

Your (Half Yearly Compliance Report) has been Submitted with following details

Proposal No	IA/OR/IND/59484/2016
Compliance ID	111302365
Compliance Number(For Tracking)	EC/M/COMPLIANCE/111302365/2024
Reporting Year	2024
Reporting Period	01 Dec(01 Apr - 30 Sep)
Submission Date	29-11-2024
RO/SRO Name	ARTATRANA MISHRA
RO/SRO Email	jhk109@ifs.nic.in
State	ODISHA
RO/SRO Office Address	Integrated Regional Offices, Bhubaneswar

Note:- SMS and E-Mail has been sent to ARTATRANA MISHRA, ODISHA with Notification to Project Proponent.

DDSP/MOEFCC/001/2024-135
November 22, 2024.

To,
**The Addl. Principal Chief Conservator of Forests (C),
Ministry of Environment, Forest & Climate Change,
Integrated Regional Office (EZ),
A/3, Chandrasekharapur,
Bhubaneswar – 751 023.**

Sub: **Submission of six-monthly compliance report of the Environmental clearance for Dalmia DSP unit of M/s Dalmia Cement Bharat Limited, At/Po. – Rajgangpur, Dist.- Sundargarh, Odisha for the period April 2024 to September 2024.**

Ref: Environmental Clearance vide File No. J-11011/232/2016- 1A II (I) dated 16.02.2018.

Dear Sir,

With reference to above captioned subject matter, we are submitting herewith the six-monthly compliance report of the conditions laid down in above Environmental clearance for Dalmia DSP unit of M/s Dalmia Cement Bharat Limited, At/Po. – Rajgangpur, Dist. – Sundargarh, Odisha for the period April 2024 to September 2024.

Thanking you,

Yours sincerely,
For **Dalmia Cement Bharat Limited,**



Ashok Kumar Mishra
Head - Environment

Encl: As above.

CC: 1. The Director, Impact Assessment Division, MoEF&CC, New Delhi.
2. The Member Secretary, CPCB, New Delhi.
3. The Member Secretary, OSPCB, Bhubaneswar, Odisha.

Half Yearly Compliance Report**2024****01 Dec(01 Apr - 30 Sep)****Acknowledgement**

Proposal Name	Proposed Cement Plant (Dalmia DSP Unit) - Clinker 3.0 MTPA, Cement 2.25 MTPA, WHRS (15 MW) and DG Set (1000 KVA) by Dalmia Cement Bharat Limited at Village & Tehsil - Rajgangpur, District - Sundargarh, Odisha.		
Name of Entity / Corporate Office	Dalmia Cement (Bharat) Limited		
Village(s)	N/A		
District	SUNDARGARH		
Proposal No.	IA/OR/IND/59484/2016	Category	Industrial Projects - 2
Plot / Survey / Khasra No.	N/A	Sub-District	N/A
State	ODISHA	Entity's PAN	*****9414C
MoEF File No.	J-11011/232/2016-IA.II (I)	Entity name as per PAN	DALMIA CEMENT (BHARAT) LIMITED

Compliance Reporting Details

Reporting Year	2024
Remarks (if any)	
Reporting Period	01 Dec(01 Apr - 30 Sep)

Details of Production and Project Area

Name of Entity / Corporate Office Dalmia Cement (Bharat) Limited

	Project Area as per EC Granted	Actual Project Area in Possession
Private	0	0.020
Revenue Land	39.27	46.207
Forest	0	0
Others	0	0
Total	39.27	46.227000000000004

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Clinker	Tons per Annum (TPA)	31/03/2025	3000000	2068606	3900000
2	WHRB	MW	31/03/2025	15	63951	15

Conditions

Specific Conditions

Sr.No.	Condition Type	Condition Details
1	MISCELLANEOUS	3. The Capital cost Rs. 95.00 Crores and annual recurring cost Rs. 5.00 Crores towards the environmental protection measures shall be earmarked separately. The funds so provided shall not be diverted for any other purpose.
PPs Submission: Complied The funds earmarked for environmental protection measures is used for the specified purpose and has not been diverted for any other purpose.		Date: 28/11/2024
2	Corporate Environmental Responsibility	1. An amount of Rs 46.00 Crores proposed towards Enterprise Social Commitment (ESC) shall be utilized as capital expenditure in project mode. The project shall be completed in concurrence with the implementation of the expansion and estimated on the basis of Scheduled Rates.
PPs Submission: Being Complied ESC earmarked funds are being utilized as capital expenditure towards education, health, sanitation, infrastructure development, livelihood and skill development initiatives etc.		Date: 28/11/2024
3	GREENBELT	Green belt shall be developed in 12.95 Ha equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant. The plantation shall be completed within one year form the date of issue of EC. In addition to this 1500 additional plants shall be planted within the premises.
PPs Submission: Complied Green cover has been developed in and around the plant premises. We have planted around 2349 saplings in this year till Sept 2024.		Date: 28/11/2024
4	WASTE MANAGEMENT	4. Kitchen waste shall be composted or convened to biogas for further use.
PPs Submission: Complied Mechanical bio-digester has been installed for composting of food and kitchen wastes for further use in horticulture.		Date: 28/11/2024
5	ENERGY PRESERVATION MEASURES	5. The project proponent shall adopt the slip power recovery system for energy conservation.
PPs Submission: Complied Slip power recovery system has been adopted for energy conservation.		Date: 28/11/2024
6	MISCELLANEOUS	Detailed study of the fauna in the study area shall be carried out within one year. If Schedule-I species are found, then conservation plan for Schedule-I species be prepared and implemented in consultation with state forest department. The PP shall provide necessary financial resources for implementation of the plan.
PPs Submission: Complied No Schedule I species have been found within the project area.		Date: 28/11/2024

7	WATER QUALITY MONITORING AND PRESERVATION	No ground water shall be used for plant & township
PPs Submission: Complied Ground water is not used for any purpose.		Date: 28/11/2024
General Conditions		
Sr.No.	Condition Type	Condition Details
1	Statutory compliance	25 (f) submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB:
PPs Submission: Complied Six monthly compliance reports including environment monitoring data are submitted to the statutory bodies.		Date: 28/11/2024
2	Statutory compliance	25 (g) submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules. 1986, as amended subsequently and put on the website of the company;
PPs Submission: Complied Environmental Statement in Form V has been submitted to OSPCCB on 24.09.2024. The same is uploaded periodically on company website		Date: 28/11/2024
3	Statutory compliance	25 (h) inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.
PPs Submission: Complied Project executed in October 2018. We have obtained consent to establish (CTE) and consent to operate (CTO) from State Pollution Control Board, Odisha for the commencement of operation since December 2019.		Date: 28/11/2024
4	MISCELLANEOUS	26. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
PPs Submission: Complied Noted.		Date: 28/11/2024
5	MISCELLANEOUS	27. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
PPs Submission: Complied Noted and will be complied if any from time to time.		Date: 28/11/2024
6	PUBLIC HEARING	28. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and that during their presentation to the EAC. The commitment made by the project proponent to the issue raised during Public Hearing shall be implemented by the proponent.

<p>PPs Submission: Complied All commitments and recommendations made in the EIA/EMP report are being implemented</p>		<p>Date: 28/11/2024</p>
7	MISCELLANEOUS	<p>29. The above conditions shall be enforced. inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act. 1974, the Air (Prevention & Control of Pollution) Act, 1981. the Environment (Protection) Act. 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules.</p>
<p>PPs Submission: Complied Noted.</p>		<p>Date: 28/11/2024</p>
8	MISCELLANEOUS	<p>30. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act. 2010.</p>
<p>PPs Submission: Complied Noted.</p>		<p>Date: 28/11/2024</p>
9	WATER QUALITY MONITORING AND PRESERVATION	<p>2 (a) Install 24x7 continuous effluents monitoring system at all the discharge points to monitor treated effluents with respect to parameters prescribed in G.S.R. No. 612 (E) dated 25th August. 2014 and subsequent amendment dated 9th May, 2016 and 10th May 2016 as amended from time to time; S.O.3305 (E) dated 7th December 2015 for thermal power plants as amended from time to time as amended from time to time;</p>
<p>PPs Submission: Complied Cement manufacturing being a dry process, no such effluent is generated and wastewater generated is recycled back in the cooling circuit and dust suppression.</p>		<p>Date: 28/11/2024</p>
10	AIR QUALITY MONITORING AND PRESERVATION	<p>a. Install 24x7 continuous emission monitoring system at all the stacks to monitor stack emission with respect to parameters prescribed in G.S.R. No. 612 (E) dated 25th August, 2014 and subsequent amendment dated 10th May, 2016 from time to time; S..O. 3305 (E) dated 7th December 2015 for thermal power plants as amended from time to time and connected to CPCB online;</p>
<p>PPs Submission: Complied Continuous Emission Monitoring System (CEMS) have been installed in all process stacks of our plant and are connected to the Board server.</p>		<p>Date: 28/11/2024</p>
11	AIR QUALITY MONITORING AND PRESERVATION	<p>b. Monitor fugitive emissions in the plant premises;</p>
<p>PPs Submission: Complied Fugitive emissions are being regularly monitored within plant premises.</p>		<p>Date: 28/11/2024</p>
12	AIR QUALITY MONITORING AND PRESERVATION	<p>c. Carryout Continuous Ambient Air Quality monitoring as per National Ambient Air Quality Standards issued by the Ministry vide G.S.R.No. 826(E) dated 16th November 2009 (as amended from time to time) within and outside the plant area at least at four locations covering upwind and downwind directions at an angle of 120 degree each; and</p>

<p>PPs Submission: Complied Continuous Ambient Air Quality Monitoring (CAAQM) System have been installed at four locations covering upwind and downwind directions.</p>		<p>Date: 28/11/2024</p>
13	AIR QUALITY MONITORING AND PRESERVATION	d. Submit monitoring report to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
<p>PPs Submission: Complied Six monthly compliance report along with monitored results are submitted to the statutory bodies periodically. The Monitoring Report attached.</p>		<p>Date: 28/11/2024</p>
14	WATER QUALITY MONITORING AND PRESERVATION	b) submit monitoring report to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
<p>PPs Submission: Complied Six monthly compliance report along with monitored data are submitted to statutory bodies periodically.</p>		<p>Date: 28/11/2024</p>
15	AIR QUALITY MONITORING AND PRESERVATION	a) Provide appropriate Air Pollution Control (APC) system for all the dust generating points including fugitive dust from all vulnerable sources;
<p>PPs Submission: Complied Air Pollution Control (APC) devices have been installed at major dust generating points including transfer towers.</p>		<p>Date: 28/11/2024</p>
16	AIR QUALITY MONITORING AND PRESERVATION	b) Design suitable capacity of bag filters to handle gas/air shall be 150% of the normal flow from process/ from suction hoods to achieve particulate emission to less than 30 mg/N m3.
<p>PPs Submission: Complied Adequately sized bag filters have been installed to control the PM emissions below 30 mg/Nm3.</p>		<p>Date: 28/11/2024</p>
17	AIR QUALITY MONITORING AND PRESERVATION	c) Provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags:
<p>PPs Submission: Complied Major Bag Houses are provided with leakage detection and mechanized bag cleaning facilities.</p>		<p>Date: 28/11/2024</p>
18	AIR QUALITY MONITORING AND PRESERVATION	d) Provide pollution control system in the cement plant as per the CREP Guidelines of CPCB;
<p>PPs Submission: Complied Pollution control measures as recommended in CREP guidelines for Cement Plant is being adhered to.</p>		<p>Date: 28/11/2024</p>
19	AIR QUALITY MONITORING AND PRESERVATION	e) Provide sufficient number of mobile or stationery vacuum cleaners to clean plant roads, shop floors, roofs regularly;
<p>PPs Submission: Complied 3 nos. of small mechanized and 1 big truck-mounted road sweepers have been deployed to clean plant roads, shop floors, roofs etc along with vacuum cleaners at shop floor.</p>		<p>Date: 28/11/2024</p>

20	AIR QUALITY MONITORING AND PRESERVATION	f) Recycle and reuse lime fines, coal fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after agglomeration;
PPs Submission: Complied Lime and coal fines collected in the pollution control devices are recycled and reused to the maximum extent possible.		Date: 28/11/2024
21	AIR QUALITY MONITORING AND PRESERVATION	g) Use leak proof trucks/dumpers for carrying coal and other raw materials and shall cover them with tarpaulin. Use closed bulkers for carrying fly ash;
PPs Submission: Complied Trucks used for carrying coal and other raw materials are covered with tarpaulin. Closed bulkers and railway rakes are used for fly ash transportation.		Date: 28/11/2024
22	AIR QUALITY MONITORING AND PRESERVATION	h) Provide wind shelter fence and chemical spraying on the raw material stock piles:
PPs Submission: Complied Wind barriers have been provided near raw material stock piles.		Date: 28/11/2024
23	AIR QUALITY MONITORING AND PRESERVATION	i) Provide Low NOx burners to control NOx emissions. Regular calibration of the instruments must be ensured. If needed, NOx will be controlled by using SCR/NSCR technologies:
PPs Submission: Complied Low NOx burners have been installed to control NOx emissions.		Date: 28/11/2024
24	AIR QUALITY MONITORING AND PRESERVATION	j) Have separate truck parking area and monitor vehicular emissions at regular interval.
PPs Submission: Complied A dedicated truck parking area has been provided and vehicular emissions are monitored.		Date: 28/11/2024
25	WATER QUALITY MONITORING AND PRESERVATION	a) Adhere to “zero liquid discharge”;
PPs Submission: Being Complied Cement manufacturing is a dry process, and zero liquid discharge is being adhered to except monsoon/surface run off.		Date: 28/11/2024
26	WATER QUALITY MONITORING AND PRESERVATION	b) Provide Sewage Treatment Plant for domestic wastewater
PPs Submission: Complied Domestic wastewater is treated in Sewage Treatment Plant.		Date: 28/11/2024
27	WATER QUALITY MONITORING AND PRESERVATION	c) Provide garland drains and collection pits for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.

<p>PPs Submission: Complied Garland drains with collection pits are provided at stockpile area.</p>		<p>Date: 28/11/2024</p>
28	<p>WATER QUALITY MONITORING AND PRESERVATION</p>	<p>a) Practice rainwater harvesting to maximum possible extent;</p>
<p>PPs Submission: Complied Rainwater harvesting system has been installed in concrete roof buildings.</p>		<p>Date: 28/11/2024</p>
29	<p>WATER QUALITY MONITORING AND PRESERVATION</p>	<p>b) Provide water meters at the inlet to all unit processes in the cement plants:</p>
<p>PPs Submission: Complied Water meters are in place at the inlet to all unit processes in the plant.</p>		<p>Date: 28/11/2024</p>
30	<p>WATER QUALITY MONITORING AND PRESERVATION</p>	<p>c) Make efforts to minimize water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.</p>
<p>PPs Submission: Complied Water conservation efforts are practised to minimize the freshwater consumption by maximizing the use of recycled water</p>		<p>Date: 28/11/2024</p>
31	<p>ENERGY PRESERVATION MEASURES</p>	<p>6 (a) provide Waste heat recovery system for kiln and cooler;</p>
<p>PPs Submission: Complied Waste Heat Recovery System has been installed for power generation.</p>		<p>Date: 28/11/2024</p>
32	<p>ENERGY PRESERVATION MEASURES</p>	<p>6 (b) make efforts to achieve power consumption less than 65 units/tonne for Portland Pozzolona Cement (PPC) and 85 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker;</p>
<p>PPs Submission: Complied Efforts are being made to lower the power and thermal energy consumption within the stipulated norms.</p>		<p>Date: 28/11/2024</p>
33	<p>ENERGY PRESERVATION MEASURES</p>	<p>6 (c) provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;</p>
<p>PPs Submission: Complied 1.732 MW Solar power system has been installed.</p>		<p>Date: 28/11/2024</p>
34	<p>ENERGY PRESERVATION MEASURES</p>	<p>6 (d) provide the project proponent for LED lights in their offices and residential areas:</p>
<p>PPs Submission: Complied LED lights are used in offices as well as residential areas.</p>		<p>Date: 28/11/2024</p>
35	<p>ENERGY PRESERVATION MEASURES</p>	<p>6 (e) maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards;</p>

<p>PPs Submission: Complied Maximum utilization of fly ash as well as slag is done in the cement blend.</p>		<p>Date: 28/11/2024</p>
36	ENERGY PRESERVATION MEASURES	6 (f) maximize utilization of alternate fuels and Co-processing to achieve best practice norms.
<p>PPs Submission: Complied Co-processing of Hazardous wastes as alternate fuels and raw mix is carried out.</p>		<p>Date: 28/11/2024</p>
37	Human Health Environment	7. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport.
<p>PPs Submission: Complied Raw material from our captive mines to the cement plant is transported through cross-country closed belt conveyor (CCBC).</p>		<p>Date: 28/11/2024</p>
38	WASTE MANAGEMENT	8. Used refractories shall be recycled as far as possible.
<p>PPs Submission: Complied Used refractories are recycled to the maximum extent possible.</p>		<p>Date: 28/11/2024</p>
39	GREENBELT	9. The PP shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration including plantation.
<p>PPs Submission: Being Complied GHG emissions inventory for the plant is in place and maximum use of RDF as fuel is done to reduce the fuel consumption. Plantation is carried out on a regular basis.</p>		<p>Date: 28/11/2024</p>
40	Risk Mitigation and Disaster Management	10. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
<p>PPs Submission: Complied Emergency Preparedness Plan based on HIRA and DMP is implemented at site along with mock drills conducted at regular intervals to check the efficiency of the same.</p>		<p>Date: 28/11/2024</p>
41	Human Health Environment	11. The PP shall Carry-out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
<p>PPs Submission: Complied PPEs have been made mandatory job specific and heat stress analysis carried out for workmen working in high temperature zone.</p>		<p>Date: 28/11/2024</p>
42	Statutory compliance	12. The PP shall adhere to the corporate environmental policy and system of the reporting of any infringements/ non-compliance of EC conditions at least once in a year to the Board of Directors and the copy of the board resolution shall be submitted to the MoEF&CC as a part of six-monthly report.
<p>PPs Submission: Complied Environment Policy is in place and non-compliances are reviewed at Board of Directors level periodically.</p>		<p>Date: 28/11/2024</p>

43	Corporate Environmental Responsibility	13. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the cement plants shall be implemented.
PPs Submission: Complied All recommendations made in the CREP guidelines for Cement Plant are being adhered to.		Date: 28/11/2024
44	Statutory compliance	14. A dedicated environmental cell with qualified personnel shall be established. The head of the environment cell shall report directly to the head of the organization.
PPs Submission: Complied An Environmental Cell with qualified personnel is in place with Head of Cell directly reporting to the Unit Head.		Date: 28/11/2024
45	Human Health Environment	15. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking. mobile toilets, mobile STP, Safe drinking water. medical health care. creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
PPs Submission: Complied Necessary basic infrastructure was provided to workers and labour during the construction phase.		Date: 28/11/2024
46	Statutory compliance	16. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
PPs Submission: Complied Noted and will be adhered to from time to time.		Date: 28/11/2024
47	Statutory compliance	17. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
PPs Submission: Complied Noted and no expansion/modification has been carried out without obtaining prior approval from the Ministry.		Date: 28/11/2024
48	WASTE MANAGEMENT	18. The waste oil, grease and other hazardous shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
PPs Submission: Complied Waste Oil, Grease and other Hazardous wastes are handled and disposed off as per HOWM Rules 2016 and amendments thereof.		Date: 28/11/2024
49	Risk Mitigation and Disaster Management	19. The storage of NH3 and other hazardous chemicals at the site shall be as per the provisions of Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 as amended from time to time.
PPs Submission: Complied Noted. NH3 and other Hazardous Chemicals are being stored properly in designated and earmarked areas as per storage rules.		Date: 28/11/2024
50	Noise Monitoring & Prevention	20. The ambient noise levels should conform to the standards prescribed under EPA Rules. 1989 viz. 75 dB(A) during day time and 70 dB(A) during night time.

<p>PPs Submission: Complied The ambient noise levels monitored are well within the stipulated norms.</p>		<p>Date: 28/11/2024</p>
51	Human Health Environment	21. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
<p>PPs Submission: Complied The health surveillance of the workers as well as executives is done periodically, and records are maintained as per Factories Act.</p>		<p>Date: 28/11/2024</p>
52	MISCELLANEOUS	22. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report.
<p>PPs Submission: Complied All environment protection measures and safeguards recommended in EIA/EMP report are implemented.</p>		<p>Date: 28/11/2024</p>
53	Human Health Environment	23. Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses, cement bagging plants.
<p>PPs Submission: Complied Ventilation system has been designed for adequate air changes in all tunnels, motor houses, cement bagging plants.</p>		<p>Date: 28/11/2024</p>
54	WASTE MANAGEMENT	24. Sufficient number of colour coded waste collection bins shall be constructed at shop floors in each hop to systematically segregate and store waste materials generated at the shop floors (other than Process waste) in designated colored bins for value addition by promoting reuse of such wastes and for good housekeeping.
<p>PPs Submission: Complied Wastes other than process wastes collected from shop floors are segregated and stored in color coded bins as a good housekeeping practice.</p>		<p>Date: 28/11/2024</p>
55	Statutory compliance	25 (a) send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government:
<p>PPs Submission: Complied Copies of the Environmental Clearance were submitted to heads of local bodies and relevant Govt. Offices.</p>		<p>Date: 28/11/2024</p>
56	Statutory compliance	25 (b) put on the clearance letter on the web site of the company for access to the Public.
<p>PPs Submission: Complied Environmental Clearance Letter has been uploaded and made available on company website.</p>		<p>Date: 28/11/2024</p>
57	Statutory compliance	25 (c) inform the public through advertisement within seven days from the date of issue of the clearance letter. at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forests and Climate Change (MoEF&CC) at http://envfor.nic.in .

PPs Submission: Complied The grant of Environmental Clearance to the project was advertised in two local newspaper i.e. Odisha Today and Manthan dated 22.02.2018.		Date: 28/11/2024
58	Statutory compliance	25 (d) upload the status of compliance of the stipulated environment clearance conditions. including results of monitored data on their website and update the same periodically
PPs Submission: Complied Status on compliance of EC conditions along with the environment monitoring data are uploaded periodically.		Date: 28/11/2024
59	Statutory compliance	25 (e) monitor the criteria pollutants Level namely PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company;
PPs Submission: Complied Stack emissions as well as ambient air quality are monitored and results displayed in public as well as uploaded on company website.		Date: 28/11/2024
Visit Remarks		
Last Site Visit Report Date:		N/A
Additional Remarks:		The detailed environment monitoring report for the period of April 2024 to September 2024 is attached as additional attachment.
<p style="color: red; text-align: center;">Note: This acknowledgement is as per the details submitted by project proponent. In no way is this document to be considered as conclusion on any action on the compliance of the project. This is strictly for the project proponent's reference purpose.</p>		

ENVIRONMENTAL MONITORING REPORT

BASED ON DATA GENERATED

FROM

APRIL 2024 – SEPTEMBER 2024

FOR

DALMIA CEMENT BHARAT LIMITED

At/Po: RAJGANGPUR – 770017, District: SUNDARGARH, ODISHA



Prepared By:

Cleenviron Private Limited

PLOT NO: 689/17, INDUSTRIAL ESTATE, KALUNGA – 770031, ROURKELA, ODISHA

Tele: 0661 – 2475746

Email: cleenviron@gmail.com

1. DATA ANALYSIS

1.1 Micro-meteorological Study:

1.1.1 Wind Speed & Wind Direction

During the entire period from 1st April to 30th September all total 4392 no. of data are recorded by the instrument and after interpretation of the collected data it was found that Calm condition prevailed over 6.85%, while considering the 24 hourly data. 7.41% calm condition prevailed from morning 6 hrs to 14hrs for the entire study period, 9.53% calm condition prevailed from 14hrs to 22hrs and 3.34% calm condition prevailed from 22hrs to 06hrs. The predominant wind directions were from NE, NE, SE & NE with average wind speed 3.79 m/sec. The wind rose diagram for the entire study period are depicted on the **Figure No: 1.1, 1.2, 1.3 & 1.4.**

1.1.2 Temperature

The maximum & minimum temperature during the entire study period were divided in to two parts as the study period was covering summer as well as monsoon seasons. The Minimum temperature during the summer season was found to be 16.52°C and the Maximum temperature was found to be 44.23°C up to the end of 30th June.

The minimum and maximum temperature during the monsoon season i.e. from July to September was found to be 23.45°C and 36.50°C. **Table No 1.1** shows a summary of micro-meteorological data collected for the entire period.

1.1.3 Rainfall

The total rain fall from 1st April to 30th September was observed to be 749.9 mm. during the study period. A month wise rainfall data recorded at the site is depicted in **Table No 1.1.**

Table No: 1.1

A SUMMARY OF THE MICRO-METEOROLOGICAL DATA

Project Site : Lanjiberna Limestone & Dolomite Mines
Location : Magazine Hill Top

Sl No	Parameters	From April – September 2024
1	Predominant Wind Direction	From NE, NE, NE & SE
2	Calm Condition %	6.85%
3	Average Wind Speed m/sec	3.79
4	Temperature °C	
	Summer Season	
	Minimum	16.52
	Maximum	44.23
	Monsoon Season	
	Minimum	23.45
	Maximum	36.50
5	Rain Fall in mm	
	April	10.2
	May	56.6
	June	145.7
	July	120.4
	August	273.4
	September	143.6
	Total	749.9

Figure No: 1.2 Wind Rose Diagram for 24 Hours

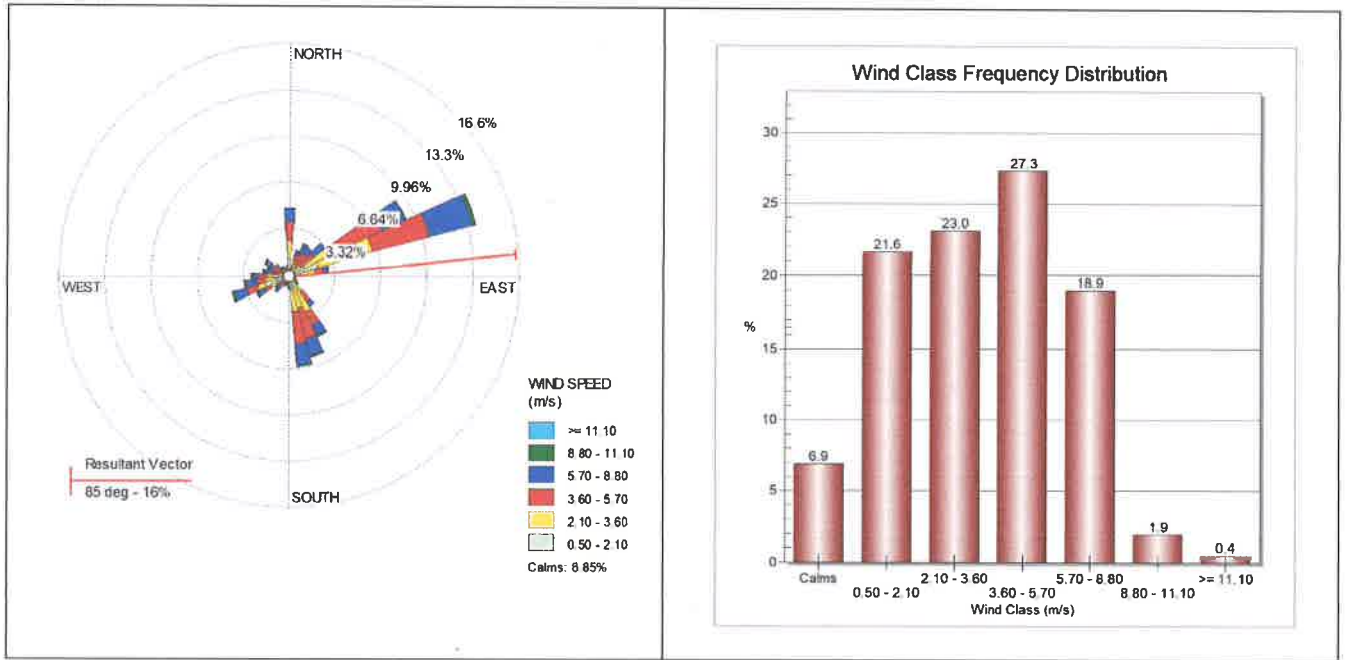


Figure No: 1.2 Wind Rose Diagram from 06 – 14 Hours

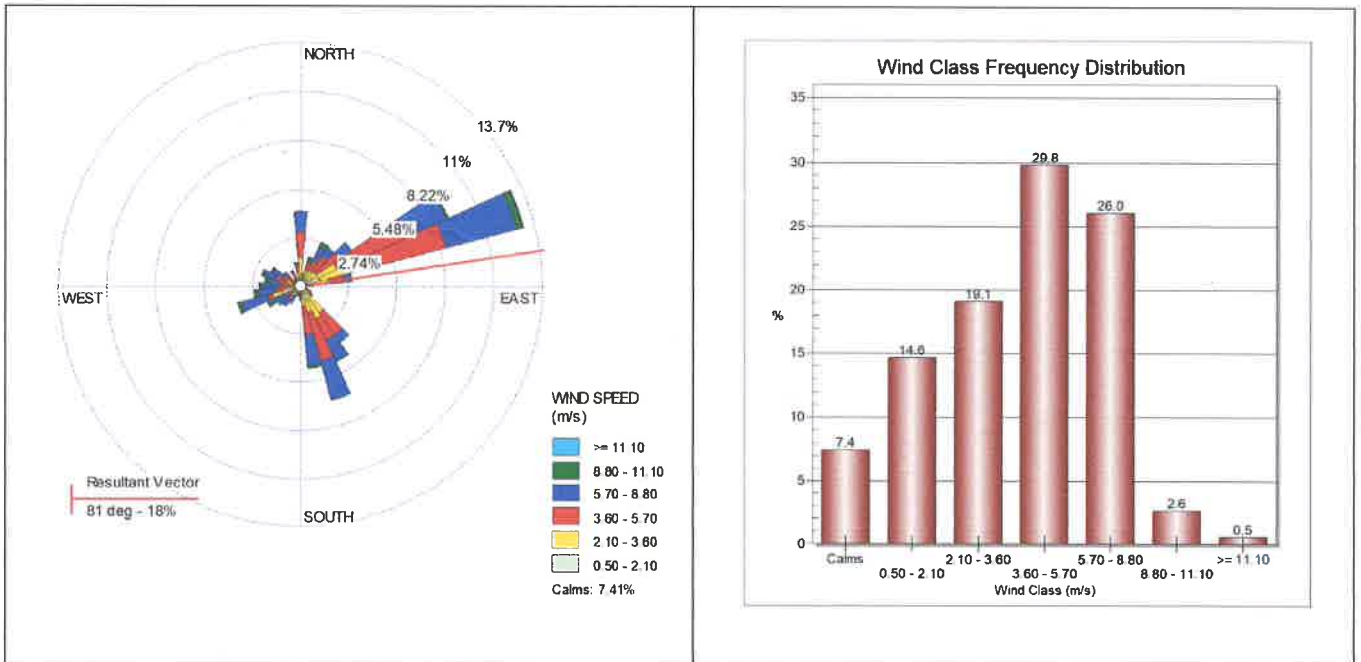


Figure No: 1.3

Wind Rose Diagram from 14 – 22 Hours

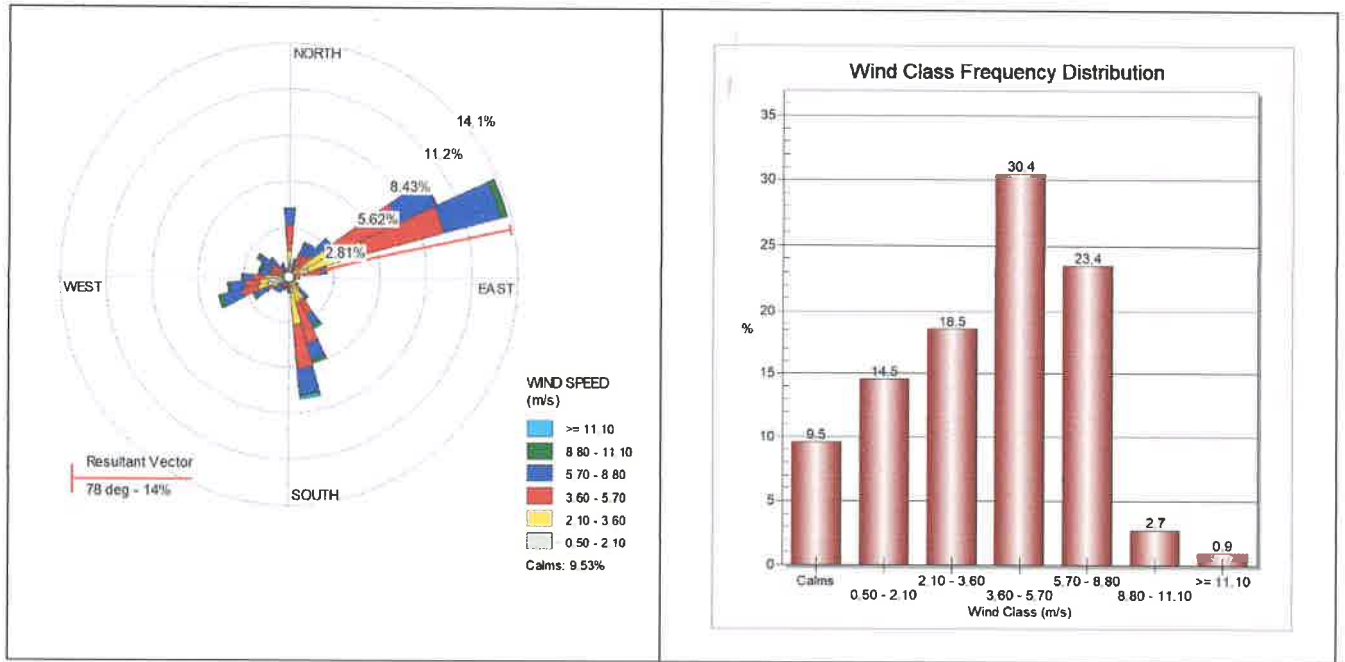


Figure No: 1.4

Wind Rose Diagram from 22 – 06 Hours

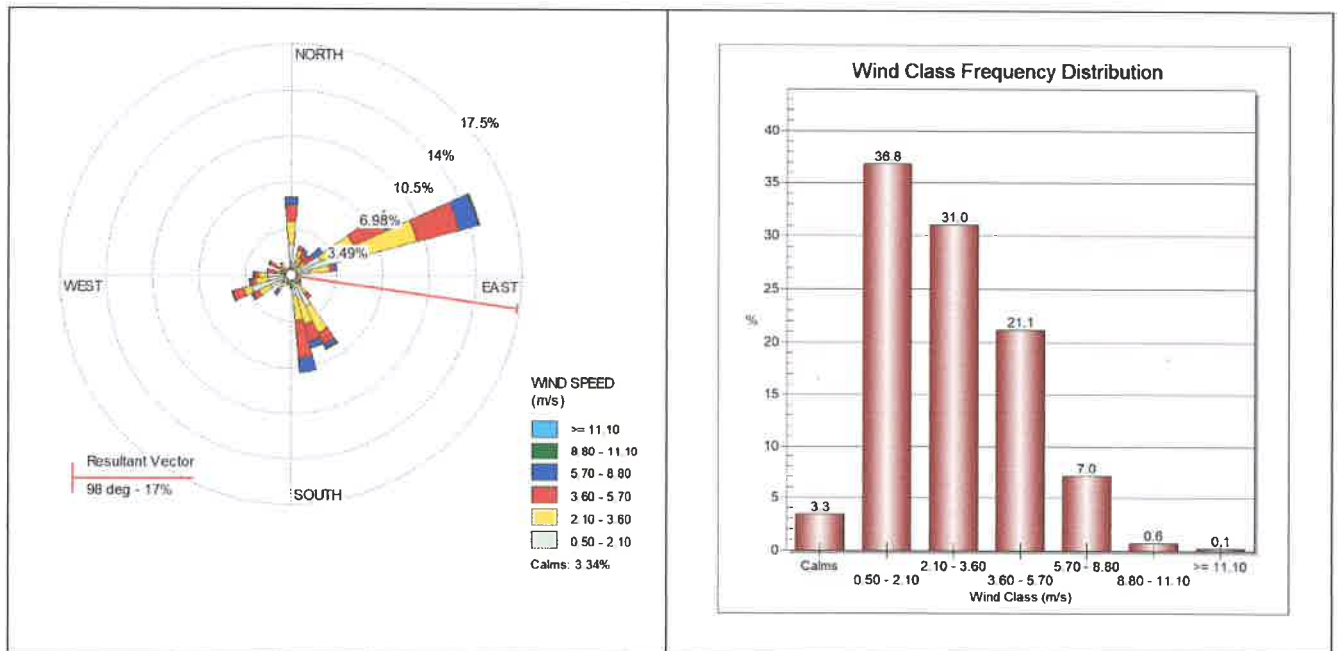


Table No: 1

AMBIENT AIR QUALITY DATA
From 01.04.2024 to 30.09.2024

Station: A-1 (Konark Vihar Area)

Months	PM2.5 µg/m ³	PM10 µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³
April	23	67	04	25	< 0.1
	25	73	03	22	< 0.1
	22	62	05	29	< 0.1
	29	78	07	30	< 0.1
	26	71	07	28	< 0.1
	20	69	03	30	< 0.1
	24	67	04	35	< 0.1
	27	79	06	27	< 0.1
May	21	70	18	19	< 0.1
	27	71	08	25	< 0.1
	21	60	07	20	< 0.1
	23	63	04	18	< 0.1
	23	60	03	12	< 0.1
	22	65	05	26	< 0.1
	24	62	06	22	< 0.1
	28	84	06	22	< 0.1
June	26	70	04	25	< 0.1
	23	74	05	20	< 0.1
	28	82	04	25	< 0.1
	24	72	03	25	< 0.1
	26	78	06	22	< 0.1
	27	85	06	25	< 0.1
	25	70	07	23	< 0.1
	22	73	08	26	< 0.1
July	27	80	05	28	< 0.1
	24	70	05	22	< 0.1
	23	64	04	20	< 0.1
	15	50	06	22	< 0.1
	20	57	04	23	< 0.1
	23	60	05	28	< 0.1
	26	68	06	23	< 0.1
	21	62	03	18	< 0.1
August	19	58	< 03	19	< 0.1
	22	69	03	20	< 0.1
	18	49	04	30	< 0.1
	11	32	07	24	< 0.1
	18	56	03	32	< 0.1
	20	64	03	19	< 0.1
	21	61	03	22	< 0.1
	11	33	03	26	< 0.1
17	47	03	16	< 0.1	
22	63	03	13	< 0.1	

Months	PM2.5 µg/m ³	PM10 µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³
September	04	11	04	17	< 0.1
	22	62	05	13	< 0.1
	27	78	09	28	< 0.1
	18	53	07	21	< 0.1
	20	57	07	29	< 0.1
	14	40	06	35	< 0.1
	22	62	05	21	< 0.1
	26	73	04	19	< 0.1
	16	45	08	24	< 0.1

Table No: 2

AMBIENT AIR QUALITY DATA

From 01.04.2024 to 30.09.2024

Station: A-2 (General Store Area, Line – 1)

Months	PM2.5 µg/m ³	PM10 µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³
April	22	64	03	16	< 0.1
	26	70	05	29	< 0.1
	28	75	08	30	< 0.1
	26	77	05	28	< 0.1
	24	75	06	22	< 0.1
	24	72	04	32	< 0.1
	25	70	05	35	< 0.1
	22	64	06	19	< 0.1
May	24	69	06	28	< 0.1
	20	57	04	15	< 0.1
	26	73	06	25	< 0.1
	21	62	08	24	< 0.1
	23	72	06	19	< 0.1
	25	62	07	22	< 0.1
	22	69	05	20	< 0.1
	22	68	06	28	< 0.1
June	23	69	03	25	< 0.1
	22	68	05	28	< 0.1
	26	73	04	20	< 0.1
	29	82	04	20	< 0.1
	25	74	05	22	< 0.1
	28	84	08	32	< 0.1
	21	60	06	24	< 0.1
	24	76	03	26	< 0.1
July	23	77	06	22	< 0.1
	23	66	< 03	16	< 0.1
	23	68	03	22	< 0.1
	24	70	04	18	< 0.1
	22	68	03	22	< 0.1

Months	PM2.5 µg/m ³	PM10 µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³
	26	73	05	20	< 0.1
	25	74	05	18	< 0.1
	21	60	06	19	< 0.1
	20	60	04	17	< 0.1
	27	75	06	21	< 0.1
August	10	25	04	14	< 0.1
	11	31	05	34	< 0.1
	06	20	07	17	< 0.1
	21	61	< 03	11	< 0.1
	19	41	03	29	< 0.1
	24	69	03	18	< 0.1
	13	44	03	29	< 0.1
	25	68	06	20	< 0.1
September	24	67	03	27	< 0.1
	12	36	04	19	< 0.1
	20	57	04	17	< 0.1
	22	61	04	15	< 0.1
	24	69	04	17	< 0.1
	13	36	04	27	< 0.1
	26	74	05	21	< 0.1
	28	80	07	24	< 0.1
	10	26	06	19	< 0.1

Table No: 3

AMBIENT AIR QUALITY DATA
From 01.04.2024 to 30.09.2024

Station: A-3 (Material Gate, DSP Unit)

Months	PM2.5 µg/m ³	PM10 µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³
April	27	81	07	25	< 0.1
	29	83	03	19	< 0.1
	23	70	05	21	< 0.1
	34	82	08	25	< 0.1
	30	85	04	28	< 0.1
	28	79	06	29	< 0.1
	28	72	05	37	< 0.1
	29	82	07	22	< 0.1
May	27	77	07	29	< 0.1
	29	83	07	24	< 0.1
	28	76	08	27	< 0.1
	29	83	08	28	< 0.1
	25	69	08	32	< 0.1
	26	70	06	20	< 0.1
	30	86	05	22	< 0.1
	26	85	07	25	< 0.1

Months	PM2.5 µg/m ³	PM10 µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³
June	27	79	05	28	< 0.1
	26	78	06	22	< 0.1
	28	80	06	25	< 0.1
	27	81	07	25	< 0.1
	30	81	04	22	< 0.1
	32	88	09	28	< 0.1
	29	83	05	20	< 0.1
	25	76	03	19	< 0.1
	28	82	08	26	< 0.1
July	25	72	03	21	< 0.1
	27	77	04	28	< 0.1
	22	67	05	24	< 0.1
	25	72	04	22	< 0.1
	27	77	03	20	< 0.1
	23	68	05	25	< 0.1
	26	70	06	23	< 0.1
	24	66	03	25	< 0.1
	26	70	06	23	< 0.1
August	10	29	09	27	< 0.1
	14	39	03	10	< 0.1
	13	39	03	46	< 0.1
	17	47	06	32	< 0.1
	14	40	03	26	< 0.1
	16	47	04	17	< 0.1
	20	58	03	18	< 0.1
	23	67	04	19	< 0.1
	19	55	03	36	< 0.1
September	19	52	04	18	< 0.1
	14	39	07	22	< 0.1
	20	59	03	25	< 0.1
	23	66	03	25	< 0.1
	21	61	08	46	< 0.1
	28	79	09	28	< 0.1
	23	68	08	33	< 0.1
	11	32	04	18	< 0.1

Table No: 4

AMBIENT AIR QUALITY DATA

From 01.04.2024 to 30.09.2024

Station: A-4 (Near Refractory Main Gate)

Months	PM2.5 µg/m ³	PM10 µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³
April	28	84	08	23	< 0.1
	32	88	06	30	< 0.1
	27	82	05	29	< 0.1

Months	PM2.5 µg/m ³	PM10 µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³
	30	84	09	29	< 0.1
	30	85	09	35	< 0.1
	25	79	04	26	< 0.1
	30	85	06	35	< 0.1
	24	76	05	20	< 0.1
May	29	86	04	15	< 0.1
	28	73	06	26	< 0.1
	24	71	07	26	< 0.1
	29	80	07	32	< 0.1
	26	77	04	19	< 0.1
	25	75	08	30	< 0.1
	27	72	03	20	< 0.1
	23	70	06	21	< 0.1
June	27	76	05	22	< 0.1
	28	83	05	25	< 0.1
	26	77	05	20	< 0.1
	28	83	05	25	< 0.1
	24	77	04	28	< 0.1
	27	78	04	22	< 0.1
	25	70	06	22	< 0.1
	27	79	07	26	< 0.1
July	26	79	03	24	< 0.1
	28	78	04	20	< 0.1
	25	74	06	24	< 0.1
	26	72	06	20	< 0.1
	23	66	04	20	< 0.1
	24	68	05	24	< 0.1
	23	70	06	22	< 0.1
	23	64	03	26	< 0.1
August	12	65	04	23	< 0.1
	27	76	03	21	< 0.1
	25	72	05	19	< 0.1
	24	70	05	19	< 0.1
	10	29	05	20	< 0.1
	20	57	04	21	< 0.1
	15	42	04	22	< 0.1
	21	60	05	20	< 0.1
September	06	18	04	18	< 0.1
	21	59	04	13	< 0.1
	17	49	03	31	< 0.1
	23	66	04	19	< 0.1
	24	70	03	21	< 0.1
	24	68	03	22	< 0.1
	25	67	05	18	< 0.1
	25	71	04	33	< 0.1
19	55	04	21	< 0.1	
24	69	03	22	< 0.1	
20	58	07	25	< 0.1	

Table No: 5

AMBIENT AIR QUALITY DATA
From 01.04.2024 to 30.09.2024

Station: A-5 (B. G Loco Gate, Line – 1)

Months	PM2.5 µg/m ³	PM10 µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³
April	28	81	04	29	< 0.1
	26	75	03	32	< 0.1
	30	83	05	27	< 0.1
	28	72	06	30	< 0.1
	25	72	04	26	< 0.1
	27	79	06	28	< 0.1
	29	78	04	29	< 0.1
	26	76	07	28	< 0.1
May	24	76	03	11	< 0.1
	23	75	04	18	< 0.1
	21	60	08	26	< 0.1
	27	79	07	25	< 0.1
	26	78	04	23	< 0.1
	25	72	05	27	< 0.1
	22	65	06	20	< 0.1
	28	80	04	29	< 0.1
30	87	04	32	< 0.1	
June	28	75	05	27	< 0.1
	25	70	03	21	< 0.1
	25	70	03	21	< 0.1
	24	85	04	23	< 0.1
	26	78	04	28	< 0.1
	22	68	07	26	< 0.1
	26	78	06	28	< 0.1
	27	80	05	24	< 0.1
July	24	70	04	15	< 0.1
	22	65	03	19	< 0.1
	23	67	04	25	< 0.1
	25	71	06	21	< 0.1
	26	68	05	18	< 0.1
	25	72	06	22	< 0.1
	20	60	< 03	16	< 0.1
	21	62	05	16	< 0.1
19	55	03	20	< 0.1	
August	24	69	08	30	< 0.1
	10	27	03	13	< 0.1
	24	68	06	20	< 0.1
	24	68	08	28	< 0.1
	08	23	< 03	17	< 0.1
	11	31	04	16	< 0.1
	19	55	04	18	< 0.1
	18	51	03	27	< 0.1

Months	PM2.5 µg/m ³	PM10 µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³
September	21	61	03	19	< 0.1
	12	35	04	11	< 0.1
	24	67	04	28	< 0.1
	20	57	04	19	< 0.1
	16	47	05	21	< 0.1
	12	36	04	25	< 0.1
	24	68	03	30	< 0.1
	17	47	04	30	< 0.1
	15	43	04	16	< 0.1

Table No: 6

AMBIENT AIR QUALITY DATA

From 01.04.2024 to 30.09.2024

Station: A-6 (Workshop Area, Line – 2)

Months	PM2.5 µg/m ³	PM10 µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³
April	24	70	06	21	< 0.1
	30	81	08	25	< 0.1
	28	83	07	24	< 0.1
	31	79	08	24	< 0.1
	26	78	05	30	< 0.1
	25	73	07	32	< 0.1
	25	78	03	36	< 0.1
	24	68	06	27	< 0.1
May	24	68	04	19	< 0.1
	25	73	08	26	< 0.1
	29	81	06	18	< 0.1
	22	65	08	28	< 0.1
	25	76	06	23	< 0.1
	23	70	05	22	< 0.1
	26	72	04	20	< 0.1
	27	73	05	22	< 0.1
June	26	78	05	29	< 0.1
	28	72	05	22	< 0.1
	25	74	06	25	< 0.1
	26	75	04	20	< 0.1
	24	70	03	18	< 0.1
	24	73	05	22	< 0.1
	23	69	08	23	< 0.1
	27	73	07	21	< 0.1
July	29	80	06	28	< 0.1
	21	65	04	18	< 0.1
	20	58	05	20	< 0.1
	24	68	03	20	< 0.1
	22	66	05	24	< 0.1
25	78	03	28	< 0.1	

Months	PM2.5 µg/m ³	PM10 µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO mg/m ³
	23	67	06	19	< 0.1
	26	73	08	25	< 0.1
	22	63	04	20	< 0.1
	24	70	07	22	< 0.1
August	23	72	07	26	< 0.1
	24	67	05	20	< 0.1
	07	19	05	32	< 0.1
	23	67	07	33	< 0.1
	17	48	05	16	< 0.1
	09	27	04	29	< 0.1
	23	66	03	27	< 0.1
	21	60	05	29	< 0.1
September	23	66	03	27	< 0.1
	21	60	05	21	< 0.1
	21	60	07	24	< 0.1
	17	49	04	25	< 0.1
	21	60	07	21	< 0.1
	18	51	04	21	< 0.1
	24	69	05	19	< 0.1
	22	64	03	31	< 0.1
	11	30	03	27	< 0.1

Table No 7:

STACK EMISSION MONITORING RESULTS

Months	Location of sampling	PM mg/Nm ³	SO ₂ mg/Nm ³	NO ₂ mg/Nm ³	Hg mg/Nm ³
April	Coal Mill – 1 Bag Filter	15	-	-	-
	Cooler ESP – 1	24	-	-	-
	CVRM – 1 Bag Filter	05	-	-	-
	CVRM – 2 Bag Filter	07	-	-	-
	CVRM – 3 Bag Filter	08	-	-	-
	Coal Mill – 2 Bag Filter	06	-	-	-
	Cooler ESP – 2	08	-	-	-
	Kiln & VRM ESP – 1	10	26.71	230.29	-
	Kiln & VRM – 2 RABH	08	14.62	197.53	-
	Boiler 1 & 2 ESP Stack	32	484.36	211.65	< 0.02
	Clinker Cooler Attached To ESP (DSP Unit)	16	-	-	-
	Coal Mill Attached To Bag Filter (DSP Unit)	06	-	-	-
	Kiln & Raw Mill RABH (DSP Unit)	08	61.08	173.01	-
May	Coal Mill – 1 Bag Filter	08	08	-	-
	Cooler ESP – 1	19	19	-	-
	CVRM – 1 Bag Filter	06	06	-	-
	CVRM – 2 Bag Filter	07	07	-	-
	CVRM – 3 Bag Filter	05	05	-	-
	Coal Mill – 2 Bag Filter	18	18	-	-
	Cooler ESP – 2	12	12.00	-	-
	Kiln & VRM ESP – 1	07	48.82	235.96	-

Months	Location of sampling	PM mg/Nm ³	SO ₂ mg/Nm ³	NO ₂ mg/Nm ³	Hg mg/Nm ³
	Kiln & VRM – 2 RABH	04	29.30	206.7	-
	Boiler 1 & 2 ESP Stack	10	452.95	224.2	< 0.02
	Clinker Cooler Attached To ESP(DSP Unit)	27	-	-	-
	Coal Mill Attached To Bag Filter(DSP Unit)	17	-	-	-
	Kiln & Raw Mill RABH (DSP Unit)	08	51.84	167.6	-
June	Coal Mill – 1 Bag Filter	07	-	-	-
	Cooler ESP – 1	16	-	-	-
	CVRM – 1 Bag Filter	09	-	-	-
	CVRM – 2 Bag Filter	08	-	-	-
	CVRM – 3 Bag Filter	06	-	-	-
	Coal Mill – 2 Bag Filter	21	-	-	-
	Cooler ESP – 2	24	-	-	-
	Kiln & VRM ESP – 1	07	31.71	270.62	-
	Kiln & VRM – 2 RABH	06	41.44	213.14	-
	Boiler 1 & 2 ESP Stack	22	469.44	304.35	< 0.02
	Clinker Cooler Attached To ESP(DSP Unit)	06	-	-	-
	Coal Mill Attached To Bag Filter(DSP Unit)	18	-	-	-
	Kiln & Raw Mill RABH (DSP Unit)	07	57.87	159.60	-
	July	Coal Mill – 1 Bag Filter	14	-	-
Cooler ESP – 1		19	-	-	-
CVRM – 1 Bag Filter		11	-	-	-
CVRM – 2 Bag Filter		09	-	-	-
CVRM – 3 Bag Filter		06	-	-	-
Coal Mill – 2 Bag Filter		21	-	-	-
Cooler ESP – 2		19	-	-	-
Kiln & VRM ESP – 1		12	41.83	193.74	-
Kiln & VRM – 2 RABH		06	61.7	232.48	-
Boiler 1 & 2 ESP Stack		09	444.88	265.37	< 0.02
Clinker Cooler Attached To ESP(DSP Unit)		14	-	-	-
Coal Mill Attached To Bag Filter(DSP Unit)		06	-	-	-
Kiln & Raw Mill RABH (DSP Unit)		15	25.44	167.99	-
August	Coal Mill – 1 Bag Filter	18	-	-	-
	Cooler ESP – 1	28	-	-	-
	CVRM – 1 Bag Filter	12	-	-	-
	CVRM – 2 Bag Filter	09	-	-	-
	CVRM – 3 Bag Filter	23	-	-	-
	Coal Mill – 2 Bag Filter	25	-	-	-
	Cooler ESP – 2	08	-	-	-
	Kiln & VRM ESP – 1	12	47.26	222.32	-
	Kiln & VRM – 2 RABH	10	38.61	201.35	-
	Boiler 1 & 2 ESP Stack	34	460.66	319.51	< 0.02
	Clinker Cooler Attached To ESP(DSP Unit)	24	-	-	-
	Coal Mill Attached To Bag Filter(DSP Unit)	08	-	-	-
	Kiln & Raw Mill RABH (DSP Unit)	21	41.42	180.30	-
September	Coal Mill – 1 Bag Filter	06	-	-	-
	Cooler ESP – 1	15	-	-	-
	CVRM – 1 Bag Filter	11	-	-	-
	CVRM – 2 Bag Filter	10	-	-	-
	CVRM – 3 Bag Filter	06	-	-	-

Months	Location of sampling	PM mg/Nm ³	SO ₂ mg/Nm ³	NO ₂ mg/Nm ³	Hg mg/Nm ³
	Coal Mill – 2 Bag Filter	26	-	-	-
	Cooler ESP – 2	08	-	-	-
	Kiln & VRM ESP – 1	16	28.71	157.30	-
	Kiln & VRM – 2 RABH	10	45.54	200.19	-
	Boiler 1 & 2 ESP Stack	19	434.26	307.44	< 0.02
	Clinker Cooler Attached To ESP(DSP Unit)	21	-	-	-
	Coal Mill Attached To Bag Filter(DSP Unit)	12	-	-	-
	Kiln & Raw Mill RABH (DSP Unit)	09	18.06	171.60	-

Table No 8:

GROUND WATER QUALITY RESULT FOR THE MONTH OF APRIL 2024

Sl No	Parameter	Results Obtained					Unit	Permissible Limit in absence of Alternate Source as per IS 10500: 2012
		Tube Well Village Liploi	Tube Well Village Surudihi	Tube Well IT Colony	Tube Well OCL DailyMarket	Tube Well Village Rani Bandha		
1	Turbidity	3.1	3.5	5.2	0.60	0.10	NTU	5.0
2	pH Value	7.09	6.62	6.83	6.89	6.56	-	6.5 – 8.5
3	Total Hardness (as CaCO ₃)	448.8	175.44	333.25	375.16	167.28	mg/l	600
4	Iron (as Fe)	0.10	0.14	0.28	0.19	0.11	mg/l	0.3
5	Chlorides (as Cl)	267.07	15.76	73.91	57.16	42.38	mg/l	1000
6	Total Dissolved Solids	1094	238	546	550	266	mg/l	2000
7	Electrical Conductivity	1843	377	868	873	422	µS/cm	-
8	Calcium (as Ca)	89.94	44.15	81.44	121.01	47.42	mg/l	200
9	Magnesium (as Mg)	54.53	15.86	31.60	17.85	11.89	mg/l	100
10	Copper (as Cu)	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	1.5
11	Manganese (as Mn)	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	0.3
12	Sulfate (as SO ₄)	166.64	21.11	91.54	103.69	25.34	mg/l	400
13	Total Nitrate (as NO ₃)	40.12	3.93	8.73	16.64	6.23	mg/l	45
14	Total Alkalinity (as CaCO ₃)	408	148	216	204	132	mg/l	600
15	Acidity	46	20	28	32	28	mg/l	-
16	Sulphide (as H ₂ S)	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	mg/l	0.05
17	Sodium (as Na)	39.02	4.73	33.99	18.68	8.09	mg/l	-
18	Potassium (as K)	3.18	2.26	1.33	3.18	1.30	mg/l	-
19	Fluoride (as F)	0.90	0.90	1.0	0.90	0.50	mg/l	1.5
20	Cadmium (as Cd)	ND	ND	ND	ND	ND	mg/l	0.003
21	Lead (as Pb)	ND	ND	ND	ND	ND	mg/l	0.01
22	Arsenic (as As)	ND	ND	ND	ND	ND	mg/l	0.05
23	Mercury (as Hg)	ND	ND	ND	ND	ND	mg/l	0.001
24	Selenium (as Se)	ND	ND	ND	ND	ND	mg/l	0.01
25	Nickel (as Ni)	ND	ND	ND	ND	ND	mg/l	0.02
26	Zinc (as Zn)	ND	ND	ND	ND	ND	mg/l	15.0
27	Total Chromium (as Cr)	ND	ND	ND	ND	ND	mg/l	0.05
28	Colour	< 5	< 5	< 5	< 5	< 5	Hazen	15
29	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
30	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
31	Temperature	24.7	24.6	24.3	24.7	24.3	°C	-
32	Residual Free Chlorine	0.26	0.18	0.21	0.19	0.20	mg/l	1.0 (min)
33	Total Bacterial Count	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent
34	E coli	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent

Table No 9:

GROUND WATER QUALITY RESULT FOR THE MONTH OF MAY 2024

SI No	Parameter	Results Obtained					Unit	Permissible Limit in absence of Alternate Source as per IS 10500: 2012
		Tube Well Village Liploi	Tube Well Village Surudihi	Tube Well IT Colony	Tube Well OCL Daily Market Gate	Tube Well Village Ranibandha		
1	Turbidity	3.1	2.4	4.2	0.80	1.6	NTU	5.0
2	pH Value	7.20	6.72	6.80	6.99	6.56	-	6.5 – 8.5
3	Total Hardness (as CaCO ₃)	170.69	134.41	345.44	333.25	146.30	mg/l	600
4	Iron (as Fe)	0.07	0.28	0.26	0.29	0.09	mg/l	0.3
5	Chlorides (as Cl)	15.76	19.71	57.16	62.08	34.49	mg/l	1000
6	Total Dissolved Solids	239	200	478	546	246	mg/l	2000
7	Electrical Conductivity	408	328	747	848	390	µS/cm	-
8	Calcium (as Ca)	53.75	45.61	81.44	81.44	45.61	mg/l	200
9	Magnesium (as Mg)	8.88	5.01	34.56	31.60	7.89	mg/l	100
10	Copper (as Cu)	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	1.5
11	Manganese (as Mn)	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	0.3
12	Sulfate (as SO ₄)	30.18	17.10	40.64	90.19	23.67	mg/l	400
13	Total Nitrate (as NO ₃)	< 2.20	3.98	3.46	5.92	< 2.20	mg/l	45
14	Total Alkalinity (as CaCO ₃)	100	96	228	232	108	mg/l	600
15	Acidity	04	28	46	40	38	mg/l	-
16	Sulphide (as H ₂ S)	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	mg/l	0.05
17	Sodium (as Na)	17.56	8.06	24.08	34.11	10.46	mg/l	-
18	Potassium (as K)	2.32	1.61	2.76	2.99	0.89	mg/l	-
19	Fluoride (as F)	0.70	1.0	0.90	1.0	0.60	mg/l	1.5
20	Cadmium (as Cd)	ND	ND	ND	ND	ND	mg/l	0.003
21	Lead (as Pb)	ND	ND	ND	ND	ND	mg/l	0.01
22	Arsenic (as As)	ND	ND	ND	ND	ND	mg/l	0.05
23	Mercury (as Hg)	ND	ND	ND	ND	ND	mg/l	0.001
24	Selenium (as Se)	ND	ND	ND	ND	ND	mg/l	0.01
25	Nickel (as Ni)	ND	ND	ND	ND	ND	mg/l	0.02
26	Zinc (as Zn)	ND	ND	ND	ND	ND	mg/l	15.0
27	Total Chromium (as Cr)	ND	ND	ND	ND	ND	mg/l	0.05
28	Colour	< 5	< 5	< 5	< 5	< 5	Hazen	15
29	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
30	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
31	Temperature	30.4	30.1	30.3	30.6	30.2	°C	-
32	Residual Free Chlorine	0.09	0.14	0.76	0.24	0.16	mg/l	1.0 (min)
33	Total Bacterial Count	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent
34	E coli	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent

Table No 10:

GROUND WATER QUALITY RESULT FOR THE MONTH OF JUNE 2024

SI No	Parameter	Results Obtained					Unit	Permissible Limit in absence of Alternate Source as per IS 10500: 2012
		Tube Well Village Liploi	Tube Well Village Surudihi	Tube Well IT Colony	Tube Well OCL Daily Market Gate	Tube Well Village Ranibandha		
1	Turbidity	2.4	2.4	3.9	0.70	1.4	NTU	5.0
2	pH Value	6.69	6.86	6.62	6.87	6.49	-	6.5 – 8.5
3	Total Hardness (as CaCO ₃)	390.14	532.38	316.99	256.03	134.41	mg/l	600
4	Iron (as Fe)	0.20	0.21	0.26	0.24	0.26	mg/l	0.3
5	Chlorides (as Cl)	56.17	260.17	50.26	46.32	21.68	mg/l	1000
6	Total Dissolved Solids	523	996	470	436	184	mg/l	2000
7	Electrical Conductivity	853	1651	779	675	328	µS/cm	-
8	Calcium (as Ca)	89.58	182.43	79.81	68.41	45.61	mg/l	200
9	Magnesium (as Mg)	40.48	18.76	28.64	14.81	5.01	mg/l	100
10	Copper (as Cu)	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	1.5
11	Manganese (as Mn)	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	0.3
12	Sulfate (as SO ₄)	81.04	134.70	89.11	79.10	16.10	mg/l	400

Sl No	Parameter	Results Obtained					Unit	Permissible Limit in absence of Alternate Source as per IS 10500: 2012
		Tube Well Village Liploi	Tube Well Village Surudihi	Tube Well IT Colony	Tube Well OCL Daily Market Gate	Tube Well Village Ranibandha		
13	Total Nitrate (as NO ₃)	25.95	30.14	3.58	5.49	3.98	mg/l	45
14	Total Alkalinity (as CaCO ₃)	200	308	180	200	132	mg/l	600
15	Acidity	26	20	14	24	28	mg/l	-
16	Sulphide (as H ₂ S)	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	mg/l	0.05
17	Sodium (as Na)	26.82	47.24	34.41	20.19	8.99	mg/l	-
18	Potassium (as K)	0.95	3.18	1.15	0.79	1.62	mg/l	-
19	Fluoride (as F)	1.0	0.80	1.0	0.90	0.70	mg/l	1.5
20	Cadmium (as Cd)	ND	ND	ND	ND	ND	mg/l	0.003
21	Lead (as Pb)	ND	ND	ND	ND	ND	mg/l	0.01
22	Arsenic (as As)	ND	ND	ND	ND	ND	mg/l	0.05
23	Mercury (as Hg)	ND	ND	ND	ND	ND	mg/l	0.001
24	Selenium (as Se)	ND	ND	ND	ND	ND	mg/l	0.01
25	Nickel (as Ni)	ND	ND	ND	ND	ND	mg/l	0.02
26	Zinc (as Zn)	ND	ND	ND	ND	ND	mg/l	15.0
27	Total Chromium (as Cr)	ND	ND	ND	ND	ND	mg/l	0.05
28	Colour	< 5	< 5	< 5	< 5	< 5	Hazen	15
29	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
30	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
31	Temperature	29.6	32.7	32.6	31.6	30.2	°C	-
32	Residual Free Chlorine	0.19	0.16	0.20	0.32	0.12	mg/l	1.0 (min)
33	Total Bacterial Count	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent
34	E coli	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent

Table No 11:

GROUND WATER QUALITY RESULT FOR THE MONTH OF JULY 2024

Sl No	Parameter	Results Obtained					Unit	Permissible Limit in absence of Alternate Source as per IS 10500: 2012
		Tube Well Village Liploi	Tube Well Village Surudihi	Tube Well IT Colony	Tube Well OCL Daily Market Gate	Tube Well Village Ranibandha		
1	Turbidity	3.1	2.9	4.1	0.50	0.40	NTU	5.0
2	pH Value	6.80	6.67	6.96	6.93	6.55	-	6.5 – 8.5
3	Total Hardness (as CaCO ₃)	522.19	174.06	311.69	380.51	206.45	mg/l	600
4	Iron (as Fe)	0.24	0.11	0.24	0.19	0.22	mg/l	0.3
5	Chlorides (as Cl)	201.55	11.74	35.22	51.86	32.29	mg/l	1000
6	Total Dissolved Solids	891	214	426	492	250	mg/l	2000
7	Electrical Conductivity	1396	342	705	795	401	µS/cm	-
8	Calcium (as Ca)	194.69	47.05	74.63	116.82	51.91	mg/l	200
9	Magnesium (as Mg)	8.85	13.77	30.49	21.64	18.68	mg/l	100
10	Copper (as Cu)	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	1.5
11	Manganese (as Mn)	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	0.3
12	Sulfate (as SO ₄)	150.29	13.01	64.11	81.16	21.46	mg/l	400
13	Total Nitrate (as NO ₃)	40.24	3.93	5.49	23.09	2.23	mg/l	45
14	Total Alkalinity (as CaCO ₃)	252	128	176	164	112	mg/l	600
15	Acidity	36	10	12	16	16	mg/l	-
16	Sulphide (as H ₂ S)	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	mg/l	0.05
17	Sodium (as Na)	39.42	8.40	35.52	30.36	13.54	mg/l	-
18	Potassium (as K)	2.10	2.64	2.49	1.49	1.20	mg/l	-
19	Fluoride (as F)	0.90	0.70	1.0	1.0	0.40	mg/l	1.5
20	Cadmium (as Cd)	ND	ND	ND	ND	ND	mg/l	0.003
21	Lead (as Pb)	ND	ND	ND	ND	ND	mg/l	0.01
22	Arsenic (as As)	ND	ND	ND	ND	ND	mg/l	0.05
23	Mercury (as Hg)	ND	ND	ND	ND	ND	mg/l	0.001
24	Selenium (as Se)	ND	ND	ND	ND	ND	mg/l	0.01
25	Nickel (as Ni)	ND	ND	ND	ND	ND	mg/l	0.02
26	Zinc (as Zn)	ND	ND	ND	ND	ND	mg/l	15.0
27	Total Chromium (as Cr)	ND	ND	ND	ND	ND	mg/l	0.05
28	Colour	< 5	< 5	< 5	< 5	< 5	Hazen	15

Sl No	Parameter	Results Obtained					Unit	Permissible Limit in absence of
		Agreeable	Agreeable	Agreeable	Agreeable	Agreeable		
29	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
30	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
31	Temperature	30.3	30.4	30.4	30.4	30.4	°C	-
32	Residual Free Chlorine	0.32	0.20	0.28	0.26	0.19	mg/l	1.0 (min)
33	Total Bacterial Count	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent
34	E coli	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent

Table No 12:

GROUND WATER QUALITY RESULT FOR THE MONTH OF AUGUST 2024

Sl No	Parameter	Results Obtained					Unit	Permissible Limit in absence of Alternate Source as per IS 10500: 2012
		Tube Well Village Liptoi	Tube Well Village Surudihi	Tube Well IT Colony	Tube Well OCL Daily Market Gate	Tube Well Village Ranibandha		
1	Turbidity	3.8	2.5	4.4	0.40	0.40	NTU	5.0
2	pH Value	6.64	6.79	6.76	6.78	6.66	-	6.5 – 8.5
3	Total Hardness (as CaCO ₃)	425.04	137.63	275.26	352.18	210.49	mg/l	600
4	Iron (as Fe)	0.22	0.22	0.10	0.29	0.29	mg/l	0.3
5	Chlorides (as Cl)	79.25	21.53	45.01	54.79	31.31	mg/l	1000
6	Total Dissolved Solids	568	220	435	492	252	mg/l	2000
7	Electrical Conductivity	901	360	692	770	410	µS/cm	-
8	Calcium (as Ca)	84.37	47.05	71.39	110.33	53.54	mg/l	200
9	Magnesium (as Mg)	52.14	4.92	23.61	18.69	18.69	mg/l	100
10	Copper (as Cu)	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	1.5
11	Manganese (as Mn)	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	0.3
12	Sulfate (as SO ₄)	104.26	19.20	62.48	80.16	23.34	mg/l	400
13	Total Nitrate (as NO ₃)	29.91	3.46	4.43	10.85	< 2.20	mg/l	45
14	Total Alkalinity (as CaCO ₃)	196	112	208	192	108	mg/l	600
15	Acidity	20	22	30	24	16	mg/l	-
16	Sulphide (as H ₂ S)	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	mg/l	0.05
17	Sodium (as Na)	14.96	8.52	27.94	21.20	13.49	mg/l	-
18	Potassium (as K)	2.52	1.74	2.24	1.34	1.56	mg/l	-
19	Fluoride (as F)	0.70	0.97	0.76	0.84	0.49	mg/l	1.5
20	Cadmium (as Cd)	ND	ND	ND	ND	ND	mg/l	0.003
21	Lead (as Pb)	ND	ND	ND	ND	ND	mg/l	0.01
22	Arsenic (as As)	ND	ND	ND	ND	ND	mg/l	0.05
23	Mercury (as Hg)	ND	ND	ND	ND	ND	mg/l	0.001
24	Selenium (as Se)	ND	ND	ND	ND	ND	mg/l	0.01
25	Nickel (as Ni)	ND	ND	ND	ND	ND	mg/l	0.02
26	Zinc (as Zn)	ND	ND	ND	ND	ND	mg/l	15.0
27	Total Chromium (as Cr)	ND	ND	ND	ND	ND	mg/l	0.05
28	Colour	< 5	< 5	< 5	< 5	< 5	Hazen	15
29	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
30	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
31	Temperature	26.9	28.1	26.9	26.9	28.1	°C	-
32	Residual Free Chlorine	0.28	0.20	0.24	0.21	0.16	mg/l	1.0 (min)
33	Total Bacterial Count	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent
34	E coli	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent

Table No 13:

GROUND WATER QUALITY RESULT FOR THE MONTH OF SEPTEMBER 2024

Sl No	Parameter	Results Obtained					Unit	Permissible Limit in absence of Alternate Source as per IS 10500: 2012
		Tube Well Village Liptoi	Tube Well Village Surudihi	Tube Well IT Colony	Tube Well OCL Daily Market Gate	Tube Well Village Ranibandha		
1	Turbidity	2.9	2.7	4.4	0.30	1.4	NTU	5.0
2	pH Value	6.59	6.63	6.62	6.89	6.78	-	6.5 – 8.5

SI No	Parameter	Results Obtained					Unit	Permissible Limit in absence of Alternate Source as per IS 10500: 2012
		Tube Well Village Liploi	Tube Well Village Surudih	Tube Well IT Colony	Tube Well OCL Daily Market Gate	Tube Well Village Ranibandha		
3	Total Hardness (as CaCO ₃)	504	189.50	310.46	379.01	322.56	mg/l	600
4	Iron (as Fe)	0.32	0.10	0.10	0.27	0.22	mg/l	0.3
5	Chlorides (as Cl)	98.82	18.59	43.05	64.58	50.88	mg/l	1000
6	Total Dissolved Solids	794	243	468	567	407	mg/l	2000
7	Electrical Conductivity	1349	372	717	871	680	µS/cm	-
8	Calcium (as Ca)	92.11	51.71	77.56	108.27	84.03	mg/l	200
9	Magnesium (as Mg)	66.63	14.69	28.41	26.46	27.43	mg/l	100
10	Copper (as Cu)	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	1.5
11	Manganese (as Mn)	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	0.3
12	Sulfate (as SO ₄)	109.41	13.82	51.02	92.25	56.55	mg/l	400
13	Total Nitrate (as NO ₃)	40.12	3.05	5.43	20.24	3.27	mg/l	45
14	Total Alkalinity (as CaCO ₃)	352	148	240	224	160	mg/l	600
15	Acidity	32	12	16	28	10	mg/l	-
16	Sulphide (as H ₂ S)	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	mg/l	0.05
17	Sodium (as Na)	24.89	7.79	26.46	20.05	20.76	mg/l	-
18	Potassium (as K)	9.64	2.45	11.62	10.14	2.66	mg/l	-
19	Fluoride (as F)	0.95	0.74	0.94	0.83	0.76	mg/l	1.5
20	Cadmium (as Cd)	ND	ND	ND	ND	ND	mg/l	0.003
21	Lead (as Pb)	ND	ND	ND	ND	ND	mg/l	0.01
22	Arsenic (as As)	ND	ND	ND	ND	ND	mg/l	0.05
23	Mercury (as Hg)	ND	ND	ND	ND	ND	mg/l	0.001
24	Selenium (as Se)	ND	ND	ND	ND	ND	mg/l	0.01
25	Nickel (as Ni)	ND	ND	ND	ND	ND	mg/l	0.02
26	Zinc (as Zn)	ND	ND	ND	ND	ND	mg/l	15.0
27	Total Chromium (as Cr)	ND	ND	ND	ND	ND	mg/l	0.05
28	Colour	< 5	< 5	< 5	< 5	< 5	Hazen	15
29	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
30	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
31	Temperature	28.3	28.6	28.4	28.9	28.5	°C	-
32	Residual Free Chlorine	0.24	0.17	0.16	0.11	0.18	mg/l	1.0 (min)
33	Total Bacterial Count	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent
34	E coli	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent

Table No 14:

DRINKING WATER QUALITY RESULT FOR THE MONTH OF APRIL 2024

SI No	Parameter	Results Obtained					Unit	Permissible Limit in absence of Alternate Source as per IS 10500: 2012	
		General Office Ground Floor drinking water	Drinking Water Point VRM Area (Line - 2)	Atithi Niwas drinking Water (L - 2)	General Office 2 nd Floor Drinking Water Point (Line - 1)	Drinking Water Point Near New Weigh Bridge (DSP Unit)			Drinking Water Near CCR Building Canteen (DSP Unit)
1	Turbidity	0.80	0.60	0.20	0.10	0.90	1.1	NTU	5.0
2	pH Value	7.46	7.60	7.79	7.79	7.28	7.73	-	6.5 - 8.5
3	Total Hardness (as CaCO ₃)	191.76	182.88	183.6	182.88	191.76	195.84	mg/l	600
4	Iron (as Fe)	0.28	0.24	0.29	0.14	0.28	0.26	mg/l	0.3
5	Chlorides (as Cl)	36.46	20.69	19.71	18.72	8.87	21.68	mg/l	1000
6	Total Dissolved Solids	282	266	269	235	264	263	mg/l	2000
7	Electrical Conductivity	436	415	424	373	416	423	µS/cm	-
8	Calcium (as Ca)	53.96	40.72	42.52	40.72	47.42	42.52	mg/l	200
9	Magnesium (as Mg)	13.88	19.75	34.28	19.75	17.84	21.81	mg/l	100
10	Copper (as Cu)	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	1.5
11	Manganese (as Mn)	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	0.3
12	Sulfate (as SO ₄)	18.36	18.96	19.59	12.37	19.16	19.44	mg/l	400
13	Total Nitrate (as NO ₃)	2.95	3.36	< 2.20	< 2.20	3.15	< 2.20	mg/l	45
14	Total Alkalinity (as CaCO ₃)	164	172	160	152	184	168	mg/l	600
15	Acidity	14	04	10	< 2.0	10	10	mg/l	-
16	Sulphide (as H ₂ S)	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	mg/l	0.05
17	Sodium (as Na)	7.41	9.27	7.48	10.31	7.44	7.45	mg/l	-
18	Potassium (as K)	3.27	5.24	3.43	1.56	3.35	3.28	mg/l	-
19	Fluoride (as F)	0.60	0.50	0.70	0.30	0.60	0.80	mg/l	1.5

SI No	Parameter	Results Obtained						Unit	Permissible Limit in absence of Alternate Source as per IS 10500: 2012
		General Office Ground Floor drinking water	Drinking Water Point VRM Area (Line - 2)	Atithi Niwas drinking Water (L - 2)	General Office 2 nd Floor Drinking Water Point(Line - 1)	Drinking Water Point Near New Weigh Bridge(DSP Unit)	Drinking Water Near CCR Building Canteen (DSP Unit)		
20	Cadmium (as Cd)	ND	ND	ND	ND	ND	ND	mg/l	0.003
21	Lead (as Pb)	ND	ND	ND	ND	ND	ND	mg/l	0.01
22	Arsenic (as As)	ND	ND	ND	ND	ND	ND	mg/l	0.05
23	Mercury (as Hg)	ND	ND	ND	ND	ND	ND	mg/l	0.001
24	Selenium (as Se)	ND	ND	ND	ND	ND	ND	mg/l	0.01
25	Nickel (as Ni)	ND	ND	ND	ND	ND	ND	mg/l	0.02
26	Zinc (as Zn)	ND	ND	ND	ND	ND	ND	mg/l	15.0
27	Total Chromium (as Cr)	ND	ND	ND	ND	ND	ND	mg/l	0.05
28	Colour	< 5	< 5	< 5	< 5	< 5	< 5	Hazen	15
29	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
30	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
31	Temperature	24.3	24.3	24.3	24.3	26.9	27.3	°C	-
32	Residual Free Chlorine	0.19	0.20	0.18	0.24	0.16	0.14	mg/l	1.0 (min)
33	Total Bacterial Count	Absent	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent
34	E coli	Absent	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent

Table No 15:

DRINKING WATER QUALITY RESULT FOR THE MONTH OF MAY 2024

SI No	Parameter	Results Obtained						Unit	Permissible Limit in absence of Alternate Source as per IS 10500: 2012
		Near Cooler Drinking Water Point(Line - 1)	Drinking Water Near CCR Building Canteen(Line - 1)	Workers' Canteen Drinking Water Point (Line - 2)	CCR Building 1 st Floor Pantry Room Drinking Water(Line - 1)	Drinking Water Point Near Cooler(DSP Unit)	Drinking Water Near General Store (DSP Unit)		
1	Turbidity	1.0	0.10	0.10	0.10	0.10	0.80	NTU	5.0
2	pH Value	7.57	7.56	7.36	7.75	7.40	7.54	-	6.5 - 8.5
3	Total Hardness (as CaCO ₃)	182.88	174.75	211.33	166.62	207.26	182.88	mg/l	600
4	Iron (as Fe)	0.16	0.26	0.10	0.29	0.14	0.28	mg/l	0.3
5	Chlorides (as Cl)	23.65	20.69	23.65	15.76	22.66	12.8	mg/l	1000
6	Total Dissolved Solids	242	240	238	229	248	236	mg/l	2000
7	Electrical Conductivity	384	384	377	363	394	393	µS/cm	-
8	Calcium (as Ca)	40.72	43.97	47.24	47.24	48.86	42.35	mg/l	200
9	Magnesium (as Mg)	19.75	15.79	22.71	11.84	20.74	18.76	mg/l	100
10	Copper (as Cu)	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	1.5
11	Manganese (as Mn)	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	0.3
12	Sulfate (as SO ₄)	13.56	19.46	15.49	14.24	14.68	15.29	mg/l	400
13	Total Nitrate (as NO ₃)	< 2.20	< 2.20	< 2.20	< 2.20	< 2.20	< 2.20	mg/l	45
14	Total Alkalinity (as CaCO ₃)	128	132	108	128	124	132	mg/l	600
15	Acidity	18	< 2.0	< 2.0	06	< 2.0	04	mg/l	-
16	Sulphide (as H ₂ S)	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	mg/l	0.05
17	Sodium (as Na)	8.11	4.94	11.96	4.24	12.11	4.73	mg/l	-
18	Potassium (as K)	3.14	1.98	3.46	2.24	3.38	2.26	mg/l	-
19	Fluoride (as F)	0.60	0.70	0.30	0.60	0.40	0.50	mg/l	1.5
20	Cadmium (as Cd)	ND	ND	ND	ND	ND	ND	mg/l	0.003
21	Lead (as Pb)	ND	ND	ND	ND	ND	ND	mg/l	0.01
22	Arsenic (as As)	ND	ND	ND	ND	ND	ND	mg/l	0.05
23	Mercury (as Hg)	ND	ND	ND	ND	ND	ND	mg/l	0.001
24	Selenium (as Se)	ND	ND	ND	ND	ND	ND	mg/l	0.01
25	Nickel (as Ni)	ND	ND	ND	ND	ND	ND	mg/l	0.02
26	Zinc (as Zn)	ND	ND	ND	ND	ND	ND	mg/l	15.0
27	Total Chromium (as Cr)	ND	ND	ND	ND	ND	ND	mg/l	0.05
28	Colour	< 5	< 5	< 5	< 5	< 5	< 5	Hazen	15
29	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
30	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
31	Temperature	30.8	30.8	30.6	30.7	30.7	30.8	°C	-
32	Residual Free Chlorine	0.11	0.19	0.16	0.14	0.14	0.20	mg/l	1.0 (min)
33	Total Bacterial Count	Absent	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent
34	E coli	Absent	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent

Table No 16:

DRINKING WATER QUALITY RESULT FOR THE MONTH OF JUNE 2024

SI No	Parameter	Results Obtained						Unit	Permissible Limit in absence of Alternate Source as per IS 10500: 2012
		Near CPP Office (Line - 2)	Drinking Water Near Clinker Silo (Line - 1)	Central Workshop/Drinking Water Point (Line - 2)	Near AFR Area Drinking Water Point (Line - 2)	Drinking Water Point Near Workers' Canteen (DSP Unit)	Drinking Water Near Coal Mill (DSP Unit)		
1	Turbidity	1.1	0.70	0.50	0.10	0.10	0.30	NTU	5.0
2	pH Value	6.86	7.61	7.55	7.47	7.32	7.49	-	6.5 – 8.5
3	Total Hardness (as CaCO ₃)	223.52	219.46	207.26	211.33	170.69	199.14	mg/l	600
4	Iron (as Fe)	0.26	0.22	0.26	0.18	0.24	0.29	mg/l	0.3
5	Chlorides (as Cl)	20.69	19.71	18.72	16.75	21.68	22.66	mg/l	1000
6	Total Dissolved Solids	324	298	288	243	295	295	mg/l	2000
7	Electrical Conductivity	532	495	465	495	506	508	µS/cm	-
8	Calcium (as Ca)	50.49	58.64	47.24	47.24	53.75	45.61	mg/l	200
9	Magnesium (as Mg)	23.70	17.77	21.72	22.71	8.88	20.74	mg/l	100
10	Copper (as Cu)	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	1.5
11	Manganese (as Mn)	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	0.3
12	Sulfate (as SO ₄)	44.61	18.56	21.11	29.06	49.11	20.69	mg/l	400
13	Total Nitrate (as NO ₃)	< 2.20	3.62	8.35	3.93	< 2.20	14.15	mg/l	45
14	Total Alkalinity (as CaCO ₃)	180	180	172	152	153	172	mg/l	600
15	Acidity	10	04	< 2.0	08	06	08	mg/l	-
16	Sulphide (as H ₂ S)	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	mg/l	0.05
17	Sodium (as Na)	12.92	12.84	12.61	14.62	14.26	17.11	mg/l	-
18	Potassium (as K)	7.71	8.06	8.46	3.29	8.79	9.06	mg/l	-
19	Fluoride (as F)	0.60	0.70	0.80	0.50	0.40	0.70	mg/l	1.5
20	Cadmium (as Cd)	ND	ND	ND	ND	ND	ND	mg/l	0.003
21	Lead (as Pb)	ND	ND	ND	ND	ND	ND	mg/l	0.01
22	Arsenic (as As)	ND	ND	ND	ND	ND	ND	mg/l	0.05
23	Mercury (as Hg)	ND	ND	ND	ND	ND	ND	mg/l	0.001
24	Selenium (as Se)	ND	ND	ND	ND	ND	ND	mg/l	0.01
25	Nickel (as Ni)	ND	ND	ND	ND	ND	ND	mg/l	0.02
26	Zinc (as Zn)	ND	ND	ND	ND	ND	ND	mg/l	15.0
27	Total Chromium (as Cr)	ND	ND	ND	ND	ND	ND	mg/l	0.05
28	Colour	< 5	< 5	< 5	< 5	< 5	< 5	Hazen	15
29	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
30	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
31	Temperature	30.5	30.5	30.5	30.5	30.5	30.5	°C	-
32	Residual Free Chlorine	0.19	0.11	0.09	0.14	0.21	0.16	mg/l	1.0 (min)
33	Total Bacterial Count	Absent	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent
34	E coli	Absent	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent

Table No 17:

DRINKING WATER QUALITY RESULT FOR THE MONTH OF JULY 2024

SI No	Parameter	Results Obtained						Unit	Permissible Limit in absence of Alternate Source as per IS 10500: 2012
		Drinking Water Near KHD Section Workers' Canteen (Line - 1)	Drinking Water Point Near General Office Ground Floor	Drinking Water Point Near CPP Workers' Canteen (Line - 2)	Drinking Water Point Near Main Gate (Line - 2)	Drinking Water Point Near New Weigh Bridge (DSP Unit)	Drinking Water Point Near CCR Building 2 nd Floor Pantry Room (DSP Unit)		
1	Turbidity	0.20	0.10	0.20	0.20	0.30	0.40	NTU	5.0
2	pH Value	7.49	6.79	7.75	7.46	7.84	7.83	-	6.5 – 8.5
3	Total Hardness (as CaCO ₃)	287.41	230.74	214.54	222.64	384.56	234.78	mg/l	600
4	Iron (as Fe)	0.16	0.11	0.29	0.27	0.22	0.26	mg/l	0.3
5	Chlorides (as Cl)	64.58	31.31	23.48	26.42	21.53	27.39	mg/l	1000
6	Total Dissolved Solids	295	293	268	280	274	274	mg/l	2000
7	Electrical Conductivity	476	455	442	445	438	443	µS/cm	-
8	Calcium (as Ca)	56.79	50.29	47.05	35.69	66.52	40.56	mg/l	200
9	Magnesium (as Mg)	35.41	25.58	23.61	32.46	53.11	32.46	mg/l	100
10	Copper (as Cu)	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	1.5

Sl No	Parameter	Results Obtained						Unit	Permissible Limit in absence of Alternate Source as per IS 10500: 2012
		Drinking Water Near KHD Section Workers' Canteen (Line - 1)	Drinking Water Point Near General Office Ground Floor	Drinking Water Point Near CPP Workers' Canteen(Line - 2)	Drinking Water Point Near Main Gate (Line - 2)	Drinking Water Point Near New Weigh Bridge (DSP Unit)	Drinking Water Point Near CCR Building 2 nd Floor Pantry Room (DSP Unit)		
11	Manganese (as Mn)	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	0.3
12	Sulfate (as SO ₄)	15.24	14.42	15.76	19.52	13.96	21.15	mg/l	400
13	Total Nitrate (as NO ₃)	< 2.20	< 2.20	2.87	4.66	2.93	< 2.20	mg/l	45
14	Total Alkalinity (as CaCO ₃)	104	180	160	164	100	160	mg/l	600
15	Acidity	08	08	08	06	08	06	mg/l	-
16	Sulphide (as H ₂ S)	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	mg/l	0.05
17	Sodium (as Na)	12.11	11.01	10.41	13.46	10.01	9.88	mg/l	-
18	Potassium (as K)	3.38	3.24	3.14	2.41	5.16	1.68	mg/l	-
19	Fluoride (as F)	0.70	0.30	0.90	0.90	0.40	0.80	mg/l	1.5
20	Cadmium (as Cd)	ND	ND	ND	ND	ND	ND	mg/l	0.003
21	Lead (as Pb)	ND	ND	ND	ND	ND	ND	mg/l	0.01
22	Arsenic (as As)	ND	ND	ND	ND	ND	ND	mg/l	0.05
23	Mercury (as Hg)	ND	ND	ND	ND	ND	ND	mg/l	0.001
24	Selenium (as Se)	ND	ND	ND	ND	ND	ND	mg/l	0.01
25	Nickel (as Ni)	ND	ND	ND	ND	ND	ND	mg/l	0.02
26	Zinc (as Zn)	ND	ND	ND	ND	ND	ND	mg/l	15.0
27	Total Chromium (as Cr)	ND	ND	ND	ND	ND	ND	mg/l	0.05
28	Colour	< 5	< 5	< 5	< 5	< 5	< 5	Hazen	15
29	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
30	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
31	Temperature	25.0	25.0	25.0	25.0	25.0	25.8	°C	-
32	Residual Free Chlorine	0.11	0.19	0.12	0.10	0.10	0.13	mg/l	1.0 (min)
33	Total Bacterial Count	Absent	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent
34	E coli	Absent	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent

Table No 18:

DRINKING WATER QUALITY RESULT FOR THE MONTH OF AUGUST 2024

Sl No	Parameter	Results Obtained						Unit	Permissible Limit in absence of Alternate Source as per IS 10500: 2012
		CCR Building Ground Floor Canteen Drinking Water Point (Line - 1)	Drinking Water Point Near CVRM - 2(Line - 1)	CCR Building 1 st Floor Pantry Room Drinking Water Point (Line - 2)	Workers' Canteen Drinking Water Point (Line - 2)	Drinking Water Point Near New General Store (DSP Unit)	Drinking Water Point Near Cooler Area(DSP Unit)		
1	Turbidity	0.10	0.10	0.10	0.90	0.10	1.0	NTU	5.0
2	pH Value	7.63	7.52	7.92	7.96	7.66	7.78	-	6.5 - 8.5
3	Total Hardness (as CaCO ₃)	202.4	259.07	194.30	226.69	222.64	198.35	mg/l	600
4	Iron (as Fe)	0.29	0.28	0.24	0.29	0.21	0.28	mg/l	0.3
5	Chlorides (as Cl)	17.61	10.76	16.75	24.46	10.76	23.48	mg/l	1000
6	Total Dissolved Solids	233	330	245	275	241	263	mg/l	2000
7	Electrical Conductivity	389	549	389	441	415	424	µS/cm	-
8	Calcium (as Ca)	45.43	58.41	43.81	53.54	40.56	32.45	mg/l	200
9	Magnesium (as Mg)	21.64	27.54	20.66	22.63	26.55	28.53	mg/l	100
10	Copper (as Cu)	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	1.5
11	Manganese (as Mn)	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	0.3
12	Sulfate (as SO ₄)	23.40	94.20	22.41	16.32	41.23	12.04	mg/l	400
13	Total Nitrate (as NO ₃)	3.27	< 2.20	3.05	3.19	< 2.20	< 2.20	mg/l	45
14	Total Alkalinity (as CaCO ₃)	120	124	144	156	128	176	mg/l	600
15	Acidity	2.0	08	< 2.0	08	04	10	mg/l	-
16	Sulphide (as H ₂ S)	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	mg/l	0.05
17	Sodium (as Na)	9.76	5.79	9.42	13.41	3.49	9.94	mg/l	-
18	Potassium (as K)	1.52	2.42	1.56	3.54	1.24	7.04	mg/l	-
19	Fluoride (as F)	0.64	0.72	0.58	0.84	0.56	0.64	mg/l	1.5
20	Cadmium (as Cd)	ND	ND	ND	ND	ND	ND	mg/l	0.003
21	Lead (as Pb)	ND	ND	ND	ND	ND	ND	mg/l	0.01
22	Arsenic (as As)	ND	ND	ND	ND	ND	ND	mg/l	0.05
23	Mercury (as Hg)	ND	ND	ND	ND	ND	ND	mg/l	0.001
24	Selenium (as Se)	ND	ND	ND	ND	ND	ND	mg/l	0.01
25	Nickel (as Ni)	ND	ND	ND	ND	ND	ND	mg/l	0.02

SI No	Parameter	Results Obtained						Unit	Permissible Limit in absence of Alternate Source as per IS 10500: 2012
		CCR Building Ground Floor Canteen Drinking Water Point (Line – 1)	Drinking Water Point Near CVRM – 2(Line – 1)	CCR Building 1 st Floor Pantry Room Drinking Water Point (Line – 2)	Workers' Canteen Drinking Water Point (Line – 2)	Drinking Water Point Near New General Store (DSP Unit)	Drinking Water Point Near Cooler Area(DSP Unit)		
26	Zinc (as Zn)	ND	ND	ND	ND	ND	ND	mg/l	15.0
27	Total Chromium (as Cr)	ND	ND	ND	ND	ND	ND	mg/l	0.05
28	Colour	< 5	< 5	< 5	< 5	< 5	< 5	Hazen	15
29	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
30	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
31	Temperature	26.9	26.9	26.9	26.9	26.9	26.9	°C	-
32	Residual Free Chlorine	0.11	0.09	0.14	0.11	0.19	0.20	mg/l	1.0 (min)
33	Total Bacterial Count	Absent	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent
34	E coli	Absent	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent

Table No 19:

DRINKING WATER QUALITY RESULT FOR THE MONTH OF SEPTEMBER 2024

SI No	Parameter	Results Obtained						Unit	Permissible Limit in absence of Alternate Source as per IS 10500: 2012
		Main Gate Canteen Drinking Water Point(Line – 1)	Drinking Water Point Near General Store Workers' Canteen(Line – 1)	Near AFR Area Drinking Water Point (Line – 2)	CPP Office 2 nd Floor Pantry Room Drinking Water Point(Line – 2)	Drinking Water Point Near Workers' Canteen (DSP Unit)	Drinking Water Point Near Coal Mill Area(DSP Unit)		
1	Turbidity	0.40	0.40	0.10	0.20	0.60	0.50	NTU	5.0
2	pH Value	7.36	7.24	7.29	7.36	7.38	7.45	-	6.5 – 8.5
3	Total Hardness (as CaCO ₃)	217.73	205.63	201.6	209.66	217.73	225.79	mg/l	600
4	Iron (as Fe)	0.29	0.28	0.16	0.14	0.22	0.26	mg/l	0.3
5	Chlorides (as Cl)	20.55	19.56	18.59	18.59	19.56	28.37	mg/l	1000
6	Total Dissolved Solids	255	243	243	248	248	252	mg/l	2000
7	Electrical Conductivity	403	400	378	381	394	408	µS/cm	-
8	Calcium (as Ca)	45.25	48.48	50.09	51.71	46.86	50.09	mg/l	200
9	Magnesium (as Mg)	25.48	20.57	18.62	19.59	24.49	24.49	mg/l	100
10	Copper (as Cu)	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	1.5
11	Manganese (as Mn)	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	0.3
12	Sulfate (as SO ₄)	44.42	30.56	30.93	30.25	21.77	25.01	mg/l	400
13	Total Nitrate (as NO ₃)	3.62	< 2.20	3.93	< 2.20	3.05	< 2.20	mg/l	45
14	Total Alkalinity (as CaCO ₃)	104	120	116	124	132	120	mg/l	600
15	Acidity	04	02	06	02	04	04	mg/l	-
16	Sulphide (as H ₂ S)	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	mg/l	0.05
17	Sodium (as Na)	7.82	7.49	8.18	7.85	7.91	7.58	mg/l	-
18	Potassium (as K)	2.46	2.26	3.29	3.21	3.14	3.28	mg/l	-
19	Fluoride (as F)	0.89	0.51	0.50	0.74	0.82	0.65	mg/l	1.5
20	Cadmium (as Cd)	ND	ND	ND	ND	ND	ND	mg/l	0.003
21	Lead (as Pb)	ND	ND	ND	ND	ND	ND	mg/l	0.01
22	Arsenic (as As)	ND	ND	ND	ND	ND	ND	mg/l	0.05
23	Mercury (as Hg)	ND	ND	ND	ND	ND	ND	mg/l	0.001
24	Selenium (as Se)	ND	ND	ND	ND	ND	ND	mg/l	0.01
25	Nickel (as Ni)	ND	ND	ND	ND	ND	ND	mg/l	0.02
26	Zinc (as Zn)	ND	ND	ND	ND	ND	ND	mg/l	15.0
27	Total Chromium (as Cr)	ND	ND	ND	ND	ND	ND	mg/l	0.05
28	Colour	< 5	< 5	< 5	< 5	< 5	< 5	Hazen	15
29	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
30	Taste	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	-	Agreeable
31	Temperature	28.5	28.5	27.9	28.4	28.7	28.8	°C	-
32	Residual Free Chlorine	0.11	0.14	0.08	0.10	0.10	0.11	mg/l	1.0 (min)
33	Total Bacterial Count	Absent	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent
34	E coli	Absent	Absent	Absent	Absent	Absent	Absent	Nos/100ml	Absent

Table No 20:

SURFACE WATER QUALITY RESULT FOR THE MONTH OF APRIL 2024

SI No	Parameter	Results Obtained				Unit	Surface Water Quality Standard as per IS: 2296 (Class C)
		Liploi Nadi Upstream (Shirdi Sai Temple)	Liploi Nadi (Municipality Dump Yard)	Liploi Nadi Downstream (Poda Nadi)	Amaghat Nadi		
1	pH Value	7.37	7.62	7.63	8.90	-	6.5 – 8.5
2	Electrical Conductivity	799	751	798	49.4	µS/cm	-
3	Total Dissolved Solids	479	451	478	32	mg/l	1500
4	Total Hardness (as CaCO ₃)	265.2	285.6	281.52	28.56	mg/l	-
5	Chlorides (as Cl)	62.08	64.06	64.06	3.94	mg/l	600
6	Sulfate (as SO ₄)	61.91	57.57	56.52	1.19	mg/l	400
7	Total Nitrate (as NO ₃)	2.76	3.76	3.14	< 2.20	mg/l	50
8	Fluoride (as F)	0.80	0.80	0.90	0.20	mg/l	1.5
9	Calcium (as Ca)	57.23	65.41	57.23	4.91	mg/l	-
10	Magnesium (as Mg)	29.74	29.74	33.71	3.96	mg/l	-
11	Copper (as Cu)	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	1.5
12	Iron (as Fe)	0.39	0.54	0.44	0.10	mg/l	50
13	Manganese (as Mn)	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	-
14	Zinc (as Zn)	< 0.02	< 0.02	< 0.02	< 0.02	mg/l	15
15	Total Arsenic (as As)	< 0.002	< 0.002	< 0.002	< 0.002	mg/l	0.2
16	Mercury (as Hg)	< 0.01	< 0.01	< 0.01	< 0.01	mg/l	-
17	Lead (as Pb)	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	0.1
18	Cadmium (as Cd)	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	0.01
19	Hex. Chromium (as Cr ⁺⁶)	< 0.01	< 0.01	< 0.01	< 0.01	mg/l	0.05
20	Selenium (as Se)	< 0.01	< 0.01	< 0.01	< 0.01	mg/l	0.05
21	Colour	< 5	< 5	< 5	< 5	Hazen	300
22	Odour	Agreeable	Agreeable	Agreeable	Agreeable	-	-
23	Taste	Agreeable	Agreeable	Agreeable	Agreeable	-	-
24	Dissolved Oxygen (Min.)	6.3	6.1	6.2	6.4	mg/l	4
25	BOD 5 days at 20°C	01	02	02	01	mg/l	3
26	Oil & Grease	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	0.1
27	Free Carbon Dioxide (as CO ₂)	14.08	8.8	10.56	7.04	mg/l	-
28	Free Ammonia (as NH ₃)	< 0.012	< 0.012	< 0.012	< 0.012	mg/l	-
29	Cyanide (as CN)	< 0.002	< 0.002	< 0.002	< 0.002	mg/l	0.05
30	Phenolic Compounds (as C ₆ H ₅ OH)	< 0.002	< 0.002	< 0.002	< 0.002	mg/l	0.005
31	Anionic Detergents (as MBAS)	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	1.0
32	Total Coliforms	Absent	Absent	Absent	Absent	Nos/100ml	5000

Table No 21:

SURFACE WATER QUALITY RESULT FOR THE MONTH OF MAY 2024

SI No	Parameter	Results Obtained				Unit	Surface Water Quality Standard as per IS: 2296 (Class C)
		Liploi Nadi Upstream (Shirdi Sai Temple)	Liploi Nadi (Municipality Dump Yard)	Liploi Nadi Downstream (Poda Nadi)	Amaghat Nadi		
1	pH Value	7.54	7.51	7.51	7.69	-	6.5 – 8.5
2	Electrical Conductivity	748	740	933	440	µS/cm	-
3	Total Dissolved Solids	449	444	560	264	mg/l	1500
4	Total Hardness (as CaCO ₃)	264.16	276.35	345.44	199.14	mg/l	-
5	Chlorides (as Cl)	62.08	49.28	62.08	23.65	mg/l	600
6	Sulfate (as SO ₄)	61.91	31.62	46.29	10.75	mg/l	400
7	Total Nitrate (as NO ₃)	3.93	3.11	2.46	2.69	mg/l	50
8	Fluoride (as F)	0.60	0.60	0.80	0.70	mg/l	1.5
9	Calcium (as Ca)	60.26	50.49	81.44	42.35	mg/l	-
10	Magnesium (as Mg)	27.65	36.54	34.56	22.72	mg/l	-
11	Copper (as Cu)	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	1.5
12	Iron (as Fe)	0.39	0.42	0.39	0.19	mg/l	50

SI No	Parameter	Results Obtained				Unit	Surface Water Quality Standard as per IS: 2296 (Class C)
		Liploi Nadi Upstream (Shirdi Sai Temple)	Liploi Nadi (Municipality Dump Yard)	Liploi Nadi Downstream (Poda Nadi)	Amaghat Nadi		
13	Manganese (as Mn)	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	-
14	Zinc (as Zn)	< 0.02	< 0.02	< 0.02	< 0.02	mg/l	15
15	Total Arsenic (as As)	< 0.002	< 0.002	< 0.002	< 0.002	mg/l	0.2
16	Mercury (as Hg)	< 0.01	< 0.01	< 0.01	< 0.01	mg/l	-
17	Lead (as Pb)	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	0.1
18	Cadmium (as Cd)	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	0.01
19	Hex. Chromium (as Cr ⁶⁺)	< 0.01	< 0.01	< 0.01	< 0.01	mg/l	0.05
20	Selenium (as Se)	< 0.01	< 0.01	< 0.01	< 0.01	mg/l	0.05
21	Colour	< 5	< 5	< 5	< 5	Hazen	300
22	Odour	Agreeable	Agreeable	Agreeable	Agreeable	-	-
23	Taste	Agreeable	Agreeable	Agreeable	Agreeable	-	-
24	Dissolved Oxygen (Min.)	6.3	6.0	6.1	6.2	mg/l	4
25	BOD 5 days at 20°C	01	02	02	01	mg/l	3
26	Oil & Grease	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	0.1
27	Free Carbon Dioxide (as CO ₂)	14.08	3.52	8.8	7.04	mg/l	-
28	Free Ammonia (as NH ₃)	< 0.012	< 0.012	< 0.012	< 0.012	mg/l	-
29	Cyanide (as CN)	< 0.002	< 0.002	< 0.002	< 0.002	mg/l	0.05
30	Phenolic Compounds (as C ₆ H ₅ OH)	< 0.002	< 0.002	< 0.002	< 0.002	mg/l	0.005
31	Anionic Detergents (as MBAS)	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	1.0
32	Total Coliforms	Absent	Absent	Absent	Absent	Nos/100ml	5000

Table No 22:

SURFACE WATER QUALITY RESULT FOR THE MONTH OF JUNE 2024

SI No	Parameter	Results Obtained				Unit	Surface Water Quality Standard as per IS: 2296 (Class C)
		Liploi Nadi Upstream (Shirdi Sai Temple)	Liploi Nadi (Municipality Dump Yard)	Liploi Nadi Downstream (Poda Nadi)	Amaghat Nadi		
1	pH Value	7.41	7.69	7.59	7.62	-	6.5 – 8.5
2	Electrical Conductivity	666	748	801	490	µS/cm	-
3	Total Dissolved Solids	400	449	480	299	mg/l	1500
4	Total Hardness (as CaCO ₃)	276.35	251.97	264.16	199.14	mg/l	-
5	Chlorides (as Cl)	48.29	45.33	52.23	21.68	mg/l	600
6	Sulfate (as SO ₄)	29.26	29.94	41.20	10.79	mg/l	400
7	Total Nitrate (as NO ₃)	< 2.20	2.69	2.39	2.24	mg/l	50
8	Fluoride (as F)	0.60	0.40	0.40	0.50	mg/l	1.5
9	Calcium (as Ca)	50.49	68.41	60.26	43.98	mg/l	-
10	Magnesium (as Mg)	36.54	19.75	27.65	21.73	mg/l	-
11	Copper (as Cu)	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	1.5
12	Iron (as Fe)	0.19	0.24	0.41	0.20	mg/l	50
13	Manganese (as Mn)	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	-
14	Zinc (as Zn)	< 0.02	< 0.02	< 0.02	< 0.02	mg/l	15
15	Total Arsenic (as As)	< 0.002	< 0.002	< 0.002	< 0.002	mg/l	0.2
16	Mercury (as Hg)	< 0.01	< 0.01	< 0.01	< 0.01	mg/l	-
17	Lead (as Pb)	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	0.1
18	Cadmium (as Cd)	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	0.01
19	Hex. Chromium (as Cr ⁶⁺)	< 0.01	< 0.01	< 0.01	< 0.01	mg/l	0.05
20	Selenium (as Se)	< 0.01	< 0.01	< 0.01	< 0.01	mg/l	0.05
21	Colour	< 5	< 5	< 5	< 5	Hazen	300
22	Odour	Agreeable	Agreeable	Agreeable	Agreeable	-	-
23	Taste	Agreeable	Agreeable	Agreeable	Agreeable	-	-
24	Dissolved Oxygen (Min.)	6.2	6.0	6.1	6.2	mg/l	4
25	BOD 5 days at 20°C	01	02	02	01	mg/l	3
26	Oil & Grease	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	0.1
27	Free Carbon Dioxide (as CO ₂)	10.56	5.28	7.04	< 0.01	mg/l	-
28	Free Ammonia (as NH ₃)	< 0.012	< 0.012	< 0.012	< 0.012	mg/l	-
29	Cyanide (as CN)	< 0.002	< 0.002	< 0.002	< 0.002	mg/l	0.05

Sl	Parameter	Results Obtained				Unit	Surface Water
30	Phenolic Compounds (as C ₆ H ₅ OH)	< 0.002	< 0.002	< 0.002	< 0.002	mg/l	0.005
31	Anionic Detergents (as MBAS)	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	1.0
32	Total Coliforms	10	100	1000	100	Nos/100ml	5000

Table No 23:

SURFACE WATER QUALITY RESULT FOR THE MONTH OF JULY 2024

Sl No	Parameter	Results Obtained				Unit	Surface Water Quality Standard as per IS: 2296 (Class C)
		Liploi Nadi Upstream (Shirdi Sai Temple)	Liploi Nadi (Municipality Dump Yard)	Liploi Nadi Downstream (Poda Nadi)	Amaghat Nadi		
1	pH Value	7.67	7.56	7.39	7.27	-	6.5 – 8.5
2	Electrical Conductivity	612	623	387	346	µS/cm	-
3	Total Dissolved Solids	367	374	645	208	mg/l	1500
4	Total Hardness (as CaCO ₃)	259.07	267.16	275.26	165.96	mg/l	-
5	Chlorides (as Cl)	33.26	34.24	36.20	22.50	mg/l	600
6	Sulfate (as SO ₄)	30.35	39.41	49.52	16.71	mg/l	400
7	Total Nitrate (as NO ₃)	3.40	3.0	2.98	2.76	mg/l	50
8	Fluoride (as F)	0.70	0.80	0.90	1.0	mg/l	1.5
9	Calcium (as Ca)	74.63	76.25	79.49	55.16	mg/l	-
10	Magnesium (as Mg)	17.70	18.68	18.68	6.75	mg/l	-
11	Copper (as Cu)	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	1.5
12	Iron (as Fe)	0.46	0.50	0.51	0.44	mg/l	50
13	Manganese (as Mn)	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	-
14	Zinc (as Zn)	< 0.02	< 0.02	< 0.02	< 0.02	mg/l	15
15	Total Arsenic (as As)	< 0.002	< 0.002	< 0.002	< 0.002	mg/l	0.2
16	Mercury (as Hg)	< 0.01	< 0.01	< 0.01	< 0.01	mg/l	-
17	Lead (as Pb)	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	0.1
18	Cadmium (as Cd)	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	0.01
19	Hex. Chromium (as Cr ^{VI})	< 0.01	< 0.01	< 0.01	< 0.01	mg/l	0.05
20	Selenium (as Se)	< 0.01	< 0.01	< 0.01	< 0.01	mg/l	0.05
21	Colour	< 5	< 5	< 5	< 5	Hazen	300
22	Odour	Agreeable	Agreeable	Agreeable	Agreeable	-	-
23	Taste	Agreeable	Agreeable	Agreeable	Agreeable	-	-
24	Dissolved Oxygen (Min.)	6.3	6.2	6.1	6.2	mg/l	4
25	BOD 5 days at 20°C	01	01	02	01	mg/l	3
26	Oil & Grease	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	0.1
27	Free Carbon Dioxide (as CO ₂)	7.04	8.8	10.56	< 0.01	mg/l	-
28	Free Ammonia (as NH ₃)	< 0.012	< 0.012	< 0.012	< 0.012	mg/l	-
29	Cyanide (as CN)	< 0.002	< 0.002	< 0.002	< 0.002	mg/l	0.05
30	Phenolic Compounds (as C ₆ H ₅ OH)	< 0.002	< 0.002	< 0.002	< 0.002	mg/l	0.005
31	Anionic Detergents (as MBAS)	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	1.0
32	Total Coliforms	100	1000	1000	100	Nos/100ml	5000

Table No 24:

SURFACE WATER QUALITY RESULT FOR THE MONTH OF AUGUST 2024

Sl No	Parameter	Results Obtained				Unit	Surface Water Quality Standard as per IS: 2296 (Class C)
		Liploi Nadi Upstream (Shirdi Sai Temple)	Liploi Nadi (Municipality Dump Yard)	Liploi Nadi Downstream (Poda Nadi)	Amaghat Nadi		
1	pH Value	7.44	7.69	7.71	7.96	-	6.5 – 8.5
2	Electrical Conductivity	620	649	692	494	µS/cm	-
3	Total Dissolved Solids	366	389	415	296	mg/l	1500
4	Total Hardness (as CaCO ₃)	259.07	271.22	319.79	246.93	mg/l	-

SI No	Parameter	Results Obtained				Unit	Surface Water Quality Standard as per IS: 2296 (Class C)
		Liploi Nadi Upstream (Shirdi Sai Temple)	Liploi Nadi (Municipality Dump Yard)	Liploi Nadi Downstream (Poda Nadi)	Amaghat Nadi		
5	Chlorides (as Cl)	35.47	50.88	49.89	25.44	mg/l	600
6	Sulfate (as SO ₄)	32.17	38.42	36.64	16.04	mg/l	400
7	Total Nitrate (as NO ₃)	< 2.20	< 2.20	2.88	2.67	mg/l	50
8	Fluoride (as F)	0.62	0.76	0.70	0.84	mg/l	1.5
9	Calcium (as Ca)	74.63	63.28	79.49	55.16	mg/l	-
10	Magnesium (as Mg)	17.70	27.54	29.51	26.56	mg/l	-
11	Copper (as Cu)	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	1.5
12	Iron (as Fe)	0.51	0.57	0.56	0.18	mg/l	50
13	Manganese (as Mn)	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	-
14	Zinc (as Zn)	< 0.02	< 0.02	< 0.02	< 0.02	mg/l	15
15	Total Arsenic (as As)	< 0.002	< 0.002	< 0.002	< 0.002	mg/l	0.2
16	Mercury (as Hg)	< 0.01	< 0.01	< 0.01	< 0.01	mg/l	-
17	Lead (as Pb)	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	0.1
18	Cadmium (as Cd)	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	0.01
19	Hex. Chromium (as Cr ⁺⁶)	< 0.01	< 0.01	< 0.01	< 0.01	mg/l	0.05
20	Selenium (as Se)	< 0.01	< 0.01	< 0.01	< 0.01	mg/l	0.05
21	Colour	< 5	< 5	< 5	< 5	Hazen	300
22	Odour	Agreeable	Agreeable	Agreeable	Agreeable	-	-
23	Taste	Agreeable	Agreeable	Agreeable	Agreeable	-	-
24	Dissolved Oxygen (Min.)	6.2	6.1	6.2	6.2	mg/l	4
25	BOD 5 days at 20°C	02	02	02	01	mg/l	3
26	Oil & Grease	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	0.1
27	Free Carbon Dioxide (as CO ₂)	8.8	14.08	10.56	7.04	mg/l	-
28	Free Ammonia (as NH ₃)	< 0.012	< 0.012	< 0.012	< 0.012	mg/l	-
29	Cyanide (as CN)	< 0.002	< 0.002	< 0.002	< 0.002	mg/l	0.05
30	Phenolic Compounds (as C ₆ H ₅ OH)	< 0.002	< 0.002	< 0.002	< 0.002	mg/l	0.005
31	Anionic Detergents (as MBAS)	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	1.0
32	Total Coliforms	100	1000	1000	100	Nos/100ml	5000

Table No 25:

SURFACE WATER QUALITY RESULT FOR THE MONTH OF SEPTEMBER 2024

SI No	Parameter	Results Obtained				Unit	Surface Water Quality Standard as per IS: 2296 (Class C)
		Liploi Nadi Upstream (Shirdi Sai Temple)	Liploi Nadi (Municipality Dump Yard)	Liploi Nadi Downstream (Poda Nadi)	Amaghat Nadi		
1	pH Value	7.24	7.40	7.27	7.05	-	6.5 – 8.5
2	Electrical Conductivity	298	321	366	354	µS/cm	-
3	Total Dissolved Solids	179	193	220	212	mg/l	1500
4	Total Hardness (as CaCO ₃)	145.15	165.31	169.34	165.31	mg/l	-
5	Chlorides (as Cl)	15.65	13.69	17.61	12.72	mg/l	600
6	Sulfate (as SO ₄)	19.64	24.93	25.84	17.16	mg/l	400
7	Total Nitrate (as NO ₃)	< 2.20	< 2.20	< 2.20	< 2.20	mg/l	50
8	Fluoride (as F)	0.58	0.60	0.61	0.64	mg/l	1.5
9	Calcium (as Ca)	37.17	42.02	38.78	38.78	mg/l	-
10	Magnesium (as Mg)	12.74	14.69	17.64	16.66	mg/l	-
11	Copper (as Cu)	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	1.5
12	Iron (as Fe)	0.28	0.31	0.39	0.19	mg/l	50
13	Manganese (as Mn)	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	-
14	Zinc (as Zn)	< 0.02	< 0.02	< 0.02	< 0.02	mg/l	15
15	Total Arsenic (as As)	< 0.002	< 0.002	< 0.002	< 0.002	mg/l	0.2
16	Mercury (as Hg)	< 0.01	< 0.01	< 0.01	< 0.01	mg/l	-
17	Lead (as Pb)	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	0.1
18	Cadmium (as Cd)	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	0.01
19	Hex. Chromium (as Cr ⁺⁶)	< 0.01	< 0.01	< 0.01	< 0.01	mg/l	0.05

SI No	Parameter	Results Obtained				Unit	Surface Water Quality Standard as per IS: 2296 (Class C)
		Liploi Nadi Upstream (Shirdi Sai Temple)	Liploi Nadi (Municipality Dump Yard)	Liploi Nadi Downstream (Poda Nadi)	Amaghat Nadi		
20	Selenium (as Se)	< 0.01	< 0.01	< 0.01	< 0.01	mg/l	0.05
21	Colour	< 5	< 5	< 5	< 5	Hazen	300
22	Odour	Agreeable	Agreeable	Agreeable	Agreeable	-	-
23	Taste	Agreeable	Agreeable	Agreeable	Agreeable	-	-
24	Dissolved Oxygen (Min.)	6.2	6.1	6.2	6.2	mg/l	4
25	BOD 5 days at 20°C	01	02	02	01	mg/l	3
26	Oil & Grease	< 0.10	< 0.10	< 0.10	< 0.10	mg/l	0.1
27	Free Carbon Dioxide (as CO ₂)	3.52	5.28	3.52	7.04	mg/l	-
28	Free Ammonia (as NH ₃)	< 0.012	< 0.012	< 0.012	< 0.012	mg/l	-
29	Cyanide (as CN)	< 0.002	< 0.002	< 0.002	< 0.002	mg/l	0.05
30	Phenolic Compounds (as C ₆ H ₅ OH)	< 0.002	< 0.002	< 0.002	< 0.002	mg/l	0.005
31	Anionic Detergents (as MBAS)	< 0.05	< 0.05	< 0.05	< 0.05	mg/l	1.0
32	Total Coliforms	100	1000	1000	100	Nos/100ml	5000

Table No 26:

26.1 EFFLUENT WATER QUALITY RESULT OF ETP INLET

SI No	Parameters	Results Obtained						Unit
		APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	
1	pH Value	7.56	7.34	7.42	7.51	7.37	7.43	-
2.	Total Suspended Solids	12.5	22.5	< 2.5	27.7	24.8	6.6	mg/l
3.	Oil & Grease	2.2	2.6	2.1	< 2.0	12.0	< 2.0	mg/l
4.	BOD 5days at 20°C	60	40	30	36	40	30	mg/l
5.	COD	184.60	122.36	92.16	110.16	24.8	92.61	mg/l

26.2 EFFLUENT WATER QUALITY RESULT OF ETP OUTLET

SI No	Parameters	Results Obtained						Permissible Limit as per CTO Conditions	Unit
		APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER		
1	pH Value	7.79	7.30	7.37	7.65	7.26	7.56	5.5 – 9.0	-
2.	Total Suspended Solids	< 2.5	2.5	< 2.5	16.8	15.6	< 2.5	100	mg/l
3.	Oil & Grease	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	10	mg/l
4.	BOD 5days at 20°C	04	12	14	08	17	11	-	mg/l
5.	COD	15.267	37.26	43.160	25.624	52.612	34.68	-	mg/l

Table No 27 :

27.1 EFFLUENT WATER QUALITY RESULT OF BOILER BLOW DOWN (Line – 2)

SI No	Parameters	Results Obtained						Unit
		APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	
1	pH Value	7.21	7.28	8.93	8.42	8.03	7.95	-
2.	Total Suspended Solids	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	mg/l
3.	Oil & Grease	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	mg/l
4.	COD	55.260	42.610	38.16	45.624	44.260	46.249	mg/l
5.	Copper (as Cu)	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	mg/l
6.	Iron (as Fe)	0.18	0.20	0.18	0.26	0.22	0.12	mg/l

27.2 EFFLUENT WATER QUALITY RESULT OF COOLING TOWER BLOW DOWN (Line – 2)

Sl No	Parameters	Results Obtained						Unit
		APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	
1	pH Value	7.49	6.90	7.45	7.36	8.60	7.90	-
2.	Total Suspended Solids	12.4	10.8	9.4	11.6	10.2	9.8	mg/l
3.	Oil & Grease	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	mg/l
4.	Total Nitrate (as NO ₃)	6.88	5.89	4.68	5.24	4.88	5.24	mg/l
5.	Phosphate (as PO ₄)	2.432	2.012	1.86	2.01	1.84	7.35	mg/l
6.	Total Chromium (as Cr)	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
7.	Zinc (as Zn)	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	
8.	Residual Chlorine (as Cl ₂)	0.28	0.20	0.19	0.21	0.24	0.18	

Table No 28 :

EFFLUENT WATER QUALITY RESULT OF STP OUTLET (LINE – 2)

Sl No	Parameters	Results Obtained						Permissible Limit as per CTO Conditions	Unit
		APR	MAY	JUN	JULY	AUG	SEPT		
1	pH Value	7.50	7.46	7.82	7.62	7.25	7.38	6.5 – 9.0	-
2.	Total Suspended Solids	< 2.5	< 2.5	< 2.5	9.4	8.2	7.8	100	mg/l
3.	BOD 5days at 20°C	10	08	06	16	24	15	30	mg/l
4.	COD	37.610	25.62	20.16	50.462	62.612	46.419	-	mg/l
5.	Fecal coliform	100	100	1000	1000	100	100	1000	mg/l

Table No 29:

EFFLUENT WATER QUALITY RESULT OF STP OUTLET (DSP UNIT)

Sl No	Parameters	Results Obtained						Permissible Limit as per CTO Conditions	Unit
		APR	MAY	JUN	JULY	AUG	SEPT		
1	pH Value	7.46	7.38	7.41	7.41	7.35	7.43	6.5 – 9.0	-
2.	Total Suspended Solids	8.2	6.4	4.2	4.2	15.8	14.6	100	mg/l
3.	BOD 5days at 20°C	05	16	05	05	20	25	30	mg/l
4.	COD	16.610	49.69	16.46	16.46	52.160	91.64	-	mg/l
5.	Fecal Coliform	100	100	100	100	100	100	1000	mg/l

Table No 30:

SOIL QUALITY RESULT FOR THE MONTH OF APRIL 2024

Sl. No.	Parameter	Unit	ETP Area (Line – 1)	Truck Parking Area	STP Area (DSP Unit)
1.	Colour	-	Brownish	Greyish	Greyish
2.	Type of Soil	-	Fine Grained Soil	Fine Grained Soil	Fine Grained Soil
3.	Texture	-	Sandy Clay Loam	Silty Clay Loam	Silty Loam
4.	Bulk Density	gm/cm ³	1.63	1.49	1.52
5.	pH (1:2 Suspension)	-	7.88	8.15	8.15
6.	Iron	mg/kg	5.2	5.4	3.92
7.	Calcium	mg/kg	182	176	158
8.	Available Potassium (as K ₂ O)	Kg/ha	153.04	224.64	273.72

Sl. No.	Parameter	Unit	ETP Area (Line – 1)	Truck Parking Area	STP Area (DSP Unit)
9.	Organic Carbon	%	0.90	1.3	0.88
10.	Available Nitrogen (as N)	Kg/ha	175.62	75.26	50.18
11.	Manganese	mg/kg	7.30	5.24	4.11
12.	Infiltration Rate	cm/hr	2.44	2.23	3.39
13.	Porosity	mg/m ³	0.25	0.28	0.192
14.	Moisture Content	%	15.6	18.6	18.9
16.	Chloride	mg/kg	0.14	0.21	0.26
17.	Sulphate	mg/kg	0.70	0.62	0.54

Table No 31:

SOIL QUALITY RESULT FOR THE MONTH OF MAY 2024

Sl. No.	Parameter	Unit	AFR Area (Line – 1)	STP Area(Line -2)	Konark Vihar Area	STP Area DSP Unit
1.	Colour	-	Greyish	Greyish	Brownish	Greyish
2.	Type of Soil	-	Fine Grained Soil	Fine Grained Soil	Fine Grained Soil	Fine Grained Soil
3.	Texture	-	Sandy Clay Loam	Silty Clay Loam	Silty Clay Loam	Silty Loam
4.	Bulk Density	gm/cm ³	1.38	1.32	1.32	1.6
5.	pH (1:2 Suspension)	-	8.30	8.32	8.14	8.06
6.	Iron	mg/kg	5.2	5.4	5.4	4.92
7.	Calcium	mg/kg	162	157	146	162
8.	Available Potassium (as K ₂ O)	Kg/ha	122.04	198.08	286.2	310.76
9.	Organic Carbon	%	0.65	0.84	1.07	0.94
10.	Available Nitrogen (as N)	Kg/ha	125.44	137.98	62.72	100.35
11.	Manganese	mg/kg	9.30	6.82	6.74	4.24
12.	Infiltration Rate	cm/hr	1.44	2.17	2.19	4.49
13.	Porosity	mg/m ³	0.28	0.21	0.24	0.192
14.	Moisture Content	%	17.6	22.4	24.2	19.6
16.	Chloride	mg/kg	0.13	0.19	0.22	0.18
17.	Sulphate	mg/kg	0.70	0.62	0.62	0.41

Table No 32:

SOIL QUALITY RESULT FOR THE MONTH OF JUNE 2024

Sl. No.	Parameter	Unit	Inside Store Yard (Line – 1)	Near AFR Area (Line – 2)	Near Weigh Bridge DSP Unit
1.	Colour	-	Brownish	Greyish	Brownish
2.	Type of Soil	-	Fine Grained Soil	Fine Grained Soil	Fine Grained Soil
3.	Texture	-	Sandy Clay Loam	Silty Clay Loam	Silty Loam
4.	Bulk Density	gm/cm ³	1.24	1.38	1.32
5.	pH (1:2 Suspension)	-	7.50	8.48	7.86
6.	Iron	mg/kg	5.2	5.4	3.92
7.	Calcium	mg/kg	172	167	153
8.	Available Potassium (as K ₂ O)	Kg/ha	258.48	318	153.04
9.	Organic Carbon	%	1.23	1.10	0.88
10.	Available Nitrogen (as N)	Kg/ha	100.35	125.44	25.08
11.	Manganese	mg/kg	8.90	5.82	5.12
12.	Infiltration Rate	cm/hr	1.64	2.09	3.24
13.	Porosity	mg/m ³	0.18	0.23	0.15
14.	Moisture Content	%	16.9	21.8	13.6
16.	Chloride	mg/kg	0.17	0.27	0.17

Sl. No.	Parameter	Unit	Inside Store Yard (Line – 1)	Near AFR Area (Line – 2)	Near Weigh Bridge DSP Unit
17.	Sulphate	mg/kg	0.73	0.52	0.26

Table No 33:

SOIL QUALITY RESULT FOR THE MONTH OF JULY 2024

Sl. No.	Parameter	Unit	Water Harvesting Pond (LINE – 2)	In Front Of HR Office (Line – 1)	AFR AREA (DSP UNIT)
1.	Colour	-	Greyish	Greyish	Greyish
2.	Type of Soil	-	Fine Grained Soil	Fine Grained Soil	Fine Grained Soil
3.	Texture	-	Sandy Clay Loam	Silty Clay Loam	Silty Loam
4.	Bulk Density	gm/cm ³	1.3	1.2	1.2
5.	pH (1:2 Suspension)	-	8.12	8.10	8.38
6.	Iron	mg/kg	4.8	5.21	5.08
7.	Calcium	mg/kg	174	179	168
8.	Available Potassium (as K ₂ O)	Kg/ha	324.96	198.08	318
9.	Organic Carbon	%	0.81	0.47	0.88
10.	Available Nitrogen (as N)	Kg/ha	238.34	62.72	112.89
11.	Manganese	mg/kg	9.61	9.23	6.02
12.	Infiltration Rate	cm/hr	6.54	4.26	5.61
13.	Porosity	mg/m ³	0.19	0.22	0.12
14.	Moisture Content	%	21.2	22.5	23.4
16.	Chloride	mg/kg	0.11	0.08	0.16
17.	Sulphate	mg/kg	0.60	0.50	0.60

Table No 34:

SOIL QUALITY RESULT FOR THE MONTH OF AUGUST 2024

Sl. No.	Parameter	Unit	ETP Area (Line – 1)	132 KVA Substation (Line – 2)	Kiskindhaban Area (Line – 1)	STP Area (DSP Unit)
1.	Colour	-	Greyish	Greyish	Greyish	Greyish
2.	Type of Soil	-	Fine Grained Soil	Fine Grained Soil	Fine Grained Soil	Fine Grained Soil
3.	Texture	-	Sandy Clay Loam	Silty Clay Loam	Silty Clay Loam	Silty Loam
4.	Bulk Density	gm/cm ³	1.3	1.2	1.4	1.2
5.	pH (1:2 Suspension)	-	7.36	8.02	7.60	6.42
6.	Iron	mg/kg	4.5	5.14	6.18	5.08
7.	Calcium	mg/kg	164	172	186	168
8.	Available Potassium (as K ₂ O)	Kg/ha	780.96	411.72	419.16	768.48
9.	Organic Carbon	%	0.5	1.84	1.34	2.47
10.	Available Nitrogen (as N)	Kg/ha	163.07	50.176	188.16	62.72
11.	Manganese	mg/kg	9.61	9.23	9.76	6.02
12.	Infiltration Rate	cm/hr	5.48	5.26	4.87	5.61
13.	Porosity	mg/m ³	0.31	0.29	0.26	0.12
14.	Moisture Content	%	21.2	21.6	20.25	23.4
16.	Chloride	mg/kg	0.18	0.28	0.26	0.16
17.	Sulphate	mg/kg	0.62	0.54	0.48	0.60

Table No 35:

SOIL QUALITY RESULT FOR THE MONTH OF SEPTEMBER 2024

Sl. No.	Parameter	Unit	Store Yard (Line – 1)	STP Area (Line – 2)	STP Area DSP Unit
1.	Colour	-	Greyish	Greyish	Greyish
2.	Type of Soil	-	Fine Grained Soil	Fine Grained Soil	Fine Grained Soil
3.	Texture	-	Sandy Clay Loam	Silty Clay Loam	Silty Loam
4.	Bulk Density	gm/cm ³	1.3	1.3	1.2
5.	pH (1:2 Suspension)	-	7.52	8.08	8.40
6.	Iron	mg/kg	4.8	6.05	5.21
7.	Calcium	mg/kg	174	179	179
8.	Available Potassium (as K ₂ O)	Kg/ha	250.68	224.64	300.72
9.	Organic Carbon	%	1.10	1.62	0.81
10.	Available Nitrogen (as N)	Kg/ha	87.80	163.07	125.44
11.	Manganese	mg/kg	174	179	179
12.	Infiltration Rate	cm/hr	9.61	9.76	9.23
13.	Porosity	mg/m ³	6.54	4.77	4.26
14.	Moisture Content	%	0.18	0.33	0.19
16.	Chloride	mg/kg	21.26	22.84	22.57
17.	Sulphate	mg/kg	0.11	0.10	0.08

Table No: 36:

NOISE LEVEL MONITORING DATA

From 01.04.2024 to 30.09.2024

Month	Location	Leq dB(A) Day Time	Leq dB(A) Night Time
Apr	Main gate Near Canteen (Line – 1)	55.3	53.6
	General Store (Line – 1)	62.9	62.5
	Guest House Area	55.6	48.1
	Konark Vihar	45.1	45.0
	CPP Area (Line – 2)	64.0	62.9
	Lime Stone Transfer Point (Line – 2)	64.1	63.7
	Project Gate Area (DSP Unit)	58.1	57.4
	General Store Area (DSP Unit)	59.0	57.1
May	Main gate Near Canteen (Line – 1)	67.0	66.1
	General Store (Line – 1)	62.0	60.2
	Guest House Area	55.0	48.9
	Konark Vihar	47.7	44.4
	CCR Building Area (Line – 2)	72.4	71.9
	Workshop Area (Line – 2)	60.7	60.8
	STP Area (DSP Unit)	61.2	58.5
	AFR Storage Area (DSP Unit)	60.6	58.6
Jun	Main gate Near Canteen (Line – 1)	55.2	52.1
	B .G Loco Gate Area (Line – 1)	61.5	60.7
	Guest House Area	54.7	51.1
	Konark Vihar	53.2	56.0
	CPP Area(Line – 2)	66.3	62.5
	CCR Office Building Area (Line – 2)	63.8	63.6
	General Store Area (DSP Unit)	61.2	60.6
	Project Gate Area (DSP Unit)	62.2	60.4
Jul	Main gate Near Canteen (Line – 1)	55.2	52.1
	B .G Loco Gate Area (Line – 1)	61.5	60.7
	Guest House Area	54.7	51.1

Month	Location	L _{eq} dB(A) Day Time	L _{eq} dB(A) Night Time
	Konark Vihar	53.2	56.0
	CPP Area(Line – 2)	66.3	62.5
	CCR Office Building Area (Line – 2)	63.8	63.6
	General Store Area (DSP Unit)	61.2	60.6
	Project Gate Area (DSP Unit)	62.2	60.4
Aug	Main gate Near Canteen (Line – 1)	58.8	63.7
	B .G Loco Gate Area (Line – 1)	62.1	58.1
	Guest House Area	56.9	52.8
	Konark Vihar	49.4	42.7
	CPP Area(Line – 2)	62.6	61.6
	Atithi Niwas Arae (Line – 2)	62.3	51.9
	Project Gate Area (DSP Unit)	59.2	57.9
	General Store Area (DSP Unit)	58.6	57.2
	Sept	General Store (Line – 1)	61.4
B .G Loco Gate Area (Line – 1)		66.8	66.5
Guest House Area		61.5	44.3
Konark Vihar		51.5	37.9
CPP Area(Line – 2)		73.8	69.8
Work Shop Area (Line – 2)		58.9	57.1
AFR Storage Area (DSP Unit)		61.3	60.4
STP Area (DSP Unit)		68.4	68.0
