kamera
Deputy Director
(Director General of Mines Safety)



Dr. Poulami C. Patil
Scientist B,
Central Pollution Control Board, Bhopal



Shri. Kailash Narayana Katare,
Regional Officer,
M. P. Pollution Control Board-
Chhindwara

Photographs



Storage of Ammonium Nitrate



Storage of TNT



Mixing Unit



Discharge of untreated effluent



Cladding site



Accumulated water after cladding



Heap of ash generated during cladding



Acoustic wall



Discharge of untreated effluent explosion site



Wardha Reservoir



Cladding site preparation



Cladding site preparation

Ground Water Collection



GPS Map
Camera Lite

M67P+8MX, Deogaon, Madhya Pradesh 460666, India

Latitude 21.663738333333338° Longitude 78.23749°
Local 06:20:53 PM Altitude 701 meters
GMT 12:50:53 PM Thursday, 06.07.2023



GPS Map
Camera Lite

P75R+XGF, Borgaon Or Sergarh, Madhya Pradesh 460661, India

Latitude 21.7103339° Longitude 78.2912134°
Local 07:04:14 PM Altitude 700 meters
GMT 01:34:14 PM Thursday, 06.07.2023



GPS Map
Camera Lite

Unnamed Road, Borgaon Or Sergarh, Madhya Pradesh 460661, India

Latitude 21.714263333333333° Longitude 78.28927°
Local 07:22:55 PM Altitude 694 meters
GMT 01:52:55 PM Thursday, 06.07.2023



GPS Map
Camera Lite

M793+V3, Mangonakalan, Madhya Pradesh 460666, India

Latitude 21.669671666666666° Longitude 78.254809999999999°
Local 06:02:51 PM Altitude 709 meters
GMT 12:32:51 PM Thursday, 06.07.2023



GPS Map
Camera Lite

Bhainsdehi - Multai Rd, Narkhed, Madhya Pradesh 460661, India

Latitude 21.695945° Longitude 78.255086666666666°
Local 05:51:49 PM Altitude 727 meters
GMT 12:21:49 PM Thursday, 06.07.2023

FORM - X
(See Rule - 31)
REPORT BY THE STATE BOARD ANALYST

Report No. - 01/ 723
Dated - 07/07/ 2023

I hereby certify that I **Amiya Ekka**, State Board Analyst duly appointed under sub - section (3) of Section 53 of the Water (Prevention and Control of Pollution) Act. 1974 (6 of 1974) received on the 6th day of **July 2023** from Regional Officer, M. P. Pollution Control Board , Jabalpur (M.P.) , an untreated water sample, near Blasting/ Cladding site water sample from **M/S Icem Engg. Company Pvt. Ltd., Village Ambori, Tehsil Multai , Dist- Betul (MP)** for the analysis. The sample was in a condition fit for analysis reported below.

I further certify that I have analysed the aforementioned sample on 13/07/2023 and declare the result of analysis to be as follows : -

<u>Sr.No.</u>	<u>Parameter</u>	<u>Unit</u>	<u>Result</u>	<u>Method used for analysis</u>
1.	pH	-	6.71	By pH Meter
2.	Chloride	mg / l	37.6	By Argentometric Method
3.	Total Solids	mg / l	416.0	By Gravimetric Method
4.	Dissolved solid	mg / l	373.0	By Gravimetric Method
5.	Suspended Solids	mg / l	43.0	By Gravimetric Method
6.	B.O.D. (3 day's at 27°C)	mg / l	3.3	By B.O.D Incubator
7.	C.O.D.	mg / l	16.0	By Open Reflux Method

The Condition of the seals , fastening and container on receipt was proper.

Signed this 13th day of July 2023

Address :-

AMIYA EKKA
Jr. Scientist,
Regional Office
M P Pollution Control Board
Vijay Nagar, Jabalpur (M.P.)

Ami
(Amiya Ekka)
STATE BOARD ANALYST
(Amiya Ekka)
Junior Scientist
Regional Office
M.P. Pollution Control Board
Jabalpur

To,

Lab Incharge
Regional Office,
M.P.Pollution Control Board,
Jabalpur (M.P.)

FORM - X
(See Rule - 31)
REPORT BY THE STATE BOARD ANALYST

Report No. - 02/ 723
Dated - 07/07/ 2023

I hereby certify that I **Amiya Ekka**, State Board Analyst duly appointed under sub - section (3) of Section 53 of the Water (Prevention and Control of Pollution) Act. 1974 (6 of 1974) received on the 6th day of **July 2023** from Regional Officer, M. P. Pollution Control Board , Jabalpur (M.P.) , an untreated water sample, outlet from cladding site Unit 1 from **M/S Icem Engg. Company Pvt. Ltd., Village Ambori, Tehsil Multai , Dist- Betul (MP)** for the analysis. The sample was in a condition fit for analysis reported below.

I further certify that I have analysed the aforementioned sample on 13/07/2023 and declare the result of analysis to be as follows : -

<u>Sr.No.</u>	<u>Parameter</u>	<u>Unit</u>	<u>Result</u>	<u>Method used for analysis</u>
1.	pH	-	7.36	By pH Meter
2.	Chloride	mg / l	23.7	By Argentometric Method
3.	Total Solids	mg / l	314.0	By Gravimetric Method
4.	Dissolved solid	mg / l	263.0	By Gravimetric Method
5.	Suspended Solids	mg / l	51.0	By Gravimetric Method
6.	B.O.D. (3 day's at 27°C)	mg / l	2.3	By B.O.D Incubator
7.	C.O.D.	mg / l	17.0	By Open Reflux Method

The Condition of the seals , fastening and container on receipt was proper.

Signed this 13th day of July 2023

Address :-

AMIYA EKKA
Jr. Scientist,
Regional Office
M P Pollution Control Board
Vijay Nagar, Jabalpur (M.P.)


(Amiya Ekka)
STATE BOARD ANALYST

To,

Lab Incharge
Regional Office,
M.P.Pollution Control Board,
Jabalpur (M.P.)

FORM - X
(See Rule - 31)
REPORT BY THE STATE BOARD ANALYST

Report No. - 03/ 723
Dated - 07/07/ 2023

I hereby certify that I **Amiya Ekka**, State Board Analyst duly appointed under sub - section (3) of Section 53 of the Water (Prevention and Control of Pollution) Act. 1974 (6 of 1974) received on the 6th day of **July 2023** from Regional Officer, M. P. Pollution Control Board , Jabalpur (M.P.) , an untreated water sample, outlet from cladding site Unit 2 from **M/S Icem Engg. Company Pvt. Ltd., Village Ambori, Tehsil Multai , Dist- Betul (MP)** for the analysis. The sample was in a condition fit for analysis reported below.

I further certify that I have analysed the aforementioned sample on 13/07/2023 and declare the result of analysis to be as follows :-

<u>Sr.No.</u>	<u>Parameter</u>	<u>Unit</u>	<u>Result</u>	<u>Method used for analysis</u>
1.	pH	-	7.21	By pH Meter
2.	Chloride	mg / l	25.7	By Argentometric Method
3.	Total Solids	mg / l	324.0	By Gravimetric Method
4.	Dissolved solid	mg / l	265.0	By Gravimetric Method
5.	Suspended Solids	mg / l	59.0	By Gravimetric Method
6.	B.O.D. (3 day's at 27°C)	mg / l	2.4	By B.O.D Incubator
7.	C.O.D.	mg / l	18.0	By Open Reflux Method

The Condition of the seals , fastening and container on receipt was proper.

Signed this 13th day of July 2023

Address :-

AMIYA EKKA
Jr. Scientist,
Regional Office
M P Pollution Control Board
Vijay Nagar, Jabalpur (M.P.)


(Amiya Ekka)
STATE BOARD ANALYST

(Amiya Ekka)
Junior Scientist
Regional Office
M.P. Pollution Control Board
Jabalpur

To,

Lab Incharge
Regional Office,
M.P.Pollution Control Board,
Jabalpur (M.P.)

FORM - X
(See Rule - 31)
REPORT BY THE STATE BOARD ANALYST

Report No. - 04/ 723
Dated - 07/07/ 2023

I hereby certify that I **Amiya Ekka**, State Board Analyst duly appointed under sub - section (3) of Section 53 of the Water (Prevention and Control of Pollution) Act. 1974 (6 of 1974) received on the 6th day of **July 2023** from Regional Officer, M. P. Pollution Control Board , Jabalpur (M.P.) , an untreated waste water collected from Explosive preparation site washing from **M/S Icem Engg. Company Pvt. Ltd., Village Ambori, Tehsil Multai , Dist- Betul (MP)** for the analysis. The sample was in a condition fit for analysis reported below.

I further certify that I have analysed the aforementioned sample on 13/07/2023 and declare the result of analysis to be as follows : -

<u>Sr.No.</u>	<u>Parameter</u>	<u>Unit</u>	<u>Result</u>	<u>Method used for analysis</u>
1.	pH	-	6.38	By pH Meter
2.	Chloride	mg / l	26.73	By Argentometric Method
3.	Total Solids	mg / l	539.0	By Gravimetric Method
4.	Dissolved solid	mg / l	471.0	By Gravimetric Method
5.	Suspended Solids	mg / l	68.0	By Gravimetric Method
6.	B.O.D. (3 day's at 27°C)	mg / l	5.0	By B.O.D Incubator
7.	C.O.D.	mg / l	28.0	By Open Reflux Method

The Condition of the seals , fastening and container on receipt was proper.

Signed this 13th day of May 2023

Address :-

AMIYA EKKA
Jr. Scientist,
Regional Office
M P Pollution Control Board
Vijay Nagar, Jabalpur (M.P.)


(Amiya Ekka)
STATE BOARD ANALYST

(Amiya Ekka)
Junior Scientist
Regional Office
M.P. Pollution Control Board
Jabalpur

To,

Lab Incharge
Regional Office,
M.P.Pollution Control Board,
Jabalpur (M.P.)

FORM - X
(See Rule - 31)
REPORT BY THE STATE BOARD ANALYST

Report No. - 05/ 723
Dated - 07/07/ 2023

I hereby certify that I **Amiya Ekka**, State Board Analyst duly appointed under sub - section (3) of Section 53 of the Water (Prevention and Control of Pollution) Act. 1974 (6 of 1974) received on the 6th day of **July 2023** from Regional Officer, M. P. Pollution Control Board , Jabalpur (M.P.) , a natural water sample of Wardha Dam Village Shergad Tehsil, Prabhatpattan, Dist Betul (MP) from **M/S Icem Engg. Company Pvt. Ltd., Village Ambori, Tehsil Multai , Dist- Betul (MP)** for the analysis. The sample was in a condition fit for analysis reported below.

I further certify that I have analysed the aforementioned sample on 13/07/2023 and declare the result of analysis to be as follows : -

<u>Sr.No.</u>	<u>Parameter</u>	<u>Unit</u>	<u>Result</u>	<u>Method used for analysis</u>
1.	pH	-	7.36	By pH Meter
2.	Chloride	mg / l	12.87	By Argentometric Method
3.	Total Solids	mg / l	281.0	By Gravimetric Method
4.	Dissolved solid	mg / l	247.0	By Gravimetric Method
5.	Suspended Solids	mg / l	34.0	By Gravimetric Method
6.	B.O.D. (3 day's at 27°C)	mg / l	1.8	By B.O.D Incubator
7.	C.O.D.	mg / l	10.0	By Open Reflux Method

The Condition of the seals , fastening and container on receipt was proper.

Signed this 13th day of July 2023

Address :-

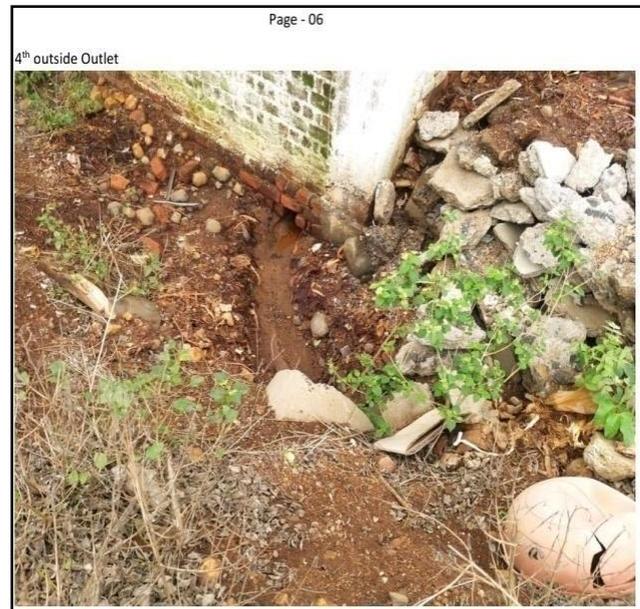
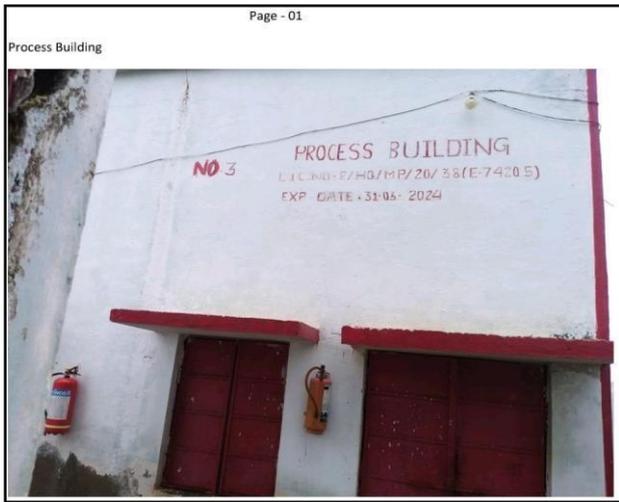
AMIYA EKKA
Jr. Scientist,
Regional Office
M P Pollution Control Board
Vijay Nagar, Jabalpur (M.P.)


(Amiya Ekka)
STATE BOARD ANALYST
(Amiya Ekka)
Junior Scientist
Regional Office
M.P. Pollution Control Board
Jabalpur

To,

Lab Incharge
Regional Office,
M.P.Pollution Control Board,
Jabalpur (M.P.)

Annexure-2



Sewage Water Discharge Report

ICEM Engineering Co. PVT. LTD.

At. Ambhori Tah. Multai, Distt. Betul, M.P. 460661

Process Building Sewage Water Discharge Mouth June-2023

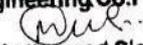
Metal Clading Powder in Used (AN = 44 % , NACL = 45 % , TNT = 11 % ,)

Date	Discharge Water	Quantity in Litter's	Remark	Signature
01-06-2023	Clean & Sawaeg	50	N	
02-06-2023	Clean & Sawaeg	120	N	
03-06-2023	Closed	0	Closed	
04-06-2023	Closed	0	Closed	
05-06-2023	Clean & Sawaeg	50	N	
06-06-2023	Clean & Sawaeg	50	N	
07-06-2023	Clean & Sawaeg	50	N	
08-06-2023	Clean & Sawaeg	50	N	
09-06-2023	Clean & Sawaeg	120	N	
10-06-2023	Closed	0	Closed	
11-06-2023	Closed	0	Closed	
12-06-2023	Clean & Sawaeg	50	N	
13-06-2023	Clean & Sawaeg	50	N	
14-06-2023	Clean & Sawaeg	50	N	
15-06-2023	Clean & Sawaeg	50	N	
16-06-2023	Clean & Sawaeg	120	N	
17-06-2023	Closed	0	Closed	
18-06-2023	Closed	0	Closed	
19-06-2023	Clean & Sawaeg	50	N	
20-06-2023	Clean & Sawaeg	50	N	
21-06-2023	Clean & Sawaeg	50	N	
22-06-2023	Clean & Sawaeg	50	N	
23-06-2023	Clean & Sawaeg	120	N	
24-06-2023	Closed	0	Closed	
25-06-2023	Closed	0	Closed	
26-06-2023	Clean & Sawaeg	50	N	
27-06-2023	Clean & Sawaeg	50	N	
28-06-2023	Clean & Sawaeg	50	N	
29-06-2023	Clean & Sawaeg	50	N	
30-06-2023	Clean & Sawaeg	50	N	



1380

For - ICEM Engineering Co. Pvt. Ltd.


 Authorized Signature



REGIONAL OFFICE

M.P. Pollution Control Board

In Front of Mullaji Petrol Pump, Parasia Road, Chhindwara

Phone – 07162-220311 E-mail – romppbcwh@gmail.com, ropcb-chhindwara@mp.gov.in, Web :- www.mppcb.nic.in



Annexure-3

Analysis Report of Air

Type : Ambient

1	Name	:	ICEM Engineering co. Pvt. Ltd.
2	Address of the Unit	:	Distt. Betul
3	Nature of Sample	:	AAR- Air Act (Routine), Inspection, Type : HOR
4	Sample Collected by & Analysed by	:	Ramesh Dwivedi & Sanjay Rajpoot
5	Date & Time of Collection & Receipt	:	06/07/2023
6	Date of Start & Completion of Analysis	:	07/07/2023
7	Sampling Point	:	Near Cladding Unit
8	Latitude	:	21.68253759
9	Longitude	:	78.28421877
8	Fuel	:	N.A.
9	APCM	:	Weather was Clear
10	Filter Paper No.	:	PM10- BT-01 & PM 2.5-PT0644802
11	Temperature on Collection	:	30 & Vol. Absorbed media- 30.00
12	Volume-Gas- Passed	:	621.6
13	Parameters	:	03 & Operation time (minute) : 480.00

S.no.	Parameters	Unit	Test Method	Range of Testing	Result
1	Nox- Amb	MICRO/M ³	IS:5182 (Part-6)	30-80 µg/M ³	9.53
2	RSPM (PM ₁₀ - Amb)	MICRO/M ³	IS:5182 (Part-XXIII)	60-100 µg/M ³	36.36
3	SO ₂ - Amb	MICRO/M ³	IS:5182 (Part-XXIII)	20-80 µg/M ³	1.25
4	RSPM (PM _{2.5} - Amb)	MICRO/M ³	IS:5182 (Part-XXIV)	40-60 µg/M ³	12.63

Report Prepared By/Sampler
Ramesh Dwivedi

Lab Incharge/Chemist
Sanjay Rajpoot



REGIONAL OFFICE
M.P. Pollution Control Board



In Front of Mullaji Petrol Pump, Parasia Road, Chhindwara
Phone – 07162-220311 E-mail – romppcbcwh@gmail.com, ropcb-chhindwara@mp.gov.in, Web :- www.mppcb.nic.in

Analysis Report of Air

Type : Ambient

- 1 Name : ICEM Engineering co. Pvt. Ltd.
- 2 Address of the Unit : Distt. Betul
- 3 Nature of Sample : AAR- Air Act (Routine), Inspection, Type : HOR
- 4 Sample Collected by & Analysed by : Ramesh Dwivedi & Sanjay Rajpoot
- 5 Date & Time of Collection & Receipt : 06/07/2023
- 6 Date of Start & Completion of Analysis : 07/07/2023
- 7 Sampling Point : Near Main Gate
- 8 Latitude : 21.98111952
- 9 Longitude : 78.28391819
- 8 Fuel : N.A.
- 9 APCM : Weather was Clear
- 10 Filter Paper No. : **PM10- BT-02 & PM 2.5-PT0644803**
- 11 Temperature on Collection : 30 & Vol. Absorbed media- 30.00
- 12 Volume-Gas- Passed : 633.6.00
- 13 Parameters : 03 & Operation time (minute) : 480.00

S.no.	Parameters	Unit	Test Method	Range of Testing	Result
1	Nox- Amb	MICRO/M ³	IS:5182 (Part-6)	30-80 µg/M ³	10.80
2	RSPM (PM ₁₀ - Amb)	MICRO/M ³	IS:5182 (Part-XXIII)	60-100 µg/M ³	38.35
3	SO ₂ - Amb	MICRO/M ³	IS:5182 (Part-XXIII)	20-80 µg/M ³	2.91
4	RSPM (PM _{2.5} - Amb)	MICRO/M ³	IS:5182 (Part-XXIV)	40-60 µg/M ³	12.48

Report Prepared By/Sampler
Ramesh Dwivedi

Lab Incharge/Chemist
Sanjay Rajpoot



REGIONAL OFFICE
M.P. Pollution Control Board



In Front of Mullaji Petrol Pump, Parasia Road, Chhindwara
Phone – 07162-220311 E-mail – romppcbwh@gmail.com, ropcb-chhindwara@mp.gov.in, Web :- www.mppcb.nic.in

Analysis Report of Air

Type : Ambient

- 1 Name : ICEM Engineering co. Pvt. Ltd.
- 2 Address of the Unit : Distt. Betul
- 3 Nature of Sample : AAR- Air Act (Routine), Inspection, Type : HOR
- 4 Sample Collected by & Analysed by : Ramesh Dwivedi & Sanjay Rajpoot
- 5 Date & Time of Collection & Receipt : 06/07/2023
- 6 Date of Start & Completion of Analysis : 07/07/2023
- 7 Sampling Point : Near Cladding Site
- 8 Latitude : 21.678697
- 9 Longitude : 78.300465
- 8 Fuel : N.A.
- 9 APCM : Weather was Clear
- 10 Filter Paper No. : BT-03
- 11 Temperature on Collection : 30 & Vol. Absorbed media- 30.00
- 12 Volume-Gas- Passed : 614.4
- 13 Parameters : 03 & Operation time (minute) : 480.00

S.no.	Parameters	Unit	Test Method	Range of Testing	Result
1	Nox- Amb	MICRO/M ³	IS:5182 (Part-6)	30-80 µg/M ³	13.34
2	RSPM (PM ₁₀ - Amb)	MICRO/M ³	IS:5182 (Part-XXIII)	60-100 µg/M ³	51.60
3	SO ₂ - Amb	MICRO/M ³	IS:5182 (Part-XXIII)	20-80 µg/M ³	2.50

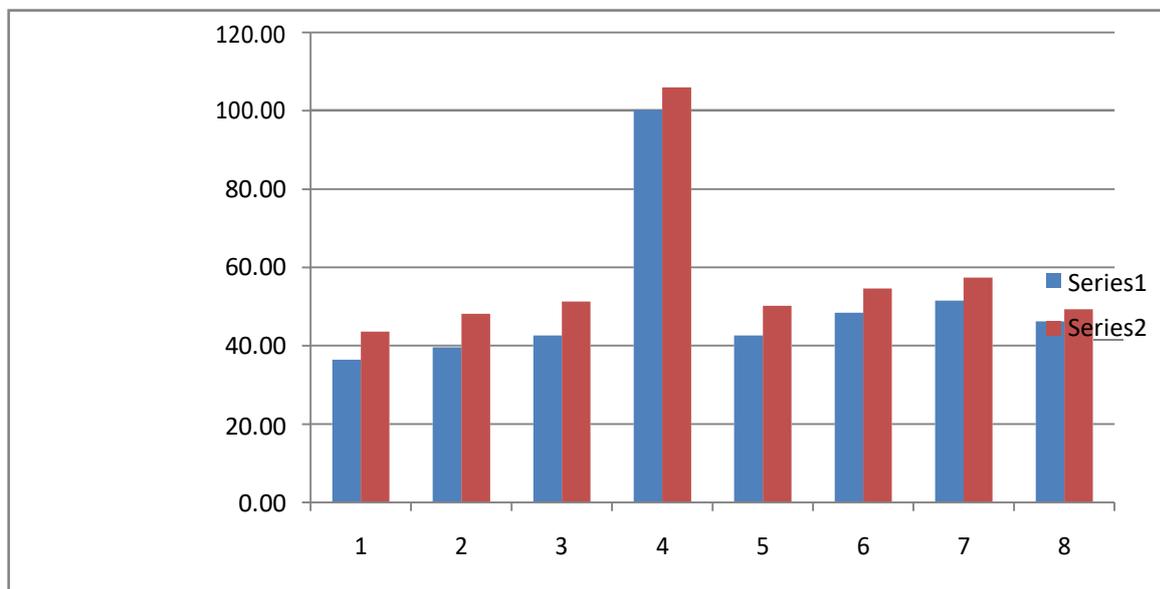
Report Prepared By/Sampler
Ramesh Dwivedi

Lab Incharge/Chemist
Sanjay Rajpoot

ICEM ENGINEERING COMPANY PVT.LTD.VILAGE-AMBHORI TEH.MULTAI,DISTT.BEUL M.P							
Noise Level Meter							
Make		LT Lutron					
Modal		SL-4011					
Serial No.		C90698					
Calibration Result of noise Level Meter							
Calibration		94 dB at 1000 Hz			114 dB at 1000 Hz		
Sr. No.	Time Duration	Sound Parameters (DBA)					
		Leq	L ₁₀	L ₅₀	L ₆₀	L _{min}	L _{max}
1	12:00 TO 13:00 PM	40.00	-	-	-	36.40	43.60
2	13:00 TO 14:00 PM	43.90	-	-	-	39.60	48.20
3	14:00 TO 15:00 PM	46.94	-	-	-	42.64	51.24
4	15:00 TO 16:00 PM	103.12	-	-	-	100.23	106.00
5	16:00 TO 17:00 PM	46.40	-	-	-	42.60	50.20
6	17:00 TO 18:00	51.51	-	-	-	48.41	54.61
7	18:00 TO 19:00 PM	54.47	-	-	-	51.53	57.40
8	19:00 TO 20:00 PM	47.79	-	-	-	46.24	49.34
Average L equvalent dB(A)		54.27	-	-	-	50.96	57.57
Before blasting		During blasting			After blasting.		

Name Sampling Point		200 meter from Cladding Site
Latitude		21.678697
Longitude		78.300465

Graph Chart for Noise Monitoring



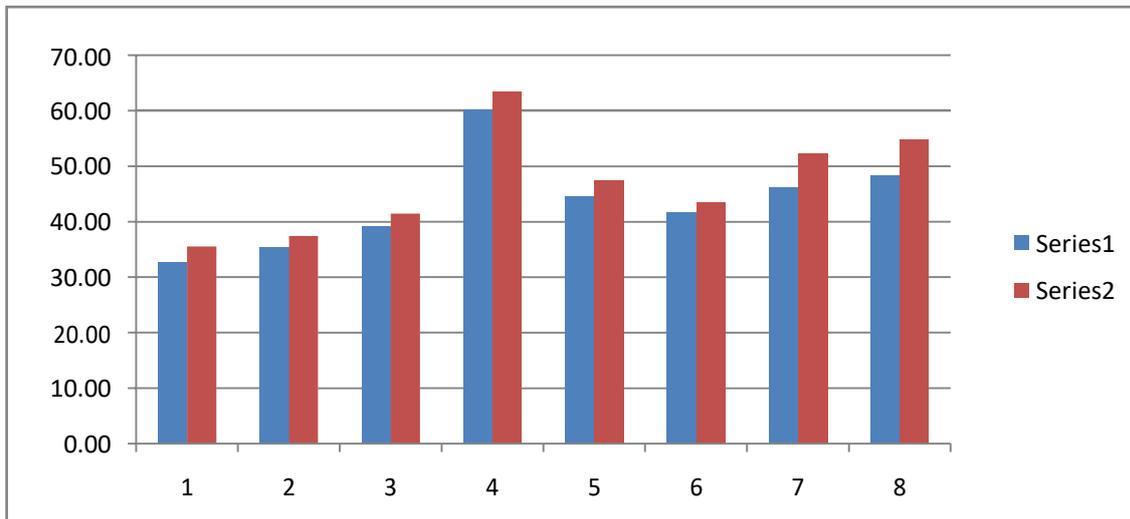
Report Prepared By/Sampler
Ramesh Dwivedi

Lab Incharge/Chemist
Sanjay Rajpoot

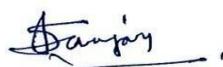
ICEM ENGINEERING COMPANY PVT.LTD.VILLAGE SOMGARH TEH.MULTAI,DISTT.BEUL M.P							
Noise Level Meter							
Make		LT Lutron					
Modal		SL-4011					
Serial No.		C90698					
Calibration Result of noise Level Meter							
Calibration		94 dB at 1000 Hz			114 dB at 1000 Hz		
Sr. No.	Time Duration	Sound Parameters (DBA)					
		Leq	L ₁₀	L ₅₀	L ₆₀	L _{min}	L _{max}
1	12:00 TO 13:00 PM	34.07	-	-	-	32.62	35.52
2	13:00 TO 14:00 PM	36.40	-	-	-	35.36	37.43
3	14:00 TO 15:00 PM	40.37	-	-	-	39.28	41.45
4	15:00 TO 16:00 PM	61.76	-	-	-	60.12	63.40
5	16:00 TO 17:00 PM	45.98	-	-	-	44.58	47.38
6	17:00 TO 18:00	42.63	-	-	-	41.74	43.52
7	18:00 TO 19:00 PM	49.30	-	-	-	46.23	52.36
8	19:00 TO 20:00 PM	51.49	-	-	-	48.24	54.74
Average L equivalent dB(A)		45.25	-	-	-	43.52	46.98
Before blasting		During blasting			After blasting.		

Graph Chart for Noise Monitoring

Sampling Point		Village- Somgarh
Latitude		21.6514
Longitude		78.3216




 Report Prepared By/Sampler
 Ramesh Dwivedi


 Lab Incharge/Chemist
 Sanjay Rajpoot

Annexure-5

WHO Guideline for Noise

In WHO noise quality guidelines, values are summarized with regard to specific environments and effects. For each environment and situation, the guideline values take into consideration the identified health effects and are set, based on the lowest levels of noise that affect health (critical health effect). Guideline values typically correspond to the lowest effect level for general populations, such as those for indoor speech intelligibility. Noise guideline values are for the onset of health effects from noise exposures.

Specific Environment	Time Base (hours)	Standard limits as per WHO guidelines	
		LAeq [dB]	LAm _{ax, fast} [dB]
Outdoor living area	16	50 - 55	-
Dwelling, indoors, Inside bedrooms	16	35	-
	8	30	45
Outside bedrooms	8	45	60
School class rooms and pre-schools, indoors	During class	35	-
Pre-school bedrooms, indoors	Sleeping time	30	45
School, playground outdoor	During play	55	-
Hospital, ward rooms, indoors	8	30	40 -
	16	30	
Hospitals, treatment rooms, indoors	-	As low as possible	-
Industrial, commercial, shopping and traffic areas, indoors and outdoors	24	70	110
Ceremonies, festivals and entertainment events	4	100	110
Public addresses, indoors and outdoors	1	85	110
Music through headphones/earphones	1	85 (under headphones, adapted to free-field values)	110
Impulse sounds from toys, fireworks and firearms	-	-	120-140 (peak sound pressure (not LAm _{ax, fast}), measured 100 mm from the ear)
Outdoors in parkland and conservation areas	-	Existing quiet outdoor areas should be preserved and the ratio of intruding noise to natural background sound should be kept low	-

M.P. POLLUTION CONTROL BOARD
Plot No. : 455, 456., Vijaynagar, Jabalpur (M.P.)
LIQUID SAMPLE ANALYSIS REPORT

Sample from : -Village- Prabhat Pattan multai, Dist. Betul (M.P.)

Sample Details : Hand Pump water sample

Date of Collection :- 06/07/2023

Date of Receipt :- 07/07/2023

Date of Analysis :- 07/07/2023

Analysis Done By :- T.S.Banerjee
Scientist

Analysis No. 53/723

Bill No. Dt.

Sample collected by :- R.O.Chhindwara

SN O	Parameters	Unit	Result I	Result II	Result III	Result IV
A - PHYSICAL PARAMETERS						
1.	Temperature	^o C	-			
2.	Turbidity	N.T.U.	2.0			
3.	Colour	-	colour less			
4.	Odour	-	odour less			
5.	Specific Conductivity	µmho/cm	403.0			
B - CHEMICAL PARAMETERS						
6.	pH	-	7.60			
7.	Total Alkalinity	mg / l	25.0			
8.	Total Hardness (as CaCO ₃)	mg / l	490.0			
9.	Calcium Hardness (as CaCO ₃)	mg / l	420.0			
10.	Magnesium Hardness (as CaCO ₃)	mg / l	70.0			
11.	Chloride	mg / l	52.0			
12.	Total Solids	mg / l	388.0			
13.	Dissolved Solids	mg / l	336.0			
14.	Suspended Solids	mg / l	52.0			
15.	Ammonical Nitrogen (as N)	mg / l	0.20			
16.	Nitrite Nitrogen (as NO ₂)	mg / l	0.28			
17.	Nitrate Nitrogen (NH ₃)	mg / l	5.82			
18.	Total Kjeldahl Nitrogen (as N)	mg / l	-			
19.	Fluoride	mg / l	BDL			
20.	Dissolved Oxygen	mg / l	-			
21.	B.O.D. (3 days, 27 ^o C)	mg / l	-			
22.	C.O.D.	mg / l	12.0			
23.	Sulphate	mg / l	18.0			
24.	Phosphate (as P)	mg / l	0.22			
25.	Lead (Pb)	mg / l	-			
26.	Chromium (Cr ⁶⁺)	mg / l	-			
27.	Copper (Cu)	mg / l	-			
28.	Zinc (Zn)	mg / l	-			
29.	Iron (Fe)	mg / l	-			
30.	Cadmium	mg / l	-			
C - BIOLOGICAL PARAMETERS						
31.	Total Coliform	MPN/100ml	-			
32.	Feacal Coliform	MPN/100ml	-			

INDICATION : PARAMETER DOES NOT CONFIRM TO :-

- Standard prescribed by M.P.P.C.B.in M.P.Gazette notification, dated 25/03/1988
- IS: 10500-1991 (Specification for Drinking Water)
- Standard prescribed in Bio-Medical Waste (Management & Handling) Rules 1988

GENERAL MARKS:-

NOTE: - No statutory liability accepted for samples , collected by M.P.P.C.B.

T.S. Banerjee
Scientist

R.O. Chhindwara
Lab in-charge

M.P. POLLUTION CONTROL BOARD
 Plot No. : 455, 456., Vijaynagar, Jabalpur (M.P.)
LIQUID SAMPLE ANALYSIS REPORT

Sample from : -Village-Somgarh , multai Dist. Betul (M.P.)

Sample Details : Hand Pump water sample

Date of Collection :- 06/07/2023

Date of Receipt :- 07/07/2023

Date of Analysis :- 07/07/2023

Analysis Done By :- T.S.Banerjee
 Scientist

Analysis No. 54/723

Bill No. Dt.

Sample collected by :- R.O.Chhindwara

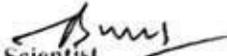
SN O	Parameters	Unit	Result I	Result II	Result III	Result IV
A - PHYSICAL PARAMETERS						
1.	Temperature	^o C	-			
2.	Turbidity	N.T.U.	4.0			
3.	Colour	-	colour less			
4.	Odour	-	odour less			
5.	Specific Conductivity	µmho/cm	482.0			
B - CHEMICAL PARAMETERS						
6.	pH	-	7.70			
7.	Total Alkalinity	mg / l	20.0			
8.	Total Hardness (as CaCO ₃)	mg / l	460.0			
9.	Calcium Hardness (as CaCO ₃)	mg / l	400.0			
10.	Magnesium Hardness (as CaCO ₃)	mg / l	60.0			
11.	Chloride	mg / l				
12.	Total Solids	mg / l	363.0			
13.	Dissolved Solids	mg / l	315.0			
14.	Suspended Solids	mg / l	48.0			
15.	Ammonical Nitrogen (as N)	mg / l	0.18			
16.	Nitrite Nitrogen (as NO ₂)	mg / l	0.26			
17.	Nitrate Nitrogen (NH ₃)	mg / l	5.80			
18.	Total Kjeldahl Nitrogen (as N)	mg / l	-			
19.	Fluoride	mg / l	BDL			
20.	Dissolved Oxygen	mg / l	-			
21.	B.O.D. (3 days, 27 ^o C)	mg / l	-			
22.	C.O.D.	mg / l	16.0			
23.	Sulphate	mg / l	16.0			
24.	Phosphate (as P)	mg / l	0.20			
25.	Lead (Pb)	mg / l	-			
26.	Chromium (Cr ⁶⁺)	mg / l	-			
27.	Copper (Cu)	mg / l	-			
28.	Zinc (Zn)	mg / l	-			
29.	Iron (Fe)	mg / l	-			
30.	Cadmium	mg / l	-			
C - BIOLOGICAL PARAMETERS						
31.	Total Coliform	MPN/100ml	-			
32.	Faecal Coliform	MPN/100ml	-			

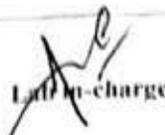
INDICATION : PARAMETER DOES NOT CONFIRM TO :-

- Standard prescribed by M.P.P.C.B. in M.P.Gazette notification, dated 25/03/1988
- IS: 10500-1991 (Specification for Drinking Water)
- Standard prescribed in Bio-Medical Waste (Management & Handling) Rules 1988

GENERAL MARKS:-

NOTE: - No statutory liability accepted for samples , collected by M.P.P.C.B.


 Scientist


 In-charge

M.P. POLLUTION CONTROL BOARD
Plot No. : 455, 456., Vijaynagar, Jabalpur (M.P.)
LIQUID SAMPLE ANALYSIS REPORT

Sample from : Village- Shergarh multai, Dist. Betul (M.P.)

Sample Details : Vardha Dam water sample

Date of Collection :- 06/07/2023

Date of Receipt :- 07/07/2023

Date of Analysis :- 07/07/2023

Analysis Done By :- T.S.Banerjee
Scientist

Analysis No. 55/723

Bill No. Dt.

Sample collected by :- R.O.Chhindwara

SN O	Parameters	Unit	Result I	Result II	Result III	Result IV
A - PHYSICAL PARAMETERS						
1.	Temperature	°C	-			
2.	Turbidity	N.T.U.	5.0			
3.	Colour	-	colour less			
4.	Odour	-	odour less			
5.	Specific Conductivity	µmho/cm	360.0			
B - CHEMICAL PARAMETERS						
6.	pH	-	7.30			
7.	Total Alkalinity	mg / l	15.0			
8.	Total Hardness (as CaCO ₃)	mg / l	425.0			
9.	Calcium Hardness (as CaCO ₃)	mg / l	310.0			
10.	Magnesium Hardness (as CaCO ₃)	mg / l	115.0			
11.	Chloride	mg / l	42.0			
12.	Total Solids	mg / l	342.0			
13.	Dissolved Solids	mg / l	301.0			
14.	Suspended Solids	mg / l	41.0			
15.	Ammonical Nitrogen (as N)	mg / l	0.24			
16.	Nitrite Nitrogen (as NO ₂)	mg / l	0.30			
17.	Nitrate Nitrogen (NH ₃)	mg / l	5.94			
18.	Total Kjeldahl Nitrogen (as N)	mg / l	-			
19.	Fluoride	mg / l	BDL			
20.	Dissolved Oxygen	mg / l	7.3			
21.	B.O.D. (3 days, 27 °C)	mg / l	-			
22.	C.O.D.	mg / l	24.0			
23.	Sulphate	mg / l	22.0			
24.	Phosphate (as P)	mg / l	0.28			
25.	Lead (Pb)	mg / l	-			
26.	Chromium (Cr ^{VI})	mg / l	-			
27.	Copper (Cu)	mg / l	-			
28.	Zinc (Zn)	mg / l	-			
29.	Iron (Fe)	mg / l	-			
30.	Cadmium	mg / l	-			
C - BIOLOGICAL PARAMETERS						
31.	Total Coliform	MPN/100ml	-			
32.	Feacal Coliform	MPN/100ml	-			

INDICATION : PARAMETER DOES NOT CONFIRM TO :-

- Standard prescribed by M.P.P.C.B.in M.P.Gazette notification, dated 25/03/1988
- IS: 10500-1991 (Specification for Drinking Water)
- Standard prescribed in Bio-Medical Waste (Management & Handling) Rules 1988

GENERAL MARKS:-**NOTE: - No statutory liability accepted for samples ,collected by M.P.P.C.B.**

T.S. Banerjee
Scientist

Dr. A.C. Karera
Lab in-charge
Chief Chemist
ROMPPCB, Jabalpur

M.P. POLLUTION CONTROL BOARD
Plot No. : 455, 456., Vijaynagar, Jabalpur (M.P.)
LIQUID SAMPLE ANALYSIS REPORT

Sample from : Village- Narkhed multai, Dist. Betul (M.P.)

Sample Details : Hand Pump water sample Near Dashrath sahu house Ambedkar chouk.

Date of Collection :- 06/07/2023

Date of Receipt :- 07/07/2023

Date of Analysis :- 07/07/2023

Analysis Done By :- T.S.Banerjee
Scientist

Analysis No. 56/723

Bill No. Dt.

Sample collected by :- R.O.Chhindwara

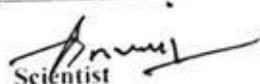
SN O	Parameters	Unit	Result I	Result II	Result III	Result IV
A - PHYSICAL PARAMETERS						
1.	Temperature	^o C	-			
2.	Turbidity	N.T.U.	4.0			
3.	Colour	-	colour less			
4.	Odour	-	odour less			
5.	Specific Conductivity	μmho/cm	347.0			
B - CHEMICAL PARAMETERS						
6.	pH	-	7.45			
7.	Total Alkalinity	mg / l	20.0			
8.	Total Hardness (as CaCO ₃)	mg / l	400.0			
9.	Calcium Hardness (as CaCO ₃)	mg / l	315.0			
10.	Magnesium Hardness (as CaCO ₃)	mg / l	75.0			
11.	Chloride	mg / l	43.0			
12.	Total Solids	mg / l	327.0			
13.	Dissolved Solids	mg / l	289.0			
14.	Suspended Solids	mg / l	38.0			
15.	Ammonical Nitrogen (as N)	mg / l	0.22			
16.	Nitrite Nitrogen (as NO ₂)	mg / l	0.38			
17.	Nitrate Nitrogen (NH ₃)	mg / l	6.10			
18.	Total Kjeldahl Nitrogen (as N)	mg / l	-			
19.	Fluoride	mg / l	BDL			
20.	Dissolved Oxygen	mg / l	-			
21.	B.O.D. (3 days, 27 ^o C)	mg / l	-			
22.	C.O.D.	mg / l	20.0			
23.	Sulphate	mg / l	24.0			
24.	Phosphate (as P)	mg / l	0.30			
25.	Lead (Pb)	mg / l	-			
26.	Chromium (Cr ⁶⁺)	mg / l	-			
27.	Copper (Cu)	mg / l	-			
28.	Zinc (Zn)	mg / l	-			
29.	Iron (Fe)	mg / l	-			
30.	Cadmium	mg / l	-			
C - BIOLOGICAL PARAMETERS						
31.	Total Coliform	MPN/100ml	-			
32.	Faecal Coliform	MPN/100ml	-			

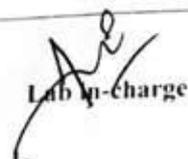
INDICATION : PARAMETER DOES NOT CONFIRM TO :-

1. Standard prescribed by M.P.P.C.B.in M.P.Gazette notification, dated 25/03/1988
2. IS: 10500-1991 (Specification for Drinking Water)
3. Standard prescribed in Bio-Medical Waste (Management & Handling) Rules 1988

GENERAL MARKS:-

NOTE: - No statutory liability accepted for samples , collected by M.P.P.C.B.


Scientist


Lab in-charge

M.P. POLLUTION CONTROL BOARD
Plot No. : 455, 456., Vijaynagar, Jabalpur (M.P.)

LIQUID SAMPLE ANALYSIS REPORT

Sample from : Village- Shergarh multai, Dist. Betul (M.P.)

Sample Details : Well water/

Date of Collection :- 06/07/2023

Date of Receipt :- 07/07/2023

Date of Analysis :- 07/07/2023

Analysis Done By :- T.S.Banerjee
Scientist

Analysis No. 57/723

Bill No. Dt.

Sample collected by :- R.O.Chhindwara

SN O	Parameters	Unit	Result I	Result II	Result III	Result IV
A - PHYSICAL PARAMETERS						
1.	Temperature	°C	-			
2.	Turbidity	N.T.U.	2.0			
3.	Colour	-	colour less			
4.	Odour	-	odour less			
5.	Specific Conductivity	µmho/cm	347.0			
B - CHEMICAL PARAMETERS						
6.	pH	-	7.60			
7.	Total Alkalinity	mg / l	10.0			
8.	Total Hardness (as CaCO ₃)	mg / l	410.0			
9.	Calcium Hardness (as CaCO ₃)	mg / l	305.0			
10.	Magnesium Hardness (as CaCO ₃)	mg / l	105.0			
11.	Chloride	mg / l	36.0			
12.	Total Solids	mg / l	338.0			
13.	Dissolved Solids	mg / l	293.0			
14.	Suspended Solids	mg / l	45.0			
15.	Ammonical Nitrogen (as N)	mg / l	0.20			
16.	Nitrite Nitrogen (as NO ₂)	mg / l	0.40			
17.	Nitrate Nitrogen (NH ₃)	mg / l	6.22			
18.	Total Kjeldahl Nitrogen (as N)	mg / l	-			
19.	Fluoride	mg / l	BDL			
20.	Dissolved Oxygen	mg / l	-			
21.	B.O.D. (3 days, 27 °C)	mg / l	-			
22.	C.O.D.	mg / l	12.0			
23.	Sulphate	mg / l	22.0			
24.	Phosphate (as P)	mg / l	0.26			
25.	Lead (Pb)	mg / l	-			
26.	Chromium (Cr ⁶⁺)	mg / l	-			
27.	Copper (Cu)	mg / l	-			
28.	Zinc (Zn)	mg / l	-			
29.	Iron (Fe)	mg / l	-			
30.	Cadmium	mg / l	-			
C - BIOLOGICAL PARAMETERS						
31.	Total Coliform	MPN/100ml	-			
32.	Feacal Coliform	MPN/100ml	-			

INDICATION : PARAMETER DOES NOT CONFIRM TO :-

- Standard prescribed by M.P.P.C.B.in M.P.Gazette notification, dated 25/03/1988
- IS: 10500-1991 (Specification for Drinking Water)
- Standard prescribed in Bio-Medical Waste (Management & Handling) Rules 1988

GENERAL MARKS:-

NOTE: - No statutory liability accepted for samples , collected by M.P.P.C.B.

T.S. Banerjee
Scientist

R.O. Chhindwara
Lab-in-charge

M.P. POLLUTION CONTROL BOARD
Plot No. : 455, 456., Vijaynagar, Jabalpur (M.P.)
LIQUID SAMPLE ANALYSIS REPORT

Sample from : Village- Devgarh multai , Dist. Betul (M.P.)

Sample Details : Hand pump water ,Near Residencial Area

Date of Collection :- 06/07/2023

Date of Receipt :- 07/07/2023

Date of Analysis :- 07/07/2023

Analysis Done By :- T.S.Banerjee
Scientist

Analysis No. 58/723

Bill No. Dt.

Sample collected by :- R.O.Chhindwara

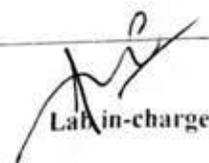
SN O	Parameters	Unit	Result I	Result II	Result III	Result IV
A - PHYSICAL PARAMETERS						
1.	Temperature	^o C	-			
2.	Turbidity	N.T.U.	4.0			
3.	Colour	-	colour less			
4.	Odour	-	odour less			
5.	Specific Conductivity	μ mho/cm	329.0			
B - CHEMICAL PARAMETERS						
6.	pH	-	7.40			
7.	Total Alkalinity	mg / l	25.0			
8.	Total Hardness (as CaCO ₃)	mg / l	450.0			
9.	Calcium Hardness (as CaCO ₃)	mg / l	355.0			
10.	Magnesium Hardness (as CaCO ₃)	mg / l	95.0			
11.	Chloride	mg / l	50.0			
12.	Total Solids	mg / l	317.0			
13.	Dissolved Solids	mg / l	282.0			
14.	Suspended Solids	mg / l	35.0			
15.	Ammonical Nitrogen (as N)	mg / l	0.18			
16.	Nitrite Nitrogen (as NO ₂)	mg / l	0.22			
17.	Nitrate Nitrogen (NH ₃)	mg / l	5.90			
18.	Total Kjeldahl Nitrogen (as N)	mg / l	-			
19.	Fluoride	mg / l	BDL			
20.	Dissolved Oxygen	mg / l	-			
21.	B.O.D. (3 days, 27 ^o C)	mg / l	-			
22.	C.O.D.	mg / l	20.0			
23.	Sulphate	mg / l	14.0			
24.	Phosphate (as P)	mg / l	0.18			
25.	Lead (Pb)	mg / l	-			
26.	Chromium (Cr ⁶⁺)	mg / l	-			
27.	Copper (Cu)	mg / l	-			
28.	Zinc (Zn)	mg / l	-			
29.	Iron (Fe)	mg / l	-			
30.	Cadmium	mg / l	-			
C - BIOLOGICAL PARAMETERS						
31.	Total Coliform	MPN/100ml	-			
32.	Feecal Coliform	MPN/100ml	-			

INDICATION : PARAMETER DOES NOT CONFIRM TO :-

- Standard prescribed by M.P.P.C.B.in M.P.Gazette notification, dated 25/03/1988
- IS: 10500-1991 (Specification for Drinking Water)
- Standard prescribed in Bio-Medical Waste (Management & Handling) Rules 1988

GENERAL MARKS:-**NOTE:- No statutory liability accepted for samples , collected by M.P.P.C.B.**


Scientist


Lab in-charge

M.P. POLLUTION CONTROL BOARD
Plot No. : 455, 456., Vijaynagar, Jabalpur (M.P.)
LIQUID SAMPLE ANALYSIS REPORT

Sample from : Village- Shergarh multai, Dist. Betul (M.P.)

Sample Details : Bore Well water, Near Durga Mandir

Date of Collection :- 06/07/2023

Analysis No. 59/723

Bill No. Dt.

Date of Receipt :- 07/07/2023

Date of Analysis :- 07/07/2023

Analysis Done By :- T.S.Banerjee
Scientist

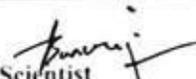
Sample collected by :- R.O.Chhindwara

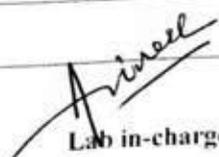
SN O	Parameters	Unit	Result I	Result II	Result III	Result IV
A - PHYSICAL PARAMETERS						
1.	Temperature	^o C	-			
2.	Turbidity	N.T.U.	2.0			
3.	Colour	-	colour less			
4.	Odour	-	odour less			
5.	Specific Conductivity	µmho/cm	373.0			
B - CHEMICAL PARAMETERS						
6.	pH	-	7.40			
7.	Total Alkalinity	mg/l	10.0			
8.	Total Hardness (as CaCO ₃)	mg/l	345.0			
9.	Calcium Hardness (as CaCO ₃)	mg/l	395.0			
10.	Magnesium Hardness (as CaCO ₃)	mg/l	50.0			
11.	Chloride	mg/l	39.0			
12.	Total Solids	mg/l	369.0			
13.	Dissolved Solids	mg/l	308.0			
14.	Suspended Solids	mg/l	61.0			
15.	Ammonical Nitrogen (as N)	mg/l	0.16			
16.	Nitrite Nitrogen (as NO ₂)	mg/l	0.20			
17.	Nitrate Nitrogen (NH ₃)	mg/l	5.40			
18.	Total Kjeldahl Nitrogen (as N)	mg/l	-			
19.	Fluoride	mg/l	BDL			
20.	Dissolved Oxygen	mg/l	-			
21.	B.O.D. (3 days, 27 ^o C)	mg/l	-			
22.	C.O.D.	mg/l	20.0			
23.	Sulphate	mg/l	12.0			
24.	Phosphate (as P)	mg/l	0.14			
25.	Lead (Pb)	mg/l	-			
26.	Chromium (Cr ^{VI})	mg/l	-			
27.	Copper (Cu)	mg/l	-			
28.	Zinc (Zn)	mg/l	-			
29.	Iron (Fe)	mg/l	-			
30.	Cadmium	mg/l	-			
C - BIOLOGICAL PARAMETERS						
31.	Total Coliform	MPN/100ml	-			
32.	Feacal Coliform	MPN/100ml	-			

INDICATION : PARAMETER DOES NOT CONFIRM TO :-

- Standard prescribed by M.P.P.C.B. in M.P.Gazette notification, dated 25/03/1988
- IS: 10500-1991 (Specification for Drinking Water)
- Standard prescribed in Bio-Medical Waste (Management & Handling) Rules 1988

GENERAL MARKS:-**NOTE:- No statutory liability accepted for samples , collected by M.P.P.C.B.**


Scientist


Lab in-charge

M.P. POLLUTION CONTROL BOARD
Plot No. : 455, 456., Vijaynagar, Jabalpur (M.P.)
LIQUID SAMPLE ANALYSIS REPORT

Sample from : Village- Mangona kalan multai, Dist. Betul (M.P.)

Sample Details : Hand pump water sample, Near Dinesh Binzade House

Date of Collection :- 06/07/2023

Analysis No. 60/723

Bill No. Dt.

Date of Receipt :- 07/07/2023

Date of Analysis :- 07/07/2023

Analysis Done By :- T.S.Banerjee
Scientist

Sample collected by :- R.O.Chhindwara

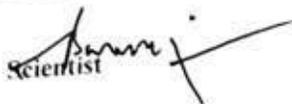
SN O	Parameters	Unit	Result I	Result II	Result III	Result IV
A - PHYSICAL PARAMETERS						
1.	Temperature	^o C	-			
2.	Turbidity	N.T.U.	2.0			
3.	Colour	-	colour less			
4.	Odour	-	odour less			
5.	Specific Conductivity	μ mho/cm	373.0			
B - CHEMICAL PARAMETERS						
6.	pH	-	7.40			
7.	Total Alkalinity	mg/l	10.0			
8.	Total Hardness (as CaCO ₃)	mg/l	345.0			
9.	Calcium Hardness (as CaCO ₃)	mg/l	395.0			
10.	Magnesium Hardness (as CaCO ₃)	mg/l	50.0			
11.	Chloride	mg/l	39.0			
12.	Total Solids	mg/l	369.0			
13.	Dissolved Solids	mg/l	308.0			
14.	Suspended Solids	mg/l	61.0			
15.	Ammonical Nitrogen (as N)	mg/l	0.16			
16.	Nitrite Nitrogen (as NO ₂)	mg/l	0.20			
17.	Nitrate Nitrogen (NH ₄)	mg/l	5.40			
18.	Total Kjeldahl Nitrogen (as N)	mg/l	-			
19.	Fluoride	mg/l	BDL			
20.	Dissolved Oxygen	mg/l	-			
21.	B.O.D. (3 days, 27 ^o C)	mg/l	-			
22.	C.O.D.	mg/l	20.0			
23.	Sulphate	mg/l	12.0			
24.	Phosphate (as P)	mg/l	0.14			
25.	Lead (Pb)	mg/l	-			
26.	Chromium (Cr ⁶⁺)	mg/l	-			
27.	Copper (Cu)	mg/l	-			
28.	Zinc (Zn)	mg/l	-			
29.	Iron (Fe)	mg/l	-			
30.	Cadmium	mg/l	-			
C - BIOLOGICAL PARAMETERS						
31.	Total Coliform	MPN/100ml	-			
32.	Feecal Coliform	MPN/100ml	-			

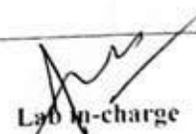
INDICATION : PARAMETER DOES NOT CONFIRM TO :-

- Standard prescribed by M.P.P.C.B.in M.P.Gazette notification, dated 25/03/1988
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- Standard prescribed in Bio-Medical Waste (Management & Handling) Rules 1988

GENERAL MARKS:-

NOTE: - No statutory liability accepted for samples , collected by M.P.P.C.B.


Scientist


Lab in-charge

- ग्राम नरखेड ग्राम निवाही
- ग्राम नरखेड हे ग्रामातील निवाही नावाच्या वडीलांनी आहे आणि मही दुई ही
- (1) नाकादेव देशमुख - निवाही नरखेड
 - (2) इश्वरराव रामराव निवाही नरखेड
 - (3) सुनिल विमलदेव निवाही नरखेड
 - (4) सचिन पिता नामदेव वाडकर नरखेड
 - (5) भा. निकेश्वर शेंकरावजी शेळके मु.पे.नरखेड
 - (6) सुभाष शास्त्री इश्याल शास्त्री मु.पे. नरखेड
 - (7) रामराव शिंदे मु.पे.नरखेड सरपंच

ग्राम मंगीनाकवा

- (1) शा.ना.शा.शा. वि.ना.शा.शा. शास्त्री मंगीनाकवा
- (2) Gulab purantab Buchhe, Mangonakaban Buchhe
- (3) Pavan shaymrao Mangonakaban Buchhe
- (4) Manohi sabhe / Ramkisan sabhe, Mangonakaban Buchhe
- (5) वासुदेव / गो.विठ्ठलराव वाडकर
- (6) रंजीत लोखराव नागले मंगीनाकवा वासुदेव
- (7) लोकेश / चैतराम लखले - मंगीनाकवा लोखेश
- (8) Jadesh Sh. Dhannu Sahu, Mangonakaban Jadesh

ग्राम अम्भोरी

- (1) सुरवेदव मंगलजी गाठे अम्भोरी Buchhe
- (2) वठ्ठल रामनाथ सोने अम्भोरी Bichane
- (3) संपद गाठे / वासुदेव अम्भोरी सुभाष
- (4) उमोद रामप्रसाद अम्भोरी अम्भोरी
- (5) मम्मद कारीनाथ अम्भोरी अम्भोरी

आज दिनांक 06/07/2023 को ग्राम अंगोरी में स्थित ICEM कंपनी द्वारा संचालित मेटल क्लाइंग (क्लाइंग) का कार्य किया जा रहा है। इस कार्य में होने वाले क्लाइंग से अंगोरी के गांव में सोमगढ़, अंगोरी, नरखेड, प्रभातपट्टन, मंगेनाकलां इत्यादि आते हैं। जिनमें क्लाइंग से होने वाली आवाज स्पष्ट सुनाई देती है। क्लाइंग से केवल 1-2 सेकंड कंपन होने का लेहसा है। क्लाइंग में श्रमिकों द्वारा आवासीय गठानों में कोई क्षति होने की जानकारी मौके पर नहीं दी गई। मौजूद निरीक्षण अनुविभागीय अधिकारी, राजस्व मुलवाई, तहसीलदार मुलवाई, नामतहसीलदार प्रभातपट्टन, राजस्व निरीक्षक प्रभातपट्टन, हल्कापटवरी अंगोरी तथा D.G.M.S, M.P.C.B., C.P.C.B. द्वारा संयुक्त रूप से स्थल निरीक्षण किया गया। जिसमें माइनिंग विभाग तथा स्वनि, प्रदूषण, जल प्रदूषण, वायु प्रदूषण कि मौके पर जांच कि गई। जिसकी रिपोर्ट विभाग द्वारा तैयार कि जायेगी।

1- ~~_____~~ (Dumsg) Dy Dms

2- ~~_____~~ RO MPPCB CW A

3- DR. POULAMI C. PATIL
C.P.C.B.

4- ग्राम - सोमगढ़ निवासी
कुशीराज साहू

~~_____~~ 09/11/22
Ravi

~~_____~~ Akhilesh

~~_____~~

~~_____~~

~~_____~~

~~_____~~

~~_____~~
श्री 2/1 ग्राम प्रभातपट्टन
शिलेश मंगेना पट्टन

~~_____~~
श्री 2/1 श्री 2/1
प्रभात पट्टन

~~_____~~
श्री 2/1 श्री 2/1
प्रभात पट्टन

~~_____~~
Rajesh

~~_____~~
मुलायम इन्द्रकाका

~~_____~~
पप्पु

ग्राम शेरगढ़

ग्राम शेरगढ़ के ग्राम निवासी के हस्ताक्षर दिए और वलया
दस्तावेज होने से सबको मे सम्पन्न होगा। अगर आ जाती है।

- (1) शोभेश S/O जीमलाल बुवा शेरगढ़ (S/O...)
- (2) रवि S/O पिरथी लाल बोबडे शेरगढ़ रवि बोबडे
- (3) शिवपाल / श्री अराव साहु शिवपाल साहु
- (4) रामनेश... साक्यां पन्डित शेरगढ़
- (5) शिवदास कोटवाल शिवदास
- (6) सुशास कंचरु
- (7) कंचरु कंचरु

