



**GOA STATE POLLUTION
CONTROL BOARD
ANNUAL REPORT
2021-22**



Dugong



Sea Turtle



Bumble Bee



Indian Vulture



River Dolphin



Tiger

It's high time we learn that humans are not at the centre of the existence of this beautiful planet; we are just another piece in this brilliant jigsaw that makes our planet. For the sake of the health and survival of our future generation we have to focus on restoring the balance and conserve the Earth's flora and fauna. The warning that has been raised again and again is that we have absolutely no time to wait; whatever we do now is going to determine the future of humanity."

**- D. Raghunandan, Scientist,
Delhi Science Forum**



Rhinoceros

GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदूषण नियंत्रण मंडळ

(An ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 Certified Board)

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Shri. Mahesh Patil
Chairman



CHAIRMAN'S MESSAGE:

GOA STATE POLLUTION CONTROL BOARD has strived to achieve a harmony between development and environment protection. The year under review was marked by considerable improvement in the fact that major decisions were taken to encourage the use of greener technology and eco-friendly processes coupled with environmental audit for industries. This will help improve preservation, protection of the environment and promote sustainable development in the state of Goa.

The Board continued its pursuit of quality and timely service through its Quality System Accreditations like ISO-9001:2015 (Quality Management Systems), ISO-14001:2015 (Environment Management Systems) and ISO-45001:2018 (Occupational Health and Safety Assessment Standards).

In order to maintain the clean and fresh air and water in the state of Goa, Board monitors quality of air through its NAMP (National Air Monitoring Programme) at 18 stations in the State Goa along with the use of two Mobile vans monitoring the air quality as and when required. Board monitors the water quality through its NWMP (National Water Monitoring Programme) at 74 locations in the State of Goa (11 locations since February 2022). All the water samples drawn under this programme are analysed in its state of Art Laboratory. During the year, Board laboratory has collected and analysed 1610 no of water samples and 7703 no of Air Samples.

The Goa State Pollution Control Board aims to develop all-round capabilities of its Boards employee in the field of pollution prevention and control, Board imparted knowledge based trainings through virtual mode due to Pandemic to its officers and staff through CPCB and other National as well as International Organizations as a continual improvement.

Goa State Pollution Control Board, started capacity building program for its staff as well as other stakeholders. New technology suppliers are encouraged for presentation at the Board conference hall attended by Board staff, Industry representatives and related Government staff.

Board conducted industrial audit to access effectiveness of Environmental Managemet

measures, this joint efforts has lead to improvements in the overall environment performance in the industry.

Particulate source apportionment study conducted by IIT Mumbai for Vasco city is completed. Study revealed sources of air pollution in Vasco Town and possible control measures.

Board plans to further strengths its Laboratory with new equipments and techniques. Happy to share that two waste treatment facilities i.e. common hazardous treatments, storage and disposal facility (CHWTSPF) and common biomedical waste facility is almost ready and will be functional in first quarter of 2022-23. This was a need of all the industry and medical professional to dispose waste in scientific manner.

I also take this opportunity to extend my sincere appreciation to the Board staff and the people of Goa for sharing in our endeavour of maintaining the clean and fresh air of Goa in our march towards the future. Rest assured the Board will continuously seek and strive to improve and maintain the quality of the environment and society at large.

I also thank Goa Government, Central Government, and Central Pollution Control Board for financial and technical support and encouragement.

On behalf of the Goa State Pollution Control Board, it is my pleasure in sharing the performance of the Board through this GSPCB Annual Report for the year 2021-22.

Mahesh K Patil



CHAIRMAN

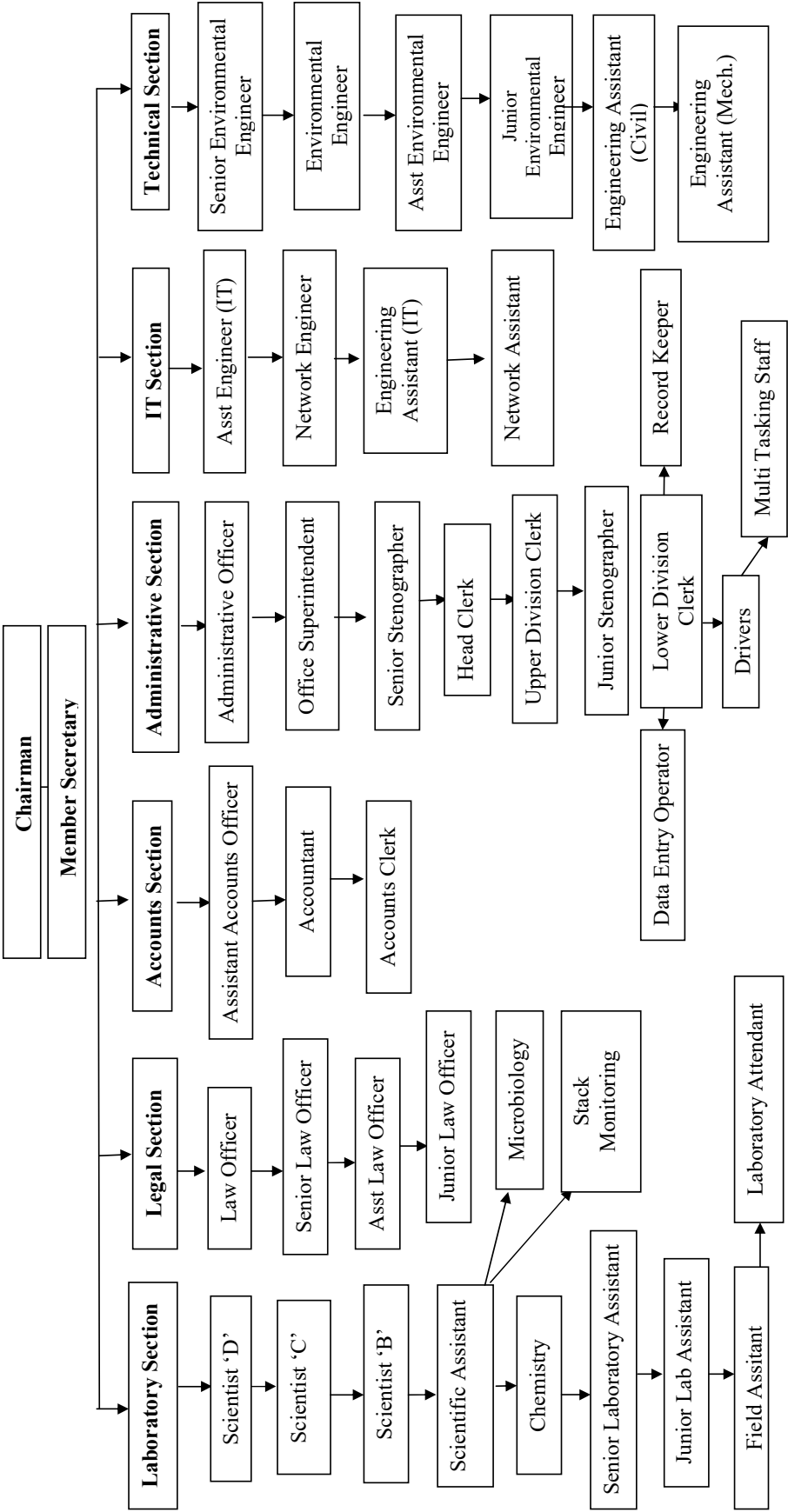
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ORGANISATIONAL CHART OF THE GOA STATE POLLUTION CONTROL BOARD



CHAPTER 1

INTRODUCTION

1.1 GENERAL INTRODUCTION

The Goa State Pollution Control Board (GSPCB) is an autonomous statutory organization constituted on 1st July, 1988 under the Water (Prevention & Control of Pollution) Act, 1974. Prior to that, when Goa formed part of the erstwhile Union Territory of Goa, Daman and Diu, the Central Board for the Prevention and Control of Water Pollution was performing the functions of the State Board in Goa. The Central Pollution Control Board (CPCB) at Ponda-Goa had established a Section Office for the purpose. The same arrangement continued till the constitution of the State Board. In the meanwhile, the Section Office was re-constituted as West Zonal Office and shifted to Baroda on 4th April, 1988. All the relevant records pertaining to Goa were transferred to the Goa State Pollution Control Board on 12th September, 1988.

The GSPCB, after its constitution, established its office in the Goa Medical College (GMC) Complex at Bambolim. In June 1991, the Government of Goa allotted independent premises for the Board at Patto- Panaji, where the Board shifted its office at House no. 243, Patto, Panaji in September 1991.

On 15th August, 2002 the Board acquired a new premises on the 1st floor in Dempo Tower at Patto Plaza, Panaji and shifted its full set-up to this new premise. The office as well as the laboratory was operating from here. Subsequently, on 15th August, 2005, additional premises measuring 311.86 Sq. mt. was acquired on the 4th floor of the same building which was dedicated to the Board Laboratory.

The Board has shifted its Administrative, Accounts, Legal, Information and Technology, Scientific and Technical section to the new Board premises located at Saligao, Bardez – Goa on 8th August, 2018, the laboratory along with analysts was shifted at the new premises in July 2019.

1.2 THE BOARD OFFICE

The GSPCB is presently operating from its own independent at Saligao. The Offices of the Chairman, Member Secretary, Technical section, Legal section, Accounts section, Scientific section, Information and Technology section & Administrative Section are currently operating from the new premises at Saligao, Bardez - Goa. The Board laboratory and entire Board office is assessed under ISO: 9001, ISO: 14001 and OHSAS: 18001.

Presently, there are one hundred and sixteen staff employed in the Board under the various sections.

1.3 FUNCTIONS OF THE VARIOUS SECTIONS

1.3.1 SCIENTIFIC SECTION

The Board has a full fledged laboratory, operating on the 1st and 2nd floors of the Office Building at Saligao. The laboratory is well equipped with instruments and equipments needed for carrying out analysis of water, air and soil, industrial effluents, rivers, wells, etc., for chemical, physical and bacteriological parameters including trace and toxic metals, pesticides and organic components. The Board laboratory follows the procedures / stipulated, protocol and guidelines in accordance with the MoEF and NABL accreditations.

The Board has set up 19 Ambient Air Quality (AAQ) and 74 water quality monitoring stations under the Central Pollution Control Board sponsored projects National Air Monitoring Programme (NAMP) and National Water Monitoring Programme (NWMP). Of the 19 AAQ stations, operation of 14 locations are outsourced to MoEF&CC approved laboratories and 5 locations are operated by the GSPCB. The Ambient Air Quality is measured in terms of parameters such as PM₁₀, PM_{2.5}, SO₂, NO_x, CO, O₃ and Pb along with meteorological parameters. The Board has two mobile CAAQMS, which are being used for Continuous Ambient Air Quality Monitoring. Also in addition to NAMP conducted at 19 locations, AAQM has been conducted along transportation routes of e-auctioned ores to address complaints regarding dust pollution. Number of stack emission monitoring have also been conducted during the year.

The 74 NWMP stations are all monitored by GSPCB staff. These stations are monitored at defined intervals and the samples collected are analyzed at the Board laboratory for physical, chemical, metals, pesticides and microbiological parameters. During the year under report the Board laboratory collected 1790 water samples from various sources such as ETP, STP, mine discharge (settling pond, mining pit, etc.), river water, well water, canal water, etc. and analyzed the same for various parameters i.e pH, Turbidity, Dissolved Solids, Conductivity, Dissolved Oxygen, Nitrate Nitrogen as NO₃-N, Nitrite Nitrogen as NO₂-N, Nitrate as NO₃, Nitrite as NO₂, Chloride as Cl, Sulphate as SO₄²⁻, Hardness as CaCO₃, Calcium as Ca, Magnesium as Mg, Suspended Solids, Oil & Grease, Chemical Oxygen Demand, Biochemical Oxygen Demand, Phosphate, Ammonical nitrogen, Acidity, Alkalinity, Fluoride, Boron (B), Chromium (Cr) Hexavalent, Potassium (K), Sodium (Na), Total Organic Carbon (TOC), Phenolphthalein Alkalinity, Total Fixed Solids, Cadmium as Cd, Copper as Cu, Nickel as Ni, Chromium as Cr, Zinc as Zn, Cobalt as Co, Lead as Pb, Iron as Fe, Manganese as Mn, Arsenic as As, Total Coliform, Fecal Coliform, E. Coli, Total plate count, Organo Chlorine Pesticides (OCPs) (Aldrin, Dieldrin, Heptachlor, Hexachlorobenzene, Methoxychlor, o,p' DDT, p,p' DDT, p,p'-DDE, α-BHC, β-BHC, γ-BHC), Organo Phosphorous Pesticides (OPPs) (Chlorpyrifos, Profenophos, Malathion, Parathion-methyl).

1.3.2 TECHNICAL SECTION

The Technical Section handles the consent management. The industries, hazardous waste handling facilities, health care facilities, municipal solid waste facilities, etc. are inspected and monitored on regular basis. The inspection reports and analysis reports are put up online through Online Consent Management and Monitoring System (OCMMS) software which are scrutinized by the Technical Advisory Committee (TAC) for Red and Orange category of industries and subsequently approved by the Chairman (in case of Red-category of industries) upon which consents under the relevant acts and authorization under relevant rules are issued. Further, as per the decision taken during the Board, Environmental Engineer – Mr. Sanjeev Joglekar is delegated Authority (DA) for issuance of Orange-category of industrial units, while RO (North) – Mr. Keshav Fadke (Asst. Env. Engr.,) is a DA for Green-category of industrial units located in North Goa district and Mrs. Nandan Prabhudessai (Asst. Env. Engr.,) is a DA for Green-category of industrial units located in South Goa district. During

the year under report, 1,506 consents have been granted for operation and establishment of the above facilities under the Water and Air Acts and Hazardous Waste Rules, 236 authorizations/registrations are granted under Bio-Medical Rules, Solid Waste Rules, E-waste Management Rules, Plastic Waste management Rules and Battery Rules (**refer Annexure XXI**).

Besides, periodic inspections to monitor red category industries are also conducted to check the consent compliance by the units. Samples of waste water, ambient air and stack emissions are monitored and analyzed in the Board laboratory.

Additionally, inspections in response to public complaints are also conducted as and when required after initially scrutinizing the complaints through the 'Complaint Committee'. The complaints are monitored by inspection, samples are collected and analysed where required and action deemed fit is initiated if required

1.3.3 LEGAL SECTION

The Legal section handles all the legal / Court matters related to the functions of the Board. The matters are filed before the Hon'ble Supreme Court, the Hon'ble High Court, the National Green Tribunal (NGT), the Administrative Tribunal the Appellate Authority under the Air Act and the Water Act and other Lower Courts.

The Personal hearings for industries, Public Hearing (in case of industrial sectors mandating environmental clearance – EC) and matters related to Right To Information (RTI) Act are also looked after by this Section.

Complaints are scrutinized and examined by the legal section before initiating action in the matter. Notices/directions/clarifications are issued to the defaulting units under the Environment (Protection) Act, 1986 i.e. Municipal Solid Waste Rules, Hazardous Wastes Rules, Bio-Medical Rules, E-Waste management Rules, Noise Pollution Rules etc. whenever required to seek compliance for the defaultings.

1.3.4 ADMINISTRATIVE SECTION

The Administrative Section deals with all the administrative matters of the Board trainings and maintenance of office building preparation of agenda and minutes for the Board meetings and subsequent follow up for the implementation of the decisions taken herein for smooth functioning of the Board.

1.3.5 ACCOUNTS SECTION

The Accounts section of the Board deals with all the accounting and financial matters of the Board such as monitoring of Revenue and Expenditures, preparation of Annual Budget and to advise the Board on financial matters in accordance with the Government Rules and Procedures for smooth functioning.

1.3.6. INFORMATION AND TECHNOLOGY

The Information and Technology section provides service to Industry in Online Registration for obtaining various Consents and Authorizations through Online Portal. The entire Board e-governance activities, support for Hardware and Software Infrastructure and troubleshooting are managed and

executed successfully by IT Department. The implementation of Office Automation System by SAP Enterprise Resource Planning for the paperless office is achieved by the Board.

1.3.7 OTHER FACILITIES

1.3.7.1 LIBRARY FACILITIES

The Board has a spacious library of its own on the 3rd Floor. It has varied publications from different departments/institutions, such as MOEF, CPCB, other State Boards' Annual Reports, etc. Scientific, Legal, Accounts and Technical books, ISI Specifications, etc. are also available in the Board library.

1.3.7.2 CONFERENCE ROOM

The Board has a spacious Conference Room with a seating capacity for 40 people. It is fully air-conditioned and has facilities like whiteboard, and overhead projector. All Board Meetings and other important meetings are held in the Conference Room.



CHAPTER 2

CONSTITUTION OF THE BOARD

2.1 CONSTITUTION OF THE BOARD INCLUDING CHANGES THEREIN

The present Board was constituted under the Chairmanship of Shri. Mahesh K. Patil. This Board was constituted vide Order No. 31-9-2017/STE-DIR/Part-I/1060 dated 05/01/2022 and the composition is as given below:-

Chairman

1. Shri. Ganesh Shetgoankar, Deputy General Manager, Excel Crop Care Limited, Mumbai. (w.e. from 26/12/2017 to 06/01/2022 (BN))
2. Shri. Mahesh K. Patil, Former Head Sustainability at M/s. Sesa Goa Ltd (M/s. Vedanta Ltd), Managing Director, M/s. N.V. Eco Agro Tourism Pvt Ltd & Director – ZEAP India (w.e.f. 6/01/2022 (AN))

Members

1. Director, Directorate of Industries, Trade & Commerce.
2. Chief Engineer, Water Resource Dept.,
3. Director, Directorate of Foods and Drugs Administration
4. Chief Inspector of Factories and Boilers
5. Director, Directorate of Health Services.
6. Mr. Shawn Brian Martins, Panch Member, Village Panchayat Calangute
7. Mr. Shubham Chodankar, Corporator, Corporation of City of Panaji
8. Ms. Unnati Sahastrabudhe, Panch Member, Village Panchayat Velguem
9. Shri. Ashirwad T. Khorjuvekar, Councilor, Mapusa Municipal Council
10. Shri. Pradip K. Naik, Councilor, Curchorem Cacora Municipal Council
11. Chairman, Confederation of Indian Industries (Goa Chapter), Goa State Office (Western Region)
12. President, Goa Chamber of Commerce and Industries
13. President, Travel and Tourism Association of Goa,
14. Managing Director, Goa State Infrastructure Development Corporation
15. Managing Director, Goa Waste Management Corporation

Member Secretary

17. Dr. Shamila Monteiro, (w.e.f. 18/07/2018)



CHAPTER 3

MEETINGS OF THE BOARD

3.1 During the year under report, the Goa State Pollution Control Board held five Board Meetings under the reconstituted Board. The details of the meetings held during the year are presented in the Table below:-

Sr. No.	Sr. No. of Meeting	Date of meeting	Venue	No. of members who attended the meeting
1.	147 th	27/05/2021	Conference Hall of the Board	9
2.	148 th	07/09/2021	Conference Hall of the Board	9
3.	149 th	21/12/2021	Conference Hall of the Board	10
4.	150 th	30/12/2021	Conference Hall of the Board	8
5.	151 st	25/02/2022	Conference Hall of the Board	15

3.2 EXTRACTS OF MINUTES OF BOARD MEETINGS HELD DURING THE YEAR UNDER REPORT.

MAJOR DECISIONS TAKEN BY THE BOARD AT ITS MEETINGS HELD DURING THE YEAR UNDER REPORT.

I. The 147th meeting held on 27th May, 2021 at 3.00 pm virtually.

Agenda item no. 3

Follow up action on the decision taken at the 145th meeting of the Board held on 14th October, 2020

Agenda item no. 10 – Member Secretary informed the members that the Board had approved in its 145th Board meeting guidelines for environmental management of dairy farms and gaushalas and its categorization, and per the said categorization dairy farms with 15 animals and above have to obtain Consent to Operate / Establish of the Board under Orange Category and Gaushalas under Green category, However, CPCB Categorization has not categorize dairy farms having less than 15 animals.

Member Secretary further informed the members that the score calculated by the TAC as per the CPCB directions, has arrived at the score of 12, hence the dairy farms below 15 animals can be categorized under White Category.

Members approved for categorization of dairy below 15 animals under White category.

Agenda item no. 18 – Review of approved fuels – Member Secretary informed the members that as approved in the meeting, letter was forwarded to Central Pollution Control Board, for which reply was received dated 24/12/2020 stating that the State of Goa is required to decide on the proposals.

She further informed that the fuel VLSFO has 0.5% sulphur content whereas FO has 4% sulphur content, for which comparative analysis of the two fuels was placed before the Technical Advisory Committee and TAC has recommended for considering VLSFO as approved fuel.

Members approved the proposal so as to forward to the Department of Environment and Climate Change for issue of notification.

Member Secretary further informed the members that time line for changeover was extended by the Department of Environment and Climate Change to 30/06/2021, however, due to the COVID pandemic, request was received from some industries for extension of changeover to approved fuel. Members approved for extension of time.

Agenda item no.19 – Reconstitution of the Panel of Board Advocates –Member Secretary informed the members that the Board had resolved to re-constitute its panel of Advocates that are currently empanelled by the State Government for defending its interest before the Hon. High Court of Bombay at Goa. Further, the Board had engaged the services of Adv. A.V. Pavithram to appear on its behalf and defend its interest before a number of cases pertaining to it in the Hon. High Court of Bombay at Goa on the terms and conditions as stipulated in the 141st Board meeting. Members approved the aforesaid appointment of Adv. Pavithran ex post facto.

Agenda item no. 4

Follow up action on the decision taken at the 125th meeting of the Board held on 28th July, 2017.

Agenda item no. 7- Member Secretary informed the members that the Board had approved categorisation of the industrial sector namely “Poultry, Hatchery and Piggery as per the letter of CPCB dated 19/07/2017.

She further informed that the Board is now in receipt of an email from CPCB dated 11/03/2021, to ensure compliance to NGT order in OA 681/2017 titled Gauri Maulekhi V/s. Union of India & Ors. dated 16/09/2020. The Order states that “Accordingly, we allow this application and direct the CPCB to revisit the guidelines for categorizing the poultry farms as Green category and exempting their regulation under the Air Act, Water Act and the EP Act. The CPCB may issue fresh appropriate orders within three months and in if no further order issued, all the State PCBs/PCCs will require enforcement of consent mechanism under the above Acts after 01.01.2021 for all poultry farms above 5000 birds in the same manner as is being done for farms having more than one lakh birds. Till then, even without such consent mechanism, the State PCB/PCCs may strictly enforce the environmental norms and take appropriate remedial action against the any violation of water, air and soil standards statutorily laid down.”

Member Secretary further informed that CPCB has requested that the final order dated 16/09/2020 of the Hon. Tribunal be implemented in letter and spirit and that the poultry farms operating without Consent to Operate and Establish in violation of the Air Act, Water Act and the Environment (Protection) Act be prosecuted, failing enforcement of environmental norms will amount to contempt of the Court.

After deliberations the Board adopted the order dated 16/09/2020 to consider 5000 birds and above under Green Category of Consent mechanism.

Agenda item no. 05

Revised score calculation for the Sewage Tankers

Member Secretary informed the members that the revised CPCB categorisation was referred to the TAC to calculate the score for sewage tankers. TAC has calculated the pollution index score of 10 and the same has been approved by Member Secretary and Chairman of the Board. Hence this unit can be categorised as White Category. Members approved for the categorisation.

Agenda item no. 06

Units generating effluents more than 100 kld.

Member Secretary informed the members that Central Pollution Control Board categorisation revised in the year 2016 and adopted by the Board, the industries have been classified under RED, ORANGE and GREEN category based on the scores evaluated by them, based on the procedure devised therein.

She further informed that there are only specific sectors in which if the effluents exceed 100Kld, the unit is categorised directly under RED category, which are as under:

1. Airports and Commercial Air Strips
2. Health-care Establishment (as defined in BMW Rules)
3. Hotels having overall wastewater generation @ 100 Kld and more.
4. Railway locomotive work shop/Integrated road transport workshop/Authorized service centers
5. Synthetic detergents and soaps(excluding formulation).
6. Automobile servicing, repairing and painting (excluding only fuel dispensing)
7. Building and construction project more than 20,000 sq. m built up area
8. Fermentation industry including manufacture of yeast, beer, distillation of alcohol (Extra Neutral Alcohol)
9. Non-alcoholic beverages(soft drink) & bottling of alcohol/non alcoholic products
10. Vegetable oil manufacturing including solvent extraction and refinery /hydrogenated oils
11. Parboiled Rice Mills

In case of other sectors, when the wastewater generation exceed 100Kld, an additional score of 10 is assigned to the score under water component as under:

Part B: Score W2: Score based on huge discharges of any kind (Penalty)		
W2	Industry having overall liquid waste generation of 100 Kld or more including industrial and domestic waste water	10

Member Secretary further informed that when the waste water generation of the unit exceed 100 Kld, it would be apparent that the unit is a large scale operation and the procedures adopted by CPCB for the 11 above enlisted sectors be extended to all the industrial sectors, when waste water generation exceeds 100 kld and the units be categorised under RED category.

Members approved for classification under Red Category the units as specified above.

Agenda item no. 7

Harmonization of Classification of Industrial Sectors into Red, Orange, Green and White category

Member Secretary informed the members that CPCB has issued directions under section

18(1)(b) of the Air and Water Acts on 07/03/2016 regarding 'Harmonization of classification of industrial sectors under Red/Orange/Green/White categories', wherein CPCB has categorized 242 industrial sectors into Red, Orange, Green & White categories. Further, the Board is now in receipt of a letter from CPCB dated 12/01/2021, categorising three sectors as below:

- i. Building & Construction Projects having built-up area upto 20000 sq.mtrs. and waste water generation greater than or equal to 50Kld- Orange Category
- ii. Construction and Demolition (C & D) waste processing plants- Orange Category
- iii. Gold Assaying & Hallmarking centres- Orange Category

Members approved for the above categorisation.

Agenda item no. 8

Creation of two posts of Drivers possessing licence for driving Heavy Motor vehicles.

Member Secretary informed the members that the Board has presently one mobile CAAQMS which is used for carrying of monitoring and the same is being driven by the Board Driver, who is also possessing licence for heavy duty driving. She further informed that another mobile CAAQMS has been already handed over after fabrication.

Member Secretary also informed that since the Drivers of the vehicles are recruited for Light vehicle driving, it is proposed to create two posts of Drivers under Heavy Motor Vehicle Driving, for which recruitment rules have been prepared on the similar lines as that of the State Govt. She further informed that on promotion of the two Drivers (LMV), these two posts shall be abolished.

Members approved for creation of two posts of Drivers (HMTV) so as to forward the proposal to the Dept. of Environment for creation of posts.

Agenda item no. 9

Constitution of Committee for empanelment of Vendors for installation, operation and maintenance of STP and ETP plants

Member Secretary informed the members that Chairman, in exercise of the powers vested with the Board under Section 9 of the Water (Prevention and Control of Pollution) Act, 1974, as amended, constituted a Committee to assist the Board for empanelment of Vendors for installation, operation and maintenance of STP and ETP plants, as per the quotes received by the Board.

Members noted the same

Agenda item no. 10

Order passed by the Hon. National Green Tribunal in the matter of O.A 400 of 2017 – Westend Green Farms Society V/s Union of India & Ors.

Member Secretary informed the members that the Hon. National Green Tribunal has passed orders in the matter of O.A no. 400 of 2017, which has been disposed off with State specific instructions to be operative by respective Boards under the mandate of Air / Water and Environment (Protection) Acts.

Members perused and noted the same.

Agenda item no. 12

Condemnation of office vehicles

- I. Member Secretary informed the members that the office vehicle bearing registration no. GA-07-E-4257 – Mahindra Bolero purchased in the year 2011 has completed 09 years on road and has covered 2,28,113 kms, and is presently off road and requires major works to be undertaken pertaining to engine repairs for which an estimate of Rs. 2,28,113/- has been received from the dealer. Since the vehicle has completed more than 1.5 lakh kms, it is proposed for condemnation of the vehicle after obtaining clearance and upset value of the vehicle from the Public Works Department.
- II. Member Secretary also informed the members that office vehicle bearing registration no. GA-07-K2050, Mahindra Quanto which was purchased in the year 2014 has completed 06 years on road and has covered 1,49,915 kms and is presently off road and requires major works pertaining to engine repairs for which an estimate of Rs. 2,24,432/- has been received from the dealer. Since the vehicle has completed approximately 1.50 lakh kms, it is proposed for condemnation of the vehicle after obtaining clearance and upset value of the vehicle from the Public Works Department.
- III. Member Secretary also informed the members that vehicle presently allotted to the Chairman of the Board bearing registration no. GA-07-K-1608 – Honda City SV MT was purchased in the year 2014 and since has completed 6 years and 11 months and has covered 1,20,331 kms till date, it is proposed to condemn the vehicle by auction after obtaining clearance and upset value of the vehicle from the Public Works Department.

Member Secretary further informed the members that the procedure of disposal of condemned vehicle by auction involves public notice to be issued in various news papers which requires additional advertising cost besides administrative charges, as such it was proposed to dispose the above three vehicles by call of quotations from open market once the upset value of the vehicles is obtained from Public Works Department.

Member Secretary informed the members that as regards serial no. (1) and (2) above it is proposed to purchase Maruti Omni vehicles as the same are required for industrial inspections, sample collection / MINARS and ambient air monitoring and for monitoring of public complaints related to water, air and noise pollution. As far as purchase of serial no. (3) vehicle for the Chairman of the Board, guidelines as issued by the State Govt. shall be followed.

Members approved for condemnation of the three vehicles as stated above and approved for purchase of new vehicles.

Agenda item no. 13

M/s Nicomet Industries Limited – filing of Miscellaneous application in National Company Law Tribunal at Mumbai.

Member Secretary informed the members that the unit of M.s Nicomet Industries Ltd was established in 1996 at Cuncolim Industrial Estate, and is presently a Corporate Debtor. The unit was dealing in the manufacture of cobalt metal, Cobalt Sulphate solution and crystals, Cobalt Nitrates solution and crystal, Cobalt Carbonate, Cobalt Acetate solution and crystal, Cobalt Chloride solutions, Cobalt Manganese Acetate solution, Cobalt octave Solution, Cobalt oxide, Nickel sulphate solution and crystals of Nickel metal, Nickel Carbonate, Nickel Oxide, Copper Metal, Sulphate crystal and sodium sulphate crystals.

Member Secretary further informed the members that Corporate Debtor (Original Respondent) has been admitted into Corporate Insolvency Resolution Process vide order dated 14th December 2018 by the Hon. Tribunal and Mr.Devang Sampat was appointed as Interim Resolution Professional (IRP) to carry out the functions as mentioned under IBC.

Member Secretary further informed the members that the Board vide its letter dated 5th March 2020 informed the IRP to comply with the measures stipulated in the Consent condition issued to the Corporate Debtors and fulfil other conditions failing which Renewal of Consent to operate application under the said Act shall be rejected.

She further informed the members that IRP informed the Board that there is a leakage in tank near solvent extraction process at the unit of the Corporate Debtor and showed his inability to rectify the said problem on account of non-cooperation of earlier Management and non-availability of funds from the Committee of Creditors. On the basis of the said complaint, the Board carried out site inspection on 22nd June 2020 at the unit and prepared the site inspection report dated 22nd June 2020 and made the observations of violations of the said Acts by the said unit.

It is on the basis of the site inspection conducted and the observations made in the Report regarding the violations committed under the said Acts and non-maintenance of the unit in accordance with the Rules, it was observed that since the unit has stopped its operations, approx. 1500–2000MT of process waste is laying in the closed shed at Plot no. M- 11. also approx. 80000MT of waste has been disposed in the captive landfill site, which is presently closed with HDPE liner, similarly some waste residue is lying in the main plant area in Plot area Plot No.L-15, 19, &20, Cuncolim Industrial Estate. As the unit has presently stopped its operations, the Board had issued directions to carry out different measures as mentioned below :

- To shift all the material stored outside the premises into closed shed
- To ensure that the chemicals stored in the tank are scientifically neutralised and disposed, either for recovery or recycling through authorised agency
- To carryout scientific closure of the secured landfill site and create an ESCCROW account for the monitoring and maintenance of landfill site
- The process residue stored within Plot no. M- 11 has to be disposed in the secured landfill site before scientific closure of the landfill
- To allot funds for the scientific closure, monitoring and maintenance of landfill site and disposal of process residue stored in Plot no. M- 11 into secured landfill.

Member Secretary informed the members that since the material is placed in dangerous and hazardous manner thereby causing health and safety hazards, the Board issued the above directions under Section 33(A) read with Section 25/26 of the Water (Prevention and Control of Pollution) Act, 1974 and under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, to which the IRP stated his inability to comply with the directives on account of non-availability of funds and informing the Board to approach the Hon. Tribunal for appropriate Directions

Member Secretary further informed the membersthat the IRP has now made an Application bearing I.A No.713 of 2020 under Section 33(1) of IBC, 2016 to the Hon. Tribunal for ordering Liquidation of the Corporate Debtor and appointment of Liquidator to take control over the assets and management of the affairs of the Corporate Debtor and the said Application came to be allowed vide order dated 16th December 2020 and Shri. Divyesh Dessai in this application came to be appointed as the Liquidator to carry out the Liquidation process of the Corporate Debtor.

Member Secretary further informed the members that the Board has decided to approach

the Hon. Tribunal to file Miscellaneous Application No. of 2021 in C.P.NO.619/I&B/MB/2018 before National Company Law Tribunal at Mumbai asking for the following prayers;

- a) This Hon. Tribunal be pleased to issue directions to the Respondent to comply with the Directions dated 9th July 2020, passed by the Applicant-Board.
- b) Any other reliefs as this Hon. Tribunal may deem fit in the facts and circumstances of the case.

Member Secretary informed the members that the Advocate representing the Board has asked for the copy of resolution authorising the Member Secretary of the Board to file the present application before the National Company Law Tribunal at Mumbai., and the Board is now required to :

- Submit a Resolution authorizing the Member Secretary of the Board to file the application before the Hon. National Company Law Tribunal at Mumbai.
- Ex-post facto approval may be granted to appoint Adv. Suraj Dessai Almeida, who is also defending Goa Electricity Department before the Hon. National Company Law Tribunal at Mumbai governed by the following terms and conditions:

Professional Fees payable to the Boards Advocates

*	Fees for appearance before the National Company Law Tribunal at Mumbai Professional fees for each hearing – Rs. 10,000/-(Rupees Ten Thousand only) and for drafting, scrutiny of document of pleading, affidavits, application or any other Miscellaneous application to be filed in the matter and filing Vakalatnama per application is Rs. 25,000/- per case before the National Company Law Tribunal, Mumbai.
*	All bills towards the Professional fees shall be submitted by the concerned Advocate within one month of the hearing in question and shall be accompanied by a Certificate of Appearance issued by the concerned Court in respect of the appearance/Order of the Court indicating the appearance of the Advocate on behalf of the Board.
*	All bills towards the Professional fees shall be submitted by the concerned Advocate shall be accompanied by a Pre-receipt and Revenue Stamp
*	Matters that are being heard together/tagged together for hearing shall be considered as a single hearing and bill for such hearings may be submitted accordingly.
*	The Board will not pay professional fees for appearances made by any other Advocates who appear in any of the Boards matters on behalf of the Boards Advocate.
*	All Board Advocates shall submit a quarterly statement with regard to the status of cases that are handled by them on behalf of the Board along with their specific comments/opinions on the steps required to be taken for their speedy disposal.
*	In the event a case handled by a Board Advocate is decided against the Board; the concerned Board Advocate will be required to immediately submit the Judgment of the Court along with his opinion regarding advisability of filing an appeal/Revision etc. from such decision.
*	The concerned Board Advocate will also be required to inform the Board on disposal of all Board matters handled by him along with copy of the final order Judgment passed by the Court and detailed opinion/instructions on further steps to be taken by the Board.
*	In the event a Court of Law issues any directions for time bound compliance by the Board in a matter concerning it; the Board Advocate is required to immediately send an email message to the Board regarding the same along with a copy of the order passed by the Court as and when obtained

After deliberations the members Resolved as under:

“The Board hereby authorises the Member Secretary of the Goa State Pollution Control Board to file Miscellaneous Application No. of 2021 in C.P.NO.619/I&B/MB/2018 before National Company Law Tribunal at Mumbai against the unit of M/s Nicomet Industries Limited, asking for the following prayers;

- a) This Hon. Tribunal be pleased to issue directions to the Respondent to comply with the Directions dated 9th July 2020, passed by the Applicant-Board.
- b) Any other reliefs as this Hon. Tribunal may deem fit in the facts and circumstances of the case.”

Members also accorded ex-post facto approval for the appointment of Adv. Suraj Dessai Almeida, who is also defending Goa Electricity Department before the Hon. National Company Law Tribunal at Mumbai, as per the terms and conditions stated above under Professional Fees payable to the Boards Advocates.

Agenda item no. 14

Disposal of Hazardous Waste of M/s Sunrise Zinc Ltd., stored at plot no. L-2 Cuncolim Industrial Estate.

Member Secretary informed the members that the unit of M/s Sunrise Zinc Limited, located at Plot no.L-2, Cuncolim Industrial Estate, Cuncolim, Salcete, Goa was involved in production of copper and zinc and brass from brass dross, copper dross and zinc skimmings by solvent extraction process. The unit had stopped its operations from November, 2007 on receiving the suspension order from Hon. High Court in Writ Petition No.376/06. The unit had constructed a landfill as per the recommendations made by Regional Research Laboratory a Central Scientific and Industrial Research Laboratory of Government of India. Once the landfill was exhausted the unit stored the hazardous waste generated above the landfills.

Member Secretary further informed the members that the Board covers the hazardous waste before the monsoons, so also the Board had conducted assessment of the quantity of the hazardous waste stored at the site. It is seen that as per reports, the total quantity available above the ground is approx. 18000m³(considering density as 1.9kg/m³ total above ground will be 32000 tons).So also considering the bottom possible storage of waste the quantity may rise above the quantity mentioned above. The Board ha also carries out sampling of the hazardous waste dumps.

Member Secretary also informed the members that as per the compliance to the Hazardous Waste Management Rules, Common Hazardous Waste Treatment and Disposal Facility (CHWTDF) has to be established and made operational at in Plot No.5 and 5A at Pissurlem Industrial Estate and the said facility is putup by M/s SMS Envirocare in support with Goa Industries Environment Management Association (GIEMA). The Board has also granted Consent to Operate for the CHWTDF. Considering the same, it is proposed to shift the hazardous waste material of M/s Sunrise Zinc Ltd. to CHWTDF.

MemberSecretary pointed out to clause 51 of the MoU between GIEMA and M/s SMS Envirocare “The GIEMA will strive to make available quantum of 25000 MT/annum of landfillabe (DLF)/Landfill after treatment(LAT) (60% of LAT and 40% of DLF) and 15000MT/annum of incinerable waste to CHWTDF. In case the above mentioned quantities of type of waste are not made available the GIEMA will ensure to financially compensate the difference in revenue based on the rates offered

by the M/s SMS Envirocare based on the above quantity assumptions”.

Member Secretary informed the members that the Board direct GIEMA to dispose the waste of M/s Sunrise Zinc. The financial cost as per the approved rates are as follows:

Direct landfill charge is Rs 1850/- per MT+ taxes as applicable, transportation is Rs 5/- per km/MT (both ways) +taxes as applicable,landfill after treatment will be(cost of direct landfill+reagents +re-handling charge @ Rs 150/- per MT +buckling factor + taxes as applicable).

Member perused the Agenda notes and approved to direct GIEMA to dispose the waste of M/s Sunrise Zinc. Further, it was also decided to obtain financial support from MoEFCC and CPCB. It as was also approved that certain funds from the Polluter Pay Principle fees collected be utilised.

Members approved the rates as stated by GIEMA.

Members also suggested to explore the possibility of funding from State Government and Goa Waste Management Corporation for remediation of contaminated sites. It was also decided to recover the expenses incurred from M/s Sunrise Zinc and others.

Agenda item no. 15

Application for Consent to operate under the Air Act and the Water Act from M/s. MK Aromatics Limited located at Survey No 310/1-A, Pernem Municipal Council Solid Waste Management Facility, Pernem Goa for the operation of the waste to fuel plant manufacturing Synthetic Crude Polymer Oil.

Members perused the application of M/s MK Aromatics Limited located at Survey No 310/1-A, Pernem Municipal Council Solid Waste Management Facility, Pernem Goa for Consent to Operate for the operation of the waste to fuel plant manufacturing Synthetic Crude Polymer Oil. Member Secretary informed the members that based on the recommendations of the Technical Advisory Committee, Consent to Operate was granted to the unit for an initial period of six months for the trial operations of the facility.

Members noted and accorded ex post facto approval.

Agenda item no. 16

Application for Consent to Operate under the Air Act and the Water Act from M/s. Biotic Waste Solutions Pvt. Limited located at Plot no. BW-1, Kundaim Industrial Estate, Kundaim, Ponda, Goa for the operation of the Common Biomedical Waste Treatment Facility

Members perused the application of M/s. Biotic Waste Solutions Pvt. Limited, for Consent to Operate Common Biomedical Waste Treatment Facility at Plot no. BW-1, Kundaim Industrial Estate, Kundaim, Ponda.

Member Secretary informed the members that based on the recommendations of the TAC, Consent to Operate was granted to the unit for an initial period of six months for the trial operations of the facility.

Members noted and accorded ex post facto approval.

Agenda item no. 17

Application for Consent to operate under the Air Act and the Water Act from M/s. Ponda Envocare Limited located at Plot no. 5 and 5A, Pissurlem Industrial Estate, Sattari, Goa for the operation

of the secured landfill site for Hazardous Waste.

Members perused the application of M/s. Ponda Envocare Limited, Plot no. 5 and 5A, Pissurlem Industrial Estate, Sattari, Goa for Consent to Operate secured landfill site for Hazardous Waste. Member Secretary informed the members that based on the recommendations of the TAC, Consent to Operate was granted to the unit for an initial period of six months for the trial operations of the facility.

Members noted and accorded ex post facto approval.

III. With the permission of the Chair, the following agenda items were taken up for discussion:

Table Item no.01

Application for Consent to Operate from South Goa District Hospital

Members perused the application of South Goa District Hospital located at Margao for operation of 500 bedded hospital for Consent to Operate under the Air Act and the Water Act. Member Secretary informed the members that based on the recommendations of the TAC, Consent to Operate was granted to the health care unit for an initial period of six months incorporating conditions for compliance.

Members noted and accorded ex post facto approval.

Table item no. 02

Re-commissioning of the 150 Kld Sewage Treatment Plant of M/s Umiya Habitat Co-operative Housing Society at Sancoale.

Member Secretary informed the members that M/s Umiya Habitat Developers had installed 150Kld sewage treatment plant for the society, since the same was not operational sewage was being discharged outside the premises. The Board issued several directions to the builder and the Society, however the same were not complied. Member Secretary further informed the members that the Hon. Minister for Environment had submitted during the Assembly Session that Goa State Pollution Control Board will get the STP operational.

She further informed the members that the STP of the Society was operated and maintained by M/s Arshea Marine, since the agency did not turn up, the Board contacted Mr. Pradeep Sawant who was representing M/s Arshea and working with M/s Deccan Water Treatment Pvt Ltd. on commission basis to provide solutions to the re-commissioning of the STP of M/s Umiya Habitat.

M/s Deccan Water Treatment Pvt Ltd submitted quotation for the re-commissioning of the STP, the total cost including GST being Rs. 22,83,300/- (Twenty two Lakhs eighty three thousand three hundred) which includes additional work of replacement of both the air blowers and increase in blower capacity from 150m³ to 200m³, additional two garden pumps and two treated water shifting pumps with additional standby pumps and piping and fitting along with electrical panels. Ozonator system, flowmeters, level switches, pressure gauges included. The other additional costs includes:

- A. Operation and maintenance cost not included in quotation The same will be additional approximately as below. (operation and maintenance will have to be done through separate vendors as the M/s Deccan water has not quoted/carrying out the O&M work).

- Operation and maintenance cost of the STP: Rs. 55,000/- per month
- Total 6 months of operations:

Total operation and maintenance cost: Rs. 3,30,000/-

- B. Manual Cleaning of aerations, equalisations, treated water tank, sludge drying tanks, oil and grease chamber, settling tank.

Total estimated cost : Rs. 60, 000/-

- C. Cleaning of pumpable sewage through night soil tanker for approx.. 15 tankers

Total estimate of Rs. 3500 per trip of 8000ltrs capacity tank: Rs. 52,500/-

- D. Miscellaneous Civil and mechanical work: Rs. 1,00,000/-

(Manhole cover repairs, bar screening, disposal of silts, welding and fabrication work)

Total: A+B+C+D: Rs. 28,25,800/- (Twenty eight lakhs twenty five thousand eight hundred only)

Member Secretary informed the members that the Board has issued a work order to M/s Deccan Water Treatment Pvt Ltd for the re-commissioning of the 150KLD Sewage Treatment Plant of M/s Umiya Habitat Co-operative Housing Society and that items at A to D stated above will be processed on quotation basis.

Members perused and accorded ex post facto approval. Members also approved for inviting quotations for items at serial no. A to D above.

Table Item no. 03

Empanelment of agencies for installation / maintenance of STP / ETP

Member Secretary informed the members that Hon. Minister for Environment and Climate Change had given assurance in the Assembly that the Board will empanel agencies for installation / maintenance of STP/ETP. The constitution of the Committee was discussed at Agenda item no. 9. She further informed that the Committee has empanelled 15 agencies. The criteria for registration being as follows:

Category of vendor	Total cumulative capacity installed during last 2 years	Registration fees / year	Renewal fee / year
Small	Upto 10 Kld	Rs. 10,000/-	Rs. 5,000/-
Medium	10-25 Kld	Rs. 20,000/-	Rs. 10,000/-
Large	Above 25 Kld	Rs. 30,000/-	Rs. 15,000/-

Members noted the empanelled agencies.

Further, Member Secretary also informed the members that the members of the Committee are required to pay sitting fees. Members approved for an amount of Rs. 1000/- per sitting to the non official members of the Committee, as paid to the Members of the Technical Advisory Committee.

Table item no. 04

Proposal submitted by IIT, Goa on Machine Learning and Sensor Based Network for Continuous Air Quality Monitoring and Prediction.

Member Secretary informed the members that IIT Goa has submitted a proposal to have a

collaborative effort with Pollution Control Board of Goa to have a comprehensive understating of the air quality data across the State by deploying low coast sensor network for more efficient data collection and analysis.

The details as submitted by IIT Goa and elaborated in the Table item were discussed and the Board has accorded in principle approval for the said proposal, pending submission of detailed presentation by Dr.Thaseem Thajudeen, Research Expertise, School of Mechanical Sciences.

Table item no. 06

Environmental Audit of the Fish meal and Fish Processing Industries located in Cuncolim Industrial Estate.

Member Secretary appraised the members of the latest details with regard to the environmental audit carried out by the Expert Committee in respect of the fish meal processing industries at Cuncolim Industrial Estate. The members were also appraised of the penalty payable by these units, so as the submission of the Bank Guarantee by these units.

1. M/s United Marine Products
2. M/s Sagar Feeds & Food Processing Industry
3. M/s Quality Foods
4. M/s Indotech ice and Cold Storage

Further the members were also informed Dr. J. Davithuraj, Scientist 'B', Central Ground Water Board, Belgaum and Mr. Gonsalo Rodrigues, AE, Water Resource Dept., Goa to carry out the ground water quality monitoring study and the dates for inspection are not confirmed due to Covid-19 guidelines.

Member Secretary informed the members that the proposal as prepared by the Officers of the Ground Water Board will be placed before the meeting.

- I. The 148th meeting held on 7TH **September, 2021 at 3.00 pm** in the Conference hall of the Board.

Table Item no.4

Proposal submitted by IIT Goa on Machine Learning and Sensor Based Network for Continuous Air Quality Monitoring and Prediction.

Sr. Environmental Engineer, GSPCB explained the salient points and objectives of the study. After deliberation the members approved the proposal submitted by IIT Goa on Machine Learning and Sensor Based Network for Continuous Air Quality Monitoring and Prediction.

Agenda item no. 3

Appointment of Public Information, Assistant Public Information Officer and First Appellate Authority under the RTI Act.

Member Secretary informed the members that with the promotion of the Senior Law Officer to Law Officer and Assistant Law Officer to Senior Law Officer there is a need to revise the order of appointment of the Public Information Officer and Assistant Public Information Officer for dealing with the matters under the Right to Information Act, 2005.

Accordingly, the following officials be designated to act as First Appellate Authority, Public

Information Officer and Assistant Public Information Officer.

First Appellate Authority	Member Secretary, GSPCB
Public Information Officer	Law Officer
Assistant Public Information Officer	Senior Law Officer

Members approved the same.

Agenda item no. 7

Applications for Fly ash export, transport & disposal facilities.

Member Secretary informed the Board Members that the Board received directions under Section 18(1)(b) of the Water (Prevention & Control Of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981 has classified Fly ash export, transport & disposal facilities under GREEN Category.

Member Secretary further informed that the Board grants consents to industries/establishments on submission of Village Panchayat NOC in case the unit is outside the industrial area. Since the activity of Fly ash export, transport & disposal facilities is not a stationary activity, the Board may consider the NOC of the panchayat for unit generating fly ash in case the unit is outside industrial area and the NOC of the panchayat of the disposal facility in order to grant consent for the said activity.

Members on due deliberation agreed to the proposal.

Agenda item no. 8

Guidelines for Environmental Management of Dairy farms and Gaushalas.

Member Secretary informed the Board Members that the Board had received guidelines for environmental Management of Dairy farms and Gaushalas dated July 2020. The said guidelines, based on the NGT order in OA No 46/2018 were approved in its 145th Board meeting held on 14/10/2020.

Further the Member Secretary informed that the Board is in receipt of Revised guidelines for environmental Management of Dairy farms and Gaushalas dated July 2021.

The salient features of these guidelines are as follows:

- a) Guidelines for Dairy operating in Urban and Peri-Urban Areas
- b) Guidelines for Dairy operating in Rural Areas
- c) Guidelines for Gaushalas
- d) IS Standard-Recommendations for loose Housing System for Animals.
- e) IS Standard – Recommendations for Cattle Housing In Rural Areas
- f) IS standard- Recommendations for Gaushala and Other Organized Milk Producers

Members perused the same and decided to adopt the said revised guidelines based on the Hon. NGT and also stated that the Board may write to Department of Environment for Notification of the said guidelines.

Agenda item no. 9

Addendum to guidelines for setting up of New Petrol pumps.

Member Secretary informed the Board members that in compliance to NGT order in OA No 86/2019: gyanprakash@pappusingh v/s Gol & Ors. Central pollution Control Board had framed guidelines for setting up of New Petrol pumps. The same were approved in 145th Board meeting held on 14/10/2020

Member Secretary informed that the Board is in receipt of Addendum to guidelines for setting up of New Petrol pumps. The Hon'ble NGT vide orders dated 23/07/2020 and 09/10/2020 in the matter of Suresh Mandaloi v/s. State of M. P. &Ors. (O.A. No. 61/2019 (CZ), directed MoEF& CC and CPCB to submit report with regard to the minimum distance from water bodies to the petrol pump.

After due deliberations the members decided to request Central Pollution Control to come up with guidelines w.r.t the setting up of petrol pumps in the vicinity of port areas for smooth operation of vessels as the storage tanks for these pumps will be very close to the water.

Further the members approved the implementations of the guidelines and also to send the same to Department of Environment for Notification of the said guidelines.

Agenda item no. 10

Guidelines for Utilization of Treated Effluent in Irrigation.

Member Secretary informed the Board members that the Hon'ble NGT (Principal branch, Delhi) had directed CPCB vide order dated 26/09/2019 in the matter of OA No 348/2017, Shailesh Singh V/s Al-Dua Food Processing Pvt. Ltd to circulate the "Guidelines for Utilization of Treated Effluent in Irrigation to all SPCBS/PCCS, which are required to be followed in every Consent to Establish as a condition for use of treated effluent in irrigation.

Members approved the implementations of the guidelines and also to send the same to Department of Environment for Notification of the said guidelines.

Agenda item no. 11

Environmental Guidelines for poultry Farms as per order passed by Hon'ble NGT on 16/09/2020 in the matter of OA No 681/2017: Gauri Maulekhi Vs Union of India &Ors.

Member Secretary informed the Board members had earlier approved in its 125th Board meeting held on 28/07/2017 wherein Poultry, Hatchery and Piggery were classified in GREEN category having birds of one lakh and more and the guidelines issued for the poultry farm by CPCB.

Thereafter based on OA No 681/2017: Gauri Maulekhi Vs Union of India &Ors. Board in its 147th Board meeting had approved for 5000birds to be under the Consent management and to be granted consent under Green category.

Member Secretary informed that the Board is in receipt of revised Environmental Guidelines for poultry Farms for implementation.

Members approved the implementations of the guidelines and also to send the same to Department of Environment for Notification of the said guidelines and also to forward the guidelines to Department of Animal Husbandry and Veterinary Services to seek their views and then forward to Central Pollution Control Board.

Agenda item no. 12

Categorisation of cycle/motorcycle track.

Member Secretary informed the Board members that the Central Pollution Control Board has categorised the industries based on scores. The industries which are not categorised score is required to be calculated for such industries and approved by the Board. The activity of cycle/motorcycle track is not specifically categorised. The score is calculated for the activity and the details were placed before

TAC and the score calculated was 10.

After due deliberation members agreed to categorise these activity in white category.

Agenda item no. 13.

Guidelines for Carcass Disposal.

Member secretary informed the Board members that the Board was in receipt of Guidelines for carcass disposal prepared in compliance of the NGT matter in OA No 465/2019 for implementation. She further informed that these guidelines were forwarded to Department to Urban Development, Directorate of Panchayat and Animal Husbandry Department.

Members agreed to the same and also stated that the Board may write to Department of Environment for Notification of the said guidelines.

Agenda item no. 14

Guidelines for Management of Sanitary Waste.

Member Secretary informed the Board members that the Central pollution Control Board has issued the Guidelines for Management of Sanitary Waste in May 2018.

Member Secretary informed the Board Members that Department of Urban Development has installed two incinerators one at Ponda and other at Cuncolim Municipality. Further one is coming up in Bicholim.

After due deliberation, the member approved for implementation of these guidelines and also to write to the Department of Environment for notification. Further to also take up the matter with Central Pollution Control Board to ensure that units manufacturing Sanitary pads/diapers to fund for installation of incinerators under as EPR policy.

Agenda item no. 15

Guidelines for Piggery Units.

Members decided to adopt the said guidelines and also stated that the Board may write to Department of Environment for Notification of the said guidelines and to forward the same to Department of Animal Husbandry and Veterinary Services.

Agenda item no. 16

Polluter Pays Penalty.

Member Secretary informed the Board members that the Board levies penalty for operating without consent of the Board, for environmental pollution, exceedance in ETP/STP parameters, Stack parameters and Ambient parameters. The Board had approved the fine in its 138th board meeting held on 29/03/2019. Thereafter the penalty was revised in its 139th Board meeting held on 08th May 2019.

The Board in its 144th meeting held on 06/07/2020 approved to levy the penalty based on the In-house report on Methodology for Assessing Environmental Compensation and Action Plan to utilize the funds based on the NGT Order in OA No 593/2017 dated 19/02/2019.

The Board was then in receipt of Environmental Compensation in view of the NGT order in OA No 573/2017 dated 21/09/2020 and 22/02/2021.

Member Secretary informed that Central Pollution Control Board has sought comments of the Board w.r.t these new guidelines.

Members stated to circulate the guidelines to various association to seek their views and comments. Further a work shop for the association needs to be conducted to create awareness.

Agenda item no. 22

Request from M/s South West Port Ltd for relaxation on monthly handling caping on coal/coke within overall permissible quantity of 5.5MMTPA.

Member Secretary informed that the Board is in receipt of request from M/s South West Port Ltd for the relaxation in monthly Coal /coke handling with leverage in monthly handling for monsoon season and fair season. Board had granted consent and amendment to the unit to have 10% leverage on monthly handling of coal/coke for the fair season from October to May and there was no leverage on monthly quantity from June to September during monsoon season.

Now unit has requested permission for leverage in monthly quantity of handling maintaining the total quantity of 5.5 MMTPA.

- i) Upto 20-25%leverage during the fair season for the month of October to may from the current 10%
- ii) Upto 10% leverage in the monsoon month of June to September from no leverage.

After deliberation members agreed to grant 10% leverage during the monsoon months while maintaining the conditions imposed in the previous Consent for coal/coke handling in the fair season and limiting the total coal/coke handling to 5.5 MMTPA.

Agenda item no. 23

Follow up action on the decision taken at the 147th meeting held on 27/05/2021
Table item no. 6.

Environmental Audit of the Fish meal and Fish Processing Industries located at Cuncolim Industrial Estate.

Member Secretary requested the Sr. Environmental Engineer, GSPCB beng the delegated Authority for Orange category to brief the members in the matter.

Sr. Environmental Engineer informed the Board Members that the Board had issued Show Cause notices to the units namely; M/s. Indotech Ice & Cold Storage, M/s. Quality Foods, M/s. Sagar Feeds & Food Processing Industries, M/s. United Marine Products, as to why polluters pay penalty should not be levied.

As per the pollutes pays penalty calculated earlier the no. of days taken for calculation was w.e.f. the date of Consent to Operate. In the reply to the Show Cause Notices the units clarified w.r.t the date on which the bore wells were installed and hence the PPP were revised.

Members approved to levy the revised fine to M/s. Indotech Ice & Cold Storage, M/s. Quality Foods, M/s. Sagar Feeds & Food Processing Industries and take decision on M/s. United Marine Products PPP based on clarification submitted by the unit as the unit had yet to submit certain documents.

Agenda item no. 24

Complaint from Dr Damodar Goankar against grant of renewal of consent to operate to M/s Chowgule and Co wet Beneficiation Plant at Costi.

Member Secretary informed that the Board was in receipt of complaint from Dr. Damodar Goankar against grant of renewal of consent to operate to M/s Chowgule and Co (TC NO.12/1957,22/1950,38/1951 at Costi Kalay Sanguem Goa and VD Chowgule (TC nos.40/1950,16/195 Costi Kalay Sanguem Goa) by Board without the unit submitting the NOC from the local panchayat for obtaining the consent. The second objection was pertaining with regards to grant of consent to operate under water and air act to the wet beneficiation plant at costi and washing plant and screening plant at Dudhal without the unit submitting the NOC from the local panchayat.

Accordingly the complainant Dr. Damodar Goankar , M/s Chowgule and Co, VD Chowgule, Directorate of mines and Geology,VP Kalay and VP Savordem were called for personal hearing on 10/2/2021 and 26/03/2021.After hearing all the parties the Hon'ble Chairman of the Board passed the order dated 24/05/2021.Copy of order passed by the Honb'le Chairman of the board is attached. In the said order with regards to revocation of consent, the Honb'le chairman ordered that the said decision will have to taken by the member secretary of the board as per the delegation of power.

Subsequently, complainant Dr. Damodar Goankar submitted letter dated 14/06/2021 requesting to revoke the renewal of consent to operate issued by the board for the wet beneficiation plant stating that the same is in violation of the supreme court direction dated 7/02/2018 in Goa foundation matter.

As per the delegation of power the Member Secretary Obtained comments from the technical sections and was of the following opinion:

With regards to the order dated 24/05/2021 issued by the Hon'ble Chairman of GSPCB, where in it is mentioned that any revocation or withdrawal of consent and alleged violation or withdrawal of consent shall have to be decided by the Member Secretary of the Board and the alleged violation of supreme court order by grant of consent to operate by GSPCB to the afforested unit shall have to be addressed by Member Secretary "In this regards I have sought details from the technical section and it has been brought on records that the wet beneficiation plant of M/s Chowgule and Co has a valid consent upto15 /05/2025 and is outside the mining lease and hence not within the preview of the supreme court order. This renewal is considered as it had a valid consent to operate upto 15/05/2020 and the unit had applied well in advance for the renewal of the consent before the expiry. This may be brought to the notice of the board if required, as based on the delegation of Power the red category for renewal is granted by Member secretary on approval of Chairman and the CTE and CTO for the first time with the approval of the Board."

Members deliberated on the matter and it was opined by Mr. Sanjay Naik, Board member that mining does not need NOC from local authority as it was going on for more than 60 years. Further NOC is required for construction purpose for which the company is having NOC for their washing plant w.r.t the Beneficiation plant it is outside the lease area and is very old more than 60 years.

Members approved and ratified the Consents issued.

Table item no. 1

Judgment dated 28/06/2021 passed by the High Court of Bombay at Goa in WP/1096/2021 filed by Shiva Petrosynth.

After deliberation on the Judgement dated 28/06/2021 of the Hon High Court of Bombay at Goa passed in the matter of WP/1096/2021 and the Agenda placed before it; the Board has decided

to request its Advocate that has appeared on its behalf to tender an opinion as to whether the Board can prefer an appeal against the said Judgement before the Hon Supreme Court of India. On receipt of the opinion the Board authorizes the Member Secretary to prefer the necessary appeal if so opined by the Advocate or if the advocate does not recommend filing of an appeal; the Board should ensure compliance with the Judgement of the Hon High Court.

Table Item no. 4

Proposed additional works of de-silting and cleaning of rivulet of River Sal.

Member Secretary informed that the Board is in receipt of a letter from Captain of Ports (Captain of Ports) seeking permission for desilting of rivulet of river Sal passing through the villages of Sirlim-Dramapur of Salcete Taluka in a stretch of 2.5Kms in length, 2.3mtrs in depth and 12mtrs wide.

The Board then issued letter to the CoP seeking clarification as follows: full project report giving all details regarding Air, Water and Soil pollution measures to be adopted for prevention etc

Captain of Ports vide letter dated 09/09/2021 has submitted reply enclosing the Marine Environmental Impact Assessment Report for proposed desilting of river Sal and states that the stretch of river Sal is in a dilapidated and silted condition thus creating pollution, stagnation due to non-tidal effects

After due deliberation the members approved to grant NOC to the Captain of Ports for the said work with a direction to abide by all the conditions stipulated in the Marine Environmental Impact Assessment Report for environment management plan for indentified environment risk and submit compliance to the Board and to take all other permissions as required to undertake the said work prior to the commencement.

The meeting ended thanks to the Chair.

THE 149th MEETING HELD ON 21st, December, 2021 AT 3.00 pm IN THE CONFERENCE HALL OF THE BOARD.

Agenda item no. 3

Harmonization of classification of Industrial Sectors into Red, Orange, Green and White Categories-reg.

Member Secretary informed the members that the Board is in receipt of detailed categorization of 'Compressed Biogas (CBG)/Bio-CNG plants' and 'Household bio digesters /gobar-gas (cow-dung) plants based on biodegradable waste, etc.' from Central pollution Control Board vide email dated 28/09/2021.

As per the categorization the Compressed Biogas (CBG)/Bio-CNG plants' and 'Household bio digesters/gobar-gas (cow-dung) plants based on biodegradable waste is categorized as follows:-

- a) CBG plants based on Municipal Solid Waste (MSW) - **Orange category**. If discharge of waste water is less than 100 Kld and more than 100 Kld **Red Category**
- b) CBG plants based on process waste (industrial/process liquid effluent & solid waste like press mud, organic sludge, molasses etc.) - **Orange category**. If discharge of waste water is less than 100 Kld and more than 100 Kld **Red Category**
- c) CBG plants based on crop residue (paddy straw/wheat straw/corn sweet sorghum/ Napier grass, etc.) - **Green category**. If discharge of waste water is less than 100 Kld and more than 100 Kld **Orange Category**
- d) CBG plants based on animal waste (dairy farms, poultry farms and other animal waste -

Green category. If discharge of waste water is less than 100 Kld and more than 100Kld

Orange Category

- e) CBG plants (irrespective of the type of feed) producing fermented organic manure (FOM) & Liquid Fermented Organic Manure (LFOM) as by-products – **White category**
- f) Household bio-digesters/gobar-gas (cow-dung) plants based on biodegradable wastes etc. – **White category**

After deliberation members decided to accept the categorization as above.

Agenda item no. 5

Delegation of powers – change in designation consequent to promotion of Officers

Member Secretary informed the members that the Board vide its 135th meeting, 141st and 145th meeting had delegated powers to its officers in terms of the provisions of section 15 of the Air (Prevention and Control of Pollution) Act, 1981 and section 12 (3-B) of the Water (Prevention and Control of Pollution) Act, 1974.

The Officers delegated the powers have been nominated by name have been promoted to the higher grade. As such the delegation of powers need to be amended as per the promotional post of the Officers/ allotted additional responsibilities..

After deliberation the members have decided that the delegation of powers to the officials of the Board as decided in its 135th meeting, 141st and 145th meeting be read as follows:-

Environmental Engineer	Powers delegated to Environmental Engineer shall be read as Senior Environmental Engineer
Senior Law Officer	Powers delegated to Senior Law Officer shall be read as Law Officer.
Scientist “C”	Powers delegated to Scientist “C” shall be read as Scientist “D”.
Office Superintendant	Powers delegated to Office Superintendant shall be read as Administrative Officer.
Network Engineer	Powers delegated to Network Engineer shall be read as Assistant Engineer (IT)

Agenda item no. 6

Approval of the Budget Estimates for the financial year 2021-22 and Revised Estimate for the financial year 2020-2021 of the Goa State Pollution Control Board its 135th meeting, 141st and 145th meeting

Member Secretary informed the members that As per section 38 of the Water (Prevention and Control of Pollution) Act, 1974, the Budget Estimate for the financial year 2021 – 2022 and Revised Estimate for the financial year 2020-2021 prepared in Form VI and VII, prescribed in Rule 31 has been prepared and placed before the Board for approval.

Members perused the Budget Estimates for the financial year 2021-22 and Revised Estimate for the financial year 2020-2021 and approved the same.

Agenda item no. 8

Solid Waste Management Facility at Cacora Village, Quepem Taluka – Reg. Buffer Zone.

Member Secretary informed the members that Government of Goa through Goa Waste

Management Corporation (GWMC) is setting up 100 TPD Solid Waste Management Facility (SWMF) in the land bearing survey no. 167,168/1,168/2 & 169 of Cacora Village Quepem Taluka.

GWMC has obtained Environmental Clearance (EC) for setting up 100 TPD SWMF at Cacora from Goa State Environmental Impact Assessment Authority (GSEIAA) ref. no. 3-181-2010/STE-DIR/69 dated 22/01/2018.. The GWMC has also obtained Consent to Establish from this Board for “Integrated Solid Waste Management Facility having capacity of 100 tons/day with 10 TPD capacity of sanitary landfill and bio-gas plant of capacity 0.3 - 0.4MW”, ref. no. 5/6307/18-PCB/CI-4106 dated 07/05/2018.. GWMC has submitted application for renewal of CTE and same is under process.

Curchorem-Cacora Municipal Council (CCMC) vide letter date 23/11/2021 had informed this office that CCMC has conveyed a special meeting on 26/11/2021 to discuss and to decide on the buffer zone for SWMF at Cacora. CCMC had requested to depute Board staff to brief the Council about the said matter. Accordingly the Board staff briefed CCMC regarding the “Guidelines on the provision of Buffer Zone around Waste Processing and Disposal Facilities” in the special meeting held on 26/11/2021. It was informed to the Council that as per the guidelines ideally a distance of 500 mtrs should be maintained as the Buffer Zone, however on case to case basis a distance of minimum 200 meter from the Solid Waste Processing and Disposal Facility can be considered subject to the condition that such facility meets the stipulated standards prescribed by State Pollution Control Board.

CCMC vide letter dated 08/12/2021 has forwarded the minutes of the Special Meeting held on 26/11/2021. It is informed that Council has resolved that the Buffer Zones should be freezed taking into account that no nearest standing structure to the Solid Waste Management facility at Cacora i.e. dwelling units or the land of Govt. Polytechnic College comes within the Buffer Zone. The Council also resolved the Buffer Zone as proposed under should be forwarded to the Goa State Pollution Control Board for freezing the buffer zone.

Sr No	Approx distance from Core activity	Direction
1	50	South
2	50	South West
3	120	West
4	50	North
5	200	North East

The proposed site for setting up of SWMF was basically waste dumping site and it is mentioned that dumping was waste at the site was practiced from 1989. Later the land was acquired by Curchorem-Cacora Municipal Council in 2011 and further the land was handed over to Department of Science and Technology in 2014. Thereafter the site was considered for setting up of Solid Waste Management Facility in 2017 and public hearing for the same was held at site on 14/11/2017. It is mentioned that the dwellings and educational institute in the vicinity of the SWMF were existing much before the Government had taken decision to set up the SWMF.

The Regulatory Framework under “Guidelines on the provision of Buffer Zone around Waste Processing and Disposal Facilities” quotes Provisions related to Buffer Zone specified in the “Solid Waste Management Rules, 2016” mentioned as under;

Schedule I (A) (ix)-A buffer zone of no development shall be maintained around solid waste processing and disposal facility, exceeding five tonnes per day of installed capacity. This will be maintained within the total area of the solid waste processing and disposal facility. The buffer zone

shall be prescribed on case to case basis by the local body in consultation with concerned State Pollution Control Board.

Separation Distances for Solid Waste Processing and Disposal Facilities under “Guidelines on the provision of Buffer Zone around Waste Processing and Disposal Facilities” states as under:

Ideally, a distance of 500 meter from the boundary of the Solid Waste Processing and Disposal Facility (sanitary landfill) should be maintained. However, on case to case basis a distance of minimum 200 meter from the Solid Waste Processing and Disposal Facility (sanitary landfill) can be considered subject to the condition that such facility meets the stipulated standards prescribed by State Pollution Control Board with respect to ambient air as well as for stack emissions.

The following technological interventions have been proposed in the Solid Waste Management Facility for odour, emission control and effluent management.

- 1) Double Door system for tipping floor coupled with Bio-filters
- 2) In feed Bunker system instead of open tipping floors
- 3) All waste to be handled and stored in enclosed sheds
- 4) Two digester tanks to facilitate treatment of waste during maintenance
- 5) Solar drying shed for compost and RDF moisture removal & storage shed
- 6) Effluents treatment Plant for treatment of effluents

As mentioned in the minutes of meeting of CCMC that the Dwellings and other structures were existing prior to acquisition of land by the Government for setting up the SWMF at Cacora and considering the fact that the SWMF is been setup on the land which is reclaimed after remediation and disposal of old waste dumped at site, the buffer zone as proposed by CCMC may be considered.

After deliberation members accepted the proposal submitted by the Curchorem-Cacora Municipal Council (CCMC) with regard to amendment of buffer zone for the Solid Waste Management facility at Curchorem Cacora. Further it was observed that the Consent to the Solid Waste Management facility has expired and while granting the renewal for the grant of Consent to Establish the above conditions should be prescribed.

Agenda item no. 10

Representation from M/s Adani Mormugao Port Terminal Ltd. (AMPTL) for export of Metcoke.

Member Secretary informed the members that the he Board is in receipt of a request from M/s Adani Mormugao Port Terminal for export of coke instead of import. It is submitted that they have been approached by M/s Vedanta for their export of met coke by unloading of coke from the barges using berth no.7 cranes and loading into the mini bulk carrier. It is submitted that the coke of approximately 8000 MT will be transported via barges from Vedanta Amona Plant at the berth no.7 and the barge and mini bulk carrier will be parked parallel and then by using AMPTPL berth crane the coke will be unloaded into the mini bulk carrier. The loaded cargo will be transported to Hazira Port in Gujarat.

The unit has proposed Environmental measures to be taken are installing tarpaulin sheet between the barge and Mini Bulk Carrier along the crane path so as to avoid any spillage in water, mist cannon will be used during the handling further the operations will be monitored for wind speed and the operations will be stopped at higher wind speed as per the Consent conditions. Further, the unit submitted that coke will be in lumpy in nature and will contain 8-10% moisture. It is submitted that handling will reduce the road transportation through trucks. The representation was placed in the

TAC and TAC recommended to considered the proposal with air pollution control measures. It was also recommended that the quantity handled should be within the consented quantity.

After deliberation members decided that the proposal be approved within the consented limits as per the permitted capacity.

Agenda item no. 11

Categorization of activities of hair cutting saloon, beauty parlour, massage parlour and spa

Member Secretary informed the members that the Central Pollution Control Board (CPCB) has revised categorization in the year 2016 in which various sectors are categorized industries based on scores. However, some of the sectors are not specifically categorized therein, and CPCB in the said categorization has mentioned that the score for any particular sector of industry be calculated based on the procedures specified therein, and the same should be vetted by the technical committee and approved by the Board.

The present proposal is that of the activity of hair cutting saloon, beauty parlour, massage parlour and spa. Based on the procedures stipulated by CPCB, the score was calculated as under:

Referring to the revised CPCB categorization, the pollution index score is evaluated

as under:

1. Water Pollution Score (W)			
Scores	Waste Water Category	Value	
Score on W1	W16	12	
Score on W2	-	0	
Water Pollution Score = W1+W2			12
2. Air Pollution Score (A)			
Scores	Air Pollutant Category	Value	
Score on A1	-	-	
Score on A2	-	0	
Air Pollution Score = A1+A2			0
3. Hazardous Waste Score (HW)			
Score	HW Category	Value	
HW	-	-	-
Grand Total = W + A + HW			12

Industrial sectors having Pollution Index score of 60 and above – Red category
 IndustrialØ Sectors having Pollution Index score of 41 to 59 –Orange category
 IndustrialØ Sectors having Pollution Index score of 21 to 40 –Green category
 IndustrialØ Sectors having Pollution Index score incl. & upto 20 –White category

Since the unit is having pollution index score of 12, the unit is categorized under **WHITE** category.

The proposal was placed before Technical Advisory Committee and the Committee has recommended for considering the activity under **WHITE** category.

After deliberation members decided to accept the recommendation of the Technical Advisory Committee for categorisation of activities of hair cutting saloon, beauty parlour, massage parlour and spa in white category and forward the same to Department of Environment and Climate Change for issue of Notification.

Agenda item no. 12

Application for Consent to Operate under Air and water Acts from M/s Hindustan Waste Management Pvt. Ltd. (SWMF at Calangute – Saligao)

Member Secretary informed the members that the Board is in receipt of application for Consent to Operate under the Air Act and the Water Act from M/s Hindustan Waste Treatment Pvt. Ltd. (Solid Waste Management Facility, Calangute – Saligao) located at survey no. 47/1 (P) of Calangute Village, Bardez Goa for expansion of the facility i.e increase in capacity from 150 tons/day to 250 tons/day (+ 20% extra capacity)

Name of the unit	M/s Hindustan Waste Treatment Pvt. Ltd. (Solid Waste Management Facility Calangute – Saligao)
Location of the unit	Survey no. 47/1 (P) of Calangute Village, Bardez Goa
Proposal	Increase in capacity from 150 tons/day to 250 tons /day (+20%) extra capacity
Water requirement	450 Kld
Waste water generation and mode of treatment	Waste water (approx. 400 Kld) from the process, floor washing and domestic waste water will be treated in the ETP of capacity 600 Kld. Floor washing from the dry waste handling shed will be treated in the existing ETP of capacity 100 Kld. Treated water will be reused for gardening
Air emissions and control measures	Air emissions will be from the biogas based generator sets which will be let out through stacks of adequate heights The provision of flare stack has been made for the flaring of the excess gasses if required. The provision of double door system for the wet waste bunker area has been provided with air blower and filter arrangement for the control of odour
Solid waste generation and mode of treatment and disposal	The total waste received considering maximum waste handling capacity will be 120 TPD of dry waste and 180 TPD of wet waste. The dry waste will be further segregated as recyclables, RDF and inert waste. Recyclables will be disposed through authorised recycling industries, inert waste will be disposed into the sanitary landfill within the premises and other waste shall be disposed as RDF by co-processing in the cement factories. Wet waste shall be treated in the fermenter tanks to generate biogas while the sludge /dry fraction can be disposed as compost
Hazardous Waste	0.1 MT/annum of Used oil to be disposed through the authorised recyclers

The application for consent to operate under the Air Act and Water Act for the for operation of the 250TPD (+20%) Integrated Solid Waste Management facility was placed before Technical Advisory

Committee on 14/12/2021 and the committee has recommended for grant of consent to operate for a period of six months for the trial operation of the unit. Further it was informed that the Consent has been granted to the unit for trial operation for 6 months.

After deliberation members decided to grant Ex-post-facto approval for the Consent issued to Operate the Solid Waste Management facility at Calangute, Saligao for a period of 6 months for trial operation of the unit.

Agenda item no. 15

Environmental Audit of Hazardous Waste Captive Incinerator of M/s Deccan Fine Chemicals (India) Private Limited

Member Secretary informed the members that an Environmental Audit of M/s Deccan Fine Chemicals (India) Private Limited was carried out by the Expert Committee consisting of Prof. Manjare and Prof. Halan Praksah (from BITS Pilani – Goa Campus) officials of the Goa State Pollution Control Board (GSPCB) and Mr. Rane (Waste Management Consultant) on 17/12/2020.

Based on the site observations and the documents provided by the industry and also the available records of the GSPCB, the audit report was prepared. The audit team observed that the unit had carried out modification of the Liquid waste Incinerator – I by removal of the Waste Heat Recovery Boiler and introduction of the quench to cool the hot glue gases without permission / information to the GSPCB. Effluent Treatment Plant operation was observed to be in line with the requirements. It was recommended that the treated effluent be analyzed for total dissolved solids to recycle the permeate in the existing idle Reverse Osmosis Plant and explore the use of this treated effluent for cooling tower make up and also replenish the captive lake water. The audit report further recommended that the condition for Zero Discharge Policy be made applicable for the unit.

Thereafter, based on the report of the Expert Committee, the GSPCB vide letter dated 14/06/2021 sought clarification from the unit with regards to the observations and recommendations made in the Audit report.

The unit vide letter dated 24/06/2021 submitted the clarifications as sought by the Audit team. The submissions were thereafter shared with the Audit team. Based on the comments received from the audit team members, GSPCB again sought clarifications from the unit vide letter dated 05/11/2021.

The unit in reply to the GSPCB letter submitted vide letter dated 15/11/2021, provided details of the quantum and quality of the reject from the desalination plant, clarified regarding the modifications carried out to the incinerator process and also requested not to alter the water consumption and effluent discharge quantities.

As proposed, the observations made in the Audit report, the clarifications submitted by the industry and the subsequent comments of the audit team members were placed before the Technical Advisory Committee on 14/12/2021 who recommended that the report be placed before the Board for decision on the subject matter.

After deliberation members decided that as per the recommendations made by the Audit team, the unit should be directed to submit action plan to gradually reduce water consumption and waste water generation. Also a period of 10 year may be granted to achieve zero discharge policy.

Agenda item no. 16

Request for inclusion of additional fuel LSHS Premium (1.5% Sulphur) in the list of approved fuels

Member Secretary informed the members that the Board is in receipt of a direction from Central Pollution Control Board to notify the Approved Fuels as per Section 2 of the Air (Prevention and Control of Pollution) Act, 1981 (no. 14 of 1981). The Board had perused the Approved Fuels of Rajasthan pollution Control Board, Delhi Pollution Control Committee and Gujarat Pollution Control Board. The Board has then formulated a list of approved fuels which is placed below for approval.

LIST OF "APPROVED FUELS"

1.	Coal with low sulphur (Less than 0.4%)
2.	Coke/Lignite
3.	LDO/LSHS
4.	Petrol (BS-IV with 50ppm Sulphur with effect from April1,2010 and BS VI with 10ppm Sulphur vide Government of India GSR 889 (E) dated September 16,2016 to be implemented w.e.f. 01/04/2020)
5.	Diesel (BS-IV with 50ppm Sulphur with effect from April1,2010 and BS VI with 10ppm Sulphur vide Government of India GSR 889 (E) dated September 16,2016 to be implemented w.e.f. 01/04/2020)
6.	Aviation turbine Fuel
7.	Liquid Petroleum Gas (LPG)
8.	Compressed Natural Gas (CNG)/LNG
9.	Kerosene
10.	Naphtha
11.	Firewood/ Dung cake
12.	Bio-gas
13.	Agro waste/bio fuel/briquettes
14.	RDF, as per the provision of Solid Waste management Rules, 2016
15.	Charcoal
16.	Hydrogen/Methane

The same was approved in the 142nd Board meeting and circular was issued by the Board on 29/05/2020. The Board forwarded the circular to Department of Environment & Climate Change for notification. The Notification was issued on 18/06/2020 for approved fuels and ban of Petcoke and furnace oil on 22/06/2020. As per the notification the industries are required to change from petcoke. furnace oil to natural gas or approved fuels by 31/12/2020.

The Board is now in receipt of proposal from Hindustan Petroleum Corporation for inclusion of the **LSHS Premium (1.5% Sulphur)** in the list of approved.

The proponents presented before TAC on 22/11/2021 and the committee has recommended for inclusion of the said fuel in the list of approved fuels.

Members decided to accept the recommendation of the Technical Advisory Committee for inclusion of the said fuel in the list of approved fuels and forward the same to Department of Environment and Climate Change for issue of Notification.

Table item no.1:

Member Secretary informed the members that the Hon'ble National Green Tribunal in OA no.

804/2017, in the matter of Rajiv Narayan & Anr V/s. Union of India and others, the Central Pollution Control Board has directed the Board to expedite the conducting of Environmental Audit of Captive TSDFs available in the State and submit the audit Report to Central Pollution Control Board.

In this regard the Board has carried out the Environmental Audit of Captive TSDFs namely M/s. Nicomet Industries Limited and M/s. Deccan Fine Chemicals (India) Pvt. Ltd.,

After deliberation members decided that the Board should direct the units to comply with the observations made in the Audit Report.

Table item no. 2:

Member Secretary informed the members as follows:-

Sr.No	Name of the unit	M/s united Marine Products
1	Location of the unit	Plot No L-28,Cuncolim Industrial Estate , Cuncolim Salcete Goa .
2	Details of the complaint	Board is in receipt of letter dated 19/02/2019 from Directorate of Vigilance from the Government of Goa forwarding a complaint dated 17/12/2018 from Calvert Gonsalves, R/o Colva Salcete Goa. The Board has approved to carry out Environmental Audit of the unit M/s United Marine Products. Office decided to form a panel of expert committee in order to carry out Environmental Audit and the order was issued on 14/10/2020. Subsequently order was issued to Expert Committee & M/s 7 Sketchzy Pvt. Ltd. to carry out Environmental Audit. Environmental Audit was conducted on 05/11/2020 and 06/11/2020. Based on Environmental Audit and Ground Penetrating Radar done by M/s 7 sketchzy pvt. Ltd. following SCN.
3	Issue of Show cause Notice	Issued on 16/12/2020 with PPP fines of Rs. 1,45,93,750/- calculated considering date of operation as 20/06/2014 till date of Environmental Audit. As per Environmental compensation formula: EC=Environmental Compensation PI=Pollution index in industrial Sector N= Numbers of days of violation tool place R=A factor in Rupees in EC S=Factor of sale of Operation LF= Location Factor Therefore: $EC=PI \times N \times R \times S \times LF$ $=50 \times 2335 \times 250 \times 0.5 \times 1$ $=1,45,93,750/-$
4	Reply to SCN	Reply letter to the SCN was received on 24/12/2020.
5	Personal Hearing	Based on the reply personal hearing was conducted dated 29/01/2021.
6	Issue of Closure directions	After personal hearing closure direction were issued on 04/02/2021.

7	Receipt of clarification wrt SCN	Unit has submitted clarification wrt the SCN and stated that there is no incriminatory evidence they are complying with all the consent conditions are requested to withdraw the SCN issue to the unit for PPP fines.
8	PPP fines Re-Calculation	No PPP fines re-calculation done in the matter.
9	Advance PPP fines	Unit has paid advance PPP fines of Rs.5,00,000/-
10	Bank Guarantee	Unit has paid Bank Guarantee of Rs.2,00,000/- valid till 29/05/2021 and now requested for extension of BG till 30/08/2021.
11	Revocation	Revocation was issued to the unit dated on 22/04/2021.
12	Correspondence letter	Board has issued letter to the unit for submission and clarification of Water Balance pertaining to the Evaporator dated on 29/07/2021.
13	Reply Letter	Unit has submitted clarification of Water Balance pertaining to the Evaporator dated on 24/08/2021 and same was placed before Environmental Audit Committee.
14	Correspondence letter	Board has issued letter to the unit for additional clarification pertaining to the Evaporator dated on 09/09/2021.
15	Reply Letter	Unit has submitted clarification to the letter dated on 22/09/2021 and same was placed before Environmental Audit Committee.
16	Correspondence letter	Board has emailed to the unit for submission of details of actual production days from date of start of the industry till the modification of Evaporator dated on 13/10/2021.
17	Reply Letter	Unit has submitted clarification to the letter dated on 27/10/2021 and stated that the total actual days of production operations are 104 days from the date of operation till the date of modification.
18	Revised Environmental Compensation	As per Environmental compensation formula: EC=Environmental Compensation PI=Pollution index in industrial Sector N= Numbers of days of violation tool place R=A factor in Rupees in EC S=Factor of sale of Operation LF= Location Factor Therefore: $EC=PI \times N \times R \times S \times LF$ $=50 \times 104 \times 250 \times 0.5 \times 1$ $=6,50,000/-$

Till date Board has not issued any correspondence to pay PPP fines to the unit , however unit has paid advance PPP fines of Rs.5,00,000/-.

The Board had decided that the unit should be directed to pay the environmental compensation as finalized by the Board as per the NGT mandated formula.

Table item no. 3:

Member Secretary informed the members that the Board had proposed to carry out Environmental Audit of M/s. Vedanta Ltd., Amona, Bicholim Goa for verification of Environmental compliance and Public grievances against the unit. Site visit of Expert Committee was held on 30/08/2021 and 31/8/2021. The Board is now in receipt of Environmental Audit Report of M/s. Vedanta

Ltd., Amona, Bicholim Goa.

After deliberation members decided that the Board should direct the unit to comply with the observations made in the Audit Report and the report should be placed before the Hon. High Court.

Table item no. 4:

Member Secretary informed the members that the following study/projects needs to be undertaken by the Board:-

1. Analysing the waste treatment process of hotels using septic tank/soak pit for the disposal of the waste water including the size and design, challenges in the disposal of the waste water in areas having high ground water levels, exploring alternate viable waste water disposal processes.
2. Empanelment of the vendors and manufacturers of the sewage treatment plants and effluent treatment plans processing of the applications for empanelment, carrying out of audit and site inspection of empanelled vendors/manufactures along with the members of the expert committee dealing with the empanelment process.
3. Implementation of the GIS platform for the use of the available data generated from the online continuous ambient air quality monitoring, online continuous stack monitoring and continuous effluent monitoring.

Presently the following contractual post are presently vacant in the Goa State Pollution Control Board.

1. Junior Environmental Engineer (Civil)
2. Junior Environmental Engineer (Mechanical)
3. Network Engineer (Software) official has submitted resignation and the post will be vacant on 01/01/2022.

In view of the above, it may be proposed to appoint 3 Junior Research Fellow with mechanical engineering background for a period of one year to carry out the above work with a consolidated salary of Rs.25,000/- per month.

After deliberation the Board has decided to accept the proposal placed before the Board for recruitment of 3 Junior Research Fellow with engineering background for a period of 1 year.

Presentation of the Source Apportionment Study for Air Quality in Vasco da gama Goa, conducted by Professor Virendra Sethi, Environmental Science and Engineering Department, IIT, Mumbai.

Professor Virendra Sethi made a detailed presentation to the Board members.

After the presentation the report was emailed to the Board members to further peruse the report.

The Member Secretary informed that the next Board meeting shall be held on 30/12/2021 at 10.30 am in the Conference hall of the Board for finalization of a decision on the report submitted by Prof. Virendra Sethi. Environmental Science and Engineering Department, IIT, Mumbai

The meeting ended thanks to the Chair.

THE 150th MEETING OF THE GOA STATE POLLUTION CONTROL BOARD HELD ON 30th December, 2021 AT 10.30 am IN THE CONFERENCE HALL OF THE BOARD.

Agenda item no. 2

Follow up action on the decision taken at the 149th meeting held on 21/12/2021.

Agenda item no. 2 – item no. 19

Agenda item no. 19 – Member Secretary informed the members that the matter was placed for discussion during 149th Board meeting held on 21/12/2021, the members discussed to defer this item for the next meeting as the members desired to study the report submitted by Prof. Viendra Sethi, IIT, Mumbai. The item is now placed for discussion.

After deliberation members accepted the report submitted by Prof. Viendra Sethi, IIT, Mumbai, they also approved to place the report before the house through the Department of Environment and Climate Change and to the Hon. High Court of Bombay at Goa.

The Board further agreed that the Technical Advisory Committee should deliberate on the application of South West Port Ltd., with regard to monthly handling quantity of coal and MPT w.r.to coal handling at Mooring Dolphin 1, 2 and 3 vis a vis the IIT report and based on the recommendations of the Technical Advisory Committee, the Member Secretary, GSPCB shall amend the respective Consent with the approval of the Chairman, GSPCB.

Agenda item no. 3

Discharge standards for Sewage Treatment Plant.

Member Secretary informed the members that the Environment Protection Rules 1986 under section 3 defines the provision for laying of standards for emission or discharge of environmental pollutants. Following is an extract of the same.

- (1) For the purpose of protecting and improving the quality of the environment and preventing and abating environmental pollution, the standards for emission or discharge of environmental pollutants from the industries, operations or processes shall be as specified in [Schedule I to IV].
- (2) Notwithstanding anything contained in sub-rule (1), the Central Board or a State Board may specify more stringent standards from those provided in 3 [Schedule I to IV] in respect of any specific industry, operation or process depending upon the quality of the recipient system and after recording reasons therefore in writing.
- (3) The standards for emission or discharge of environmental pollutants specified under sub-rule (1) or sub-rule (2) shall be complied with by an industry, operation or process within a period of one year of being so specified.

[(3A) (i) Notwithstanding anything contained in sub-rules (1) and (2), on and from the 1st day of January, 1994, emission or discharge of environmental pollutants from the 6 [industries, operations or processes other than those industries, operations or processes for which standards have been specified in Schedule-I] shall not exceed the relevant parameters and standards specified in schedule VI.

Provided that the State Boards may specify more stringent standards for the relevant parameters with respect to specific industry or locations after recording reasons therefore in writing (ii) The State Board shall while enforcing the standards specified in Schedule VI follow the guidelines specified in Annexure I and II in that Schedule].

Copy of the extract of the EP rule 1986 and General discharge standards at schedule VI.

As mentioned above for the purpose of protecting and improving the quality of the environment and preventing and abating environmental pollution, the standards for emission or discharge of environmental pollutants from the industries, operations or processes has been specified in [Schedule I to IV]. Further as per 3A, in case if the industry sector not specified in the schedule I, the Board has to consider General discharge standards in schedule VI.

As per the schedule I, the Emission and discharge standards for Hotel industries are covered in the serial No.39 as annexed at A. Similarly the MoEF&CC had specified new discharge standards for industry sector as "SEWAGE TREATMENT PLANT (STP)" at serial no.105 of the schedule I. These standards are based on the sewage generated in the cities.

Earlier the Board was in receipt of directions dated 21/04/2015. The directions mostly talked about the total sewage generation in all the class cities and pollution of rivers due to discharge of sewage in the nallah and rivers. Further it also stated that there is gap between the total sewage generation and total treatment of the sewage and the sewage are polluting the rivers. The CPCB had directed that State Pollution Control Board should make mandatory to local/urban bodies /municipal council to setup sewage treatment plants to reduce the gap of sewage generation and treatment and had specified stringent discharge standards as most of the sewage treatment plant were discharging the treated water in rivers. It was directed to implement the new standards to existing and new sewage treatment plant to treat municipal sewage. Accordingly, Board had in its 126th Board meeting had implemented standards and according Board had directed all the industrial unit irrespective of the schedule 1 and VI to make necessary arrangement to meet the new standards. During the said time there was no specific standards mentioned in schedule I of the EP rule 1986 and only general discharge standards of schedule VI were considered. Further the revised standards were also placed in 145th Board meeting.

Meanwhile the draft standards of 2015 specified in the above directions were finalized with line and standards and the Ministry of Environment, Forest & Climate Change (MoEF & CC) vide Notification dated 13.10.2017 amended the Environment (Protection) Amendment Rules, 2017 at Serial No.105 of Schedule-I to the Environment (Protection) Rules, 1986. Details of the draft and finalized standards is mentioned in below table.

Sr. No.	Parameters	Old Norms 1986	Draft Norms Nov., 15	MoEF&CC Notification October 2017
1.	Biochemical Oxygen Demand (BOD) (mg/l)	<30	<10	<30 and <20 (metro cities)
2.	Chemical Oxygen Demand (COD) (mg/l)	<250	50	No limit
3.	Total Suspended Solids (TSS) (mg/l)	<100	<20	<100 and <50 (metro cities)
4.	Total Nitrogen (mg/l)	<100	<10	No limit
5.	Ammonical Nitrogen (mg/l)	<50	<5	No limit
6.	Total Phosphorus (mg/l)	No limit	No limit	No limit
7.	Fecal Coliform MPN/100 ml	No limit	<100	<1000

The notified standards of 2017 were later challenged in the NGT in OA 1069/2018. The Tribunal also noted that the proposed standards as per Draft Notification dated 24.11.2015 issued by Ministry of Environment, Forest & Climate Change (MoEF & CC) are sought to be diluted by the impugned Notification of 2017.

Accordingly, the Tribunal constituted an Expert Committee comprising the nominees from IIT Kanpur, IIT Roorkee, NEERI and CPCB which was to give its report after examining the best available technologies. The committees had suggested standards based on class of cities such as mega metropolitan, metropolitan, class I and others cities.

Accordingly, NGT accepted the report of the Expert Committee with the modification that the standards recommended for Mega and Metropolitan Cities will also apply to rest of the cities in the country.

Parameters	Mega metropolitan and other cities	
pH	Between	5.5 & 9.0
Total Suspended Solids	Not to exceed	Not more than 20
BOD,	Not to exceed	10 mg/l
COD	Not to exceed	50 mg/l
Phosphorus Total	Not to exceed	1.0mg/l
N-total	Not to exceed	10mg/l
Fecal Coliform	Less than	100mg/l

The NGT petitions and the MOEF&CC Notification 2017 mostly considered the common municipal sewerage plant catering to municipal/local bodies sewage systems which are discharging large quantum of treated water in rivers.

Scenario in Goa:

In Goa, most of the small sewage treatment plants are ranging from 10KLD to 500KLD are installed at the industries, residential societies/complex, hotels for the treatment of domestic sewage. The treated water is used for gardening, toilet flushing, floor washing, car washing etc. No treated water is discharged in the rivers or nallah. As far as municipal area, sewage generated are treated in the Common sewage treatment plants ranging from 5.5 to 20MLD. The said common sewage treatment plants are installed and operated by the Goa Sewerage Infrastructure Development Corporations (SIDCGL) and by the Public Works Department (PWD).The treated water is discharged into rivers and creek for flushing of river and creek.

The direction issued by the Central Pollution Control Board vide order File No. A19014/43/06 dated 21st April 2015 forwarding the draft standards of discharge , the notifications issued by vide Notification dated 13.10.2017 by Ministry of Environment, Forest & Climate Change (MoEF & CC)way of Environment (Protection) Amendment Rules, 2017 against Serial No.105 of Schedule-I to the Environment (Protection) Rules, 1986 and the NGT order in OA 1069/2018 can be interpreted that standards are laid down for the sewage treatment plant installed for the municipal sewerage majorly in the mega ,metropolitan, class one cities and all the major cities. Also the environment protection Rule 1986 specifies discharge standards for hotels industries at serial no.39

There are presently no discharge specific standards specified for the smaller sewage treatment plant connected to smaller residential complex, industries etc. Neither such sectors are covered in the

schedule I-IV of the EP Rule 1986. Hence earlier the General Discharge standards of Schedule VI were considered.

Some of the consent issued by the Maharashtra State Pollution Control Board with sewage discharge standards.

In view of above it may be noted that treated effluent standards are specified only for industry sector as "Sewage Treatment plant at serial no. 105" in schedule I and Hotel industry at serial no.39 and no specific standards are specified for residential complex STP and till date General discharge standards of schedule VI was considered. Further the NGT order in OA 1069/2018 mostly talk about Common sewerage plant installed for treatment of municipal sewage ranging in MLDs and about the type of cities. Further it can be inferred that treated effluent standards are specified only for industry sector as "Sewage Treatment plant at serial no. 105" in schedule I covers Common sewage treatment plants established by SIDCGL/PWD which are ranging in MLDs capacities and discharging treated effluents in water bodies for flushing of rivers and creek. Whereas smaller STP of industries and residential complex are not covered in schedule I and hence schedule VI standards to be considered. Also as far as Goa is concerned no treated water from STP is discharged into water bodies and mostly used for toilet flushing, gardening, floor washing etc. In view of above may decide as below.

1. Treated effluent discharge standards for Sewage treatment plants of above 150KLD capacity for Industries, Residential complex/societies, STP operated by SIDCGL/ PWD and Hotel industries and Industrial sectors above 50KLD STP.

Parameters	Discharge on land for irrigation, Inland surface water	
pH	Between	5.5 & 9.0
Total Suspended Solids	Not to exceed	Not more than 20
BOD, 3 days, 27° C	Not to exceed	10 mg/l
COD	Not to exceed	50 mg/l
Phosphorus Total (Discharge in lakes/water bodies)	Not to exceed	1.0mg/l
N-total	Not to exceed	10mg/l
Fecal Coliform	Less than	100mg/l
Oil & Grease	Not to exceed	10mg/l
NH4-N (Discharge in lakes/water bodies)	Not to exceed	5mg/l

****Note:** The oil & Grease and NH4-A is not notified in the EP rules 1986 amendment 2017. However considering the effect of oil and grease and ammonical N, standards for discharge in rivers are added. Since Goa is a tourism destinations there are large number of floating populations and hotels. Further the hotel are mostly located in coastal area. Hence the STP capacity of 50KLD is considered as base levels for stringent standards.

2. Treated effluent discharge standards for Sewage treatment plants of upto 150KLD capacity for Industries, Residential complex/societies, STP operated by SIDCGL/ PWD etc and Hotel industries upto 50KLD STP.

Parameters	Discharge on land for irrigation	
pH	Between	5.5 & 9.0
Total Suspended Solids	Not to exceed	Not more than 100

BOD, 3 days, 27° C	Not to exceed	30 mg/l
COD	Not to exceed	250 mg/l
Oil & Grease	Not to exceed	10mg/l
Phosphorus Total (Discharge in lakes/water bodies)	Not to exceed	5.0mg/l

Members deliberated and discussed the application for standards for Industries, Residential Complexes and Hotels and resolved as follows:

1. Treated effluent discharge standards for Sewage treatment plants of above 150KLD capacity for Industries, Residential complex/societies, STP operated by SIDCGL/PWD and Hotel industries above 50KLD STP are :

Parameters	Discharge on land for irrigation, Inland surface water	
pH	Between	5.5 & 9.0
Total Suspended Solids	Not to exceed	Not more than 20
BOD, 3 days, 27° C	Not to exceed	10 mg/l
COD	Not to exceed	50 mg/l
Phosphorus Total (Discharge in lakes/water bodies)	Not to exceed	1.0mg/l
N-total	Not to exceed	10mg/l
Fecal Coliform	Less than	100mg/l
Oil & Grease	Not to exceed	10mg/l
NH4-N (Discharge in lakes/ water bodies)	Not to exceed	5mg/l

2. Treated effluent discharge standards for Sewage treatment plants of upto 150KLD capacity for Industries, Residential complex/societies, STP operated by SIDCGL/PWD etc and Hotel industries upto 50KLD STP are :-

Parameters	Discharge on land for irrigation	
pH	Between	5.5 & 9.0
Total Suspended Solids	Not to exceed	Not more than 100
BOD, 3 days, 27° C	Not to exceed	30 mg/l
COD	Not to exceed	250 mg/l
Oil & Grease	Not to exceed	10mg/l
Phosphorus Total (Discharge in lakes/water bodies)	Not to exceed	5.0mg/l

THE 151st MEETING HELD ON 25th FEBRUARY, 2022 AT 3.00 PM, IN THE CONFERENCE HALL OF THE BOARD.

Agenda item no.3

Revision of the Delegation of powers

Member Secretary informed the members that the Board had earlier delegated powers to its officer for issue of Consent to the units, category wise in terms of the provisions of section 15 of the Air (Prevention and Control of Pollution) Act, 1981 and section 12 (3-B) of the Water (Prevention

and Control of Pollution) Act, 1974, however it was now felt that all Consents etc. needs to be issued by Member Secretary on approval of the Chairman so that the Head of the Board is aware of all the matters pertaining to the Board, and in this regards, the Chairman, vide office order no. 1/5/22/Vol. XXIX/Admn/19012 dated 01/02/2022 has suspended the earlier order delegating powers and directed that all correspondence issued by the Board including Consent orders, directions, notices etc. shall henceforth be issued only by the Member Secretary of the Board and in absence by the concerned authorized Link Officer.

Members noted and accorded ex post facto approval.

Agenda item no.4

Financial position of the Board

Member Secretary explained the members the receipts and expenditure of the Board for the last three years.

Chairman informed the members that it was proposed to appoint a Chartered Accountant for preparing of the finalization of the Accounts. Further he also informed that the Board accounts have not been audited for the last three years.

Member of the Board also desired to know about the office premises in Panaji, to which the Member Secretary informed the members that the area on the 1st floor on the Dempo Towers building has been rented to the Dept. of Urban Development and the 4th floor to the State Environment Impact Assessment Authority, for which both the depts. are making payments, however, payment for the last few months is pending, for which the departments have requested to forward to them the pre-receipts.

Agenda item no. 5

Environmental Guidelines on Poultry farms

Member Secretary informed the members that the Board had earlier received guidelines from Central Pollution Control Board (CPCB) on Poultry farms where in 1,00,000 and more birds required Consent of the Board, the said guidelines were placed before the Board in its 125th Board meeting held on 28/07/2017 and 139th Board meeting 8th May 2019.

Further, the Board received order of Hon'ble National Green Tribunal order dated 16/09/2020 in OA No 681/2017 "Gauri Maulekhi Vs Union of India & Ors." wherein the CPCB was directed to revisit the guidelines for categorizing the poultry farms as Green category and exempting their regulation under the Air Act, Water Act and the Environment (Protection) Act. As per the said orders, CPCB was directed to issue fresh appropriate orders within three months and if no further orders are issued all States PCBs/PCCs will require enforcement of Consent mechanism under the above Acts after 01/01/2021 for all poultry farms above 5000 birds in the same manner as is being done for farms having more than one lakh birds. Till then, even without such Consent mechanism, the State PCBs/PCCs may strictly enforce the environmental norms and take appropriate remedial action against any violation of water, air and soil standards statutorily laid down.

Member Secretary further informed the members that the said directions of the Hon. Court were placed before the Board in its 147th Board meeting and it was approved that birds above 5000 require Consent to Operate under Water and Air act and are categorized under Green category. Further, Board received guidelines from CPCB vide letter dated 17th August 2021, where in poultries having birds above 25000 require to obtain Consent under Water and Air Acts and are categorized under Green category along with various other conditions such as siting guidelines, water, air and soil

pollution etc and the same were approved at the 148th Board meeting.

She further informed that since the Board is now in receipt of revised guidelines in view of the order dated 10/12/2021, the revised categorization of poultry farms handling 5000 birds and above require to obtain Consent to Establish and Consent to Operate of the Board with effect from 01/01/2023.

Members noted the same and approved for its implementation..

Agenda item no. 6

Noise Action Plan

Member Secretary informed the members that the State Govt. vide Notification No. 7/4/98/STE/DIR/Part-IV/412 dated 31/07/2020 published in Official Gazette Series II No.19 dated 06/08/2020, has directed "Authority" to ensure that no audio system or public address system shall be let out / installed without being fitted with sound limiter in any Government or non-Government function in the whole of the State of Goa for outdoor functions.

The Ambient Air Quality Standards in respect of Noise as per the Notification are as follows:

Area Code	Category of Area / Zone	Limits in dB(A) Leq*	
		Day Time	Night Time
A.	Industrial Area	75	70
B.	Commercial Area	65	55
C.	Residential Area	55	45
D.	Silence Zone	50	40

She further informed that vide Notification No. 7/4/98/STE/DIR/Part-IV/753 dated 14/10/2020, the State government has mentioned categorization of the areas as per the Outline Development Plans., the role of the Board is as follows:

a.	In case of events/ functions/ programmes involving more than 50 participants, the application shall be forwarded by the Authority to the Goa State Pollution Control board (GSPCB). The Applicant shall deposit a fee of Rs. 3000/- /event programme / functions with the GSPCB.
b.	The GSPCB will forward the report to the Department of Environment and the Department will than after assessment issue recommendation to the Authority i.e. Collector/Deputy Collector.
c.	In case of Open air venues for marriages /weddings/ functions/ parties etc. each such venue shall install online noise level monitoring system and shall also provide a display board along the periphery of the venue so as to display the noise levels recorded at the venue for the benefit of the public. Such online system shall be also connected to the GSPCB server as well as the office of the Sub-Divisional Magistrate and Office of the Deputy Superintendent of Police for the purpose of monitoring the noise levels and ensuring compliance to the Rules. The open air venue Operator will submit details of the equipment installed at the venue to the concerned Sub-Divisional Magistrate in Form 'E' and the said details will be forwarded to the GSPCB for its inspection and comments. The Applicant shall deposit an amount of Rs. 5000/- as fees to the GSPCB. The GSPCB will forward the inspection report with recommendations to the Department of Environment. The Department of Environment will thereafter forward the report to then SDM/DM with its recommendations. Every Open Air Venue shall be assessed by the Authority annually through GSPCB and Department of Environment.

d.	Only those Diesel Generator Sets which comply with the provision of the Environment (Protection) Rules, as notified by the MoEF&CC from time to time in respect of acoustic enclosure, noise level, certification, insertion loss and exhaust muffler shall be sold purchased, supplied/ used by any manufacture/dealer/shopkeeper. The Diesel Generator Set operation shall be monitored by Authority prescribed under these Rules. Noise Levels and penalties in case of DG sets other equipments are as recommended by the CPCB in their report submitted to the Hon'ble NGT in O.A. No. 05/09/2016 in October, 2019.

Further, Rule (8) stipulates as follows:

a.	Required equipment for measuring intensity of sound shall be made available to the "Authority" by the Department of Environment
b.	The Goa State Pollution Control Board shall carry out Noise level mapping along with the Police Officials on regular basis as per Notification No.7/4/98/STE/DIR/Part-IV/753 dated 14/10/2020. The Protocol for Ambient Level Noise Monitoring, July, 2015 issued by the Central Pollution Control Board (CPCB) i) The Noise Level Mapping shall be extended to other areas if required on the recommendations of the District Magistrate. ii) The Goa State Pollution Control Board shall carry out the Noise level mapping with assistance of MoEF&CC approved Laboratories whenever required and the expenditure incurred for the same will be reimbursed by the Department of Environment. The Mapping shall be initiated at Verna Industrial Estate, for Industrial area, Panaji and Margao City for commercial area and residential area and Goa Medical College and Cujira School Complex, Bambolim for silence zones. iii) The Goa State Pollution Control Board (GSPCB) shall organize capacity building and necessary technical guidance to the officials from the Revenue Department and the Police Department. The Board will also carry out Noise Level Monitoring whenever required on the instructions of the Revenue Authorities.
c.	The Department of Environment will also provide wide publicity in print and electronic media about the provision of these Rules
d.	The Education / Higher Education Department will carry out awareness amongst students in respect of provision of these Rules with Assistance of the Goa State Pollution Control Board.

Member Secretary informed that certain amendments were required to be made as no annexures were attached to the Notification as stated. Further, it was also informed that in case the Board is required to conduct the monitoring than the fees needs to be as per the guidelines of Central Pollution Control Board and the same has been brought to the notice of the Dept. of Environment and Climate Change for suitable amendment.

On perusal of the Noise Rules, the members stated that this will cause hindrance to the tourism industry, which is still to recover post covid. Further, there will be lot of delay in processing the applications as it will have to be routed to the Collector and to Goa State Pollution Control Board and to Dept. of Env. & Climate Change etc.

Chairman informed the members that Confederation of Indian Industries / Goa Chamber of Commerce and Industries / Travel and Tourism Association of Goa make representation to the Govt.

Agenda item no. 7

Application for Consent to Establish under the Air Act and Water Act from National Institute of Technology, Cuncolim Goa for Administration cum residential complex of NIT and Installation of Sewage Treatment Plant for the complex of 210KLD and 130KLD capacity.

Member Secretary informed the members that the Board is in receipt of an application from

National Institute of Technology, Cuncolim Goa for Consent to Establish under the Air Act and Water Act, for installation of Sewage Treatment Plant for the Complex of 210 KLD and 130 KLD. She further informed the members that following specific conditions have been incorporated in the Consent.

1. Unit will have to install tertiary ultra filtration system for the STP
2. Unit has to provide separate pipeline for Grey and dark water. Also unit has to install oil and grease trap for the STP and electronic flow meters at inlet and outlet of the STP
3. Unit has to install organic waste composting unit to treat the wet waste

Members noted and accorded ex post facto approval.

Agenda item no. 8

Application for Consent to Operate (Expansion) from M/s MRF Ltd. (Unit II)

Member Secretary informed the members that the Board is in receipt of an application for Consent to Operate (expansion) under the Air Act and the Water Act from M/s. MRF (unit II) located at Plot no. Survey no. 254/0, P.B. no 1, Tisk, Usgao, Goa for increase in production of tubes by installing additional 5 nos. of tube curing presses.

She further informed that the application was placed before Technical Advisory Committee and the Committee has recommended for CTO (expansion) with a condition to obtain Environmental Clearance if applicable prior to actual operations.

Members agreed to grant of Consent after ensuring that Environmental Clearance is obtained if applicable.

III. With the permission of the Chair, Member Secretary took up the following Table items for discussions.

Table item no. 1

Appointment of Advocates for defending the interest of the Board in the Courts of Law

Member Secretary informed the members that Goa State Pollution Control Board is a party respondent in a number of matters before the Hon Supreme Court of India, the High Court of Bombay at Goa, the National Green Tribunal (Principal Bench-New Delhi and Western Zone Bench-Pune) the Administrative Tribunal-Panaji, District and Trial Courts including JMFCs, the Human Rights Commission, Goa Lokayukta, State Information Commissioner etc and other Judicial Forums/Tribunals., which pertain to Public Interest Petitions, Writ Petitions, Original Applications; challenging action/inaction by the Board in various matters; Appeals against orders/directions issued by the Board and criminal complaints filed by the Board.

She further informed that in terms of the provisions of Rule 16(xv) of the Goa Water and Air Rules 2021; the Member Secretary of the GSPCB has power to engage Legal Advisors, Advocates, Attorneys on terms and conditions to be approved by the Board. Earlier, the Board at its 148th Meeting held on 07/09/2021 has nominated a number of Advocates on a Panel of Advocates to represent it before various Courts of Law, Tribunals and Judicial Forums.

Member Secretary further informed the members that the Board is now in receipt of C.V's from two Advocates with regard to nomination on the Board's Panel of Advocates, accordingly it was proposed to re-constitute the GSPCB's Panel of Advocates as follow with the following terms and conditions of appointment:

1.	Advocate General of the State of Goa.
2.	All Government and Additional Government Advocates of the State of Goa before various Courts
3.	State of Goa, Standing Counsel at New Delhi before the Supreme Court of India and the NGT.
4.	Advocate Joaquim Godinho, Panaji
5.	Advocate Pavithran A.V., Panaji
6.	Advocate Manish Salkar, Panaji
7.	Advocate S.N. Joshi, Panaji
8.	Advocate Ruchira Gupta, New Delhi
9.	Advocate Fawia Mesquita, Pune
10.	Advocate Wilbur Menezes, Panaji
11.	Advocate Bhupesh Prabhudessai, Panaji

II. The Terms and Conditions of appointment of the aforesaid Panel of Advocates shall be as follows:

a.	All cases filed against the Board before all Courts/Judicial Forums in Goa, New Delhi, Pune, Mumbai etc shall be allotted to any one of the above Advocates by the Member Secretary of the Board with the approval of the Chairman. Letter of allotment in this regard shall also be issued to the concerned Advocate by the Board. In cases of urgent nature where appearance is made without a letter of allotment, an ex post facto letter of allotment may be issued by the Member Secretary.
b.	All bills towards the Professional fees shall be submitted by the concerned Advocate within one month of the hearing in question and shall be accompanied by a Certificate of Appearance issued by the concerned Court in respect of the appearance/Order of the Court indicating the appearance of the Advocate on behalf of the Board.
c.	All bills towards the Professional fees shall be submitted by the concerned Advocate shall be accompanied by a Pre receipt and Revenue Stamp.
d.	Matters that are being heard together/tagged together for hearing shall be considered as a single hearing and Bill for such hearings may be submitted accordingly.
e.	The Board will not pay professional fees for appearances made by any other Advocates who appear in any of the Boards matters on behalf of the Boards Advocate. The Board will also not pay costs towards transportation incurred by the Advocates for travelling to the Courts etc.
f.	All Board Advocates shall submit a quarterly statement with regard to the status of cases that are handled by them on behalf of the Board along with their specific comments/opinions on the steps required to be taken for their speedy disposal.
g.	In the event a case handled by a Board Advocate is decided against the Board; the concerned Board Advocate will be required to immediately submit the Judgment of the Court along with his opinion regarding advisability of filing an appeal/Revision etc. from such decision.
h.	The concerned Board Advocate will also be required to inform the Board on disposal of all Board matters handled by him along with copy of the final order Judgment passed by the Court and detailed opinion/instructions on further steps to be taken by the Board.
i.	In the event a Court of Law issues any directions for time bound compliance by the Board in a matter concerning it; the Board Advocate is required to immediately send an email message to the Board regarding the same along with a copy of the order passed by the Court as and when obtained.
j.	The Board may seek a Professional Opinion from the Advocates on its Panel in respect of Legal matters as and when the need arises; the Board shall pay a professional fee of Rs. 8000/- towards such opinion rendered by its Advocates.

III. The Advocates as above shall be paid a **professional fee of Rs. 5,500/-per hearing** attended on behalf of the Board before the Supreme Court of India, High Court of Bombay at Goa, National Green Tribunal at New Delhi and Pune. However in the event an Advocate appears on behalf of the Board before the Administrative Tribunal at Panaji, District and Sessions Court and its subordinate Courts including Judicial Magistrate First Class as well as before Judicial Forums such as Human Rights Commission, Lokayukta, State Information Commission etc; he shall be paid a **professional fee of Rs. 3,000/- per hearing.**

Member Secretary further proposed that the Board with the approval of the Chairman be authorized to appoint any Advocate of his / her choice (other than the Advocates in the Board Panel) including Senior Counsels to appear on behalf of the GSPCB and defend its interests; as per the individual requirements of the Board in matters as so deemed fit by the Member Secretary and Chairman; in order to ensure that the Boards interests are effectively upheld and defended, the terms and conditions of such appointment as well as Professional Fees to be paid to such Advocates so appointed may be determined by the Member Secretary and the Chairman of the Board and can thereafter be placed before the Board for ratification/approval.

Members perused and approved the list of Advocates to be appointed on the Panel of the Board and also the terms and conditions and fees structure as enclosed. Further, the members also empowered the Chairman and Member Secretary to appoint any Advocate of his / her choice (other than the Advocates in the Board Panel) including Senior Counsels to appear on behalf of the GSPCB and defend its interests; as per the individual requirements, the terms and conditions of such appointment as well as Professional Fees to be paid to such Advocates so appointed to be determined by the Member Secretary and the Chairman of the Board and thereafter be placed before the Board for ratification/approval.

Table item no. 2

Amendments to be made in the notified Goa Water (Prevention and Control of Pollution), Rules 2021 and Goa Air (Prevention and Control of Pollution) Rules, 2021

Member Secretary informed the members that the State Government had initially framed the Goa Water (Prevention and Control of Pollution) Rules 1989 and Goa Air (Prevention and Control of Pollution) Rules, 1989, that were thereafter amended in 1998, the new Rules were notified in 2011 but were thereafter withdrawn by the Government.

She further informed the members that the State Government has now repealed the Goa Water (Prevention and Control of Pollution) Rules 1989 and Goa Air (Prevention and Control of Pollution) Rules, 1989, and have notified the Goa Water (Prevention and Control of Pollution), Rules 2021 and Goa Air (Prevention and Control of Pollution) Rules, 2021

Member Secretary further informed the members that Section 64 of the Water Act and Section 54 of the Air Act confers powers on the State Government to make Rules to carry out the purposes of the said Acts. Rules in this regard relate to the following matters amongst others, namely; Board Meetings, constitution of committees, powers and duties of the Member Secretary and Chairman, Forms of Notices and Reports, Forms for applications for Consent, including consent fees, forms for Budget and Accounts etc. These Rules are to be made, varied, amended or repealed only after consultation with the GSPCB.

She further informed the members that the Board had earlier submitted its say on the proposed draft rules to the State Government.

However, she informed that on receipt of the final Goa Water (Prevention and Control of Pollution), Rules 2021 and Goa Air (Prevention and Control of Pollution) Rules, 2021, as notified by the State Government it is seen that certain recommendations as submitted by the GSPCB to the State Government through the Department of Environment, vide its letter dated 29/07/2021 in terms of Section 64 of the Water Act and Section 54 of the Air Act have not been considered by the State Government while notifying the said Rules. It is further observed that certain Rules have been added/amended/varied/repealed etc. and that this will result in hampering of smooth administrative functioning of the GSPCB.

She informed that in view of the same, a detailed proposal to be submitted to the State Government seeking various amendments to the notified Goa Water (Prevention and Control of Pollution), Rules 2021 and Goa Air (Prevention and Control of Pollution) Rules, 2021, has been prepared which also contains justification for the proposed amendments.

Members perused in details the proposed amendments / additions / deletions to be incorporated in the Goa Water (Prevention and Control of Pollution), Rules 2021 and Goa Air (Prevention and Control of Pollution) Rules, and unanimously decided to sent the amendments/ additions / deletions to the Rules to the State Govt. .for immediate amendments in the Rules.

Members also took a serious note that inspite of the objections raised in the draft Rules, the same were not incorporated. Further it was decided to convey to the Department of Environment and Climate Change, any amendments to be done in the Rules be brought to the notice of the Board, and the same shall be notified in consultations with the Board, as mandated in the Rules.

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CHAPTER 4

COMMITTEES AND SUB-COMMITTEES CONSTITUTED BY THE BOARD AND THEIR ACTIVITIES

4.1 TECHNICAL ADVISORY COMMITTEE

In order to develop uniformity in approach and to ensure timely clearance of the consent applications, a Technical Committee comprising technically and scientifically qualified professionals which was re-constituted during the year under report vide Order no. 8/11/09-PCB/ Vol.VIII/Admn /16149 dated 10/12/2018 and subsequent Amendment vide Order no. 8/11/09-PCB/ Vol.VIII/Admn /205 dated 03/04/2019. **Refer Annexure - I.**

4.2 DEPARTMENTAL PROMOTION COMMITTEE AND DEPARTMENTAL SELECTION COMMITTEE IN RESPECT OF GROUP “C” POSTS.

Shri. Ganesh Shetgaonkar, Ex-Chairman, GSPCB reconstituted departmental promotion committee and departmental selection committee in respect of group “C” posts. **Refer Annexure – II.**

4.3 PURCHASE COMMITTEE:

Shri. Ganesh Shetgaonkar, Ex-Chairman, GSPCB reconstituted purchase committee for purchase of sophisticated Scientific instruments/equipments for the Board laboratory - Refer Annexure – III

4.4. PROCUREMENT OF GOODS / SERVICES / INSTRUMENTS / EQUIPMENTS / SERVICING OF EQUIPMENTS AND ANY OTHER SERVICES COMMITTEE.

Shri. Ganesh Shetgaonkar, Ex-Chairman, GSPCB constituted procurement of goods/ services/instruments/equipments/servicing of equipments and any other services committee. **Refer Annexure – IV.**

4.5 DELEGATION OF POWER TO MEMBER SECRETARY

Shri. Mahesh K. Patil, Chairman, GSPCB issued delegation of power Order to the Member Secretary. **Refer Annexure – V.**

4.6. PROMOTIONS

The following officials of the Board were promoted during the year:

Sr.	Name of the official	Promoted to the post of
1.	Mrs. Jenica Sequeira	Scientist “D”
2.	Mr.Sanjeev S. Joglekar	Senior Environmental Engineer

3.	Mrs. Natalia Dias	Law Officer
4.	Mrs. Francisca Pereira	Scientist "C"
5.	Mr. Constance Fernandes	Senior Law Officer
6.	Mr. Ganpat Naik	Scientist "B"
7.	Mrs. Tulita Da Costa e Fernandes	Administrative Officer
8.	Mrs. Indira Raut	Assistant Engineer (IT)
9.	Mr. Manoj Kudalkar	Assistant Environmental Engineer
10.	Mr. Amit Shanbag	Assistant Environmental Engineer
11.	Mr. Pravin Faldessai	Assistant Environmental Engineer
12.	Mr. Rohan Nagvekar	Assistant Environmental Engineer
13.	Mr. Nilesh Parsekar	Scientist "B"
14.	Mrs. Livia D'silva	Scientist "B"
15.	Mr. Santosh Haldankar	Scientific Assistant
16.	Mr. Waman Chari	Scientific Assistant
17.	Mr. Sajid Inamdar	Scientific Assistant
18.	Mr. Sanmesh Borkar	Scientific Assistant
19.	Mrs. Joclyn Coelho	Senior Laboratory Assistant
20.	Mr. Sunny Pirankar	Senior Laboratory Assistant
21.	Mr. Johny Moniz	Senior Laboratory Assistant
22.	Mr. Kamlesh Kavlekar	Senior Laboratory Assistant
23.	Mrs. Swapna Naik	Office Superintendent
24.	Mr. Pratik Chari	Network Engineer
25.	Mr. Rajendra Naik	Engineering Assistant (IT)
26.	Mrs. Debra Pereira	Senior Stenographer
27.	Mr. Umesh Kankonkar	Accounts Clerk
28.	Mr. Salvador Rodrigues	Record Keeper
29.	Mr. Derick Dias	Lower Divisional Clerk



CHAPTER 5

MONITORING NETWORK FOR AIR AND WATER QUALITY

The Goa State Pollution Control Board monitors the air and water quality under the Central Pollution Control Board (CPCB) sponsored projects namely National Air Monitoring Programme (NAMP) and National Water Monitoring Programme (NWMP). The NAMP project covers 18 Ambient Air Quality Monitoring (AAQM) locations while, the Goa State Pollution Control Board (GSPCB) monitors water quality at 74 locations throughout Goa under the Central Pollution Control Board sponsored project NWMP. However, out of these 74 locations, water-quality monitoring at 11 locations has been started since February 2022. These locations are classified as per the Best Designated Usage of the waters prescribed by the Central Pollution Control Board (CPCB).

5.1 National Air Monitoring Programme (NAMP)

This is an ongoing activity funded by the Central Pollution Control Board, New Delhi under the National Air Monitoring Programme (NAMP). Under this Programme the Board continued to monitor the ambient air quality at 18 locations within the state of Goa. Besides the 18 NAMP locations, Board monitors additional location at Fire Brigade station, MPT (which is discontinued as NAMP station since September 2019) as a source stations. The following AAQM stations are listed below.

1. Panaji Town, Near GSPCB Office
2. Vasco Town, Fuse Call Office
3. MPT Quarters Baina
4. Assanora
5. Bicholim
6. Honda
7. Codli
8. Amona
9. Usgao
10. Curchorem (was not operated due to renovations at the site since September 2018)
11. Sanguem
12. Tilamol-Quepem
13. Margao Town
14. Mapusa Town
15. Ponda Town
16. Kundaim Industrial Estate
17. Cuncolim Industrial Estate
18. Tuem Industrial Estate
19. MPT (Source Station)

Out of the 19 AAQM locations 14 AAQM locations are outsourced to MOEF&CC recognized Laboratory.

The geographical location of the 18 air quality monitoring stations is shown in the map presented in Figure 5.1.1 The ambient air quality data for these stations observed during the year are given in Annexure VI.

Figure 5.1.1 : Map of Goa showing the Ambient Air Quality Monitoring Stations



5.1.1 Trend Status of Ambient Air Quality in Goa

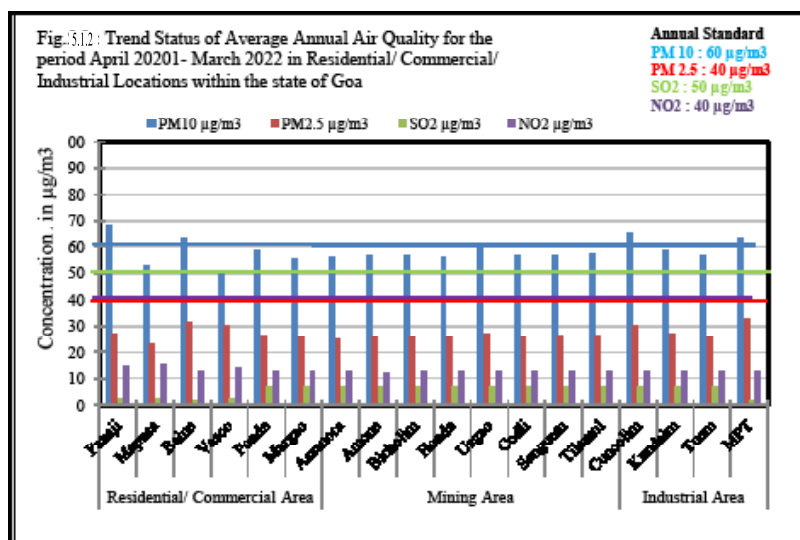
5.1.1.1 Ambient Air Quality in Other Areas of Goa (Residential/Commercial /Industrial Locations)

The annual averages of PM10, PM2.5, SO2 and NO2 of the locations is shown below in Table 5.1.1 and Fig 5.1.2. The data indicates that the levels of PM2.5, SO2 and NO2 (annual avgs)

are within the permissible limits; Whereas, PM10 (annual avgs) is within the permissible limits at all locations except at Panaji, Baina, Cuncolim and MPT.

Table-5.1.1: Trend status of Air Quality for the period April 2021 – March 2022 at different locations in Goa

ANNUAL AVERAGES OF AAQM DATA FOR NAMP STATIONS FROM APRIL 2021 to MARCH 2022						
Sr. No.	Area type	NAMP Station	PM10 µg/m3	PM2.5 µg/m3	SO2 µg/m3	NO2 µg/m3
1	Residential/ Commercial Area	Panaji	68	27	2	15
2		Mapusa	53	23	2	15
3		Baina	63	31	2	13
4		Vasco	50	30	2	14
5		Ponda	59	27	7	13
6		Margao	56	25	7	13
7	Mining Area	Assanora	56	25	7	13
8		Amona	56	26	7	12
9		Bicholim	57	26	7	13
10		Honda	56	26	7	13
11		Usgao	59	27	7	13
12		Codli	57	26	7	13
13		Sanguem	57	26	7	13
14		Tilamol	57	26	7	13
15	Industrial Area	Cuncolim	65	30	7	13
16		Kundaim	59	27	7	13
17		Tuem	57	26	7	13
18		MPT	63	33	2	13
Annual Std			60.00	40.00	50.00	40.00



Parameters like Ozone (O₃), Lead (Pb), and Carbon Monoxide (CO) have also been monitored at the outsourced 14 locations and are found within prescribed limits (Refer Annexure VII). The field observations around the monitoring sites indicates prominence of anthropogenic activities like vehicular movement, construction activities and industrial emissions.

Ambient Air Quality Monitoring data is utilized in the CPCB AQI tool for effective dissemination of air quality information to the common person people in simple linguistic terms that is easily understood by public domain. An Expert Group comprising medical professionals, air quality experts, academia, advocacy groups, and SPCBs was constituted and a technical study was awarded to IIT Kanpur. IIT Kanpur and the Expert Group recommended the said AQI scheme. (ref Air Quality Index-CPCB)

There are six AQI categories, namely Good, Satisfactory, Moderately polluted, Poor, Very Poor, and Severe, based on eight pollutants (PM₁₀, PM_{2.5}, NO₂, SO₂, CO, O₃, NH₃, and Pb) for which short-term (up to 24-hourly averaging period) National Ambient Air Quality Standards are prescribed. (Refer Table 5.1.2)

Table 5.1.2 : AQI Category, Pollutants and Health Breakpoints								
AQI Category (Range)	PM ₁₀ 24-hr	PM _{2.5} 24-hr	NO ₂ 24-hr	O ₃ 8-hr	CO 8-hr (mg/m ³)	SO ₂ 24-hr	NH ₃ 24-hr	Pb 24-hr
Good (0-50)	0-50	0-30	0-40	0-50	0-1.0	0-40	0-200	0-0.5
Satisfactory (51-100)	51-100	31-60	41-80	51-100	1.1-2.0	41-80	201-400	0.5 -1.0
Moderately polluted (101-200)	101-250	61-90	81-180	101-168	2.1- 10	81-380	401-800	1.1-2.0
Poor (201-300)	251-350	91-120	181-280	169-208	10-17	381-800	801-1200	2.1-3.0
Very poor (301-400)	351-430	121-250	281-400	209-748*	17-34	801-1600	1200-1800	3.1-3.5

**One hourly monitoring (for mathematical calculations only)*

Based on the measured ambient concentrations, corresponding standards and likely health impact, is determined for each of these pollutants. The AQI values and corresponding ambient concentrations (health breakpoints) as well as associated likely health impacts for the identified eight pollutants are as follows (Refer Table 5.1.3)

Table 5.1.3: AQI : Associated Health Impacts

AQI	Associated Health Impacts
Severe (401-500)	SEVERE : May cause respiratory effects even on healthy people and serious health effect on people with lung/heart diseases
Very Poor (301-400)	VERY-POOR : May cause respiratory illness to the people on prolonged exposure. Effect may be more pronounced in people with lung and heart diseases
Poor (201-300)	POOR : May cause breathing discomfort to people on prolonged exposure and discomfort to people with heart disease
Moderately polluted (101-200)	MODERATELY POLLUTED : May cause breathing discomfort to the people with lung disease such as asthma and discomfort to people with heart disease Children and older adults
Satisfactory (51-100)	SATISFACTORY : May cause minor breathing discomfort to sensitive people
Good (0-50)	GOOD : Minimal impact

The data has also been displayed in term of Air Quality Index (AQI) as provided in **Annexure VI** for the various locations monitored. The data indicate Good to Satisfactory Air Quality in general.

5.2 National Water Quality Monitoring Programme (NWMP)

The Goa State Pollution Control Board (GSPCB) monitors water quality at 74 locations throughout Goa under the Central Pollution Control Board sponsored project NWMP. However, out of these 74 locations, water-quality monitoring at 11 locations has been started since February 2022. These locations are classified as per the Best Designated Usage of the waters prescribed by the Central Pollution Control Board (CPCB). The water bodies monitored include rivers, wells, canals, lake, reservoir, creek, nallah and STP. Among the rivers, the estuarine rivers as well the sweet water rivers which form a part of the network for water intake points for water treatment plants for public water supply have been covered. Ground water sources (well water) located within the industrial estates is also part of this programme.

The 74 locations covered under this programme are distributed throughout Goa and represents 40 locations in North Goa district and 34 locations in the South District.

<u>NORTH GOA</u>				
Sr. No.	Type	Rivers/ Lake/ Canal/ Wells/ Creeks/ STP/ Beach/ spring/ waterfall	CPCB Classification as per designated best use	Location
1	R	Rv. Tiracol	Class 'SW-II'	Tiracol
2	R	Rv. Chapora	Class 'C'	1.Near Alorna Fort, Pernem
3	R		Class 'SW-II'	2.Siolim
4	R	Rv. Kalna	Class 'C'	Chandel, Pernem
5	R	Rv. Madei	Class 'C'	Dabos, Valpoi
6	R	Rv. Valvanti	Class 'C'	Sankli, Bicholim
7	R	Rv. Bicholim	Class 'C'	Baranzan Nagar, Bicholim

8	R	Rv. Assanora	Class 'C'	Assanora
9	R	Rv. Sinkerim	Class 'C'	1.Candolim Side Near Bridge
10	R		Class 'C'	2.Nerul Temple
11	R	Rv. Khandepar	Class 'C'	Opa-Ponda
12	R	Rv. Mandovi	Class 'SW-II'	1.Tonca, Marcela
13	R		Class 'SW-II'	2.Amona Bridge
14	R		Class 'SW-II'	3.Mandovi Bridge
15	R		Class 'SW-II'	4.IFFI Jetty
16	R		Class 'SW-II'	5.Near Hotel Marriot
17	R	Rv. Mapusa	Class 'SW-II'	Culvert on Mapusa-Panaji Highway
18	L	Anjunem Lake	Class 'C'	Anjunem
19	L	Mayem Lake	Class 'C'	Mayem, Bicholim
20	L	Carambolim Lake	Class 'C'	Carambolim, Old Goa
21	C	Cumbarjua Canal	Class 'SW-II'	Corlim (Discharge Point of Syngeta Ltd.)
22	W	Well - Kudaim I.E.	Class 'A'	M/s Cadila Healthcare Ltd.
23	W	Well - Corlim I.E.	Class 'A'	Corlim Industrial Estate
24	W	Well - Pilerne I.E.	Class 'A'	M/s Unichem
25	W	Borewell - Bethora I.E.	Class 'A'	Bethora Industrial Estate
26	W	Borewell - Madkaim I.E.	Class 'A'	Madkaim Industrial Estate
27	B	Tiracol Beach	Class 'SW-II'	Tiracol
28	B	Miramar Beach	Class 'SW-II'	Miramar
29	B	Calangute Beach	Class 'SW-II'	Calangute
30	B	Morjim Beach	Class 'SW-II'	Morjim
31	B	Vagator Beach	Class 'SW-II'	Vagator
32	R	River Mandovi	Class 'SW-II'	Ribandara-Chodan Ferry Point
33-A	STP	Influent Sample	-	Tonca STP
33-B	STP	Treated Effluent Sample	-	Tonca STP
34	WaterFall	Harwale Waterfall	Class 'C'	Harwale
35	Spring	Salmona Spring	-	Salmona, Saligao
36	R	Upstream of River Mandovi, M/s Vedanta Pvt. Ltd.	Class 'SW-II'	Amona
37	R	Downstream of River Mandovi, M/s Vedanta Pvt. Ltd.	Class 'SW-II'	Amona
38	L	Batim Lake	Class 'C'	Goa Velha
39	Creek	St. Inez Creek Upstream	Class 'B'	Panaji
40	Creek	St. Inez Creek Downstream	Class 'B'	Panaji

SOUTH GOA				
Sr. No.	Type	Rivers/ Lake/ Canal/ Wells/ Creeks/ Nallahs /Dam	CPCB Classification as per designated best use	Location
1	R	Rv. Zuari	Class 'SW-II'	1.Panchawadi
2	R		Class 'SW-II'	2.Borim Bridge
3	R		Class 'SW-II'	3.Marciam Jetty
4	R		Class 'SW-II'	4.D/S of point where Kumbarjua Canal Joins
5	L	Rv. Sal	Class 'C'	1.Rumder
6	R		Class 'SW-II'	2.Khareband, Margao
7	R		Class 'SW-II'	3.Pazarconi, Cuncolim (Near Culvert Margao- Cancona NH)
8	R		Class 'SW-II'	4.Orlim Bridge, Orlim
9	R		Class 'SW-II'	5.Near Hotel Leela, Mobor, Cavelossim
10	R	Rv. Talpona	Class 'C'	1.Canacona
11	R	Rv. Khandepar	Class 'C'	Codli near Bridge, u/s OPA waterworks, Sanguem
12	R	Rv. Kushawati	Class 'C'	Near Bund at Kevona, Rivona, Sanguem
13	L	Salaulim Lake	Class 'C'	Salaulim, Sanguem
14	L	Raia Lake	Class 'C'	Curtorim
15	L	Saipem Lake	Class 'C'	Saipem
16	L	Curtorim Lake	Class 'C'	Curtorim
17	C	Agricultural Canal	Class 'E'	Agricultural Canal upstream of Cuncolim I.E. (1 Km from M/s Nicomet Ind.)
18	C	Agricultural Canal	Class 'E'	Agricultural Canal downstream of Cuncolim I.E. (1 Km from M/s Nicomet Ind.)
19	C	Dando Creek	Class 'C'	Dando Mollo, Velsao, Marmugao
20	W	Well - Verna I.E.	Class 'A'	M/s Cipla Limited
21	W	Well - Sancoale I.E.	Class 'A'	Sancoale Industrial Estate
22	W	Borewell - Concolim I.E.	Class 'A'	Cuncolim Industrial Estate
23	B	Mobor Beach	Class 'SW-II'	Mobor
24	B	Baina Beach	Class 'SW-II'	Baina
25	B	Galgibag Beach	Class 'SW-II'	Galgibag
26	B	Colva Beach	Class 'SW-II'	Colva
27	B	Velsao Beach	Class 'SW-II'	Velsao
28	Dam	Chapoli Dam	Class 'C'	Chapoli, Canacona
29	Creek	Colva Creek Upstream	Class 'SW-II'	Colva

30	Creek	Colva Creek Downstream	Class 'SW-II'	Colva
31	Nallah	Bethora Nallah Upstream	Class 'B'	Bethora
32	Nallah	Bethora Nallah Downstream	Class 'B'	Bethora
33	L	Sarzora Lake	Class 'C'	Chinchinim
34	L	Ambulor Lake	Class 'C'	Verna

These 74 locations are divided into two groups i.e., (i) 66 locations which are being monitored on monthly-basis and (ii) 8 locations (*i.e. Bore wells*) are monitored on half-yearly basis as per CPCB protocol.

Seven Hundred and Ninety samples were collected from all these water bodies and analyzed during the year 2021-2022. The NWMP data is attached at **Annexure VII**

From the water Quality data analysis for the year 2021-2022, it is observed as follows.

1. River Chapora at Alorna fort, River Kalna at Chandel , River Assanora at Assanora, River Valvanti at Sanquelim, River Madei at Dabos, River Khandepar at Opa water works, Ponda, River Khandepar at Codli, River Khushavati at Rivona, River Talpona at Canacona, Dando Mollo Creek at Velsao, Salaulim Reservoir at Salaulim , Chapoli Dam, Mayem Lake, Raia Lake, Carambolim lake, Anjunem Lake, Sarzora Lake all parameters are within limits for class C river as per CPCB classification based on designated best use of rivers. Thus, **Water Quality Index (WQI) is satisfactory**.
2. At Harwale waterfall, River Bicholim at Barazannagar – parameter namely Total coliform is exceeding the permissible limit during most of the monitoring months. These waters are classified as class C based on CPCB's categorisation designated best use of rivers. Thus, **WQI is not-satisfactory** at these locations.
3. At Saipem lake, water-sampling was not possible during April – June 2021 and January to March 2022. However, during other months, Dissolved oxygen (D. O.) is low while Biochemical oxygen demand (B.O.D.) is relatively high thereby indicating that WQI is not-satisfactory. While in case of Curtorim lake, Batim lake, Ambulor lake, Rumder lake, all parameters, *in general*, are within the prescribe limits and hence **WQI is satisfactory**.
4. At river Mapusa on Culvert along NH, River Sal at Pazorconi, Mobor, Orlim bridge & Khareband, Cumbarjua canal, River Zuari at Panchwadi, River Zuari at Cortalim, River Zuari at Madkai, River Zuari at Borim bridge ,River Tiracol, River Chapora at Siolim bridge, River Sinkerim at Candolim bridge & at Ganpati Temple, River Mandovi at Tonca-Marcela, at IFFI jetty, at Hotel Marriott, at Ribander-Chodan ferry, at Amona bridge & Near Mandovi bridge, Panaji , Upstream and downstream of Colva creek, Upstream of River Mandovi at Sesa Goa, Downstream of River Mandovi at Sesa Goa, Tiracol Beach, Miramar Beach, Calangute Beach, Morjim Beach, Mobor Beach, Baina Beach, Galgibag Beach, Colva Beach, Vagator Beach, Velsao Beach, Fecal coliform is exceeding the permissible limit for class SW-II river as per CPCB classification based on designated best use of rivers. In addition, waters at few of the above locations, *at times*, indicate non-compliance to the prescribed limits in respect of Biochemical

Oxygen Demand (B.O.D.) or pH and hence, in general, **WQI at these locations is not-satisfactory.**

5. At the Agricultural Canal upstream and downstream of Cuncolim IDC, all parameters are within limits using the limit for class - E river as per CPCB classification based on designated best use and hence **WQI is satisfactory** for the said clas – E.
6. Water-quality parameters analysed in Bore wells at Sancoale / Pilerene / Madkai Industrial Estate indicate compliance to CPCB-prescribed parameters as applicable to class - A as per CPCB classification based on designated best use and hence **WQI is satisfactory**. While, bore wells at Cuncolim and Bethora Industrial Estates have recorded low Dissolved Oxygen (D.O.), bore wells at Corlim and Verna industrial estates have recorded low pH while, bore well at Kundaim industrial estate has recorded relatively higher B.O.D. although other parameters are well within the prescribed limits in these bore wells.
7. At upstream and downstream of St. Inez creek, Dissolved Oxygen (D.O.) is below permissible limit and Biochemical Oxygen Demand (B.O.D.) is exceeding the permissible limit for class - B as per CPCB classification based on designated best use and hence **WQI is not-satisfactory**.
8. Similarly, upstream and downstream of Bethora nallah, selective parameters such as pH, Dissolved Oxygen (D.O.) and Biochemical Oxygen Demand (B.O.D.) occasionally shows variation in CPCB-prescribed parameters.
9. Water-quality parameters at the STP-outlet of Tonca, Panaji with reference to Biochemical Oxygen Demand (B.O.D.) and Residual Chlorine exceeds the permissible limit stipulated for STP-treated waters.
10. At Salmona Spring, all the parameters are within the prescribed limits and thus, **WQI is satisfactory**.
11. It is observed that the river water quality of the five river stretches : namely Chapora/ Assanora/Valvanti/Khandepar/Talpona which were earlier not in compliance are observed to complies with the CPCB –prescribed standards.

Designated best use classification (Water quality standards) of surface waters

Designated Best Use	Quality Class	Primary Water Quality Criteria
Drinking water source without conventional treatment but with chlorination	A	Total coliform organisms (MPN*/100 ml) shall be 50 or less pH between 6.5 and 8.5 Dissolved Oxygen 6 mg/l or more, and Biochemical Oxygen Demand 2 mg/l or less
Outdoor bathing (organized)	B	Total coliform organisms(MPN/100 ml) shall be 500 or less pH between 6.5 and 8.5 Dissolved Oxygen 5 mg/l or more, and Biochemical Oxygen Demand 3 mg/l or less
Drinking water source with conventional treatment	C	Total coliform organisms(MPN/100 ml) shall be 5000 or less pH between 6 and 9 Dissolved Oxygen 4 mg/l or more, and Biochemical Oxygen Demand 3 mg/l or less

Propagation of wildlife and fisheries	D	pH between 6.5 and 8.5 Dissolved Oxygen 4 mg/l or more, and Free ammonia (as N) 1.2 mg/l or less
Irrigation, industrial cooling and controlled disposal.	E	pH between 6.0 and 8.5 Electrical conductivity less than 2250 micro mhos/cm, Sodium Absorption Ratio less than 26, and Boron less than 2 mg/l

*** MPN: Most Probable Number**

**Designated best use classification (water quality standards)
for Coastal waters and marine outfall**

Class	Designated best use	Primary Water Quality Criteria
SW-I	Salt pans, Shell fishing, Mariculture and Ecologically Sensitive Zones	pH – 6.5 – 8.5 D. O. – 5 mg/l Colour and odour – No noticeable colour or offensive odour Floating matter – Nothing obnoxious Suspended solids – none from sewage or industrial waste Oil and Grease – 0.1 mg/l Heavy metals – Mercury 0.001 mg/l Lead – 0.001 mg/l Cadmium – 0.01 mg/l
SW-II	Bathing, Contact water sports and Commercial fishing	pH – 6.5 – 8.5 D. O. – 4 mg/l Colour and odour – No noticeable colour or offensive odour Floating matter – Nothing obnoxious or detrimental for use Turbidity – 30 NTU (<i>Nephelometric Turbidity Unit</i>) Faecal Coliform – 100/100 ml (MPN) Biochemical Oxygen Demand (3 days at 27°C) – 3 mg/l
SW-III	Industrial cooling, Recreation (non-contact) and Aesthetics	pH – 6.5 – 8.5 D. O. – 3 mg/l Colour and odour – No noticeable colour or offensive odour Floating matter – No visible, obnoxious floating debris Turbidity – 30 NTU (<i>Nephelometric Turbidity Unit</i>) Faecal Coliform – 500/100 ml (MPN) Dissolved Iron (Fe) – 0.5 mg/l or less Dissolved manganese (Mn) – 0.5 mg/l or less
SW-IV	Harbour	pH – 6.0 – 9.0 D. O. – 3 mg/l Colour and odour – No visible colour or offensive odour Floating matter, Oil, grease and scum (including petroleum products) – 10 mg/l or detrimental for use Faecal Coliform – 500/100 ml (MPN) Biochemical Oxygen Demand (3 days at 27°C) – 5 mg/l

SW-V	Navigation and Controlled waste disposal	pH – 6.0 – 9.0 D. O. – 3 mg/l Colour and odour – None in such concentrations that will impair any usage specifically assigned to this class. Sludge deposits, solid refuse floating solids, oil, grease and scum – None except for such small amounts discharge of appropriately treated sewage and or industrial waste effluents. Faecal Coliform – 500/100 ml (MPN)

Figure 5.2.1 is a map showing quality monitoring locations under national water monitoring programme (NWMP).



CHAPTER 6.

PRESENT STATE OF ENVIRONMENT, ENVIRONMENTAL PROBLEMS AND COUNTER MEASURES

6.1 Ambient Air Quality in Iron Ore Mining Transportation Routes

Ambient Air Quality Monitoring was conducted in the iron ore transportation routes as listed below. The AAQM data is placed at **Annexure VIII**. The air quality is generally good to satisfactory during the monitoring period.

1. At open space in front of Govt. Primary School Fanaswadi, Naveli
2. On open terrace of residential house of Mr. Sagun Gawas, Sanvordem
3. On the Open terrace of Shri Ramnath Setu Naik, Bodyamal, Uguem
4. On the Open terrace of residential house of Mr. Anil alias shaba Faldessai, Cavrem
5. On the open terrace of office building of village panchayat of Kaleyem, Sanguem
6. Within the premises of M/s. Timblo Enterprises, Maulinguem, Kaley Village, Sanguem
7. Within Premise of Shree Sateri Temple, Bag Xelvona, Quepem
8. On the open Terrace of Residential House of Mr. Selwyn D'costa, Quepem
9. On the open Terrance of M/s. Mallikarjun Store near Village Panchayat, Sanvordem
10. On the open Terrance of Residential House of Mr. Dilip Raikar, Sanguem
11. Ambaulim Quepem (House of Ramnath B. Naik), Quepem

6.2 CONTINUOUS AMBIENT AIR QUALITY MONITORING STATION (CAAQMS) Mobile station was operated for conducting Ambient Air Quality Monitoring in and around the industrial premises in Goa for the period from April 2021 to March 2022.



The AAQM were conducted at the following locations by deploying the CAAQMS Mobile Van to ascertain the Ambient Air Quality in and around the industries and other local areas in Goa.

Sl. No.	Date of Mobile CAAQMS Operations	Name & Address of Industry	No. of Days Monitored
1.	03-06-2021 to 05-06-2021	M/s.Vedanta Ltd, Amona	2 days
2.	05-10-2021 to 08-10-2021	M/s. Global Ispat Ltd; Cuncolim Indl. Estate	2 days
3.	12-10-2021 to 15-10-2021	M/s. John Distilleries Pvt. Ltd; Cuncolim Indl. Estate	2 days
4.	19-10-2021 to 22-10-2021	M/s. Shradhha Ispat Pvt Ltd; Cuncolim Industrial Estate	2 days
5.	26-10-2021 to 29-10-2021	M/s. Shrdi Steels Re Rollers Pvt Ltd; Cuncolim Industrial Estate	2 days
6.	01-11-2021 to 04-11-2021	M/s. Trimurty Industries, Cuncolim Industrial Estate	2 days
7.	09-11-2021 to 12-11-2021	M/s. Sunrise Electromelt Pvt. Ltd; Cuncolim Industrial Estate	2 days
8.	16-11-2021 to 19-11-2021	M/s. United Marine Products, Cuncolim Industrial Estate	2 days
9.	22-11-2021 to 25 -11-2021	M/s. RukminiRama Steel Re-rolling Mills Pvt. Ltd; Cuncolim Industrial Estate	2 days
10.	08-12-2021 to 17-12-2021	M/s. Goa Carbon Ltd; St. Jose De Areal, Salcete-Goa	4 days
11.	21-12-2021 to 24-12-2021	M/s. Hindustan Waste Treatment Plant, Saligao, Bardez-Goa	2 days
12.	28-12-2021 to 31-12-2021	M/s. Unichem Laboratories Ltd; Pilerne Industrial Estate	2 days
13.	04-01-2022 to 07-01-2022	M/s. Goa Glass Fibres Ltd; Colvale	2 days
14.	11-01-2022 to 14-01-2022	GlenMark Pharmaceuticals Ltd; Colvale Industrial Estate	2 days
15.	02-03-2022 to 03-03-2022	M/s. Ambey Metallic Pvt. Ltd; Pissurlem Industrial Estate	1 day
16.	04-03-2022 to 07-03-2022	Manovikas English School Ground , Sonsoddo,Fatorda, Margao	3 days
17.	09-03-2022 10-03-2022	M/s. Ambey Metallic Pvt. Ltd; Pissurlem Industrial Estate	1 day
18.	14-03-2022 to 17-03-2022	M/s. Counto Microfine Products Pvt. Ltd; Pissurlem Industrial Estate	2 days
19.	29-03-2022 to 01-04-2022	M/s. Alcon Cement Co. Pvt. Ltd; Surla	2 days
Total Number of days AAQM conducted by deploying Mobile CAAQMS Van			39 days

6.3 Noise and AAQM monitoring during Deepawali Festival, 2021.

6.3.1 Noise Level Monitoring During Deepawali Festival, 2021

Noise Level Monitoring During Deepawali Festival, 2021



Noise level limits prescribed by CBCB

Category of Area/Zone	Limits in dB (A) Leq	
	Day Time (6.00 am – 10.00 pm)	Night Time (10.00 pm – 6.00 am)
Commercial Area	65	55
Residential Area	55	45
Silence Zone	50	40

City : Mapusa

- **Latitude & Longitude** :15.60°N, 73.82 °E
- **Climate/Meteorology**: Tropical Climate
- **Population**:39,989as per 2011 census*
- **Major land use**: Urban

Monitoring Location:Near Municipal Market

Description of monitoring site: Commercial

Activities around the monitoring location: On **Pre-Deepawali day (29-10-2021)** Medium to Light Vehicular Movement,On **Deepawali Day (04-11-2021)** Heavy to Light Vehicular Movement, Bursting of fire crackers light Rainfall was observed.

Data/Observations:

Noise level during Deepawali festival, 2021:

Location A: Mapusa	Pre-Deepawali day (29-10-2021)			Deepawali Day (04-11-2021)		
Time duration	Lmin	Lmax	Leq dB(A)	Lmin	Lmax	Leq dB(A)
18:00 to 19:00 Hr	61.2	79.6	64.2	48.5	80.5	64.5
19:00 to 20:00 Hr	61.0	72.2	62.8	43.2	94.0	68.2
20:00 to 21:00 Hr	59.4	71.2	61.1	49.4	95.6	72.7

21:00 to 22:00 Hr	59.7	72.4	61.6	46.8	86.1	67.4
22:00 to 23:00 Hr	56.6	83.5	61.5	41.9	99.0	68.7
23:00 to 24:00 Hr	50.2	75.4	56.9	41.9	84.4	63.1

City :Panjim

- **Latitude & Longitude :** 15°29'56' N, 73°49'40'E
- **Climate/Meteorology:** Tropical Monsoon Climate
- **Population:** 70,991 as per 2011 census*
- **Major land use:** Urban

Monitoring Location: Patto-Panjim

Description of monitoring site: Commercial

Activities around the monitoring location: On **Pre-Deepawali day (29-10-2021)** Heavy to Light Vehicular Movement, On **Deepawali Day (04-11-2021)** Heavy to Light Vehicular Movement, Bursting of fire crackers light Rainfall was observed.

Data/Observations:Noise level during Deepawali festival, 2021:

Location B : Panaji	Pre-Deepawali day (29-10-2021)			On Deepawali Day (04-11-2021))		
Time duration	Lmin	Lmax	Leq dB(A)	Lmin	Lmax	Leq dB(A)
18:00 to 19:00 Hr	59.8	82.5	61.9	43.4	83.1	63.8
19:00 to 20:00 Hr	67.4	83.7	65.8	42.7	90.0	67.9
20:00 to 21:00 Hr	63.2	90.8	66.1	45.9	94.7	67.2
21:00 to 22:00 Hr	39.2	83.6	53.2	55.3	83.7	68.0
22:00 to 23:00 Hr	38.2	83.3	48.0	43.7	73.8	49.6
23:00 to 24:00 Hr	40.4	76.2	52.2	42.3	73.5	56.3

City : Vasco

- **Latitude & Longitude :** 15°23'53'N, 73°48'40'E
- **Climate/Meteorology:** Tropical Climate
- **Population:** 94393 as per 2011 census*
- **Major land use:** Urban

Monitoring Location: Fuse Call-Office, Vasco

Description of monitoring site: Commercial

Activities around the monitoring location On **Pre-Deepawali day (29-10-2021)** Heavy to Light Vehicular Movement, On **Deepawali Day (04-11-2021)** Heavy to Light Vehicular Movement Bursting of fire crackers light Rainfall & playing of music in temple Nearby(During Diwali day)

Data/Observations:

Noise level during Deepawali festival, 2021:

Location C : Vasco	Pre-Deepawali day (29-10-2021)			On Deepawali Day (04-11-2021))		
Time duration	Lmin	Lmax	Leqd B(A)	Lmin	Lmax	Leq dB(A)
18:00 to 19:00 Hr	38.3	77.6	61.0	42.4	74.3	62.8
19:00 to 20:00 Hr	39.5	80.4	61.4	41.2	88.4	73.1
20:00 to 21:00 Hr	38.7	88.8	65.3	43.6	93.0	66.3

21:00 to 22:00 Hr	40.7	81.1	58.2	56.5	85.5	65.5
22:00 to 23:00 Hr	36.5	93.0	60.6	56.2	100.9	72.0
23:00 to 24:00 Hr	50.2	76.3	55.2	47.8	86.9	67.5

City : Margao

- **Latitude & Longitude :** 15°16'25'N, 73°57'29'E
- **Climate/Meteorology:** Tropical Monsoon Climate
- **Population:** 87,650 as per 2011 census*
- **Major land use:** Urban

Monitoring Location: Municipality Garden

Description of Monitoring Site: Commercial

Activities around the monitoring location : On **Pre-Deepawali day (29-10-2021)** Medium to Light Vehicular Movement, On **Deepawali Day (04-11-2021)** Heavy to Light Vehicular Movement, Bursting of fire crackers, light Rainfall was observed.

Data/Observations:

Noise level during Deepawali festival, 2020:

Location D : Margao	Pre-Deepawali day (29-10-2021)			On Deepawali Day (04-11-2021)		
Time duration	Lmin	Lmax	Leq dB(A)	Lmin	Lmax	Leq dB(A)
18:00 to 19:00 Hr	56.2	74.2	62.1	58.1	93.7	62.0
19:00 to 20:00 Hr	56.8	74.8	65.5	50.9	95.7	58.6
20:00 to 21:00 Hr	58.6	72.6	63.7	43.2	91.2	68.6
21:00 to 22:00 Hr	59.7	72.9	61.8	55.8	93.9	67.3
22:00 to 23:00 Hr	59.6	75.5	61.3	52.7	94.4	65.0
23:00 to 24:00 Hr	59.8	76.5	61.6	41.4	91.5	62.2

Note: All values are in Leq dB(A)

The value reported in should not be compared with Prescribed Noise Level standards for designated areas as the time period for Measurement (6 p.m. to 12 Midnight) do not match with the period specified in the prescribed standard (Day time: (6 a.m. to 10 p.m.) and night time: 10 p.m. to 6 a.m.).

* Census data source – www.citypopulation.de/india

6.3.2. Ambient Air Quality - Deepawali 2021

AAQM was conducted at Panaji during Deepawali 2021. The data is placed at ANNEXURE IX.

From the data placed at Annexure IX, it is observed that PM10 has exceeded for 3 days, on 29-11-2021, 10-11-2021 and 11-11-2021 and PM2.5 exceeded for 2 days, on 09-11-2021 and 11-11-2021 of 14 monitoring days. Field Observations reported during exceedence days: Low to high density Light Motor Vehicular movement and Heavy Motor Vehicular movement, sweeping activity and windy conditions observed during Monitoring. No exceedence observed with respect to any of the parameters monitored on 04-11-2021 (Diwali Day).

6.4. Annual Report Of Stack Monitoring For The Year APRIL 2021 TO MARCH 2022

During the year under report , the Goa State Pollution Control Board conducted Stack Emission Monitoring programmes for 50 Stacks in different Industries / Hotels within the State of Goa . The units mostly comprises of Traditional ovens , Induction Furnaces, Reheating Furnaces, Boilers, Thermic Fluid Heaters, Waste Heat Recovery Boilers, Rotary Kilns, Process Stacks, Blast Furnaces, DG Sets, etc. The details of the stack emission monitoring conducted are presented below.

Sr. No.	Area	Industrial Area	Name of Unit	Type of Stack	Date of Sampling
1	Honda	Honda Ind. Estate	M/s. Fresenius Kabi India Pvt. Ltd.	Boiler (6TPH)	06.04.21
2	Honda	Honda Ind. Estate	M/s. Fresenius Kabi India Pvt. Ltd.	Boiler (10TPH)	08.04.21
3	Pilerne	Pilerne Ind Estate	M/s. Sureklean Services Pvt Ltd.	DG (250 KVA)	22.10.21
4	Pilerne	Pilerne Ind Estate	M/s. Sureklean Services Pvt Ltd.	Boiler (3.0T/hr)	03.11.21
5	Verna	Verna Ind Estate	M/s. IFB Industries Limited	DG (750 KVA)	09.11.21
6	Verna	Verna Ind Estate	M/s. Goa Thermopack Pvt Ltd	Boiler (1.0T/hr)	11.11.21
7	Salcete	Margao Ind Estate	M/s. Goa Carbon Limited	Rotary Kiln (100000 mT/ annum)	15.11.21
8	Salcete	Margao Ind Estate	M/s. Goa Carbon Limited	Cooler stack	18.11.21
9	Verna	Verna Ind Estate	M/s. IFB Industries Limited	DG (750 KVA)	22.11.21
10	Verna	Verna Ind Estate	M/s. Marksons Pharma Ltd.	Boiler (3.0 T/hr)	24.11.21
11	Verna	Verna Ind Estate	M/s. Indoco Remedies Ltd	Boiler (2.0 T/hr)	26.11.21
12	Verna	Verna Ind Estate	M/s. Marksons Pharma Ltd.	Boiler (2.25 T/hr)	01.12.21
13	Aquem, Margao	-	M/s. French Bakery	Traditional Oven no. 1	06.12.21
14	Aquem, Margao	-	M/s. French Bakery	Traditional Oven no. 2	08.12.21
15	Verna	Verna Ind Estate	M/s. Indoco Remedies Ltd	Boiler (4.0 TPH)	10.12.21
16	Navelim Village, Bicholim.	-	M/s. VEDANTA LIMITED (Sinter Plant)	Tail End ESP of sinter plant	15.12.21
17	Navelim Village, Bicholim.	-	M/s. VEDANTA LIMITED (Sinter Plant)	Cast house de-dusting	17.12.21
18	Navelim Village, Bicholim.	-	M/s. VEDANTA LIMITED (Sinter Plant)	Head End ESP	20.12.21

Sr. No.	Area	Industrial Area	Name of Unit	Type of Stack	Date of Sampling
19	Amona Village, P.O.Marcela-Bicholim.	-	M/s. VEDANTA LIMITED (Pig Iron Plant)	Blat Furnace - II after Bag House	22.12.21
20	Amona Village, P.O.Marcela-Bicholim.	-	M/s. VEDANTA LIMITED (Pig Iron Plant)	Laddle dumping chamber after Bag House	27.12.21
21	Amona Village, P.O.Marcela-Bicholim.	-	M/s. VEDANTA LIMITED (Pig Iron Plant)	Blast Furnace - I (Hot Blast Stove)	29.12.21
22	Amona Village, P.O.Marcela-Bicholim.	-	M/s. VEDANTA LIMITED (Pig Iron Plant)	Blast Furnace- I after Bag House	31.12.21
23	Amona Village, P.O.Marcela-Bicholim.	-	M/s. VEDANTA LIMITED (Pig Iron Plant)	Blast Furnace -II (Hot Blast Stove)	04.01.22
24	-	Tivim Ind Estate	M/s. Centaur Pharmaceuticals Pvt Ltd (Plant I)	Boiler – I (600 Kg/hr)	12.01.22
25	-	Tivim Ind Estate	M/s. Centaur Pharmaceuticals Pvt Ltd (Plant I)	Boiler – II (600 Kg/hr)	14.01.22
26	Amona Village, P.O.Marcela-Bicholim.	-	M/s. VEDANTA LIMITED (Met coke division)	Boiler (WHRB -I) (64 T/hr)	19.01.22
27	Amona Village, P.O.Marcela-Bicholim.	-	M/s. VEDANTA LIMITED (Met coke division)	Boiler (WHRB -II) (64 T/hr)	21.01.22
28	Navelim Village, Bicholim.	-	M/s. VEDANTA LIMITED (Waste heat recovery plant 2) coke oven plant expansion	Boiler no. 1 (65 T/hr) (WHRB-I)	24.01.22
29	Navelim Village, Bicholim.	-	M/s. VEDANTA LIMITED (Waste heat recovery plant 2) coke oven plant expansion	Boiler no. 2 (65 T/hr) (WHRB -II)	27.01.22
30	-	Madkaim Ind estate	M/s. Sun pharmaceuticals Ind Pvt Ltd	Boiler (850 kg/hr)	31.01.22

Sr. No.	Area	Industrial Area	Name of Unit	Type of Stack	Date of Sampling
31	-	Tivim Ind estate	M/s. Centaur Pharmaceuticals Pvt Ltd (unit II)	Boiler (600 kg/hr)	02.02.22
32	-	Colvale Ind estate	M/s. Goa Glass Fibre Limited	Glass Melting Furnace (78 MT/day)	04.02.22
33	-	Tuem Ind estate	M/s. Centaur Pharmaceuticals Pvt Ltd	Boiler (3000kg/hr)	08.02.22
34	-	Verna Ind estate	M/s. Cipla limited (Cipla-III)	Boiler (2.0 TPH)	10.02.22
35	-	Verna Ind estate	M/s. Cipla limited (Cipla-II)	Boiler (6.0 TPH)	15.02.22
36	-	Verna Ind estate	M/s. Cipla limited (Cipla-II)	Boiler (2.8 TPH)	17.02.22
37	-	Verna Ind estate	M/s. Cipla limited (Cipla-II)	Boiler (3.5TPH)	21.02.22
38	-	Verna Ind estate	M/s. Cipla limited (Cipla-II)	DG - 750 KVA	23.02.22
39	-	Verna Ind Estate	M/s. Cipla limited (Cipla- I)	Boiler (2.8 TPH)	25.02.22
40	-	Verna Ind Estate	M/s. Cipla limited (Cipla- I)	Boiler (3.5 TPH)	01.03.22
41	-	Verna Ind Estate	M/s. Cipla limited (Unit-III)	Boiler (5.0 TPH)	03.03.22
42	-	Verna Ind Estate	M/s. Lupin Limited	DG (2250 KVA)	07.03.22
43	-	Verna Ind Estate	M/s. Lupin Limited	Boiler (3.0TPH)	09.03.22
44	-	Verna Ind Estate	M/s. Lupin Limited	Boiler (3.0TPH)	14.03.22
45	-	Kundaim Ind Estate	M/s. Berger Paints India Ltd	DG (1500 KVA)	16.03.22
46	-	Kundaim Ind Estate	M/s. Berger Paints India Ltd	Thermic Fluid Heater (20 Lac kcal/hr)	21.03.22
47	-	Kundaim Ind Estate	M/s. Mohit Steel Industries Pvt Ltd	Induction Furnace (6 MT/Heat)	23.03.22
48	-	Kundaim Ind Estate	M/s. Berger Paints India Ltd	Thermopack (10 lac Kcal/hr)	25.03.22
49	Mavwasoda usgaon Ponda	-	M/s. Procter & Gamble Health Limited	Boiler (6.0 TPH)	29.03.22
50	Mavwasoda usgaon Ponda	-	M/s. Procter & Gamble Health Limited	Boiler (4.0 TPH)	31.03.22

Remark: The result of the stack emission monitoring indicate that the flue gases are within the permissible limits except for two stacks for which the emissions exceeded the permissible limits.

6.5 Ambient Air Quality in and around M/s. Goa Carbon Limited

Ambient Air Quality Monitoring was conducted in and around M/s Goa carbon Ltd at St. Jose de Areal. The AAQM data is placed at **Annexure X**. The air quality is generally satisfactory to Moderate during the monitoring period.

1. Behind weigh bridge within the premises of M/s Goa Carbon Ltd, St. Jose De Areal
2. Near FO Tank of M/s Goa Glass Ltd, St. Jose De Areal
3. Near Raw pet coke handling shed of M/s Goa Carbon Ltd, St. Jose De Areal
4. Near FO Tank of M/s Goa Carbon Ltd, North-East side, St. Jose De Areal
5. Near Raw Material Storage yard of M/s Goa Carbon Ltd, West side, St. Jose De Areal
6. Open terrace residential of Mr. Felix Pereira, East side , St. Jose De Areal
7. Near Village Panchayat, St. Jose De Areal
8. Near Entry Gate, Souh Side, Goa Carbon Ltd, St. Jose De Areal

6.6 Ambient Air Quality around Dudhsagar

Ambient Air Quality Monitoring was conducted at the following locations at Mollem around the Dudhsagar. The AAQM data is placed at **Annexure XII**. The air quality is generally satisfactory to Moderate during the monitoring period.

1. Near Dudhsagar Entry Gate , Mollem
2. Near Dudhsagar temple, Mollem

6.7. Ambient Air Quality at Sonsoddo dump site at Margao.

Ambient Air Quality Monitoring was conducted at the following locations at Sonsodo, Margao. The AAQM data is placed at **Annexure XIII**. The air quality is generally satisfactory to moderate during the monitoring period.

1. Near Express Carwash, Margao
2. Open space of residence of Mr. Malik Amin Nanda, Near Vet Hospital, St. Xavier Road, Margao
3. Mr. Jojo Sequeira Residence, H. NO. 1011 Raia, Margao

6.8 Ambient Air Quality at Municipal Solid Waste Dump sites

Ambient Air Quality Monitoring was conducted at the following Municipal Solid waste Dump sites. The AAQM data is placed at **Annexure XIV**. The air quality is generally satisfactory during the monitoring period. .

1. On the Open Terrace of Security Cabin, Cuncolim Municipal Council, Cuncolim
2. Near Bailing Station, Cuncolim Municipal Council, Cuncolim
3. Near the Solid Waste Dump ,Cuncolim Municipal Council, Cuncolim

4. On the Open Terrace of Security Cabin, Canacona Municipal Council, Canacona
5. Near Bailing Stationn, Canacona Municipal Council, Canacona
6. On the Top of the Security Cabin Near Entrance Gate, Quepem Municipal Council, Quepem
7. Near the Landfill Site, Quepem Municipal Council, Quepem
8. Near Entrance Gate MSW Treatment Site, Cuchorem Municipal Council, Cuchorem
9. Near the Mix Solid Waste Dumps, Cuchorem Municipal Council, Cuchorem
10. At Entrance Near Security Cabin, Margao Municipal Council, Margao
11. Near Administrative Building, Margao Municipal Council, Margao
12. Near Old Waste Dump (Legacy Waste) Margao Municipal Council, Margao
13. Near Entrance Gate of Proposed MRF Shed, Marmugoa Municipal Council, Marmugoa
14. Near Biogas Plant, Marmugoa Municipal Council, Marmugoa
15. Opposite to Present Bailing Station, Marmugoa Municipal Council, Marmugoa
16. Near main gate of plant, Valpoi Municipal
17. Behind plant (within premises), Valpoi Municipal
18. Near solid waste dump, Valpoi Municipal
19. Near Office block of the plant, Pernem Municipal
20. Back side of plant (within Premises), Pernem Municipal
21. Near weigh bridge, Bicholim Municipal
22. Near Solid waste dump, Bicholim Municipal
23. Near Ground slab, Bicholim Municipal
24. Near leachet tank, Sankhali Municipal
25. Near Compound wall, Sankhali Municipal
26. Near Security gate, Sankhali Municipal
27. Near solid waste dump (Right side of bailing machine), Ponda Municipal
28. Near main gate of plant, Ponda Municipal
29. Front side Near bailing machine, Ponda Municipal

6.9 Particulate Source Apportionment Study for Air Quality in Vasco-da-Gama

The Goa State Pollution Control Board conducted a Source Apportionment Study in Vasco da Gama in order to address the issue of Particulate Matter, with specific attention to the potential and extent of influence of port activities of dusty cargo handling. The study was awarded to IIT-Bombay. The study was initiated in November 2017 and was conducted in two phases and the final report was submitted in December 2021.

The Phase -I study comprised;

- i. Preliminary studies including field surveys and field sampling campaigns for understanding the expected contribution of pollutants from the port operations
- ii. AEROMOD runs were carried out for meteorological conditions and particulates for estimating the source strengths
- iii. collection of a few coupon samples to get a sense of dry deposition of fugitives in and near the vicinity of port to understand the concern of nuisance
- iv. historical data was used to study seasonal and historical pattern of particulate levels
- v. Thermo-gravimetric analysis was carried out to understand the nature of samples in terms of volatile and fixed carbon content.

The Phase-II study comprised;

- i. Gravimetric analysis for Teflon and quartz samples
- ii. Collection of historical data of Ambient Air Quality Monitoring (AAQM), Continuous Ambient Air Quality Monitoring (CAAQM) and wind data from MPT, and port activities data and further compilation and analyses
- iii. EC-OC analysis for PM samples at NEERI-Nagpur
- iv. Study of pollution load levels during Lock-down period
- v. EDXRF analysis at ARAI, Pune
- vi. PMF based Source Apportionment based on EC-OC and EDXRF data which was repeated with inclusion of IC data
- vii. AEROMOD simulation were made for monthly resolution based on the highest activity level during the sampling campaign, as well as, for season based time frame and potential doubling of the activities
- viii. Status on the progress on discussion with GSPCB
- ix. IC analysis for ions at ARAI, Pune

Outcome of the Study

The study focussed on the work related to gravimetric measurements for comparison of levels related to particulate matter (PM₁₀, PM_{2.5} and TSP) in proximity of the port activities. The particulate matter samples collected during the sampling campaign were analysed for elements, ions and EC-OC for source apportionment; and the influence of the meteorology on the dispersion of particulate matter from port activities was studied based on level of activity in the port during the sampling period using AEROMOD.

The following conclusions are made from the study;

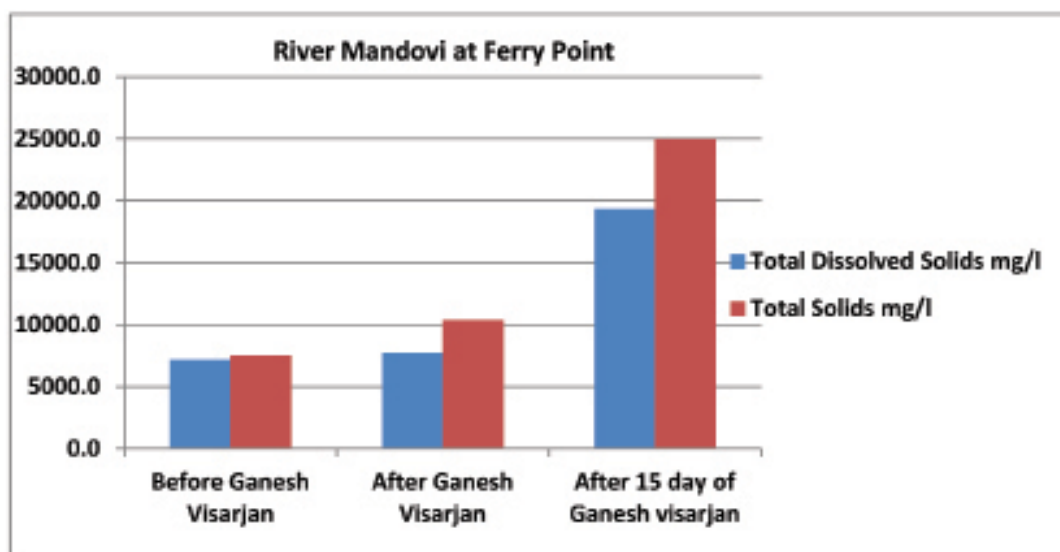
1. The source apportionment results indicate that control measures need to be taken for port activities, open burning of biomass and solid-wastes, vehicular emissions, and road dust re-suspension by vehicles and sweeping, across the entire Vasco da Gama area. Marine aerosols cannot be controlled as Vasco da Gama is a coastal city.
2. Since emission factors are highest for re-suspension from stock piles, use of screens and shapes/ orientations of the stockpiles can greatly reduce re-suspension by wind.
3. Episodic events are caused by high wind conditions; monitoring of wind speed at the location of the berths is critical for emergency shut-down of operations and practice of water spraying to maintain the moisture levels in the stockpiles needs to continue
4. In addition to PM-10 and PM2.5 for regulatory requirements, establishing a TSP measurement network is important for routine monitoring for influence of larger particles; monitoring needs to be strengthened

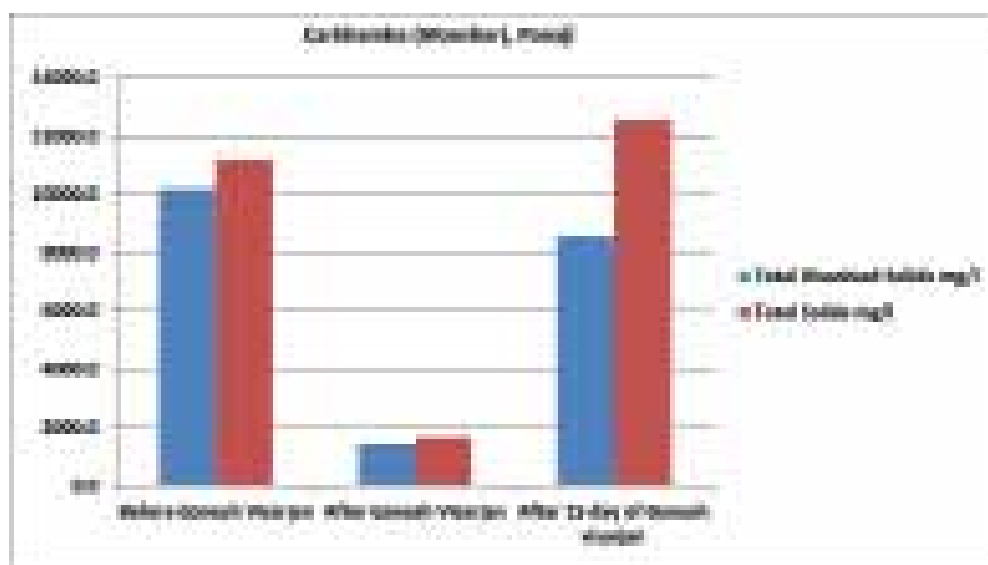
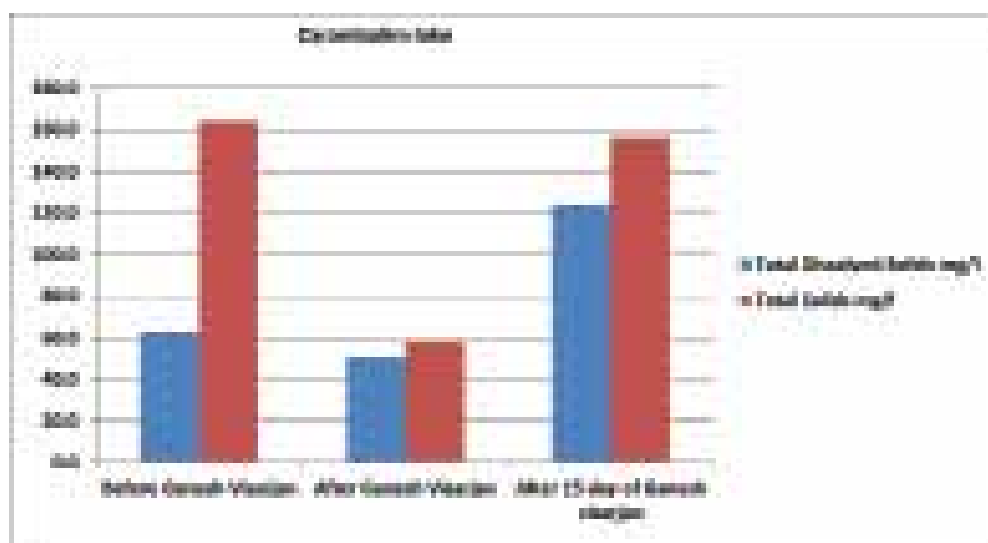
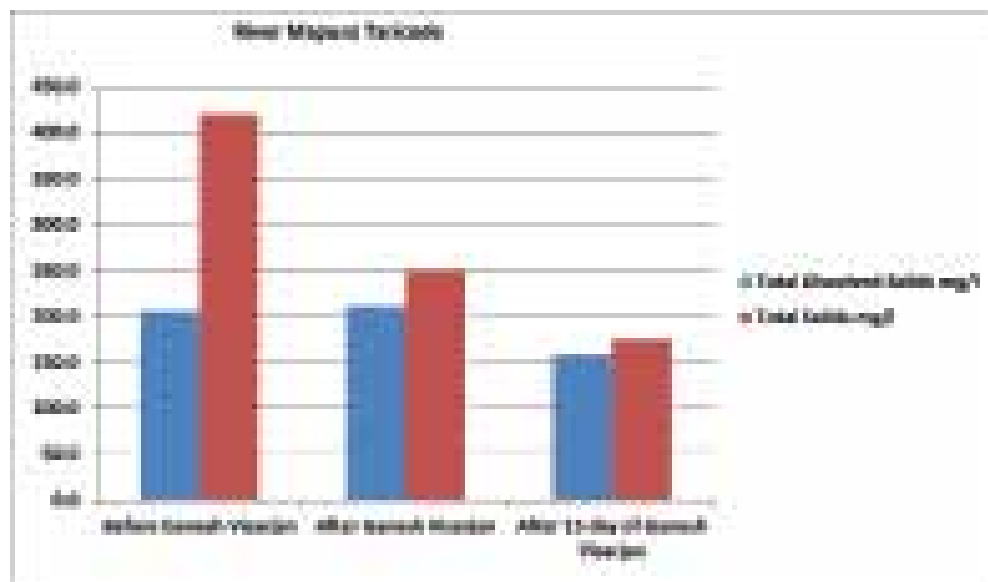
Further, based on the insights of the study, it is recommended that an Environmental Management Plan (EMP) be developed to re-evaluate the monitoring and control measures for the influence of dusty cargo in the vicinity of port area. Further, the detailed Report entitled 'Particulate Source Apportionment Study for Air Quality in Vasco d Gama, Goa' is available on the Board's website.

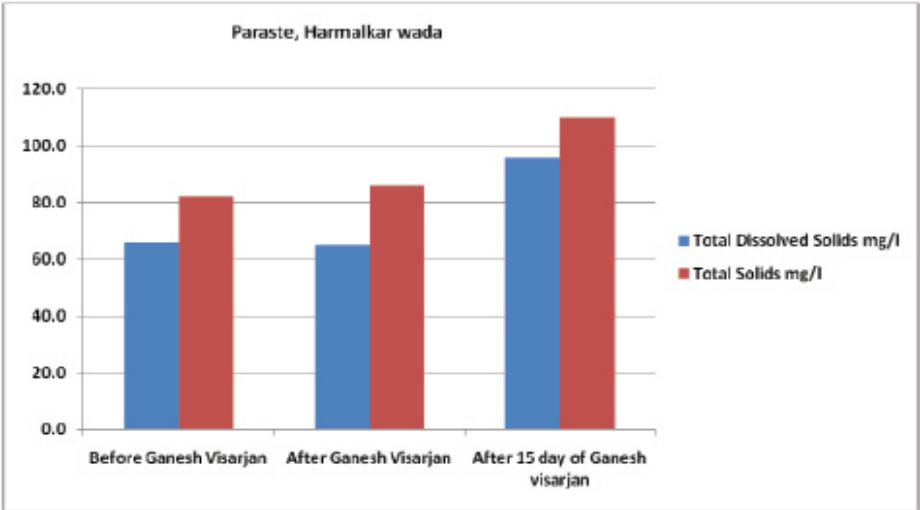
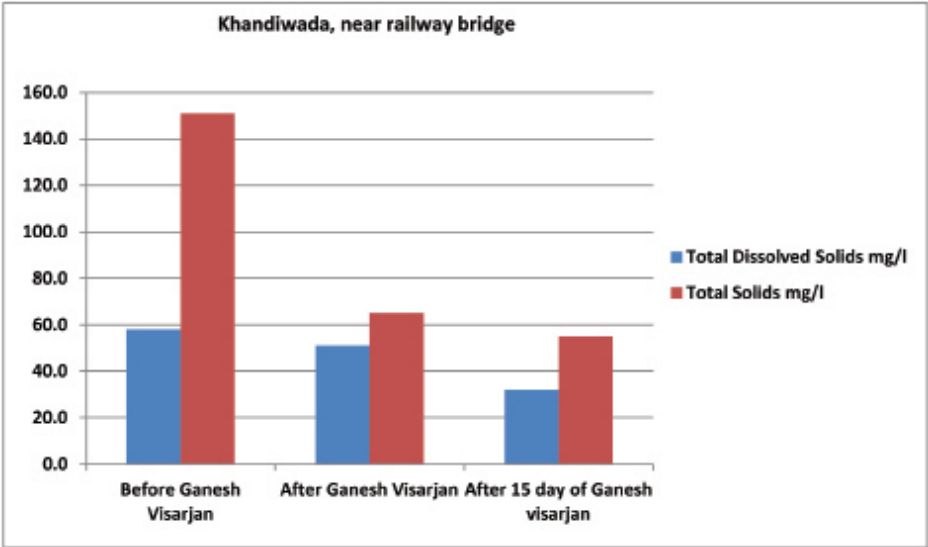
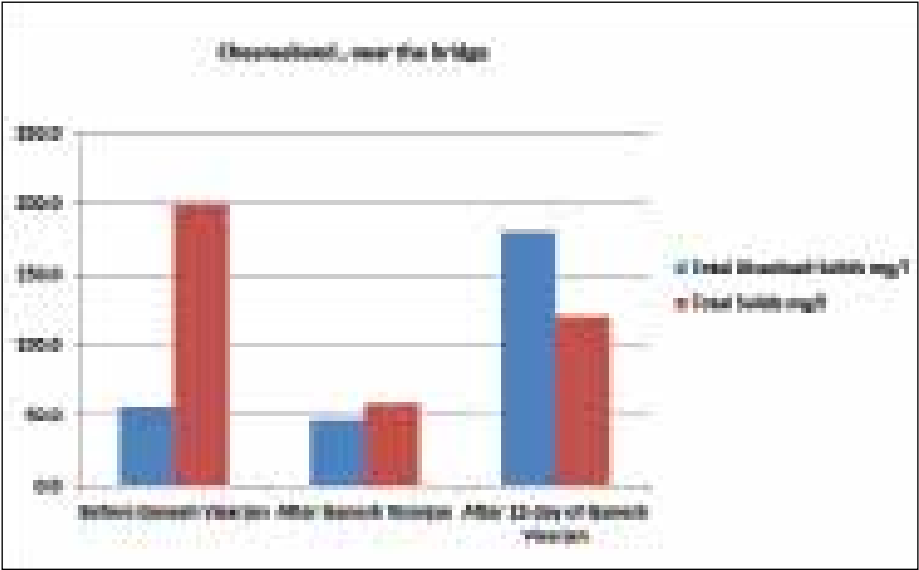
6.10 Monitoring of Water Quality during Pre-Post-Ganesh Visarjan (2021)

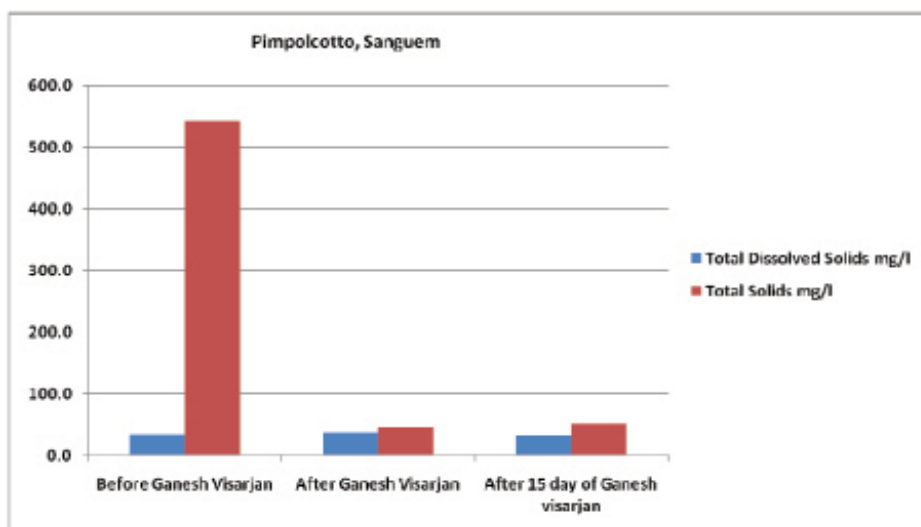
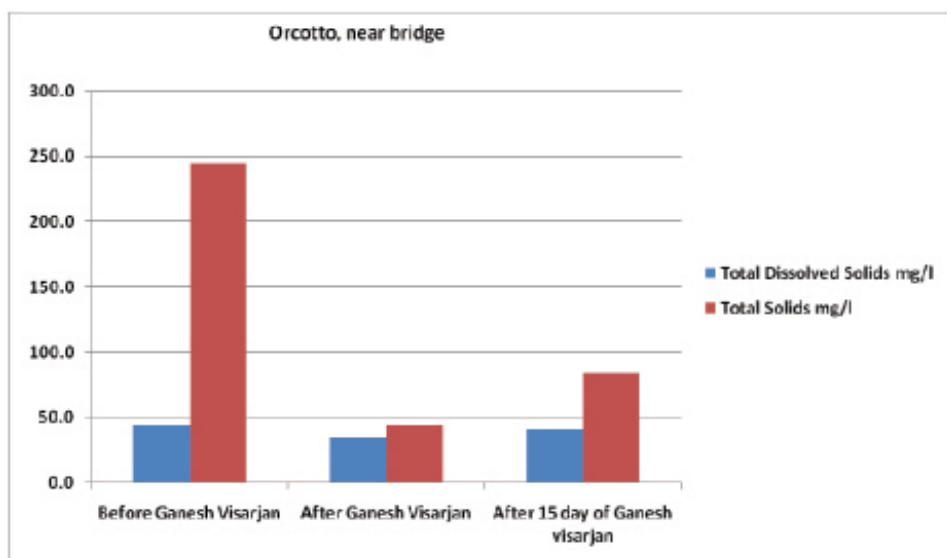
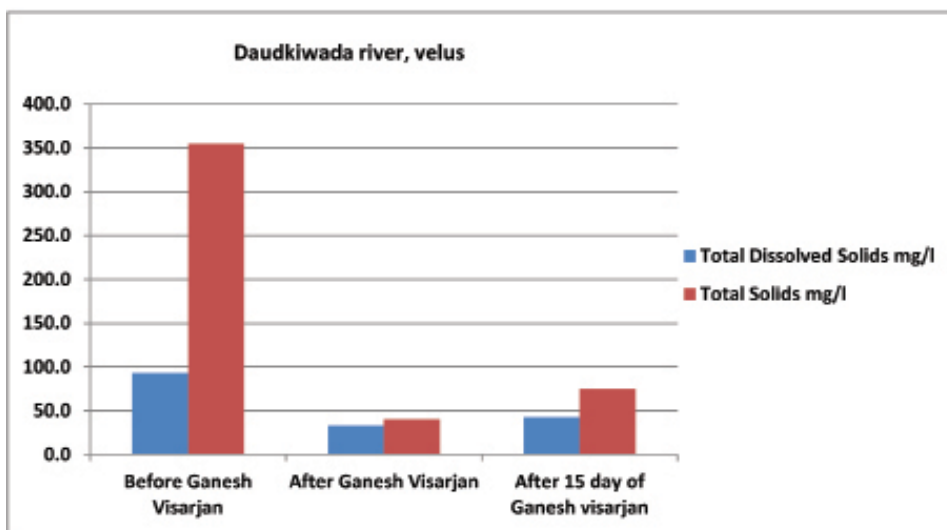
The Goa State Pollution Control Board (GSPCB) monitors water quality at 12 locations as per the directives of Central Pollution Control Board (CPCB), during Pre- and Post- Ganesh Visarjan. The data is presented in **Annexure XIV**. As per the water quality monitoring conducted during pre and post Ganesh Visarjan - 2021, the measured values indicate relative-increase in Total Dissolved Solids (TDS) at most of the locations during pre – and post-visarjan period. However, location-specific trend in TDS is graphically depicted below -

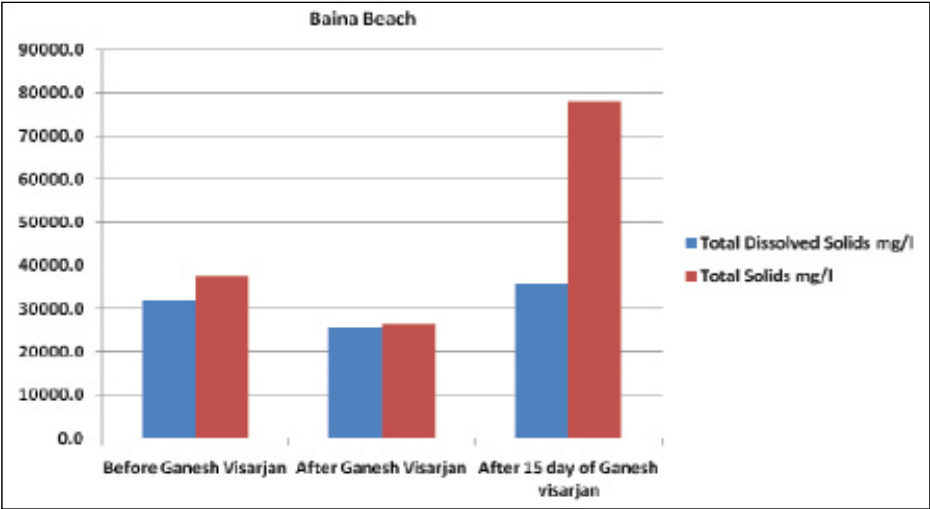
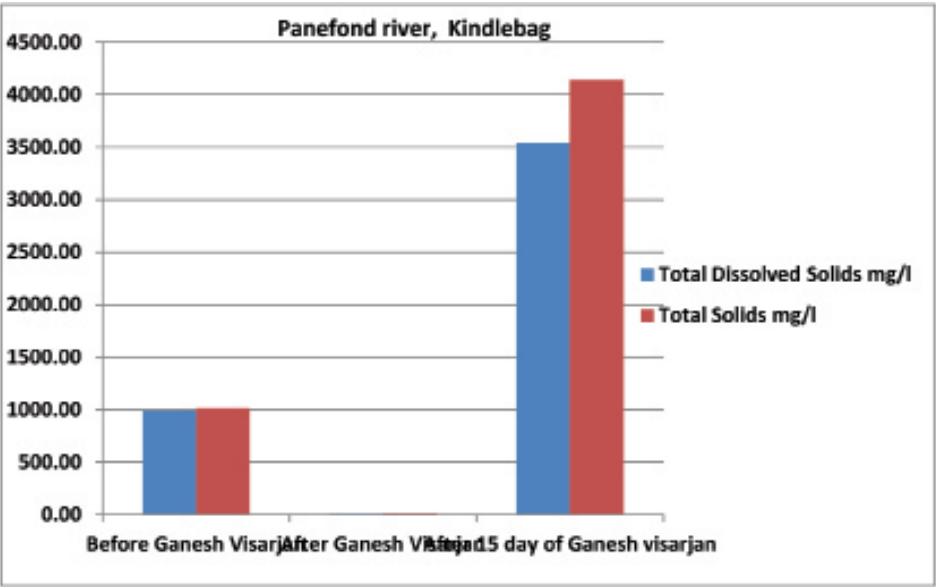
GANESH VISARJAN DATA OF 2021











6.11 PERFORMANCE EVALUATION STUDIES OF SEWAGE TREATMENT PLANTS IN THE STATE OF GOA

1 EFFLUENT TREATMENT PLANT – M/s SOUTH GOA PLANNING & DEVELOPMENT AUTHORITY (SGPDA) WHOLESALE FISH MARKET , FARTODA, MARGAO GOA FROM 13-12-2021 to 14-12 2021(24hrs)

I SUMMARY AND CONCLUSIONS

- a. The SGPDA wholesale fish market, Margao located to the Northern side of the Serulim – Margao road and to the Eastern side of river Sal.
- b. The retail fish traders/vendors were doing their business of selling fish in retail in the market with the vendors sitting on the ground with fish in their baskets/plastic crates with puddles of leachate around. Fish was also being sold all along the main entrance road right upto the main road. The ground does not have concrete flooring, leachate (fish water) was observed collected in the potholes/depression all around the place.

The fish vendors were seen emptying their containers of the waste water on the ground.

- c. The waste water generated get diverted in to the storm water drain by gravity, the same is connected to the collection tank.
- d. The SGPDA has set up Vertical Wetland system for treatment of waste water generated from the fish market adjacent to the river Sal.
- e. The process of treatment involved in wetland treatment are the constructed wetland stages containing various layers of gravel and sand that aid in the treatment of the waste water. There is a distribution grid which ensures that the water is uniformly spread out across the available area where the canna indica plants are planted. There is a multitude of processes that happen simultaneously within the constructed wetland that achieve the desired treatment of the wastewater stream. The wastewater generated at the SGPDA fish market is collected in a collection tank. This is then pumped to the first stage of the constructed wetland which is operated in aerobic conditions. Slowly the water filters down the first stage and enters into the second stage of the wetland by gravity. The second stage is operated under anaerobic conditions. The water flows down and out by gravity which is achieved by a gradient given at the bottom of the wetland and is then collected at the final collection tank before being discharge into the sal river.
- g. The waste water generated from the fish market complex get scattered and saturate in to the ground before it reached the collection tank.
- h. The waste water approx. 2KLD is directed to an ETP of 15 KLD capacity.
- i. Analysis report of Final effluent collected from 24 hours during operation of plant indicates that the consent parameter are within the prescribed standard limits

II. RECOMMENDATIONS

- a. The fish market complex ground needs concrete flooring, with proper drainage system to divert the waste water generated in to the effluent treatment plant.
- b. The concrete flooring needs to get rid of the potholes and depressions which results in water stagnation and can facilitate to maintain hygiene with regular washing of floor.
- c. To provide the platform for the fish vendor for selling their fish with collection tank for waste and wash water and provide separate area for collection of waste water from the fish transportation trucks so that the waste water can be transferred to the ETP for treatment.
- d. To direct the SGPDA to installation of flow meter at inlet and outlet of the ETP.
- e. The SGPDA should ensure continuous operations of ETP plant to maintain the parameters within the stimulated limits.
- f. Records should be maintained of the sludge generated and disposed.
- g. May suggest the SGPDA to explore the possibility of reuse of treated water which is presently discharge into River Sal.

2. SEWAGE TREATMENT PLANT – M/s UMIYA BUILDERS & DEVELOPERS (UMIYA HABITAT) SURVEY NO 117/1-A, PLOT No A, NEAR GOVT. PRIMARY SCHOOL, QUEENY NAGAR, SANCOALE-GOA FROM 09-12-2021 TO 10-12-2021 (24hrs)

I. SUMMARY AND CONCLUSIONS

- a. The unit deals with residential complex having 275 flats and 10 shops.
- b. The unit has designed a Sewage Treatment Plant to treat 150 KLD of waste water, however, only 90 KLD of waste water were generated during monitoring period.
- c. Waste water samples were collected at different stages of treatment units and analysed for the major water quality parameters, such as biological oxygen demand (BOD), chemical oxygen demand (COD), total suspended solids (TSS), Oil & Grease, Fecal Coliform.
- d. The domestic waste water are collected as the raw effluent in collection tank is taken in to Aeration Tank for aeration. After settling, it is further passed through carbon filter. The treated water is used for gardening.
- e. The analysis reports indicate that MLSS, MLVSS & DO in the Aeration Tank are 115 mg/l, 88 mg/l and 3.9 mg/l respectively.
- f. The settleability test shown settled volume of sludge of approx. 120 ml/l, i.e 12% of sludge in the Aeration tank and calculated SVI was 10.43 ml/g.
- g. The activated sludge plant was operating at F/M ratio at 4.8 per day.
- h. Analysis report of Final effluent collected from 24 hours during operation of plant indicates that the consent parameter within the prescribed standard limits

II. RECOMMENDATIONS

- a. Records should be maintained of the sludge generated and disposed.
- b. May suggest the unit to explore the possibility of reuse of treated water.

3. EFFLUENT TREATMENT PLANT – M/s PROCTER & GAMBLE HEALTH LIMITED. PLOT NO-11/1, MARWASODO, PONDA GOA FROM 25-03-2022 TO 26-03-2022 (24hrs)

I. SUMMARY AND CONCLUSIONS

- a. The Procter & Gamble Health Ltd. deals with manufacturing of Vitamin E dry powder, Injection, soft gelatine capsule.
- b. The Industry has designed an Effluent Treatment Plant to treat 450 KLD , however only 260 KLD of waste water generated during monitoring period.
- c. The domestic waste water approx. 80KLD is directed to an ETP of 450 KLD capacity. Thus the quantity of total effluent generated (trade + sewage) is characteristically around 340 KLD.
- d. The analysis reports indicate that MLSS, MLVSS & DO in the Aeration Tank are 1370.0 mg/l, 940.0 mg/l and 0.0 (zero) mg/l respectively.

- e. The settleability test shown settled volume of sludge of approx. 400 ml/l, i.e 40% of sludge in the Aeration tank and calculated SVI was 292 ml/g. The unit needs to take steps to control sludge level in the system.
- f. The activated sludge plant was operating at F/M ratio at 11.79 per day.
- g. Waste water was seen discharging through the storm water drain outside the compound wall of the unit.
- h. Aeration pump was not in operation also ETP tanks not cleaned on regular basis, The skimmer installed at the ETP is not efficient to trap oil & grease generated from the unit.
- i. Analysis report of Final effluent collected from 24-hours during operation of plant indicates that the consent parameters are exceeding the prescribed standard limits.

II. RECOMMENDATIONS

- a. The parameter which were measured to assess the treatment efficiency of ETP are DO, pH, COD, BOD, SS, Total Coliform, Fecal Coliform. Results showed that the effluent from the ETP investigated failed to comply with discharge standard in terms of BOD, Fecal Coliform & DO.
- b. The unit should ensure continuous operations of ETP plant to maintain the parameters within the stipulated limits as per the consent issued by the board.
- c. The consent granted to the unit is required to be amended, with respect to the addition of faecal coliform parameter in treated effluent standard.
- d. Since in an aeration tank, the settled volume sludge is high, indicates excess amount of sludge in the aeration tank and higher amount of untreated sludge remains in the collection tank. The untreated sludge in the collection tank needs to be treated in the aeration tank by increasing aeration to enhance DO and by maintaining the sludge volume in the aeration tank.
- e. The wastewater released through storm water drain, outside the compound wall of the unit shall be stopped immediately.
- f. Maintenance work of ETP needs to be carried out on urgent basis. Aeration pump needs to put in operation, replacing of skimmer, ETP tanks needs to be cleaned on regular basis.
- g. Records should be maintained of the sludge generated and disposed.
- h. May suggest the unit to explore the possibility of reuse of treated water.

4. EFFLUENT TREATMENT PLANT – M/s DEVYANI FOOD INDUSTRIES LIMITED. SURVEY NO 295, NH-4A, TISK USGAO, PONDA GOA FROM 01-04-2022 to 02-04-2022 (24hrs)

I. SUMMARY AND CONCLUSIONS

- a. The Devyani Food Industries Ltd. deals with manufacturing of Ice cream/Frozen Dessert, Milk and the milk Product.
- b. The Industry has designed an Effluent Treatment Plant to treat 215 KLD, however only 190 KLD of waste water generated during monitoring period.

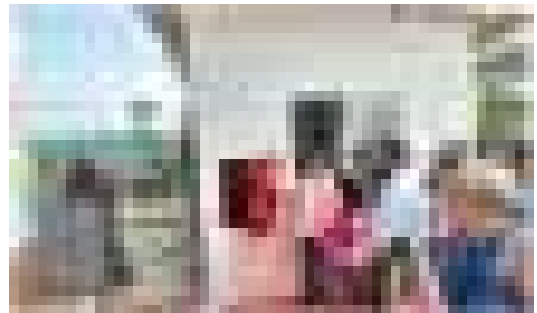
- c. The domestic waste water approx. 8KLD is directed to septic tank/soak pit.
- d. The analysis reports indicate that MLSS, MLVSS & DO in the Aeration Tank are 5870.0 mg/l, 4653.0 mg/l and 0.0 (zero) mg/l respectively.
- e. The settleability test shown settled volume of sludge of approx. 900 ml/l, i.e 90% of sludge in the Aeration tank and calculated SVI was 153 ml/g. The unit needs to take steps to control sludge level in the system.
- f. The activated sludge plant was operating at F/M ratio at 1.0 per day.
- g. Aeration pump was not in operation also ETP tanks not cleaned on regular basis, The skimmer installed at the ETP is not efficient to trap oil & grease generated from the unit.
- h. The anaerobic tank is jam-packed with sludge. Emanating foul smell.
- i. Non – hazardous solid waste like scrap, cups wrappers and other solid items observed burning within the premises.
- j. Analysis report of Final effluent collected from 24 hours during operation of plant indicates that the parameter are exceeding the prescribed standard limits.

II. RECOMMENDATIONS

- a. The parameter which were measured to assess the treatment efficiency of ETP are DO, pH, COD, BOD, SS, Total Coliform, Fecal Coliform. Results showed that the effluent from the ETP investigated failed to comply with discharge standard in terms of Fecal Coliform & DO.
- b. The unit should ensure continuous operations of ETP plant to maintain the parameters within the stipulated limits as per the consent issued by the board.
- c. The consent granted to the unit is required to be amended, with respect to the addition of faecal coliform parameter in treated effluent standard.
- d. Since in an aeration tank, the settled volume sludge is high, indicates excess amount of sludge in the aeration tank and higher amount of untreated sludge remains in the collection tank. The untreated sludge in the collection tank needs to be treated in the aeration tank by increasing aeration to enhance DO and by maintaining the sludge volume in the aeration tank.
- e. Effluent needs appropriate retention time at the anaerobic tank. Sludge needs to be removed from anaerobic tank for efficient functioning of ETP.
- f. Maintenance work of ETP needs to be carried out on urgent basis. Aeration pump needs to be put in operation, replacing of skimmer, ETP tanks need to be cleaned on regular basis.
- g. Non – hazardous solid waste shall be disposed through agency authorized by GSPCB.
- h. Records should be maintained of the sludge generated and disposed.
- i. May suggest the unit to explore the possibility of reuse of treated water.

6.12. RECOMMISSIONING OF 150 KLD STP OF M/S. UMIYA HABITAT CO. HOUSING SOCIETY AS PER THE ASSURANCE GIVEN BY THE HON'BLE ENVIRONMENT MINISTER; SHRI. NILESH CABRAL IN THE GOA LEGISLATIVE ASSEMBLY

M/s.Umiya Builder and Developers has constructed a Residential Complex of 275 nos of flats at located at Zuarinagar, Sancoale Goa. The resident of the said flats thereafter formed a residential society in the Name of Umiya Habitat Co Housing society. There was a long pending dispute between the builder and the society with regards to operation and maintenance of the 150KLD sewage Treatment Plant and other building related issues .The society always had claimed that the STP was under capacity designed .The board also carried out performance evaluation and the found that the STP was working within capacity. Due to the said disputeand neglet of STP operations, the STP started malfunctioning and resulted in the discharge of raw sewage outside the premises into adjoining area. Board also issued numerous directions to the builser and the society to take measures in 2014-2015. Thereafter there were frequent complaint from the locals residing in the down stream of the complex regarding discharge of sewage water. The Board also filed a criminal proceedings against the builders in JMFC Vasco. The Local MLA also raised these issues in the Goa legislative Assembly. The Honble Environment Minister Shri Nilesh Cabral Assured the MLA that the Board will rectify and repair the sewage Treatment Plant. Accordingly the Board took a decision and the work of repair and recomissioning of the STP was allotted to M/s Deccan water Treatment Pune who was the original vendor. The work of recomissioning and repair was completed and the operation and the maintenance of the STP was allotted to M/s EP Bio Composite. The board as per the directions and assurance given by the Hon'ble Environment Minister carried out repair and operation and maintenance successfully over the period of five months. The Board also carried out samplings and STP performance evaluations during the said period. The said STP plant was thereafter inaugurated by the Honb'le Environment Minister Shri Nilesh Cabral in presence of Local MLA Smt Alina Saldana and society members on 15th December 2021. After successfully operating the plant for five months the operation and maintenance was handed over to the Umiya Habitat Cooperative housing society.



6.13 ASSESSMENT OF ILLEGAL EXTRACTION OF LATERITE STONES AND ENVIRONMENTAL COMPENSATION AT MAULINGEM BICHOLIM GOA IN RESPECT OF APPLICATION FILED BY SMT. JAYASHRI RAJEBHOSALE V/S. STATE OF GOA & OTHERS
BRIEF SUMMARY

Mrs. Jayashri Raje Bhosale had filed application bearing application no. 37/2014 (WZ) before Hon'ble National green Tribunal regarding illegal extraction of Laterite Stones.

Mrs. Jayashri Raje Bhosale has filed as application in theHon'ble NGT as regards to illegal extraction of stones in Sy. 21/1, 22/1, 23/1, 70/1, 70/4, 74/2, 74/1, 102/1, 115/1, 99/1 of village MaulinguemBicholim Taluka Goa.

The Directorate of Mines and Geology had conducted inspection on 20/11/2014 and assessed

the quantum of laterite stones extracted from the said illegal laterite quarries is approximately **822023 nos.** Thereafter M/s. Sadekar Enviro Engineers Pvt. Ltd. on behalf of applicant carried out assessment on 24/02/2015 & 25/02/2015 and assessed that the quantum of laterite stones extracted from quarries is approximately **29,42,105 nos.** by considering 55 nos. of pits. The petitioner then approached the National Institute of Technology (NIT) Surathkal and the National Institute of Technology (NIT) Surathkal had carried an assessment of laterite stones from 2/09/2015 to 4/09/2015 to be approximately **2840880 nos.** considering 44 nos. of pits. There is a discrepancy in the assessment carried out by the Directorate of Mines and Geology, the National Institute of Technology (NIT) Surathkal and M/s. Sadekar Enviro Engineers Pvt. Ltd.

Hence in order to confirm the actual quantum of extraction of laterite stone at the said site Hon'ble NGT in Original Application No.482/2018 directed Goa State Pollution Control Board to assess the amount of environmental compensation due to illegal extraction of laterite stones in aforementioned Survey numbers and as such joint survey of an existing quarry pits is carried out along with the officials of the Directorate of Mines and Geology and Surveyors of Inspector of Survey and Land Records Bicholim Goa along with the Officials of Goa State Pollution Control Board and representative of Petitioner.

INSPECTION AND ASSESSMENT

The Hon'ble NGT vide order dated 22/10/2019 had directed the committee of SEIAA, Goa State Pollution Control Board and District Magistrate, North Goa to inspect the area and file a report on the present status in respect of impugned mining. In compliance to order of the Hon'ble NGT the committee inspected the said site of existing laterite quarries located at Maulingem and found that there are no active quarrying operations in survey numbers 21/1, 22/1, 23/1, 70/1, 70/4, 74/2, 74/1, 102/1, 115/1, 99/1 of village Maulingem Bicholim Taluka Goa.

Hon'ble NGT vide order dated 12/12/2020 passed an order stating that the fees paid to NIT by the applicant and other expenses incurred should be Reimbursed by the Goa State Pollution Control Board stating that the compliance of law is the responsibility of Goa State Pollution Control Board and Hon'ble NGT directed Goa State Pollution control board to pay an amount of Rs. 2.0 Lakhs to cover amount of fees paid by the applicant as well as the other expenses incurred by the applicant in pursuing these proceedings within one month. Further Hon'ble NGT directed joint committee of the State Pollution Control Board, the SEIAA and the District Magistrate (With the state PCB as the nodal agency) to review the entire proceedings and to take further action in accordance with the law within three months after reconciling the figure of the illegal mining

The Goa State Pollution Control Board vide letter dated 09/11/2020 has requested Director, Directorate of Settlement and land Records to provide list of registered/ approved surveyors for conducting total station survey. The Directorate of Settlement and land Records replied to Boards letter directing to take assistance from the Office of the Inspector of Survey & Land records, Bicholim for conducting total station survey for purpose of estimation of volume of excavation from existing quarry pit at Maulingem, Bicholim Goa. Thereafter Inspector of Survey & Land records, Bicholim requested to approach with necessary documents and plans to fix date for site inspection. The Board replied to Inspector of Survey & Land records, Bicholim submitted necessary documents. Inspector of Survey & Land records, Bicholim scheduled Joint survey and inspection on 28/12/2020 & 29/12/2020 and thereafter on 30/12/2020, 05/01/2021, 07/01/2021, 12/01/2021 14/01/2021 & 16/02/2021.

The officials of the Goa State Pollution Control Board alongwith officials of Inspector of survey and land Records Bicholim, Directorate of Mines & Geology, Office of the Mamlatdar (Bicholim) and representative of Mrs. Jayashri Rajebhosle @ Bimabai Rauji Rane, Mr. Vinayak Kudkar carried out joint inspection and survey of the existing quarry pits located at Maulinguem Village of Bicholim Taluka on 28/12/2020, 29/12/2020, 30/12/2020, 05/01/2021, 07/01/2021, 12/01/2021, 14/01/2021 & 16/02/2021 with regards to order passed by National green tribunal in original application no. 482/2018.

Survey Methodology

The inspection and joint survey of an existing quarry pits is carried out along with the officials of the Directorate of Mines and Geology, Surveyors from Inspector of Survey and Land Records Bicholim, and Officials of Goa State Pollution Control Board alongwith representative of Petitioner. The survey was carried out using electronic total station (ETS) and the position of quarry pits is superimposed on the site plan by the officials of Inspector of Survey and Land Records. The site plan has been prepared by officials of Inspectorate of survey and land Records Bicholim showing position of existing quarry pits and area in Sq. Mts. of existing quarry pits in survey nos. 74/1, 74/2, 76/2, 72/1, 115/1, 99/1, 100/3, 100/4, 100/5, 100/6 & 102/1 of Maulinguem village Bicholim taluka. The average depths of quarry pits were considered approximately by the inspection team.

Assessment of Laterite stones:

As per the joint inspection and survey carried out on 28/12/2020, 29/12/2020, 30/12/2020, 05/01/2021, 07/01/2021, 12/01/2021 14/01/2021 & 16/02/2021 the total volume of laterite stones extracted from the existing quarry pits excluding wastage is approximately 64736.63 M³ and the number of laterite stones is approximately 3853370 nos.

The comparison with respect to total volume of excavation and estimated no. of laterite stones extracted from quarries is tabulated in table 1 :

Table:1

Sr. No	Description	Directorate of mines and Geology	NIT, Surathkal	M/s. Sadekar Enviro engineers Pvt. Ltd	Joint Survey & Inspection by ISLR, GSPCB, DMG, Mamlatdar officials
1.	Total Volume of excavation	19729 Cu. M	56149.162 Cu. M	65903.15 Cu. M	86315.5 Cu. M
2.	Estimated no. of laterite stones extracted from quarries	822023 nos.	2 8 4 0 8 8 0 nos.	29,42,105 nos.	3853370 nos.

CALCULATION OF ENVIRONMENTAL COMPENSATION:

4.1 The Environmental compensation calculation is as follows:

The approximate total volume of material required for restoration is works out to be **86315.5 cu. m.**

Considering capacity of each truck as 10 m³, approximately 8630 nos. of trucks would be required to restore the quarries at the said site. The mining pits are to be filled with slag, Fly ash and inert upto 1.0 Mts from the top of the quarry and the remaining depth by compost.

Considering the cost of transportation per each trucks as Rs. 3000/- approx, the total cost of transportation of 8630 trucks would be **Rs. 2,58,90,000.00.**

Additional expenditure for deployment of staff for monitoring, Machinery for levelling, Plantation etc. would be approximately **Rs. 86,00,000.00**.

Total environmental compensation

Hence the total environmental compensation would be

Rs. 2,58,90,000.00 + 86,00,000.00 = Rs. 3,44,90,000.00

(Rupees Three Crore Forty Four Lakhs Ninety Thousand Only).

The Environmental compensation calculation is as follows:

The approximate volume of total material required for restoration is works out to be **86315.5 cu. m**. Considering capacity of each truck as 10 m³, approximately 8630 nos. of trucks would be required to restore the quarries at the said site. Considering the cost of transportation per each trucks as Rs. 3000/- approx, the total cost of transportation of 8630 trucks would be **Rs. 2,58,90,000.00**. Additional expenditure for deployment of staff for monitoring, Machinery for levelling, Plantation etc. would be approximately **Rs. 86,00,000.00**. Hence the total environmental compensation would be **Rs. 3,44,90,000.00 (Rupees Three Crore Forty Four Lakhs Ninety Thousand Only)**.

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CHAPTER 7

ENVIRONMENTAL TRAINING

7.1 TRAINING / WORKSHOPS/ SEMINARS, ETC., ATTENDED BY BOARD OFFICIALS

During the year under report, the officials of the Board attended training programmes / workshops / seminars etc., organized by reputed Institutions through virtual mode. The details of the same are as follows:

<u>Online Trainings for the year 2021-2022</u> <u>(Scientific Section)</u>		
Name Of the Officials	Topic	Date
Mrs. Jenica Sequeira, Sc "D", Dr. Mohan Girap Sc "C", Mrs. Francisa Pereira, sc "C" Mr. Sanjay Kankonkar, Sc "B" Mrs. Livia D'Silva, Sc "B" Mr. Ganpat Naik, Sc "B" Mrs. Sahyadri Gurav, Sc "B" Mr. Ravi Naik, SA Mr. Krishnanath Pednekar, SA Mr. Samir Borkar, S.L.A. and Mr. Chaitanya Salgaonkar, SA	Source Apportionment study: capacity building training.	10 th and 11 th March 2022.
Mr. Sanjay Kankonkar Sc "B"	Online Training programme on Continuing Professional development	17/08/2021.
Dr. Shamila Monteiro M.S Mr. Ravi Naik, SA Mr. Krishnanath Pednekar, SA Mr. Nilesh Surlekar, SLA Mr. Samir Borkar, SLA Mr. Pravin Faldessai A.E.E Mr. Vijay Kansekar JEE	Nomination for Online Training / Webinars programme on Industrial Pollution and Monitoring in Collaboration with SEPA	October to January 2022.
Mrs. Jenica Sequeira, Sc "D" Mrs. Francisca Pereira, Sc "C" Mr. Sanjay Kankonkar, Sc "B" Mrs. Livia D'Silva, Sc "B" Mr. Ganpat Naik, Sc "B" Mrs. Avina Pereira e Barretto, SA Mrs. Edma Sheth, SA Mrs. Denza Cardozo, SA Mr. Krishnanath Pednekar, SA Mr. Ravi Naik, SA Mr. Sanmesh Borkar, SA Mr. Samir Borkar, SLA Mrs. Jocelyn Coelho, SLA Mr. Johnny Moniz, SLA	Laboratory Management System/ Awareness & Auditing (as per ISO/IEC 17025: 2017 & NABL Requirements) & Uncertainty Measurement.	25th October to 30th October 2021

Dr. Mohan Girap, Sci "C", Mrs. Nandan Prabhudessai, A.E.E.	Air (prevention and control of pollution) Act 1981 and Rules. Water (prevention and control of pollution) Act, 1974 and Rules. Environment Protection Act 1986 (Amended) and Rules. The Biomedical Waste Rules.	15 th November 2021. 22 th November 2021
Mrs. Jenica Sequeira, Sci 'D' Mr. Sanjay Kankonkar, Sci 'B' Mrs. Avina Pereira, SA Mr. Sanmesh Borkar, SA Mr. Pravin Faldessai, A.E.E Mr. Vijay Kansekar, JEE	Nomination for online Certificate Training on Sai Pollutions Impact Assessment and Remediation	7 th to 9 th March 2022
Dr. Mohan Grip, Sci 'c'	The a webinar on National pollution Control Day on the topic Environment Concerns of Mining	2 th December 2021
Mrs. Sahyadri Gurav, Sci 'B'	Laboratory Management System Awareness and Auditing (As per ISO/IRC 17025: 2017 & NABL Requirements) Uncertainty Measurement	7 th 10 th March 2022-04-12 14 th -15 th March 2022
Mrs. Livia D'silva ,Sci 'B'	Performance Evaluation of ETP/STP/ CETPs	28 th -30 th March 2022

Online Training for the year 2021-2022
(Technical Section)

Name of the Officials	Topic	Date
Mr. Rohan Nagvekar, A.E.E. Mr. Manoj Kudalkar, A.E.E. Mr. Amit Shanbag, A.E.E. Mr. Pravin Faldessai, A.E.E. Mr. Devesh Gholkar, J.E.E Mr. Vijay Kansekar. J.E.E Mr. Shashank Dessai, J.E.E Mr. Siddhant Prabhu Dessai, J.E.E, Mr. Sebastiao Barreto, E.A., Mr. Ashley Pereira, E.A, Mr. Sebastiao Colaco, E.A.Mr. Liston Fernandes, E.A. Mrs. Nandan Prabhudessai, A.E.E., and Mr. Keshav Fadke, A.E.E	Source Apportionment study: capacity building training.	10 th and 11 th March, 2022.
Mrs. Nandan Prabhudessai, A.E.E and Mr. Pravin Faldessai, A.E.E.	Waste water Treatment – Efficiency Enhancement of fisheries and Aquaculture Wastewater Treatment Plant through MT Waste water Treatment – Eco friendly Microbial Treatment of Petrochem/ Refinery Wastewater.	23 rd September, 2021. 1430-1600 hr 7 th October, 2021 1430-1600 hrs

Mr Rohan Nagvekar, AEE Mr. Vijay Kansekar, JEE Mr. Devesh Gholkar, JEE Mr Shashank Dessai, JEE Mrs. Jenica Sequira, Sci 'D' Mr. Sanjay Kankonkar, Sci 'B' Mrs. Livia D'Silva, Sci 'B' Mrs. Sahyadri Gurav, Sci 'B' Mrs. Denza Cardozo, SA Mrs. Reema Redkar, JLA Mr. Amit shanbag, AEE, Mr. Pravin Faldessai, AEE	Design of Solid Waste Management (SWM) Facility, Common Bio Medical Waste Treatment Facility (CBMWTF). Construction and Demolition Waste Management in India. Soil Pollution Impact Assessment and Remediation of Contamination Sites. Eco- toxicity Environment Monitoring Environment Toxicology Group. Performance Evaluation of ETP/STP/ CETPs.	14 th March – 16 th 2022. 10 th March – 11 th 2022. 7 th March - 09 th 2022. 17 th March – 18 th 2022. 28 th March -30 th 2022.
Mrs. Jenica Sequira, Sci 'D' Mr. Amit shanbag, AEE Mrs. Livia D'Silva, Sci 'B' Mr. Sanjay Kankonkar, Sci 'B' Mrs. Sahyadri Gurav, Sci 'B' Mr. Devesh Gholkar, JEE Mr Shashank Dessai, JEE Mr. Pravin Faldessai, A.E.E Mr. Rohan Nagvekar, AEE Mr. Vijay Kansekar, JEE Mrs. Denza Cardozo, SA Mrs. Reema Redkar, JLA	Nomination of Online training programmes of the financial year 2021-2022.	3 th February, 2022.
Mr. Rohan Nagvekar, AEE Mr. Vijay Kansekar, JEE Mr. Sebastiao Colaco, E.A Mr. Manoj Kudalkar AEE	Online Training programme on Design of Solid Waste Management (SWM) Facility	10 th March, 2022,
Mr. Amit Shanbag, AEE Mr. Pravin Faldessai, AEE Mr. Sanjay Kankonar, Sci 'B'	Performance Evaluation of ETP/STP/ CETPs.	28 th March -30 th 2022.

Online Training for the year 2021-2022
(Admin Section)

Name of the Officials	Topic	Date
Mrs. Francisca Auria Lobo, LDC, Mrs. Ana Maria Lourence, LDC and Mrs Joice Coutinho, LDC	The online Workshop on 'basic Knowledge of devnagari.	28 th and 30 th September, 2021.

Online Training for the year 2021-2022
(Legal Section)

Name of the Officials	Topic	Date
Mrs. Natalia Dias, Law Officer Shri Constance Fernandes, SLO	Environmental legislations, Interpretation, Enforcement, Legal and statutory requirements – case studies.	28 th to 30 th March, 2022

<u>Online Training for the year 2021-2022</u>		
Name of the Officials	Topic	Date
Dr. Shamila Monteiro Member Secretary.	Workshop on “Sensitisation – cum – Review Workshop under National Clean Air Programme and XV-FC Million Plus Cities.	23th and 24 th November, 2021.
Mr. Ganesh Shetgaonkar Chairman		

7.2. DEPUTATION IN THE BOARD

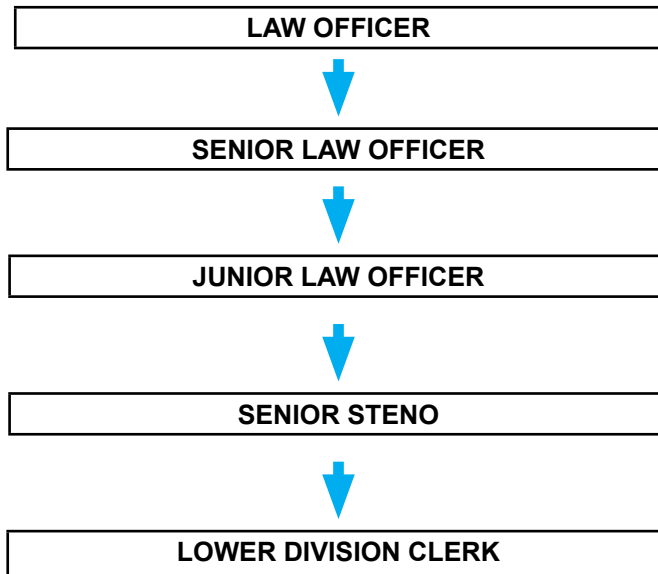
1. Vide Government Order No. DA/Admn/45-6(Part)/2021-2022/TR146/39 dated 17/05/2021 of the Directorate of Accounts Smt. Claudia S. Correia, Assistant Accounts Officer is posted as Assistant Accounts Officer of the Board.
5. Vide Government Order No. DA/Admn-II/10-26(Part)A/2021-2022/TR-576/108 dated 13/07/2021 of the Directorate of Accounts Shri. Jonathan James Alphonso is posted as Accountant of the Board.



CHAPTER 8

LEGAL MATTERS OF THE BOARD

8.1 ORGANIZATION CHART OF LEGAL SECTION, GSPCB



8.2 ROLES AND RESPONSIBILITIES OF LEGAL SECTION

- Ensures that the Board is adequately represented before the Courts of law and Judicial forums and that the Advocates appointed by the Board are adequately briefed in individual matters.
- Ensures that all pleadings filed before the Courts of law and Judicial forums are drafted and vetted within the specified time frames set out by the Courts and that the same are filed before the Courts.
- Ensures that orders passed by the Courts are informed to the Board and that the directions passed by the Courts are complied with within the stipulated time periods.
- Submits Legal opinions/interpretations of Court Orders, Judgments, statutes of law as and when directed.
- Ensures that all legal correspondence issued by the Board including statutory directions are legally drafted and vetted prior to issue by the Board.

8.3 IMPLEMENTATION OF ACTS & RULES

- ◆ Water (Prevention and Control of Pollution) Act, 1974,
- ◆ Air (Prevention and Control of Pollution) Act, 1981
- ◆ Some of the provisions under Environmental (Protection) Act 1986.
- ◆ Goa Water (Prevention & Control of Pollution) Rules
- ◆ Air (Prevention & Control of Pollution) Rules
- ◆ The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- ◆ The Bio-Medical Waste Management Rules, 2016.
- ◆ The Solid Waste Management Rules, 2016.
- ◆ The Construction and Demolition Waste Management Rules, 2016.
- ◆ The Plastic Waste Management Rules 2016
- ◆ The E-waste (Management) Rules, 2016
- ◆ The Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.
- ◆ The Noise Pollution (Regulation and Control) Rules, 2000.
- ◆ The Batteries (Management and Handling) Rules, 2001
- ◆ Notifications: Environment Impact Assessment Notification, 2006.

8.4 Broad action that can be initiated against a violator by the GSPCB; in the event of violation of the provisions of the Water Act, Air Act, Environment (Protection) Act and the Rules framed thereunder;

- ❑ Issue of statutory directions under section 33(A) of the Water Act, 31(A) of the Air Act and Section 5 of the Environment (Protection) Act, as the case may be; for carrying out specific pollution control measures or for closure of the unit/establishment after complying with the principles of Natural Justice.
- ❑ Initiation of Criminal Proceedings under the Water Act, Air Act and the Environment (Protection) Act before Criminal Courts of Law.
- ❑ Imposition of Polluter Pays Penalty in terms of NGT directives and CPCB guidelines after detailed assessment and computation of the Penalty and after complying with the principles of Natural Justice.

8.5 REQUIREMENT OF CONSENT OF THE BOARD

- No industry can run without valid consent to establish/operate under Air and Water Act and any operation carried out without such lawful consents is deleterious to the

environment in as much as it frustrates the regulatory regime of law to prevent and control environmental pollution.

- Section 21 of the Air Act and Section 25 of the Water Act places restrictions, both on establishment and operation of any industrial plant without previous consent of the Board. The legislative intent behind this provision would lead to decipher two concepts--- one, the consent for the purpose of establishing an industrial plant while the other for operation of that plant. The purpose of this section is to ensure that when a unit or an industrial plant is given consent to operate, the unit ought to have satisfied all the conditions stated in the order of consent to establish `would` have installed the requisite effluent treatment plants and other ant-pollution devices to ensure that it causes no pollution. It necessary implies that this is the rule
- Renewal of Consent not to be granted unless all adequate measures are taken to control pollution failing which action as per section 31(A) of Air and section 33(A) of Water may be initiated against the owner. It is settle law that grant of renewal is a fresh grant though it breathes life into the operation of the previous consent or license granted as per existing appropriate provisions of law/Act, rules or orders acts intra vires . The right to get renewal is not a vested right but a privilege subject to fulfillment of the conditions precedent enumerated under the Act. The time period for compliance is also not specified.
- Allowing Operation of any industry without complying with air and water pollution control measures solely on the economic aspect does not justify the continuance. Balancing the vital interests of the vast majority of citizens against the commercial interests of few the balance must heavily tilt in favour of citizens in general. Balance must overwhelmingly prioritize the harmful effects of the hazardous air on present and future generations
- Environment is wealth which needs protection from being plundered by law violators, for their monetary interests, by adequate monitoring and stringent vigilance. Its scientific management, including enforcement of polluter pays principle, requires study of level of pollution and contributors thereto and cost of restoration to be recovered by an efficient machinery. Such steps will advance the environmental rule of law and lead to sustainable development. The 'Polluter Pays' principle requires compensation to be recovered to meet the cost of remedying the adverse impact of pollution. Governance of such laws can be held to be satisfactory if the magnitude of punishment of law violators corresponds to the extent of violation of law and the compensation recovered is adequate to meet the cost of damage
- The issue of granting consent to operate to the units does not bestow any legal right to the units. The units are required to seek and obtain the requisite clearances/licences/ permits/NOCs required under statutory provisions stipulated under various laws, Acts and Rules of Central/State Government/Court Order etc before taking any effective steps to implement the project. In case the units has not complied with the required permissions before taking any effective steps to implement the project the authorities are free to initiate action under the relevant provision of law.

8.6 LITIGATION PROFILE OF THEGSPCB:-

- The GSPCB is party Respondent in a number of cases before various Courts and Judicial Forums including the Supreme Court of India, High Court of Bombay at Goa, National

Green Tribunal at New Delhi and Pune, Administrative Tribunal at Panaji, District and Sessions Court, JMFC, Human Rights Commission, Lokayukta, State Information Commission and Arbitration Forum.

- The GSPCB engages Advocates to appear on its behalf before various Courts of law and Judicial forums and defend its interests.
- The GSPCB has at its 151st Meeting; reconstituted the panel of Advocates who will appear on its behalf before various Courts of law and Judicial forums and defend its interests.
- The Member Secretary of the GSPCB in terms of the powers conferred under the Goa Water and Air Rules 2021 appoints Advocates from the Panel to appear on behalf of the Board in individual cases.
- Terms and Conditions of the appointment of Advocates of the Board as well as Fees to be paid to the Boards Advocates are as specified in the minutes of the 151st Board meeting.
- The Board is required to file pleadings by way of Affidavits in reply etc before these Courts/ Forums and is occasionally also required to prefer Petitions/Applications/Appeals etc before these forums as and when required.

8.7 STATUS OF COURT MATTERS PERTAINING TO GSPCB DURING THE YEAR 2021-22

1. Cases pending before the High Court of Bombay at Goa

Sr no.	Case no.	Case Title
1	PIL WP 24/2018 (STM no. 2420/2018) and MA (STA no. 2421/2018)	Sherwyn Filipe Francisco Corriea & ors V/s. Gos State pollution Control Board & ors
2	SuoMotu Writ Petition 2/2007	---V/s State of Goa &ors (Garbage matter)
3	MCA/72/2020 in SMWP/2/2007	Aromatics Ltd Vs Chief Secretary And 46 Ors
4	WP/881/2017	Pravir Phadte v/s State of Goa and ors. (Amona matter)
5		Ananat Kankonkar v/s State of Goa and ors.
6	WP(F)/1533/2021	Digamber Naik V/s State of Goa and Ors
7	PILWP/22/2021	Antonio Alvares v/s CS State of Goa and ors
8	WP/225/2021	Kevin Colaco v/s Deputy Collector and ors
9	WP/19/2022	Anil Carvalloh v/s GSPCB and ors
10	WP/779/2021	Goa Foundaton v/s DMG and ors
11	WP/401 /2021	CCP V/S GSPCB and ors
12	WP/97/2021	Kamat Towers Premises Owners Maintenance Co-operative Society Ltd. & 2 ors. V/s. Corporation of City of Panaji and 6 ors.

13	PILWP/28/209	Arturo De souza v/s State of Goa and ors (M/s Adwalpalkar and M/s Kenkre /STP matter)
14	PILWP/41/2018	Sanjeev Raiturkar v/s State of Goa and ors. (SGPDA Fish market matter)
15	Criminal WP/257/2019	Manzar Quazi V/s. GSPCB & anr
16	Criminal WP/735/2021	L A Mathew v/s GSPCB and anr
17	Criminal WP/21/2021	Board of Trustees of MPT v/s GSPCB and anr
18	Criminal WP/22/2021	D DAmbe v/s GSPCB and anr
19	Criminal WP/46/2021 Matter filed by GSPCB.	GSPCB v/s Advippa Kambli and ors (Criminal writ Petition reg MPT)
20	Criminal WP/33/2021 Matter filed by GSPCB	GSPCB v/s SWPL and ors
21	WPCR no. 58/2021 Matter filed by GSPCB.	GSPCB v/s Global Ispat (Criminal writ Petition)
22	PILWP/2/2020	The Goa Foundation V/s. State of Goa
23	LD-VC-CW-29-2020	Mulakh Khanjan Tenants Association & ors V/s. State of Goa & ors
24	PILWP/15/2011	Colva Civic and Consumer Forum v/s State of Goa and ors
25	PILWP 45/2019	Citizens for Sonsodo & ors V/s. MMC & rs
26	Criminal Revision application no. 49/2019	GSPCB V/s. Government of Goa & ors
27	MCA no. 354/2017 in W.P.no. 1/2008.	Villagers of the Shrigao Villagers V/s. Sirigao Nagarik Sanghatana Sirigao & Ors.
28	WP/696/2013 And WP/615/2014	SayadriSinari v/s State of Goa and ors And PayalBadkar and ors v/s GSPCB and ors (Reg recruitment in GSPCB in 2011)
29	PILWP/58/2019	Goa Foundation V/s.GSPCB&ors
30	PILWP no. 53/2019	Capt. Viriato H.M. Fernandes &Anr V/s. Mahindra Holiday & Resorts Pvt. Ltd. &Ors
31	PIL W.P.no. 30/2017	Goa Foundation V/s. State of Goa &Ors
32	WP 903/2018	Pravin Kumar Goasalia V/s. GSPCB
33	PIL WP no. 17/2018	Dhatwada Usgao Citizens Forum &Anr. V/s. Village Panchayat of Usgao-Ganjam & ors (Goa Foundation v/s M/s. MRF ltd)
34	LD-VC-CW-101-2020	Placido De Souza V/s. State of Goa & ors
35	WP / 59 / 2020	Shital R. Parab V/s State of Goa & ors
36	PILWP/6/2017	Mr. Satish V Gawas V/s. State of Goa & 3
37	W.P.no. 682/2016	Mr.Umesh V. Goankar & 3 Ors. V/s. State of Goa & 15 Ors.
38	WP/295/2017	Kashinath Shetye & 3 ors V/s. State of Goa thru CS & 13 ors
39	WP/622/2017	Goa Coastal Zone Management Authority V/s. State of Goa & 11 ors.

40	First Appeal no. 138/2017 & Civil Application. 265/2017-	Jose Azavedo and 5 Ors. V/s. Manuel Filomena Gama and 50 Ors
41	WP/399/2018	Cain D'Cruz V/s. Mamlatdar of Salcete, Govt. of Goa, margao

Cases pending before the Supreme Court

Sr no.	Case no.	Case name
1	WP(Civil) no. 728/2015	Arjun Gopal &ors V/s Union of India &ors
2	WP(Civil) no. 13029/1985	M.C.Mehta V/s. Union of India &ors.
3	Civil Appeals No(s). 5826-5827 of 2019	Mathala Chandrapati Rao V/s. Union of India &Ors.
4	SLA(Civil) no. 3739/2020	Ganesh Benzoplast Limited V/s. Mormugao Port Trust/Board of Trustees &ors.
5	W.P.(Civil no. 375/2012)	Paryavarana Suraksha Samitte & Anr V/s. UOI & Ors
6	WP(C) no. 369 of 2020	M. Kaviya & ors V/s. Union of India &ors
7	Civil Appeal no. 1657/2018	Bharat Jhunjhunwala V/s Pushp Saini
8	Civil Appeal no. 1657/2018	Vedanta v/s Goa Foundation and ors.
9	Civil Appeal no	Bainguinim Citizens Forum v/s GWMC and ors

Cases pending before the National Green Tribunal

Sr no.	Case name	Case no.
1.	Mahendra Kakule v/s GSPCB and ors	Appeal no. 8/2020
2.	Nalini Fernandes v/sGCZMA and ors	OA/18/2020
3.	Abhijeet Prabhudessai v/s GSPCB	Appeal 17 and 18 of 2020
4.	Salu D'Souza & Anr. V/s. GCZMA &Ors	Application No. 16/2016
5.	RoyalaFernandes v/s State of Goa and ors	OA/42/2021
6	Linettee Nunes v/s GSPCB and ors	Appeal/54/2018
7	Cavellosim Ccivic Forum v/s VP Cavellosim and ors.	OA/185/2017
8	Board of Trustees of MPT v/s WISL and ors	OA/87/2016
9	Sarang Yadwadkar v/s State of Maharashtra and ors	OA/66/2021
10	Brackish water Research Centre v/s Gujrat PCB and ors	OA/73/2021
11.	Dr. Joe De souza v/s State of Goa and ors	Appeal no/2/2022
12.	Chandravadan Ssurti v/s State of Goa and ors	OA/18/2022

4. DISPOSED MATTERS

Sr no.	Case name	Case No.
1	Roshni Da Silva V/s State of Goa and Ors (Reg Siddhi Cateres matter)	WP/ 28 /2021
2	ShrikantNayak v/s State of Goa and ors	WP/546/2021
3	SiddeshHiroji v/s The Chief Secretary Govt of Goa and ors	WP/138/2021
4	Dr.JorsonFernandes v/s State of Goa and ors	OA/16/2021
5	Riveeira De Goa v/s Sstate of Goa and anr	WP/1093/2021
6	Shiva Petrosynth v/s GSPCB and ors	WP/1096/2019
7	Siddesh Gawas v/s State of Goa and ors	WP/03/2021
8	Sociadade De Fomento v/s GSPCB and ors	WP/68/2021
9	Caetano Monteiro v/s State of Goa and ors	WP/310/2021

Court cases pending in the District Court and Other Court Forum

Sr no	Case no.	Case Name
1.	Criminal Case No. 306/OA/ WPCP/2015/C	Shri. Levinson J. Martins V/s. M/s. Jimcap Electronics Pvt. Ltd &Ors.
2.	Criminal Case No. 190/OA/2015/A.	Shri. Levinson J. Martins, The Member Secretary, Goa State Pollution Control Board V/s. M/s.Umiya Habiab, Represented by its Proprietor Aniruddh Mehta, S/o. Bhanuprasad Mehta, , 102/103, Anand Gawas-I, Airport Road, Vasco Da Gama & ors..
3.	Cri. Case no. 539/OA/16/E	Shri. Levinson J. Martins, The Member Secretary, Goa State Pollution Control Board V/s. Quality Exports &Ors.
4	Cri. Case no. 181/OA/2016/B	Shri. Levinson J. Martins, The Member Secretary, Goa State Pollution Control Board V/s. M/s. Sua Industries &Ors..
5	Cr. Case no. 2039/OA/2017/D	Goa State Pollution Control Board V/s. M/s Mormugao Port Trust &ors
6.	Civil suit no 22/2018	Mrs Anjali Anand V/s. G. ovt of Goa & 7 ors

Cases Pending in the Institution of Lokyukta

Sr.no	Case No.	Case Name
1.	Proceeding No.38/2018	Sushant Ray v/s The Sarpanch Smt. Asmita Gaude& 17 ors

Cases pending in the Goa Human Rights Commission, Panaji

Sr. No	Case No.	Case name
1.	Proceeding no. 302/2016	Social Justice Council Forum V/s GSPCB (Goa Carbon)
2.	Proceeding no. 168/2017	Shri. Sandeep Gawade V/s. GSPCB.
3.	Proceeding no138/2019	Citizen of Sonsodo v/s MMC
4.	Proceeding no. 28/2020	Mr..Sadanand Vaingankar v/s Directorate of Health Services
5.	Proceedings no. 62/2020	Complaint from Parshuram Sonurlekar

Cases pending in the Administrative Tribunal

Sr No.	Case no.	Case name
1.	PA/1/2020/Air in Misc. ApIn. No. 95/2020/ Stay/Poll/apl	French bakery V/s GSPCB &ors

Cases pending in the District Judge-I Mapusa

Sr No.	Case no.	Case name
1	CRRA. 76/2018	GSPCB V/s M/s Curlies Guest House

Court Cases pending in the Judicial Magistrate First Class(North Taluka)

Sr No.	Case no.	Case name
1.	Criminal Case No. 623/OA/2015/D	The Member Secretary, GSPCB Dempo Towes, Patto Plaza, Panaji-Goa Rep. by Shri. Levinson J. Martins V/s. Mrs.Everilda D'Mello Director of Mrs. Derisa (Mela Rosa) Maina Bati, Arpora, Bardez-Goa.

8.8 RIGHT TO INFORMATION ACT 2005 (RTI ACT)

- * The RTI Act provides access to all information *that is available and existing*. This is clear from a combined reading of section 3 and the definitions of 'information' and 'right to information' under clauses (f) and (j) of section 2 of the Act. If a public authority has any information in the form of data or analysed data, or abstracts, or statistics, an applicant may access such information, subject to the exemptions in section 8 of the Act. But where the information sought is not a part of the record of a public authority, and where such information is not required to be maintained under any law or the rules or regulations of the public authority, the Act does not cast an obligation upon the public authority, to collect or collate such non-available information and then furnish it to an applicant."

- * A public authority is also not required to furnish information which require drawing of inferences and/or making of assumptions or reasons or answering of queries. It is also not required to provide 'advice' or 'opinion' to an applicant, nor required to obtain and furnish any 'opinion' or 'advice' to an applicant. The reference to 'opinion' or 'advice' in the definition of 'information' in section 2(f) of the Act, only refers to such material available in the records of the public authority. Many public authorities have, as a public relation exercise, provide advice, guidance and opinion to the citizens. But that is purely voluntary and should not be confused with any obligation under the RTI Act.
- * The Act should not be allowed to be **MISUSED OR ABUSED**, to become a tool to obstruct the national development and integration, or to destroy the peace, tranquillity and harmony among its citizens. Nor should it be converted into a tool of oppression or intimidation of honest officials striving to do their duty. The nation does not want a scenario where 75% of the staff of public authorities spends 75% of their time in collecting and furnishing information to applicants instead of discharging their regular duties. The threat of penalties under the RTI Act and the pressure of the authorities under the RTI Act should not lead to employees of a public authorities prioritising 'information furnishing', at the cost of their normal and regular duties.
- * The clause of '**LIFE OR LIBERTY**' can be invoked to obtain information within 48 hours of filing the RTI application. The 'Life or Liberty' clause can be applied only in cases where there is an imminent danger to the life or liberty of a person and the non-supply of the information may either lead to death or grievous injury to the concerned person. Such imminent danger or the fact that the disclosure of the information would obviate the danger to the life or liberty of an individual has to be demonstrably proven. Merely the fact that the disclosure of information may assist an appellant to lead a better life is not sufficient for invoking the proviso of Section 7(1).
- * "**Personal Information** are passport details, copies of birth certificate and copies of records of educational qualification, action taken against employees, confidential reports are personal information, The performance of an employee/officer in an organization is primarily a matter between the employee and the employer and normally those aspects are governed by the service rules which fall under the expression "personal information", the disclosure of which has no relationship to any public activity or public interest. On the other hand, the disclosure of which would cause unwarranted invasion of privacy of that individual, if the Public Information Officer or the Appellate Authority is satisfied that the larger public interest justifies the disclosure of such information, appropriate orders could be passed but the petitioner cannot claim those details as a matter of right."
- * The Goa State Pollution Control Board has appointed the following officials as First Appellate Authority, Public Information Officer and Assistant Public Information Officer as per the RTI Act 2005.

1)	Member Secretary	First Appellate Authority
2)	Law Officer	Public Information Officer
3)	Senior Law Officer	Assistant Public Information Officer

- * During the Year 2021 the Board has received **173 number** of Applications for request of information and **7 number** of First Appeals which are accordingly processed as per the provisions of the Act.

CHAPTER 9

FINANCE AND ACCOUNTS OF THE BOARD

9.1 STATUS OF AUDITING OF ACCOUNTS OF THE BOARD

As per sub-sections 2 & 3 of section 40 of the water (Prevention and Control of Pollution) Act, 1974, the accounts of the Board are to be audited by an Auditor duly qualified to act as an Auditor of Companies under section 226 of the Companies Act, 1956. The said Auditor is to be appointed by the State Government on the advice of Comptroller & Auditor General of India (CAG).

Auditing of the Board accounts for the financial year 2016-17 has been completed. The Audit of accounts of the F.Y. 2017-2018, 2018-2019, 2019-20 and 2020-21 is in process of being completed.

9.2 INCOME, EXPENDITURE AND FUNDING

The income and expenditure account of the Board for the year ended 31st March, 2022 is as per table below:

Receipt and Payment Statement for the year 2021 - 2022

Receipts	Amount	Payments	Amount
Opening Balance	40148387	Advertisement & Publicity	1788318
RTI	20121	Advocate Charges	1987440
E-Tender Application Fees	49600	AMC	1619478
Consent Fees	93558737	Building Expenditure	11708927
Biomedical Authorisation	456500	Electricity Charges	1635804
Lab Analysis and Ambient Monitoring	1821340	Hazardous Waste management	441884
Others	13462465	Hiring vehicles	596353
Rent on Premise	26631688	Honorarium	351243
Public Hearing	69400	hospitality Charges	123356
FD Repayment Credit	36846720	Lab Expenses	21617624
NAMP Receipts	14965333	OCMMS Charges	424013
		office equipment	607695
		Office Expenses	1428726
		Petrol and Diesel	1127895
		postage	252337
		Printing and Stationery	558684
		Public hearing Exp	1828329

		refund	523807
		Repairs and Maintainance	2369545
		Salaries	135522573
		STP Commencement Exp	2096704
		Telephone/Internet Charges	193004
		Training Expenses	339862
		Travel Expenses	275964
		Wages	6315540
		Water Charges	109244
		MOEF Expenses	5431431
		Closing Balance	26754511
	228030291		228030291

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CHAPTER 10

ANY OTHER IMPORTANT MATTERS DEALT WITH BY THE BOARD

10.1 IMPLEMENTATION OF HAZARDOUS AND OTHER WASTE (MANAGEMENT & TRANSBOUNDARY MOVEMENT) RULES, 2016, AS AMENDED THEREAFTER.

The Hazardous Waste (Management & Handling) Rules were notified by the Ministry of Environment & Forests in the year 1989 under the provisions of the Environment Protection Act, 1986. Later the Rules were amended in the years 2000, 2003, 2008, 2016, 2018 and 2020 and subsequently, they were modified as the Hazardous and other Wastes (Management & Transboundary Movement) Rules 2016, as amended 2020.

The Board grants authorizations to industries generating and handling hazardous wastes. The Goa State Pollution Control Board has identified 1681 industrial units generating hazardous waste in Goa upto the period of April 2020-2021. The hazardous waste generated in the State of Goa for the year 2020-2021, is as follows: Landfillable (23.42 MT), Incinerable (5392.10 MT), Recyclable (2330.86 MT), Utilizable (19269.80 MT)

10.2 IMPLEMENTATION OF BIO-MEDICAL WASTE MANAGEMENT RULES, 2016 AS AMENDED THEREAFTER.

For the purpose of implementation of the Bio-Medical Waste Management Rules 2016 as amended thereafter, HCFs have been classified as per bedded and non bedded.

1. Bedded – 148 nos
2. Non bedded – 631 nos

For the year 2020, 139 Health Care Units were granted authorizations under the Bio-Medical Waste Management Rules, 2016, as amended, 2018.

The status of the Bio Medical waste generated by these units during the year is given in **Annexure XV**.

10.3 NOISE POLLUTION (REGULATION & CONTROL) RULES, 2000 AS AMENDED 2017.

The Board conducts monitoring of noise levels whenever any specific complaints of noise pollution are received and action is taken accordingly. In pursuance of clause (c) of rule 2 of the Noise Pollution Regulation & Control Rules, 2000, the Government of Goa vide Notification No. 2/51/2000 –II D (G) Vol I has designated (1) District Magistrates (2) Director General of Police (3) Deputy Collector and Sub-Divisional Magistrates (4) Superintendent of Police and Sub-Divisional Police Officers as 'authority' for the maintenance of ambient air quality standards in respect of noise under the said rules, with effect from 21.09.2000. In view of this, the Board forwards to the Competent Authority all the reports of Noise Level Monitoring conducted by the Board for necessary action.

10.4 IMPLEMENTATION OF SOLID WASTES MANAGEMENT RULES, 2016

The Board issues an authorization to all the Local Bodies under the provisions of Solid Waste Management Rules 2016. The authorizations have been issued independently for specific purpose to the local Bodies.

As per the Annual Report for the year 2020-2021 submitted to the Central Pollution Control Board, out of 13 Municipal Councils and 1 Municipal Corporation; 1 Municipal Corporation and 1 municipal council has installed garbage treatment plant and is in operation is annexure as **Annexure XVI**

10.5 IMPLEMENTATION OF PLASTICS WASTE (MANAGEMENT & HANDLING) RULES, 2016 AS AMENDED THEREAFTER.

There are Fourty four units involved in manufacture of plastic bags and containers in the State. The 44 units have obtained consent. **Annexure XVII** gives the details on "Implementation of Plastic Waste (Management and Handling) Rules, 2016 as amended thereafter in States/UTS".

The Government of Goa through the High Level Task Force (HLTF) constituted to provide directions and implement various measures as announced in the Budget Speech, 2012-13, towards resolving the solid waste management problems affecting the State of Goa has taken a decision to phase out the plastic from domestic use.

Accordingly the Government has decided to strictly implement banning the manufacturing, sale and use of the plastic having thickness less than 50 microns and bags which do not have the name of manufacturer, thickness and registration number printed on them as per the provisions of the Plastic Rules 2010 and Goa Non Biodegradable Garbage (Control) Act, 1996.

Further as per Plastic Waste Management rules, 2016 as amended in 2021

- a. The manufacture, import, stocking, distribution, sale and use of following single-use plastic commodities shall be prohibited from 1st January, 2022: Ear buds with plastic sticks, plastic sticks for balloons, plastic flags, candy sticks, ice-cream sticks, polystyrene [Thermocol] for decoration.
- b. the manufacture, import, stocking, distribution, sale and use of following single-use plastic commodities shall be prohibited from 1st July, 2022:
 - i. single-use plastic (including polystyrene and expanded polystyrene) items: plates, cups, glasses, cutlery such as forks, spoons, knives, straw, trays, wrapping/packing films around sweet boxes; invitation cards; and cigarette packets, plastic/PVC banners less than 100 micron, stirrers.
 - ii. the above provision shall not apply to commodities (including carry bags) made of compostable plastic material.

Board has issued directions to Municipal Administration, Panchayats, Collectors to ensure implementation of the rules. Also Public notices and awareness through stakeholder meetings is carried out by the Board.

10.6 IMPLEMENTATION OF BATTERIES (MANAGEMENT AND HANDLING) RULES, 2001 AS AMENDED IN 2010.

There is one unit who are involved in manufactures/assembling/pre-conditioners of lead acid battery within the state of Goa. 53 dealers have obtained registration as battery dealers. Most of the Bulkconsumersarefilinghalfyearlyreturnstothetothe Board, while mostofthedealersarenofilinghalfyearlyreturnstothistothisoffice.

The details of the returns under the said rules are given in **Annexure XVIII for the year 2020-2021.**

10.7 IMPLEMENTATION OF E-WASTES (MANAGEMENT) RULES, 2016

The computer market in the State has been increasing due to lot of commercial development and IT related activities. The Stateis emerging with a large middle class group who are willing to buy PC's. A large chunk of demand is still met by Assemblers who compete primarily on low cost advantage.

PC usage increases with the increase of the income level and education level of people. Majority of obsolete PC's are diverted to the grey markets, where in the non functional parts are changed and fixed with the new parts in PC's and further sold back to customers and remaining miscellaneous scraps are sold to scrap-dealers and recyclers.

There are no recyclers in the State specially do ingrecycling for obsolete PC's. Existing E-waste handling practices are not expected to manage future E-waste generation thus formal recycling center is needed for E-waste collection, segregation, dismantling and recycling of the material. Thereis a lack of awareness in public regarding E-waste handling, treatment and disposal.

Presently, one unit is registered with the Board for collection and dismantling of E-waste from the State of Goa, which is then sent to the registered recycler for recycling. Also the Board has granted authorization for one unit for dismantling of E-waste

The details of annual returns for the year 2020-2021 is annexed as **Annexure XIX.**

10.8. IMPLEMENTATION OF CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT RULES, 2016.

The State government has handed over land to Goa Waste Management Corporation (GWMC) in survey no. 146/2, 146/3, 146/4, 148/2, 148/6 and 148/7 of Village Curchirem of Bicholim Taluka, for setting up C & D Waste Management Facility of 500 TPD capacity. The Board has granted authorization to Goa Waste Management Corporation (GWMC) for temporary storage of C & D waste at the said site.

The details of annual returns for the year 2020-2021 is annexed as **Annexure XX.**

10.9 As an intiative to save the Environmental from “Single Use Plastic”, the Board in collaboration with Goa State Bio-diversity Board, Department of Environment and Climate change and Goa State Election Commission initated a compaign for promotion of use of cloth bags by contributing an amount of Rs.10 Lakhs towards distribution of eco friendly bags to households in Goa

ANNEXURE I

GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदूषण नियंत्रण मंडळ

(An ISO 9001:2015, ISO 14001:2015. OHSAS 18001:2007 Certified Board)

Phone Nos. : 0832-2407700
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2407703

Tel/Fax No. : 0832-2407700
No. 8/11/09-PCB/Vol. VIII/Admn/



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Member Secretary GSPCB: ms-gspcb.goa@nic.in
Environment Engineer, GSPCB: ee-gspcb.goa@nic.in
Scientist, GSPCB: scientist-gspcb.goa@nic.in
Office: goapcb@gspcb.in

03/04/2019

AMENDMENT

Read: Office Order no. 8/11/09-PCB/Vol.VIII/Admn/16149 dated 10/12/2018
Sub: Re-constitution of the Technical Advisory Committee (TAC)

In partial modification of the Office Order referred to above, the member referred to serial no. 3 of the said order has been substituted as follows:

Sr.	Name	Designation
3.	Dr. Sumitra Kandolkar	Associate Professor, Civil Engineering Department, Goa College of Engineering, Farmagudi, Ponda Goa
		Member

The terms of reference referred to in the above order remain unchanged.


(Ganesh Budhu Shetgaonkar)
Chairman, GSPCB

To,

1.	Dr. Xivanand Verlekar, Retd. Scientist, NIO (Biologist), House no. 606, Pinto Vaddo, Candolim, Bardez Goa.
2.	Dr. Sampatrao Dagu Manjare, Associate Professor, BITS Pilani, Goa Campus, Zuarinagar, Goa
3.	Dr. Sumitra Kandolkar, Associate Professor, Civil Engineering Department, Goa College of Engineering, Farmagudi, Ponda Goa
4.	Mr. Dilip M. Rege, Karma Gardens, Flat no. 107, SMRC Road, Nr. Regina Mundi School, Chicalim Goa 403711
5.	Mrs. Francisca Pereira, Scientist 'B', Goa State Pollution Control Board
6.	Mrs. Nandan Prabhudessai, Junior Environmental Engineer, Goa State Pollution Control Board
7.	Mr. Keshav Fadke, Junior Environmental Engineer, Goa State Pollution Control Board
8.	Dr. Mohan Girap, Scientist 'C', Goa State Pollution Control Board

c.c for information to:

1.	The Principal, Goa College of Engineering, Farmagudi, Ponda Goa.

c.c to:

1. Scientist 'C' – Lab In-charge, GSPCB	2. Environmental Engineer, GSPCB	3. Assistant Accounts Officer, GSPCB	4. P.A to Chairman	5. P.A to Member Secretary	6. T.A.C file
7. Admn. File	8. Guard file.				

GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदूषण नियंत्रण मंडळ

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Member Secretary GSPCB: ms-gspcb.goa@nic.in
Environment Engineer, GSPCB: ee-gspcb.goa@nic.in
Scientist, GSPCB: scientist-gspcb.goa@nic.in
Office: goapcb@gspcb.in

No. 8/11/09-PCB/Vol. VIII/Admn/16149

10/12/2018

OFFICE ORDER

Sub: Re-constitution of the Technical Advisory Committee (TAC)

Ref: Order no. 8/11/09-PCB/Vol.VIII/Tech/20390 dated 25/01/2018

The Technical Advisory Committee of the Board is re-constituted with immediate effect and will comprise the following members:

Sr.	Name	Designation	
1.	Dr. Xivanand Verlekar	Retd. Scientist, NIO (Biologist), House no. 606, Pinto Vaddo, Candolim, Bardez Goa.	Member
2.	Dr. Sampatrao Dagu Manjare	Associate Professor, BITS Pilani, Goa Campus, Zuarinagar, Goa	Member
3.	Dr. Purnanand Savoikar	Professor, Civil Engineering, Goa College of Engineering, Farmagudi, Ponda Goa	Member
4	Mr. Dilip M. Rege	Karma Gardens, Flat no. 107, SMRC Road, Nr. Regina Mundi School, Chicalim Goa 403711	Member
5.	Mrs. Francisca Pereira	Scientist 'B', Goa State Pollution Control Board	Member
6.	Mrs. Nandan Prabhudessai	Junior Environmental Engineer, Goa State Pollution Control Board	Member
7.	Mr. Keshav Fadke	Junior Environmental Engineer, Goa State Pollution Control Board	Member
8.	Dr. Mohan Girap	Scientist 'C', Goa State Pollution Control Board	Member Convenor

Terms of reference:

1.	On receipt of applications under Orange category (STP projects) and Red category of industries, once verified by the I.T section of the Board for documents and payment of fees, the concerned Junior Environmental Engineer / Engineering Assistant shall inspect the unit and submit inspection report along with scientific analysis report etc. and shall recommend only those cases which are in order and duly completed in all respect to the TAC for scrutiny / recommendation/comments/suggestions etc.
2.	The Technical Advisory Committee shall meet every Monday at 4.00 pm in the Conference hall of the Board to scrutinize and for recommendations / comments/ suggestions on the applications received for Consent to Establish/Operate / Renewal of Consents under the Water Act and the Air Act, Authorization under the Hazardous Waste Rules, Bio-medical Waste Rules (except that of Green category industries)
3.	The recommendations of the Committee meetings in the form of minutes shall be placed before the Chairman for approval. On approval of the Minutes by the Chairman, the Consent order shall be issued by the Designated Officer /Member Secretary.
4.	The non official member shall be paid sitting fees as per the prevailing Rules.
5.	This order shall supercede all the earlier orders issued in regard to the Constitution of the Technical Advisory Committee for the Goa State Pollution Control Board.


 (Ganesh Budhu Shelgaonkar)
 Chairman, GSPCB

To,

1.	The Members listed above.

c.c for information to:

1.	The Dean, BITS Pilani, Goa Campus, Zuarinagar, Goa
2.	The Principal, Goa College of Engineering, Farmagudi, Ponda Goa.

c.c to:

1. Scientist 'C' – Lab In-charge, GSPCB	2. Environmental Engineer, GSPCB	
3. Assistant Accounts Officer, GSPCB	4. P.A to Chairman	5. P.A to Member Secretary
6. T.A.C file	7. Admn. File	8. Guard file.

ANNEXURE II

GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदूषण नियंत्रण मंडळ

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Member Secretary GSPCB: ms-gspcb.goa@nic.in
Environment Engineer, GSPCB: ee-gspcb.goa.ni
Scientist, GSPCB: scientist-gspcb.goa@nic.in
Office: goapcb@gspcb.in 3/06/2021

Admin/3021

ORDER

Sub: Re-constitution of a Departmental Promotion Committee and Departmental Selection Committee in respect of Group 'C' posts in the Goa State Pollution Control Board.

Ref: This office order no. 1/5/10-PCB/Vol.VIII/2995 dated 07/09/2011

In pursuance of the powers vested under section 9 of the Water (Prevention and Control of Pollution) Act, 1974 and under section 11 of the Air (Prevention and Control of Pollution) Act, 1981, and as per the Notification no. 5/20/87-STE/DIR/Part IV/440 dated 12th July, 2011, published in the official Gazette Series I, no. 15 dated 14th July, 2011, the composition of the Departmental Promotion Committee (D.P.C) and Departmental Selection Committee (D.S.C) in respect of Group 'C' posts in the Goa State Pollution Control Board has been re-constituted, comprising of the following members, with immediate effect.

1.	Chairman of the Board	Chairman of the Committee
2.	Director, Department of Environment & Climate Change, Govt. of Goa, or his representative	Member
3.	Senior Environmental Engineer, GSPCB (in case of Technical, Accounts, Admn., I.T posts)	Member
4.	Scientist 'D' (in case of Scientific, posts)	Member
5.	Member Secretary, Goa State Pollution Control Board	Member

The terms of reference of the above mentioned Committee shall be as follows:

1.	Screening / Selection / Recommendations/ Making of appointments /Promotions / Probation clearance / Confirmation / Grant of claims under

ANNEXURE III

GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदूषण नियंत्रण मंडळ

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Member Secretary GSPCB: ms-gspcb.goa@nic.in
Office: mail.gspcb@gov.in

No. 3/43/13-PCB/Lab/12929

19/10/2021

OFFICE ORDER

The Purchase Committee of the Board is hereby re-constituted for purchase of sophisticated Scientific Instruments / Equipments for the Board laboratory, with effect from the date of this order.

1.	Mrs. Jenica Sequeira (in her absence Link Officer shall represent)	Scientist 'D' Goa State Pollution Control Board
2.	Assistant Accounts Officer (in his absence Accountant shall represent)	Goa State Pollution Control Board
3.	Dr. Prakash Mehra	Senior Principal Scientist, CSIR – National Institute of Oceanography, Dona Paula (mobile no. 9890234866)
4.	Dr. Aditya Peketi	Scientist, CSIR – National Institute of Oceanography, Dona Paula (mobile no. 9850990233)
5.	Shri Sanjeev Joglekar (in his absence Link Officer shall represent)	Senior Environmental Engineer, Goa State Pollution Control Board
6.	Mr. Sanjay Kankonkar (in his absence Link Officer shall represent)	Scientist 'B' Goa State Pollution Control Board
7.	Mrs Natalia Dias (in her absence Link Officer shall represent)	Law Officer, Goa State Pollution Control Board
8.	Mr. Rajiv Nevgi	Industrialist, Shriram Sadan, Datawadi, Mapusa Goa 403507

N.B: In the event instrument / equipment related to air monitoring like CAAQMS is required to be purchased, a separate order nominating an Expert shall be issued.

This order supercedes all other orders issued in this regard.


(Ganesh Shetgaonkar)
Chairman

Goa State Pollution Control Board

To,

The Members of the Committee referred above.

c.c. for information to: The Director, National Institute of Oceanography, Dona Paula, Goa

c.c. to 1. Office copy 2. Admn. copy 3. Guard file.

ANNEXURE IV

GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदूषण नियंत्रण मंडळ

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Office: mail.gspcb@gov.in

No. I/5/21-PCB/Vol.XXIX/Admn./12930

19/10/2021

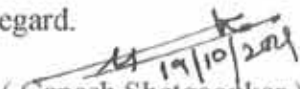
OFFICE ORDER

The below mentioned Committee is hereby constituted for the procurement of goods / services / instruments / equipments / servicing of equipments and any other services for all the sections of the Board, by following the process of inviting quotations, tenders, e-tenders as per the guidelines prescribed.

This order shall be effective from the date of issue of this order.

1.	Senior Environmental Engineer	In the absence Link official	
2.	Assistant Accounts Officer	In the absence, Accountant	
3.	Scientist 'D'	In the absence Link official	
4.	Administrative Officer		matters pertaining to Admn.
5.	Assistant Engineer (I.T)		matters pertaining to I.T

This order supercedes all other orders issued in this regard.


(Ganesh Shetgaonkar)

Chairman

Goa State Pollution Control Board

To,

The Members of the Committee / Link Officials referred above.

c.c. to 1. Office copy 2. Admn. copy 3. Guard file.

ANNEXURE V

GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदूषण नियंत्रण मंडळ

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Member Secretary GSPCB: ms-gspcb.goa@nic.in
Office: mail.gspcb@gov.in

No. 1/5/22-PCB/Vol. XXIX/Admn/19012

01/02/2022

OFFICE ORDER

In order to streamline the overall functioning of the Goa State Pollution Control Board and in view of pendency and delay in processing, deciding and disposing off various issues pertaining to the Board including Consent Applications, Public Complaints etc. it is directed as follows:

The Orders of the Goa State Pollution Control Board delegating its powers to the various Officers of the Board; other than the Orders delegating powers to the Member Secretary of the GSPCB; shall stands suspended with immediate effect.

All correspondence issued by the Board including Consent Orders, Directions, Notices etc. shall henceforth be issued only by the Member Secretary of the Board and in absence by the concerned authorized link officer.

This Order is issued with immediate effect and all concerned are required to note the same, instruct/intimate the officials under their respective sections and act accordingly.


(Mahesh K. Patil)

Chairman

Goa State Pollution Control Board

To,
Dr. Shamila Monteiro,
Member Secretary, GSPCB

Copy for information to:

1. P. A to Chairman, GSPCB
2. P.A. to Member Secretary, GSPCB
3. All Section heads.
4. AEE's/EA's
5. Concerned Dealing Hands
6. Personal file of official
7. Order file
8. Staff File
9. Office Notice Board
10. Guard file

ANNEXURE VI

ANNUAL AAQM DATA OF NAMP STATION FROM					APRIL 2021 to MARCH 2022		
Station: Near Dempo Towers, Patto plaza					City: Panaji		
		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)					AIR QLTY
	Parameters	PM10	PM2.5	SO2	NO2	AQI	
Sr.No	Date	24-hr avg	24-hr avg	24-hr avg	24-hr avg		
APRIL							
1	01-04-2021	57	10	2	28	57	Satisfactory
2	07-04-2021	79	10	2	23	79	Satisfactory
3	09-04-2021	52	13	2	30	52	Satisfactory
4	12-04-2021	52	39	2	26	65	Satisfactory
5	15-04-2021	48	16	2	30	48	Good
6	21-04-2021	41	5	2	22	41	Good
7	23-04-2021	49	16	2	19	49	Good
8	28-04-2021	44	10	2	20	44	Good
MAY							
9	03-05-2021	64	53	2	19	88	Satisfactory
10	06-05-2021	41	13	2	19	41	Good
11	11-05-2021	82	17	2	15	82	Satisfactory
12	13-05-2021	85	6	2	22	85	Satisfactory
13	19-05-2021	88	\$	2	26	88	Satisfactory
14	21-05-2021	51	6	2	22	51	Satisfactory
15	26-05-2021	88	13	2	19	88	Satisfactory
16	28-05-2021	58	6	2	14	58	Satisfactory
JUNE							
17	02-06-2021	60	23	2	13	60	Satisfactory
18	04-06-2021	60	Monitoring stopped due to Rainy Season	2	21	60	Satisfactory
19	11-06-2021	53		2	15	53	Satisfactory
20	18-06-2021	136		2	13	124	Moderate
21	23-06-2021	76		2	13	76	Satisfactory
22	25-06-2021	46		2	19	46	Good
23	30-06-2021	56		2	13	56	Satisfactory

JULY							
24	02-07-2021	51	Monitoring stopped due to Rainy Season	2	16	51	Satisfactory
25	07-07-2021	154		2	13	136	Moderate
26	09-07-2021	34		2	19	34	Good
27	23-07-2021	58		2	23	58	Satisfactory
28	28-07-2021	226		2	11	184	Moderate
29	30-07-2021	74		2	11	74	Satisfactory
AUGUST							
30	04-08-2021	80	Monitoring stopped due to Rainy Season	2	11	80	Satisfactory
31	06-08-2021	59		2	5	59	Satisfactory
32	11-08-2021	42		2	12	42	Good
33	13-08-2021	50		2	15	50	Good
34	18-08-2021	66		2	16	66	Satisfactory
35	20-08-2021	64		2	12	64	Satisfactory
36	25-08-2021	51		2	12	51	Satisfactory
37	27-08-2021	37		2	13	37	Good
SEPTEMBER							
38	01-09-2021	28	Monitoring stopped due to Rainy Season	2	5	28	Good
39	03-09-2021	82		2	5	82	Satisfactory
40	08-09-2021	31		2	13	31	Good
41	15-09-2021	63		2	10	63	Satisfactory
42	17-09-2021	57		2	9	57	Satisfactory
43	22-09-2021	31		2	16	31	Good
44	24-09-2021	57		2	12	57	Satisfactory
45	29-09-2021	26		2	5	26	Good
OCTOBER							
46	01-10-2021	29	*	2	9	29	Good
47	06-10-2021	34	*	2	21	34	Good
48	08-10-2021	38	*	2	17	38	Good
49	12-10-2021	87	*	2	5	87	Satisfactory
50	14-10-2021	107	*	2	5	105	Moderate
51	20-10-2021	42	*	2	12	42	Good

52	22-10-2021	50	*	2	9	50	Good
53	27-10-2021	72	14	2	10	72	Satisfactory
54	28-10-2021	46	25	2	12	46	Good
55	29-10-2021	127	57	2	13	118	Moderate
56	30-10-2021	52	47	2	12	78	Satisfactory
57	31-10-2021	77	10	2	12	77	Satisfactory
NOVEMBER							
58	01-11-2021	37	26	2	5	43	Good
59	02-11-2021	24	25	2	5	42	Good
60	03-11-2021	34	26	2	5	43	Good
61	04-11-2021	36	17	2	5	36	Good
62	05-11-2021	25	23	2	5	38	Good
63	06-11-2021	22	14	2	12	23	Good
64	07-11-2021	30	14	2	12	30	Good
65	08-11-2021	68	34	2	10	68	Satisfactory
66	09-11-2021	93	76	2	11	153	Moderate
67	10-11-2021	109	59	2	10	106	Moderate
68	11-11-2021	142	61	2	10	128	Moderate
69	12-11-2021	177	38	2	11	151	Moderate
70	17-11-2021	116	32	2	18	111	Moderate
71	19-11-2021	44	30	2	18	50	Good
72	24-11-2021	48	MB	2	17	48	Good
73	26-11-2021	47	MB	2	19	47	Good
74	30-11-2021	73	MB	2	13	73	Satisfactory
DECEMBER							
75	02-12-2021	25	MB	2	14	25	Good
76	08-12-2021	100	MB	2	16	100	Satisfactory
77	10-12-2021	61	MB	2	15	61	Satisfactory
78	15-12-2021	71	MB	2	15	71	Satisfactory
79	17-12-2021	111	MB	2	15	107	Moderate
80	22-12-2021	140	61	2	26	127	Moderate
81	24-12-2021	97	43	2	17	97	Satisfactory
82	29-12-2021	84	MB	2	17	84	Satisfactory

83	31-12-2021	112	MB	2	12	108	Moderate
JANUARY							
84	05-01-2022	81	MB	2	12	81	Satisfactory
85	07-01-2022	81	MB	2	14	81	Satisfactory
86	12-01-2022	56	MB	2	11	56	Satisfactory
87	14-01-2022	47	MB	2	11	47	Good
88	19-01-2022	83	MB	2	21	83	Satisfactory
89	21-01-2022	54	MB	5	31	54	Satisfactory
90	25-01-2022	80	MB	6	21	80	Satisfactory
91	28-01-2022	97	MB	6	22	97	Satisfactory
FEBRUARY							
92	02-02-2022	140	MB	4	11	127	Moderate
93	04-02-2022	44	MB	5	14	44	Good
94	09-02-2022	39	MB	2	18	39	Good
95	11-02-2022	88	MB	2	20	88	Satisfactory
96	16-02-2022	51	MB	2	17	51	Satisfactory
97	18-02-2022	36	MB	2	17	36	Good
98	23-02-2022	84	MB	2	17	84	Satisfactory
99	25-02-2022	57	MB	4	13	57	Satisfactory
MARCH							
100	02-03-2022	75	MB	2	13	67	Satisfactory
101	04-03-2022	83	MB	2	14	53	Satisfactory
102	09-03-2022	54	MB	2	10	51	Satisfactory
103	11-03-2022	80	MB	2	15	65	Satisfactory
104	15-03-2022	125	MB	2	14	55	Satisfactory
105	17-03-2022	69	MB	2	17	47	Good
106	23-03-2022	80	MB	2	12	37	Good
107	25-03-2022	56	MB	2	16	44	Good
108	30-03-2022	74	MB	2	13	31	Good
* No Monitoring MB-Machine Breakdown							

ANNUAL AAQM DATA OF NAMP STATION FROM APRIL 2021 to MARCH 2022

Station: Within the premises of Muncipal Building

City: Mapusa

		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)				AQI	AIR QLTY
	Parameters	PM10	PM2.5	SO2	NO2		
Sr. No	Date	24-hr avg	24-hr avg	24-hr avg	24-hr avg		
APRIL							
1	01-04-2021	61	5	2	24	61	Satisfactory
2	07-04-2021	36	5	2	24	36	Good
3	09-04-2021	72	21	2	25	72	Satisfactory
4	12-04-2021	66	13	2	23	66	Satisfactory
5	15-04-2021	37	20	2	21	37	Good
6	21-04-2021	59	27	2	22	59	Satisfactory
7	23-04-2021	137	18	2	16	125	Moderate
8	28-04-2021	91	47	2	19	91	Satisfactory
9	30-04-2021	74	35	2	20	74	Satisfactory
MAY							
10	05-05-2021	36	19	2	16	36	Good
11	07-05-2021	59	47	2	17	78	Satisfactory
12	11-05-2021	37	25	2	18	42	Good
13	13-05-2021	46	9	2	18	46	Good
14	21-05-2021	125	7	2	20	117	Moderate
15	26-05-2021	64	\$	2	14	64	Satisfactory
16	28-05-2021	75	\$	2	16	75	Satisfactory
JUNE							
17	02-06-2021	53	19	2	16	53	Satisfactory
18	04-06-2021	85	28	2	18	85	Satisfactory

19	09-06-2021	33	Moni- toring stopped due to Rainy Season	2	14	33	Good
20	11-06-2021	38		2	21	38	Good
21	18-06-2021	67		2	12	67	Satisfactory
22	23-06-2021	52		2	10	52	Satisfactory
23	25-06-2021	35		2	19	35	Good
24	30-06-2021	25		2	15	25	Good
JULY							
25	02-07-2021	33	Moni- toring stopped due to Rainy Season	2	15	33	Good
26	07-07-2021	45		2	15	45	Good
27	09-07-2021	39		2	22	39	Good
28	28-07-2021	82		2	10	82	Satisfactory
29	30-07-2021	59		2	10	59	Satisfactory
AUGUST							
30	04-08-2021	40	Moni- toring stopped due to Rainy Season	2	5	40	Good
31	06-08-2021	37		2	12	37	Good
32	11-08-2021	29		2	13	29	Good
33	13-08-2021	33		2	12	33	Good
34	18-08-2021	51		2	15	51	Satisfactory
35	20-08-2021	37		2	12	37	Good
36	25-08-2021	27		2	12	27	Good
37	27-08-2021	21		2	14	21	Good
SEPTEMBER							
38	01-09-2021	35	Moni- toring stopped due to Rainy Season	2	11	35	Good
39	03-09-2021	31		2	5	31	Good
40	08-09-2021	57		2	13	57	Satisfactory
41	15-09-2021	53		2	5	53	Satisfactory
42	17-09-2021	45		2	10	45	Good
43	22-09-2021	42		2	16	42	Good
44	24-09-2021	28		2	13	28	Good
45	29-09-2021	78		2	5	78	Satisfactory

OCTOBER							
46	01-10-2021	30	18	2	5	30	Good
47	06-10-2021	22	*	2	16	22	Good
48	08-10-2021	27	*	2	16	27	Good
49	12-10-2021	28	21	2	11	35	Good
50	14-10-2021	31	29	2	5	48	Good
51	20-10-2021	32	*	2	14	32	Good
52	22-10-2021	39	30	2	11	50	Good
53	27-10-2021	48	6	2	13	48	Good
54	29-10-2021	49	39	2	12	65	Satisfactory
NOVEMBER							
55	02-11-2021	27	20	2	5	33	Good
56	05-11-2021	26	13	2	5	26	Good
57	10-11-2021	52	25	2	12	52	Satisfactory
58	12-11-2021	89	47	2	11	89	Satisfactory
59	17-11-2021	34	16	2	16	34	Good
60	19-11-2021	31	7	2	17	31	Good
61	24-11-2021	18	8	2	33	41	Good
62	26-11-2021	43	32	2	26	53	Satisfactory
63	30-11-2021	24	8	2	12	24	Good
DECEMBER							
64	02-12-2021	61	8	2	16	61	Satisfactory
65	08-12-2021	61	30	2	15	61	Satisfactory
66	10-12-2021	42	37	2	16	62	Satisfactory
67	15-12-2021	42	13	2	15	42	Good
68	17-12-2021	96	36	2	25	96	Satisfactory
69	22-12-2021	124	33	2	19	116	Moderate
70	24-12-2021	81	23	2	19	81	Satisfactory
71	29-12-2021	49	28	2	18	49	Good
72	31-12-2021	38	23	2	5	38	Good

JANUARY							
73	05-01-2022	95	14	2	14	95	Satisfactory
74	07-01-2022	75	28	2	11	75	Satisfactory
75	12-01-2022	24	19	2	11	32	Good
76	14-01-2022	64	27	2	13	64	Satisfactory
77	19-01-2022	54	41	5	37	68	Satisfactory
78	21-01-2022	52	35	6	24	58	Satisfactory
79	25-01-2022	71	26	6	16	71	Satisfactory
80	28-01-2022	109	7	6	25	106	Moderate
FEBRUARY							
81	02-02-2022	78	5	4	11	78	Satisfactory
82	04-02-2022	41	17	4	14	41	Good
83	09-02-2022	41	17	2	17	41	Good
84	11-02-2022	68	36	2	19	68	Satisfactory
85	16-02-2022	53	15	2	12	53	Satisfactory
86	18-02-2022	52	31	2	13	52	Satisfactory
87	23-02-2022	43	30	2	13	50	Good
88	25-02-2022	62	19	2	18	62	Satisfactory
MARCH							
89	02-03-2022	36	6	2	11	43	Good
90	04-03-2022	79	22	2	12	57	Satisfactory
91	09-03-2022	33	50	2	11	53	Satisfactory
92	11-03-2022	78	9	2	13	54	Satisfactory
93	15-03-2022	85	64	2	21	48	Good
94	17-03-2022	54	38	2	13	48	Good
95	23-03-2022	47	34	2	17	55	Satisfactory
96	25-03-2022	28	7	2	19	44	Good
97	30-03-2022	69	8	2	15	36	Good
* No Monitoring MB-Machine Breakdown							

ANNUAL AAQM DATA OF NAMP STATION FROM						APRIL 2021 to MARCH 2022	
Station:MPT Quarters						City: Baina	
		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)				AQI	AIR QLTY
	Parameters	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
Sr.No	Date	24-hr avg	24-hr avg	24-hr avg	24-hr avg		
APRIL							
1	01-04-2021	42	6	2	19	42	Good
2	07-04-2021	37	19	2	16	37	Good
3	09-04-2021	36	20	2	25	36	Good
4	12-04-2021	55	29	2	21	55	Satisfactory
5	15-04-2021	31	29	2	25	48	Good
6	21-04-2021	39	22	2	18	39	Good
7	23-04-2021	41	17	2	20	41	Good
8	28-04-2021	96	24	2	19	96	Satisfactory
9	30-04-2021	46	21	2	19	46	Good
MAY							
10	05-05-2021	28	24	2	20	40	Good
11	07-05-2021	27	18	2	22	30	Good
12	11-05-2021	44	19	2	18	44	Good
13	13-05-2021	35	20	2	21	35	Good
14	19-05-2021	80	MB	2	18	80	Satisfactory
15	21-05-2021	71	MB	2	19	71	Satisfactory
16	26-05-2021	51	MB	2	19	51	Satisfactory
JUNE							
17	02-06-2021	35	Monitoring stopped due to Rainy Season	2	26	35	Good
18	04-06-2021	24		2	18	24	Good
19	11-06-2021	56		2	12	56	Satisfactory
20	18-06-2021	115		2	13	110	Moderate
21	23-06-2021	53		2	17	53	Satisfactory
22	25-06-2021	26		2	11	26	Good
23	30-06-2021	23		2	16	23	Good

JULY							
24	02-07-2021	41	Monitoring stopped due to Rainy Season	2	15	41	Good
25	07-07-2021	90		2	5	90	Satisfactory
26	09-07-2021	24		2	15	24	Good
27	23-07-2021	426		2	24	395	
28	28-07-2021	213		2	5	175	Moderate
29	30-07-2021	187		2	5	158	Moderate
AUGUST							
30	04-08-2021	138	Monitoring stopped due to Rainy Season	4	5	125	Moderate
31	06-08-2021	83		2	9	83	Satisfactory
32	11-08-2021	92		2	10	92	Satisfactory
33	13-08-2021	54		2	11	54	Satisfactory
34	18-08-2021	26		2	11	26	Good
35	20-08-2021	37		2	11	37	Good
36	25-08-2021	89		2	11	89	Satisfactory
37	27-08-2021	50		2	10	50	Good
SEPTEMBER							
38	01-09-2021	33	Monitoring stopped due to Rainy Season	4	5	33	Good
39	03-09-2021	36		2	5	36	Good
40	09-09-2021	70		2	5	70	Satisfactory
41	15-09-2021	138		2	9	125	Moderate
42	17-09-2021	100		2	9	100	Satisfactory
43	22-09-2021	35		2	22	35	Good
44	24-09-2021	37		2	11	37	Good
45	29-09-2021	14		2	13	16	Good
OCTOBER							
46	01-10-2021	29	43	2	14	72	Satisfactory
47	06-10-2021	32	*	2	18	32	Good
48	08-10-2021	28	*	2	16	28	Good
49	12-10-2021	17	*	2	5	17	Good
50	14-10-2021	13	*	2	5	13	Good
51	20-10-2021	71	12	2	16	71	Satisfactory

52	22-10-2021	36	11	2	11	36	Good
53	27-10-2021	72	*	2	11	72	Satisfactory
54	29-10-2021	62	*	2	12	62	Satisfactory
NOVEMBER							
55	03-11-2021	31	MB	2	5	31	Good
56	05-11-2021	43	MB	2	5	43	Good
57	10-11-2021	126	MB	2	12	117	Moderate
58	12-11-2021	144	MB	2	12	129	Moderate
59	17-11-2021	30	MB	2	12	30	Good
60	19-11-2021	32	MB	2	16	32	Good
61	24-11-2021	31	MB	2	20	31	Good
62	26-11-2021	121	MB	2	16	114	Moderate
63	30-11-2021	62	MB	2	12	62	Satisfactory
DECEMBER							
64	02-12-2021	22	MB	2	13	22	Good
65	08-12-2021	91	MB	2	15	91	Satisfactory
66	10-12-2021	66	MB	2	15	66	Satisfactory
67	15-12-2021	56	MB	2	16	56	Satisfactory
68	17-12-2021	347	MB	2	15	297	Poor
69	21-12-2021	MB	62	MB	MB		
70	23-12-2021	MB	86	MB	MB		
71	28-12-2021	64	57	2	5	95	Satisfactory
72	30-12-2021	36	26	2	5	43	Good
JANUARY							
73	05-01-2022	57	32	2	12	57	Satisfactory
74	07-01-2022	53	52	2	12	87	Satisfactory
75	12-01-2022	46	36	2	5	60	Satisfactory
76	14-01-2022	34	13	2	18	34	Good
77	19-01-2022	58	53	2	13	88	Satisfactory
78	21-01-2022	33	32	2	5	53	Satisfactory
79	25-01-2022	88	29	2	10	88	Satisfactory
80	28-01-2022	99	40	2	11	99	Satisfactory

FEBRUARY							
81	02-02-2022	46	49	2	13	82	Satisfactory
82	04-02-2022	32	22	2	13	37	Good
83	09-02-2022	44	26	2	13	44	Good
84	11-02-2022	60	44	2	12	73	Satisfactory
85	16-02-2022	48	27	2	5	48	Good
86	18-02-2022	47	32	2	12	53	Satisfactory
87	23-02-2022	50	32	2	11	53	Satisfactory
88	25-02-2022	36	19	2	10	36	Good
MARCH							
89	02-03-2022	45	31	2	14	64	Satisfactory
90	04-03-2022	42	36	2	13	24	Good
91	09-03-2022	37	39	2	12	67	Satisfactory
92	11-03-2022	51	58	2	13	45	Good
93	15-03-2022	63	54	2	5	30	Good
94	17-03-2022	44	26	2	5	10	Good
95	23-03-2022	51	27	2	12	54	Satisfactory
96	25-03-2022	35	16	2	5	26	Good
97	30-03-2022	34	15	2	22	20	Good
* No Monitoring MB-Machine Breakdown							

ANNUAL AAQM DATA OF NAMP STATION FROM						APRIL 2021 to MARCH 2022	
Station: Fuse Call Office						City: Vasco	
		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)				AQI	AIR QLTY
	Parameters	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
Sr.No	Date	24-hr avg	24-hr avg	24-hr avg	24-hr avg		
APRIL							
1	01-04-2021	110	18	2	22	107	Moderate
2	07-04-2021	43	13	2	13	43	Good
3	09-04-2021	70	12	2	24	70	Satisfactory
4	12-04-2021	68	29	2	26	68	Satisfactory
5	15-04-2021	49	12	2	20	49	Good
6	21-04-2021	68	30	2	17	68	Satisfactory
7	23-04-2021	63	25	2	20	63	Satisfactory
8	28-04-2021	61	5	12	17	61	Satisfactory
9	30-04-2021	44	17	2	15	44	Good
MAY							
10	05-05-2021	47	19	2	22	47	Good
11	07-05-2021	43	10	2	20	43	Good
12	11-05-2021	57	8	2	19	57	Satisfactory
13	13-05-2021	58	10	2	24	58	Satisfactory
14	19-05-2021	93	8	2	25	93	Satisfactory
15	21-05-2021	56	20	2	21	56	Satisfactory
16	26-05-2021	80	16	2	19	80	Satisfactory
JUNE							
17	02-06-2021	27	6	2	19	27	Good
18	04-06-2021	37	Monitoring stopped due to Rainy Season	2	20	37	Good
19	11-06-2021	48		2	12	48	Good
20	18-06-2021	71		2	13	71	Satisfactory
21	23-06-2021	43		2	18	43	Good
22	25-06-2021	50		2	11	50	Good
23	30-06-2021	30		2	11	30	Good

JULY							
24	02-07-2021	35	Monitoring stopped due to Rainy Season	2	15	35	Good
25	07-07-2021	27		2	14	27	Good
26	09-07-2021	12		2	12	15	Good
27	23-07-2021	68		2	12	68	Satisfactory
28	28-07-2021	58		2	11	58	Satisfactory
29	30-07-2021	46		2	5	46	Good
AUGUST							
30	04-08-2021	27	Monitoring stopped due to Rainy Season	2	5	27	Good
31	06-08-2021	23		2	5	23	Good
32	11-08-2021	38		2	5	38	Good
33	13-08-2021	37		2	11	37	Good
34	18-08-2021	33		2	20	33	Good
35	20-08-2021	30		2	17	30	Good
36	25-08-2021	51		2	9	51	Satisfactory
37	27-08-2021	69		2	11	69	Satisfactory
SEPTEMBER							
38	01-09-2021	32	Monitoring stopped due to Rainy Season	2	5	32	Good
39	03-09-2021	43		2	5	43	Good
40	09-09-2021	41		2	5	41	Good
41	15-09-2021	51		2	5	51	Satisfactory
42	17-09-2021	53		2	10	53	Satisfactory
43	22-09-2021	21		2	24	30	Good
44	24-09-2021	29		2	5	29	Good
45	29-09-2021	22		2	14	22	Good
OCTOBER							
46	01-10-2021	29	51	2	16	85	Satisfactory
47	06-10-2021	36	*	2	17	36	Good
48	08-10-2021	21	*	2	14	21	Good
49	12-10-2021	44	*	2	10	44	Good
50	14-10-2021	32	*	2	10	32	Good
51	20-10-2021	39	64	2	15	113	Moderate
52	22-10-2021	49	29	2	10	49	Good

53	27-10-2021	50	45	2	10	75	Satisfactory
54	29-10-2021	56	41	2	11	68	Satisfactory
NOVEMBER							
55	03-11-2021	26	19	2	5	32	Good
56	05-11-2021	16	20	2	5	33	Good
57	10-11-2021	75	69	2	10	130	Moderate
58	12-11-2021	143	126	2	10	305	
59	17-11-2021	30	25	2	16	42	Good
60	19-11-2021	30	20	2	20	33	Good
61	24-11-2021	23	13	2	23	29	Good
62	26-11-2021	56	45	2	21	75	Satisfactory
63	30-11-2021	16	12	2	13	20	Good
DECEMBER							
64	02-12-2021	10	MB	2	12	15	Good
65	08-12-2021	60	MB	2	15	60	Satisfactory
66	10-12-2021	49	MB	2	15	49	Good
67	15-12-2021	39	MB	2	14	39	Good
68	17-12-2021	103	MB	2	13	102	Moderate
69	21-12-2021	68	38	2	19	68	Satisfactory
70	23-12-2021	138	121	2	9	301	
71	28-12-2021	67	55	2	9	92	Satisfactory
72	30-12-2021	35	18	2	9	35	Good
JANUARY							
73	05-01-2022	79	38	2	5	79	Satisfactory
74	07-01-2022	59	48	2	30	80	Satisfactory
75	12-01-2022	47	31	2	17	52	Satisfactory
76	14-01-2022	29	25	2	14	42	Good
77	19-01-2022	52	43	2	16	72	Satisfactory
78	21-01-2022	32	27	2	16	45	Good
79	25-01-2022	83	35	2	16	83	Satisfactory
80	28-01-2022	87	39	2	11	87	Satisfactory

FEBRUARY							
81	02-02-2022	78	15	2	11	78	Satisfactory
82	04-02-2022	34	31	2	12	52	Satisfactory
83	09-02-2022	45	23	2	13	45	Good
84	11-02-2022	78	46	2	12	78	Satisfactory
85	16-02-2022	44	22	2	11	44	Good
86	18-02-2022	56	26	2	14	56	Satisfactory
87	23-02-2022	56	38	2	5	63	Satisfactory
88	25-02-2022	45	20	2	12	45	Good
MARCH							
89	02-03-2022	51	35	2	12	34	Good
90	04-03-2022	52	16	2	16	41	Good
91	09-03-2022	37	33	2	11	47	Good
92	11-03-2022	49	47	2	14	44	Good
93	15-03-2022	78	26	6	5	27	Good
94	17-03-2022	48	34	2	25	47	Good
95	23-03-2022	59	33	2	17	31	Good
96	25-03-2022	38	19	2	12	53	Satisfactory
97	30-03-2022	43	8	2	24	49	Good
* No Monitoring MB-Machine Breakdown							

ANNUAL AAQM DATA OF NAMP STATION FROM APRIL 2021 to MARCH 2022

Station: Roof top of Municipal market										City: Ponda
		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)							AQI	AIR QLTY
	Parameters	PM10	PM2.5	SO2	NO2	*CO	O3	Pb		
Sr. No	Date	24-hr avg	24-hr avg	24-hr avg	24-hr avg	1-hr avg	1-hr avg	24-hr avg		
APRIL										
2	06-04-21	85	39	10	14	0.09	15.1	BDL	85	Satisfactory
3	09-04-21	69	35	11	14	0.09	15.0	BDL	69	Satisfactory
4	13-04-21	83	39	10	14	0.09	14.8	BDL	83	Satisfactory
5	16-04-21	82	43	10	14	0.09	15.2	BDL	82	Satisfactory
6	20-04-21	80	40	10	14	0.09	15.3	BDL	80	Satisfactory
7	23-04-21	70	35	9	14	0.08	14.9	BDL	70	Satisfactory
8	27-04-21	85	35	8	13	0.08	14.6	BDL	85	Satisfactory
9	30-04-21	71	35	9	13	0.08	14.3	BDL	71	Satisfactory
MAY										
10	04-05-21	69	31	9	13	0.09	14.3	BDL	69	Satisfactory
11	07-05-21	61	25	7	13	0.09	14.3	BDL	61	Satisfactory
12	11-05-21	69	29	8	13	0.08	13.9	BDL	69	Satisfactory
13	14-05-21	56	23	7	13	0.08	13.8	BDL	56	Satisfactory
14	18-05-21	64	25	7	13	0.08	14.2	BDL	64	Satisfactory
15	21-05-21	62	23	7	13	0.08	13.9	BDL	62	Satisfactory
16	25-05-21	56	25	7	13	0.08	13.8	BDL	56	Satisfactory
17	28-05-21	55	23	7	12	0.08	13.6	BDL	55	Satisfactory
JUNE										
18	01-06-21	50	21	9	13	0.08	14.2	BDL	50	Satisfactory
19	04-06-21	52	21	8	13	0.08	14.0	BDL	52	Satisfactory
20	08-06-21	53	22	8	13	0.08	13.8	BDL	53	Satisfactory
21	11-06-21	51	21	7	12	0.08	13.6	BDL	51	Satisfactory
22	15-06-21	50	21	7	13	0.07	13.8	BDL	50	Satisfactory
23	18-06-21	50	23	6	12	0.08	13.8	BDL	50	Satisfactory
24	22-06-21	51	22	7	12	0.07	13.6	BDL	51	Satisfactory

25	25-06-21	52	20	7	13	0.07	13.4	BDL	52	Satisfactory
26	29-06-21	52	21	7	13	0.07	13.3	BDL	52	Satisfactory
JULY										
27	02-07-21	51	21	8	12	0.07	13.6	BDL	51	Satisfactory
28	06-07-21	52	21	8	12	0.07	13.7	BDL	52	Satisfactory
29	09-07-21	53	21	7	12	0.06	13.8	BDL	53	Satisfactory
30	13-07-21	50	20	7	12	0.06	13.7	BDL	50	Good
31	16-07-21	50	20	6	12	0.06	13.5	BDL	50	Satisfactory
32	20-07-21	50	20	6	12	0.06	13.7	BDL	50	Good
33	23-07-21	47	19	6	12	0.06	13.6	BDL	47	Good
34	27-07-21	49	20	6	12	0.05	13.3	BDL	49	Good
35	31-07-21	49	19	8	12	0.06	13.2	BDL	49	Good
AUGUST										
36	03-08-21	48	20	8	12	0.08	13.3	BDL	48	Good
37	06-08-21	49	20	8	12	0.08	13.4	BDL	49	Good
38	10-08-21	48	22	7	12	0.07	13.5	BDL	48	Good
39	13-08-21	49	20	7	12	0.07	13.6	BDL	49	Good
40	17-08-21	49	20	7	12	0.07	13.7	BDL	49	Good
41	20-08-21	49	20	7	12	0.07	13.7	BDL	49	Good
42	24-08-21	51	20	7	12	0.06	13.3	BDL	51	Satisfactory
43	27-08-21	51	20	7	12	0.06	13.2	BDL	51	Satisfactory
44	31-08-21	53	20	7	12	0.06	13.2	BDL	53	Satisfactory
SEPTEMBER										
45	03-09-21	44	21	7	12	0.08	13.5	BDL	44	Good
46	07-09-21	47	21	7	12	0.08	13.4	BDL	47	Good
47	09-09-21	52	22	7	12	0.07	13.8	BDL	52	Satisfactory
48	13-09-21	50	20	7	12	0.07	14.2	BDL	50	Good
49	17-09-21	50	21	7	12	0.07	13.8	BDL	50	Satisfactory
50	21-09-21	55	23	7	12	0.07	13.7	BDL	55	Satisfactory
51	24-09-21	55	25	6	12	0.07	13.8	BDL	55	Satisfactory
52	28-09-21	52	23	6	12	0.08	14.1	BDL	52	Satisfactory

OCTOBER										
53	01-10-21	56	24	8	13	0.08	13.1	BDL	56	Satisfactory
54	05-10-21	57	27	7	12	0.08	13.0	BDL	57	Satisfactory
55	08-10-21	55	26	7	13	0.07	13.1	BDL	55	Satisfactory
56	12-10-21	57	26	7	12	0.07	12.9	BDL	57	Satisfactory
57	15-10-21	60	29	8	13	0.08	13.0	BDL	60	Satisfactory
58	19-10-21	61	29	7	12	0.07	12.8	BDL	61	Satisfactory
59	22-10-21	58	26	7	13	0.07	12.9	BDL	58	Satisfactory
60	26-10-21	59	25	7	13	0.08	12.7	BDL	59	Satisfactory
61	29-10-21	63	26	7	13	0.08	13.1	BDL	63	Satisfactory
NOVEMBER										
62	02-11-21	58	28	7	13	0.08	12.9	BDL	58	Satisfactory
63	05-11-21	60	27	7	13	0.08	12.8	BDL	60	Satisfactory
64	09-11-21	57	29	7	13	0.08	13.1	BDL	57	Satisfactory
65	12-11-21	58	29	7	13	0.08	12.6	BDL	58	Satisfactory
66	16-11-21	57	27	8	13	0.08	12.6	BDL	57	Satisfactory
67	19-11-21	59	29	7	13	0.08	12.9	BDL	59	Satisfactory
68	23-11-21	56	25	7	13	0.08	12.7	BDL	56	Satisfactory
69	26-11-21	56	25	6	13	0.08	12.6	BDL	56	Satisfactory
70	30-11-21	55	25	7	13	0.08	12.6	BDL	55	Satisfactory
DECEMBER										
71	03-12-21	65	29	7	13	0.08	13.0	BDL	65	Satisfactory
72	07-12-21	60	28	7	13	0.08	12.7	BDL	60	Satisfactory
73	10-12-21	67	33	7	13	0.08	12.9	BDL	67	Satisfactory
74	14-12-21	69	32	7	13	0.08	12.6	BDL	69	Satisfactory
75	17-12-21	66	28	8	13	0.08	12.7	BDL	66	Satisfactory
76	21-12-21	67	27	7	13	0.08	12.8	BDL	67	Satisfactory
77	24-12-21	64	29	7	13	0.09	13.0	BDL	64	Satisfactory
78	28-12-22	61	30	7	13	0.09	13.1	BDL	61	Satisfactory
79	31-12-21	61	28	7	13	0.09	13.1	BDL	61	Satisfactory
JANUARY										
80	04-01-22	60	29	6	14	0.09	13.7	BDL	60	Satisfactory
81	07-01-22	58	28	7	13	0.08	13.8	BDL	58	Satisfactory

82	11-01-22	59	28	6	13	0.09	13.5	BDL	59	Satisfactory
83	14-01-22	58	29	6	13	0.09	13.6	BDL	58	Satisfactory
84	18-01-22	61	29	6	13	0.08	13.6	BDL	61	Satisfactory
85	21-01-22	59	30	6	13	0.09	13.4	BDL	59	Satisfactory
86	25-01-22	58	28	6	13	0.08	13.2	BDL	58	Satisfactory
87	28-01-22	60	29	7	13	0.08	13.1	BDL	60	Satisfactory
FEBRUARY										
88	01-02-22	60	31	6	13	0.08	13.4	BDL	60	Satisfactory
89	04-02-22	58	30	6	13	0.08	13.6	BDL	58	Satisfactory
90	08-02-22	63	30	6	13	0.08	13.2	BDL	63	Satisfactory
91	11-02-22	62	30	7	14	0.08	13.7	BDL	62	Satisfactory
92	15-02-22	60	28	6	13	0.08	13.6	BDL	60	Satisfactory
93	18-02-22	60	29	7	13	0.08	13.5	BDL	60	Satisfactory
94	22-02-22	62	30	6	13	0.08	13.2	BDL	62	Satisfactory
95	25-02-22	61	30	6	13	0.09	13.3	BDL	61	Satisfactory
MARCH										
96	01-03-22	59	30	6	14	0.07	13.5	BDL	59	Satisfactory
97	04-03-22	61	30	6	13	0.08	13.6	BDL	61	Satisfactory
98	08-03-22	59	33	6	13	0.08	13.4	BDL	59	Satisfactory
99	11-03-22	63	32	6	13	0.08	13.7	BDL	63	Satisfactory
100	15-03-22	65	28	6	13	0.08	13.8	BDL	65	Satisfactory
101	18-03-22	62	32	6	13	0.08	13.6	BDL	62	Satisfactory
102	22-03-22	65	31	6	13	0.08	13.4	BDL	65	Satisfactory
103	25-03-22	66	30	6	13	0.08	13.2	BDL	66	Satisfactory
104	29-03-22	70	31	7	13	0.08	13.3	BDL	70	Satisfactory

ANNUAL AAQM DATA OF NAMP STATION FROM APRIL 2021 to MARCH 2022										
Station: Rooftop of Ravindra Bhavan Building									City:Margao	
		Time Weighted Average (TWA)							AQI	AIR QLTY
		24 – Hour	24 – Hour	24 – Hour	24 – Hour	24 – Hour	24 – Hour	24 – Hour		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
Sr. No	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
APRIL										
1	03-04-2021	70	34	9	15	0.09	15	BDL	70	Satisfactory
2	07-04-2021	71	36	9	14	0.09	15	BDL	71	Satisfactory
3	10-04-2021	69	37	9	14	0.09	15	BDL	69	Satisfactory
4	14-04-2021	68	34	9	15	0.09	14	BDL	68	Satisfactory
5	17-04-2021	75	33	9	14	0.08	15	BDL	75	Satisfactory
6	21-04-2021	65	31	9	15	0.08	15	BDL	65	Satisfactory
7	24-04-2021	69	34	9	14	0.08	15	BDL	69	Satisfactory
8	28-04-2021	63	28	9	14	0.08	14	BDL	63	Satisfactory
MAY										
9	01-05-2021	50	27	9	14	0.08	14	BDL	50	Satisfactory
10	05-05-2021	57	26	7	13	0.08	14	BDL	57	Satisfactory
11	08-05-2021	49	30	7	14	0.07	14	BDL	50	Satisfactory
12	12-05-2021	62	31	7	14	0.07	14	BDL	62	Satisfactory
13	15-05-2021	51	26	7	13	0.07	13	BDL	51	Satisfactory
14	19-05-2021	53	24	7	12	0.07	13	BDL	53	Satisfactory
15	22-05-2021	58	25	7	12	0.07	13	BDL	58	Satisfactory
16	26-05-2021	60	24	7	13	0.07	13	BDL	60	Satisfactory
17	29-05-2021	55	25	7	13	0.07	13	BDL	55	Satisfactory
JUNE										
18	02-06-2021	52	21	7	13	0.07	14	BDL	52	Satisfactory
19	05-06-2021	51	21	6	13	0.07	14	BDL	51	Satisfactory
20	09-06-2021	51	20	7	13	0.07	14	BDL	51	Satisfactory
21	12-06-2021	52	23	7	14	0.07	14	BDL	52	Satisfactory
22	16-06-2021	52	21	7	13	0.07	14	BDL	52	Satisfactory
23	19-06-2021	51	21	7	12	0.06	13	BDL	51	Satisfactory

24	23-06-2021	51	22	6	13	0.06	13	BDL	51	Satisfactory
25	26-06-2021	49	20	6	12	0.07	13	BDL	49	Good
26	30-06-2021	51	21	6	13	0.07	13	BDL	51	Satisfactory
JULY										
27	03-07-2021	52	20	6	13	0.07	14	BDL	52	Satisfactory
28	07-07-2021	49	20	6	12	0.07	14	BDL	49	Good
29	10-07-2021	52	21	6	12	0.07	14	BDL	52	Satisfactory
30	14-07-2021	49	20	6	12	0.07	14	BDL	49	Good
31	17-07-2021	51	20	7	12	0.07	13	BDL	51	Satisfactory
32	21-07-2021	50	20	6	12	0.06	13	BDL	50	Satisfactory
33	24-07-2021	48	18	7	12	0.06	13	BDL	48	Good
34	28-07-2021	42	19	7	12	0.06	13	BDL	42	Good
35	31-07-2021	45	20	7	13	0.06	13	BDL	45	Good
AUGUST										
36	04-08-2021	45	20	6	13	0.07	13	BDL	45	Good
37	07-08-2021	46	20	6	12	0.07	14	BDL	46	Good
38	11-08-2021	45	20	6	12	0.07	14	BDL	45	Good
39	14-08-2021	46	18	6	12	0.07	13	BDL	46	Good
40	18-08-2021	47	18	7	12	0.07	14	BDL	47	Good
41	21-08-2021	48	20	6	12	0.07	13	BDL	48	Good
42	25-08-2021	48	20	7	12	0.06	13	BDL	48	Good
43	28-08-2021	48	21	7	12	0.06	13	BDL	48	Good
SEPTEMBER										
44	01-09-2021	48	19	6	13	0.08	14	BDL	48	Good
45	04-09-2021	47	20	6	13	0.07	14	BDL	47	Good
46	06-09-2021	50	21	7	13	0.07	14	BDL	50	Good
47	08-09-2021	50	20	7	13	0.07	13	BDL	50	Satisfactory
48	15-09-2021	45	21	6	13	0.07	13	BDL	45	Good
49	18-09-2021	52	23	6	12	0.07	14	BDL	52	Satisfactory
50	22-09-2021	53	23	6	12	0.07	14	BDL	53	Satisfactory
51	25-09-2021	53	23	6	12	0.06	14	BDL	53	Satisfactory
52	29-09-2021	53	22	7	12	0.08	14	BDL	53	Satisfactory

OCTOBER										
53	01-10-2021	55	25	7	12	0.08	13	BDL	55	Satisfactory
54	05-10-2021	53	26	8	13	0.08	12	BDL	53	Satisfactory
55	08-10-2021	52	24	8	12	0.07	13	BDL	52	Satisfactory
56	12-10-2021	53	23	8	13	0.08	13	BDL	53	Satisfactory
57	15-10-2021	57	27	7	13	0.07	12	BDL	57	Satisfactory
58	19-10-2021	58	28	7	13	0.08	13	BDL	58	Satisfactory
59	22-10-2021	62	26	8	13	0.08	13	BDL	62	Satisfactory
60	26-10-2021	57	26	7	13	0.09	13	BDL	57	Satisfactory
61	29-10-2021	59	28	7	12	0.08	13	BDL	59	Satisfactory
NOVEMBER										
62	02-11-2021	57	27	7	12	0.08	13	BDL	57	Satisfactory
63	05-11-2021	56	25	7	13	0.08	13	BDL	56	Satisfactory
64	09-11-2021	55	27	7	13	0.08	13	BDL	55	Satisfactory
65	12-11-2021	57	26	7	12	0.07	13	BDL	57	Satisfactory
66	16-11-2021	57	26	7	13	0.08	13	BDL	57	Satisfactory
67	19-11-2021	56	27	6	13	0.08	12	BDL	56	Satisfactory
68	23-11-2021	51	24	7	13	0.07	12	BDL	51	Satisfactory
69	26-11-2021	60	29	7	13	0.07	13	BDL	60	Satisfactory
70	30-11-2021	51	24	7	13	0.07	13	BDL	51	Satisfactory
DECEMBER										
71	03-12-2021	59	29	7	12	0.08	12	BDL	59	Satisfactory
72	07-12-2021	59	31	7	13	0.08	13	BDL	59	Satisfactory
73	10-12-2021	61	29	7	13	0.08	13	BDL	61	Satisfactory
74	14-12-2021	63	33	7	13	0.07	13	BDL	63	Satisfactory
75	17-12-2021	56	25	7	13	0.08	12	BDL	56	Satisfactory
76	21-12-2021	59	24	7	13	0.08	13	BDL	59	Satisfactory
77	24-12-2021	61	28	7	13	0.08	13	BDL	61	Satisfactory
78	28-12-2021	64	30	7	13	0.08	13	BDL	64	Satisfactory
79	31-12-2021	58	27	7	13	0.08	13	BDL	58	Satisfactory
JANUARY										
80	04-01-2022	59	26	7	13	0.08	14	BDL	59	Satisfactory
81	07-01-2022	59	27	6	13	0.07	13	BDL	59	Satisfactory

82	11-01-2022	56	27	7	13	0.08	13	BDL	56	Satisfactory
83	14-01-2022	57	28	6	13	0.07	13	BDL	57	Satisfactory
84	18-01-2022	55	30	6	13	0.08	13	BDL	55	Satisfactory
85	21-01-2022	58	27	6	13	0.08	13	BDL	58	Satisfactory
86	25-01-2022	60	30	6	13	0.08	14	BDL	60	Satisfactory
87	28-01-2022	58	26	6	13	0.08	14	BDL	58	Satisfactory
FEBRUARY										
88	01-02-2022	57	28	6	13	0.08	14	BDL	57	Satisfactory
89	04-02-2022	58	28	6	13	0.08	13	BDL	58	Satisfactory
90	08-02-2022	62	29	6	13	0.07	13	BDL	62	Satisfactory
91	11-02-2022	62	30	7	13	0.08	13	BDL	62	Satisfactory
92	15-02-2022	59	25	6	14	0.08	13	BDL	59	Satisfactory
93	18-02-2022	59	28	6	13	0.08	13	BDL	59	Satisfactory
94	22-02-2022	55	26	6	13	0.08	13	BDL	55	Satisfactory
95	25-02-2022	57	28	6	13	0.07	13	BDL	57	Satisfactory
MARCH										
96	01-03-2022	57	28	6	13	0.08	14	BDL	57	Satisfactory
97	04-03-2022	56	30	6	13	0.08	14	BDL	56	Satisfactory
98	08-03-2022	60	30	6	13	0.08	14	BDL	60	Satisfactory
99	11-03-2022	59	27	6	13	0.08	13	BDL	59	Satisfactory
100	15-03-2022	61	30	6	13	0.08	13	BDL	61	Satisfactory
101	18-03-2022	59	28	6	13	0.08	13	BDL	59	Satisfactory
102	22-03-2022	58	29	6	13	0.08	13	BDL	58	Satisfactory
103	25-03-2022	63	29	7	13	0.08	13	BDL	63	Satisfactory
104	29-03-2022	63	29	7	13	0.08	13	BDL	63	Satisfactory

ANNUAL AAQM DATA OF NAMP STATION FROM APRIL 2021 to MARCH 2022

Station: Residence of Mr. Rama Naik, Assanora Junction

City: Assanora

		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)							AQI	AIR QLTY
	Parameters	PM10	PM2.5	SO2	NO2	*CO	O3	Pb		
Sr. No	Date	24-hr avg	24-hr avg	24-hr avg	24-hr avg	1-hr avg	1-hr avg	24-hr avg		
APRIL										
1	01-04-21	74	33	10	15	0.08	14	BDL	74	Satisfactory
2	05-04-21	75	36	10	15	0.08	15	BDL	75	Satisfactory
3	08-04-21	75	35	7	13	0.07	15	BDL	75	Satisfactory
4	12-04-21	70	32	7	13	0.08	15	BDL	70	Satisfactory
5	15-04-21	69	33	7	13	0.08	15	BDL	69	Satisfactory
6	19-04-21	72	33	7	14	0.09	15	BDL	72	Satisfactory
7	22-04-21	67	29	7	14	0.09	15	BDL	67	Satisfactory
8	26-04-21	74	36	8	13	0.08	14	BDL	74	Satisfactory
9	29-04-21	71	31	7	13	0.08	14	BDL	71	Satisfactory
MAY										
10	03-05-21	64	27	8	13	0.09	13.8	BDL	64	Satisfactory
11	06-05-21	65	30	8	13	0.09	13.9	BDL	65	Satisfactory
12	10-05-21	66	32	8	14	0.08	13.6	BDL	66	Satisfactory
13	13-05-21	53	25	8	13	0.08	13.5	BDL	53	Satisfactory
14	18-05-21	53	24	8	14	0.07	13.3	BDL	53	Satisfactory
15	20-05-21	55	25	8	13	0.08	13.2	BDL	55	Satisfactory
16	24-05-21	54	27	7	13	0.07	13.1	BDL	54	Satisfactory
17	27-05-21	55	28	8	14	0.07	13.2	BDL	55	Satisfactory
18	31-05-21	53	26	7	13	0.07	13.2	BDL	53	Satisfactory
JUNE										
19	03-06-21	50	22	8	14	0.07	13.6	BDL	50	Good
20	07-06-21	50	22	8	14	0.06	13.0	BDL	50	Satisfactory
21	10-06-21	51	23	7	13	0.07	13.1	BDL	51	Satisfactory
22	14-06-21	53	23	7	12	0.07	13.4	BDL	53	Satisfactory
23	17-06-21	51	21	8	13	0.07	13.5	BDL	51	Satisfactory

24	21-06-21	48	21	8	13	0.07	13.3	BDL	48	Good
25	24-06-21	52	21	7	13	0.06	13.2	BDL	52	Satisfactory
26	28-06-21	53	23	7	13	0.07	13.7	BDL	53	Satisfactory
JULY										
27	01-07-21	52	21	7	13	0.06	14.2	BDL	52	Satisfactory
28	05-07-21	50	22	6	12	0.06	13.9	BDL	50	Satisfactory
29	08-07-21	51	22	6	12	0.06	13.7	BDL	51	Satisfactory
30	12-07-21	51	21	7	13	0.06	14.1	BDL	51	Satisfactory
31	15-07-21	48	19	7	12	0.06	13.9	BDL	48	Good
32	19-07-21	48	19	7	12	0.06	13.7	BDL	48	Good
33	22-07-21	49	18	7	13	0.06	13.5	BDL	49	Good
34	26-07-21	48	19	7	13	0.06	13.2	BDL	48	Good
35	29-07-21	49	19	7	12	0.05	13.1	BDL	49	Good
AUGUST										
36	02-08-21	46	19	7	13	0.06	13.8	BDL	46	Good
37	05-08-21	47	19	7	13	0.06	13.7	BDL	47	Good
38	09-08-21	45	18	6	12	0.06	13.9	BDL	45	Good
39	12-08-21	46	19	6	11	0.06	13.3	BDL	46	Good
40	16-08-21	47	19	7	12	0.06	13.7	BDL	47	Good
41	19-08-21	47	19	7	12	0.06	13.8	BDL	47	Good
42	23-08-21	50	20	7	12	0.06	13.6	BDL	50	Good
43	26-08-21	49	20	7	12	0.06	13.5	BDL	49	Good
44	30-08-21	49	23	6	12	0.06	13.2	BDL	49	Good
SEPTEMBER										
45	02-09-21	47	21	7	12	0.06	14.1	BDL	47	Good
46	06-09-21	48	22	7	12	0.06	14.0	BDL	48	Good
47	09-09-21	53	21	7	12	0.06	13.7	BDL	53	Satisfactory
48	13-09-21	50	22	7	13	0.07	13.8	BDL	50	Good
49	16-09-21	52	22	7	13	0.07	14.0	BDL	52	Satisfactory
50	20-09-21	48	22	7	12	0.07	13.8	BDL	48	Good
51	23-09-21	53	22	6	12	0.06	13.9	BDL	53	Satisfactory
52	27-09-21	52	22	7	12	0.07	14.0	BDL	52	Satisfactory
53	30-09-21	54	23	7	13	0.07	14.1	BDL	54	Satisfactory

OCTOBER										
54	04-10-21	53	23	7	14	0.07	12.6	BDL	53	Satisfactory
55	07-10-21	54	23	7	13	0.07	12.3	BDL	54	Satisfactory
56	11-10-21	53	23	7	13	0.06	12.4	BDL	53	Satisfactory
57	14-10-21	57	24	7	13	0.07	12.5	BDL	57	Satisfactory
58	18-10-21	57	24	7	13	0.07	12.3	BDL	57	Satisfactory
59	21-10-21	59	25	7	13	0.08	12.6	BDL	59	Satisfactory
60	25-10-21	56	23	7	13	0.08	12.9	BDL	56	Satisfactory
61	28-10-21	54	25	7	13	0.07	12.9	BDL	54	Satisfactory
NOVEMBER										
62	01-11-21	54	26	7	12	0.07	12.9	BDL	54	Satisfactory
63	04-11-21	55	26	7	13	0.07	12.7	BDL	55	Satisfactory
64	08-11-21	56	26	7	12	0.08	12.6	BDL	56	Satisfactory
65	11-11-21	52	23	7	13	0.08	12.9	BDL	52	Satisfactory
66	15-11-21	56	25	7	12	0.08	12.8	BDL	56	Satisfactory
67	18-11-21	55	27	8	13	0.08	12.6	BDL	55	Satisfactory
68	22-11-21	58	24	7	13	0.08	12.3	BDL	58	Satisfactory
69	25-11-21	54	26	7	13	0.07	12.6	BDL	54	Satisfactory
70	29-11-21	55	27	7	13	0.07	12.7	BDL	55	Satisfactory
DECEMBER										
71	02-12-21	53	23	7	13	0.08	13.3	BDL	53	Satisfactory
72	06-12-21	51	23	7	13	0.07	12.8	BDL	51	Satisfactory
73	09-12-21	62	25	7	12	0.08	12.6	BDL	62	Satisfactory
74	13-12-21	61	23	7	12	0.08	12.9	BDL	61	Satisfactory
75	16-12-21	53	24	7	13	0.08	12.8	BDL	53	Satisfactory
76	20-12-21	61	25	7	13	0.08	13.0	BDL	61	Satisfactory
77	23-12-21	59	30	7	13	0.09	13.1	BDL	59	Satisfactory
78	27-12-21	60	29	7	13	0.09	13.5	BDL	60	Satisfactory
79	30-12-21	57	27	8	13	0.09	13.1	BDL	57	Satisfactory
JANUARY										
80	03-01-22	58	28	7	13	0.08	12.9	BDL	58	Satisfactory
81	06-01-22	61	26	6	14	0.08	13.1	BDL	61	Satisfactory
82	10-01-22	55	25	7	13	0.08	13.5	BDL	55	Satisfactory

83	14-01-22	56	26	6	13	0.08	13.6	BDL	56	Satisfactory
84	17-01-22	56	26	6	14	0.08	13.2	BDL	56	Satisfactory
85	21-01-22	56	25	6	13	0.08	13.0	BDL	56	Satisfactory
86	24-01-22	59	25	6	14	0.08	13.1	BDL	59	Satisfactory
87	27-01-22	57	28	6	14	0.09	13.2	BDL	57	Satisfactory
88	31-01-22	57	28	6	14	0.09	13.5	BDL	57	Satisfactory
FEBRUARY										
89	03-02-22	57	28	7	13	0.08	12.9	BDL	57	Satisfactory
90	07-02-22	58	26	6	13	0.08	13.1	BDL	58	Satisfactory
91	10-02-22	58	29	7	14	0.08	13.5	BDL	58	Satisfactory
92	14-02-22	56	28	7	13	0.08	13.6	BDL	56	Satisfactory
93	17-02-22	57	28	7	14	0.08	13.2	BDL	57	Satisfactory
94	21-02-22	57	27	7	13	0.08	12.8	BDL	57	Satisfactory
95	24-02-22	58	28	7	13	0.08	13.1	BDL	58	Satisfactory
96	28-02-22	57	28	7	13	0.09	13.2	BDL	57	Satisfactory
MARCH										
97	03-03-22	56	27	6	12	0.08	13.2	BDL	56	Satisfactory
98	07-03-22	58	28	7	13	0.08	13.2	BDL	58	Satisfactory
99	10-03-22	59	28	6	13	0.08	13.4	BDL	59	Satisfactory
100	14-03-22	58	29	7	14	0.08	13.5	BDL	58	Satisfactory
101	17-03-22	61	27	7	14	0.08	13.7	BDL	61	Satisfactory
102	21-03-22	58	28	7	14	0.08	13.6	BDL	58	Satisfactory
103	24-03-22	56	31	7	14	0.08	13.9	BDL	56	Satisfactory
104	28-03-22	58	27	6	14	0.08	13.3	BDL	58	Satisfactory
105	31-03-22	66	31	6	13	0.08	13.1	BDL	66	Satisfactory

ANNUAL AAQM DATA OF NAMP STATION FROM APRIL 2021 to MARCH 2022										
Station: Residence of Mr. Sagun Ramkrishna Fadte									City: Amona	
		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)							AQI	AIR QLTY
	Parameters	PM10	PM2.5	SO2	NO2	*CO	O3	Pb		
Sr. No	Date	24-hr avg	24-hr avg	24-hr avg	24-hr avg	1-hr avg	1-hr avg	24-hr avg		
APRIL										
1	02-04-21	57	34	9	14	0.09	15	BDL	57	Satisfactory
2	06-04-21	59	32	9	14	0.08	14	BDL	59	Satisfactory
3	09-04-21	60	31	7	13	0.08	14	BDL	60	Satisfactory
4	13-04-21	63	30	8	13	0.08	14	BDL	63	Satisfactory
5	16-04-21	63	35	9	14	0.08	14	BDL	63	Satisfactory
6	20-04-21	64	35	7	13	0.07	14	BDL	64	Satisfactory
7	23-04-21	73	35	8	13	0.08	14	BDL	73	Satisfactory
8	27-04-21	61	36	7	13	0.08	14	BDL	61	Satisfactory
9	30-04-21	63	33	7	13	0.07	14	BDL	63	Satisfactory
MAY										
10	04-05-21	61	30	7	13	0.07	14	BDL	61	Satisfactory
11	07-05-21	58	26	7	12	0.08	14	BDL	58	Satisfactory
12	11-05-21	71	31	8	13	0.07	14	BDL	71	Satisfactory
13	14-05-21	63	29	8	13	0.07	14	BDL	63	Satisfactory
14	18-05-21	51	25	8	13	0.07	14	BDL	51	Satisfactory
15	21-05-21	52	24	8	13	0.07	13	BDL	52	Satisfactory
16	25-05-21	55	28	7	13	0.06	13	BDL	55	Satisfactory
17	28-05-21	52	26	8	12	0.07	13	BDL	52	Satisfactory
JUNE										
18	01-06-21	51	23	8	13	0.06	14	BDL	51	Satisfactory
19	04-06-21	51	20	7	12	0.06	14	BDL	51	Satisfactory
20	08-06-21	52	22	7	13	0.06	14	BDL	52	Satisfactory
21	11-06-21	50	22	7	12	0.06	14	BDL	50	Satisfactory
22	15-06-21	52	20	7	12	0.06	14	BDL	52	Satisfactory
23	18-06-21	49	23	7	13	0.06	14	BDL	49	Good
24	22-06-21	51	22	7	13	0.06	14	BDL	51	Satisfactory

25	25-06-21	51	22	7	12	0.06	12	BDL	51	Satisfactory
26	29-06-21	51	21	8	12	0.07	13	BDL	51	Satisfactory
JULY										
27	02-07-21	52	22	7	12	0.07	13	BDL	52	Satisfactory
28	06-07-21	52	21	6	12	0.07	13	BDL	52	Satisfactory
29	09-07-21	52	21	6	13	0.07	13	BDL	52	Satisfactory
30	13-07-21	53	21	6	11	0.07	13	BDL	53	Satisfactory
31	16-07-21	49	19	6	12	0.07	13	BDL	49	Good
32	20-07-21	48	19	6	12	0.06	13	BDL	48	Good
33	23-07-21	48	20	6	12	0.63	13	BDL	48	Good
34	27-07-21	49	20	6	12	0.06	13	BDL	49	Good
35	30-07-21	49	20	6	13	0.07	13	BDL	49	Good
AUGUST										
36	05-08-21	55	24	6	12	0.07	13	BDL	55	Satisfactory
37	07-08-21	54	24	6	12	0.07	13	BDL	54	Satisfactory
38	10-08-21	57	25	6	13	0.07	13	BDL	57	Satisfactory
39	13-08-21	51	22	7	12	0.07	13	BDL	51	Satisfactory
40	17-08-21	51	23	7	12	0.06	14	BDL	51	Satisfactory
41	20-08-21	53	23	7	12	0.07	14	BDL	53	Satisfactory
42	24-08-21	52	22	7	12	0.06	14	BDL	52	Satisfactory
43	27-08-21	49	21	7	13	0.06	13	BDL	49	Good
44	31-08-21	48	21	6	12	0.06	13	BDL	48	Good
SEPTEMBER										
45	03-09-21	47	22	7	12	0.07	14	BDL	47	Good
46	07-09-21	48	19	6	12	0.07	14	BDL	48	Good
47	10-09-21	51	20	6	12	0.07	14	BDL	51	Satisfactory
48	14-09-21	52	23	7	12	0.07	14	BDL	52	Satisfactory
49	17-09-21	54	22	6	12	0.07	14	BDL	54	Satisfactory
50	21-09-21	52	23	7	12	0.08	14	BDL	52	Satisfactory
51	24-09-21	51	22	6	12	0.08	14	BDL	51	Satisfactory
52	28-09-21	52	21	6	12	0.07	14	BDL	52	Satisfactory

OCTOBER										
53	01-10-21	54	24	7	13	0.07	13	BDL	54	Satisfactory
54	05-10-21	52	23	7	13	0.07	13	BDL	52	Satisfactory
55	08-10-21	56	25	7	13	0.07	13	BDL	56	Satisfactory
56	12-10-21	54	25	7	13	0.07	13	BDL	54	Satisfactory
57	15-10-21	57	27	7	13	0.08	12	BDL	57	Satisfactory
58	19-10-21	54	27	8	13	0.08	13	BDL	54	Satisfactory
59	22-10-21	56	25	7	12	0.08	14	BDL	56	Satisfactory
60	26-10-21	56	26	6	12	0.08	13	BDL	56	Satisfactory
61	29-10-21	58	26	6	12	0.08	13	BDL	58	Satisfactory
NOVEMBER										
62	02-11-21	57	28	7	13	0.08	13	BDL	57	Satisfactory
63	05-11-21	56	26	8	12	0.08	13	BDL	56	Satisfactory
64	09-11-21	57	26	7	12	0.08	13	BDL	57	Satisfactory
65	12-11-21	57	26	7	12	0.08	13	BDL	57	Satisfactory
66	16-11-21	56	25	6	12	0.08	13	BDL	56	Satisfactory
67	19-11-21	57	26	8	13	0.09	13	BDL	57	Satisfactory
68	23-11-21	57	25	8	13	0.08	13	BDL	57	Satisfactory
69	26-11-21	56	24	7	12	0.08	13	BDL	56	Satisfactory
70	30-11-21	54	25	6	12	0.08	13	BDL	54	Satisfactory
DECEMBER										
71	03-12-21	55	25	7	13	0.08	13	BDL	55	Satisfactory
72	07-12-21	67	33	6	12	0.08	13	BDL	67	Satisfactory
73	10-12-21	57	26	7	12	0.08	13	BDL	57	Satisfactory
74	14-12-21	62	28	7	13	0.08	13	BDL	62	Satisfactory
75	17-12-21	77	31	7	13	0.08	13	BDL	77	Satisfactory
76	21-12-21	70	31	7	13	0.08	13	BDL	70	Satisfactory
77	24-12-21	63	32	7	12	0.08	13	BDL	63	Satisfactory
78	28-12-21	60	26	7	12	0.08	13	BDL	60	Satisfactory
79	31-12-21	58	26	7	12	0.09	13	BDL	58	Satisfactory

JANUARY										
80	04-01-22	60	26	6	12	0.08	13	BDL	60	Satisfactory
81	07-01-22	59	26	6	12	0.08	13	BDL	59	Satisfactory
82	11-01-22	62	27	6	13	0.08	14	BDL	62	Satisfactory
83	14-01-22	58	26	6	13	0.08	13	BDL	58	Satisfactory
84	18-01-22	56	22	6	12	0.08	14	BDL	56	Satisfactory
85	21-01-22	57	27	6	12	0.09	13	BDL	57	Satisfactory
86	25-01-22	61	28	6	13	0.09	13	BDL	61	Satisfactory
87	28-01-22	58	28	6	13	0.08	13	BDL	58	Satisfactory
FEBRUARY										
88	01-02-22	59	30	6	12	0.08	14	BDL	59	Satisfactory
89	04-02-22	59	31	6	13	0.08	13	BDL	59	Satisfactory
90	08-02-22	64	28	6	12	0.08	13	BDL	64	Satisfactory
91	11-02-22	56	26	6	12	0.08	13	BDL	56	Satisfactory
92	15-02-22	59	29	6	13	0.08	14	BDL	59	Satisfactory
93	18-02-22	58	28	7	13	0.08	14	BDL	58	Satisfactory
94	22-02-22	57	27	6	13	0.09	13	BDL	57	Satisfactory
95	25-02-22	60	30	7	13	0.09	13	BDL	60	Satisfactory
MARCH										
96	01-03-22	58	27	7	12	0.08	14	BDL	58	Satisfactory
97	04-03-22	58	29	7	12	0.08	14	BDL	58	Satisfactory
98	08-03-22	59	28	7	12	0.08	14	BDL	59	Satisfactory
99	11-03-22	61	31	7	12	0.08	13	BDL	61	Satisfactory
100	15-03-22	61	32	6	13	0.08	14	BDL	61	Satisfactory
101	18-03-22	59	26	6	12	0.08	13	BDL	59	Satisfactory
102	22-03-22	61	25	7	12	0.08	14	BDL	61	Satisfactory
103	25-03-22	60	29	6	13	0.08	13	BDL	60	Satisfactory
104	29-03-22	58	29	7	13	0.08	13	BDL	58	Satisfactory

ANNUAL AAQM DATA OF NAMP STATION FROM APRIL 2021 to MARCH 2022

Station: Municipality Building								City: Bicholim		
		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)							AQI	AIR QLTY
	Parameters	PM10	PM2.5	SO2	NO2	*CO	O3	Pb		
Sr. No	Date	24-hr avg	24-hr avg	24-hr avg	24-hr avg	1-hr avg	1-hr avg	24-hr avg		
APRIL										
1	01-04-21	80	40	10	15	0.08	15.4	BDL	80	Satisfactory
2	05-04-21	79	40	10	15	0.08	15.5	BDL	79	Satisfactory
3	08-04-21	80	41	9	14	0.08	15.1	BDL	80	Satisfactory
4	12-04-21	68	38	9	15	0.09	15.2	BDL	68	Satisfactory
5	15-04-21	67	32	10	15	0.08	14.7	BDL	67	Satisfactory
6	19-04-21	67	32	9	15	0.08	14.5	BDL	67	Satisfactory
7	22-04-21	65	32	10	15	0.09	15.0	BDL	65	Satisfactory
8	26-04-21	76	38	9	14	0.07	15.0	BDL	76	Satisfactory
9	29-04-21	79	38	9	13	0.07	14.8	BDL	79	Satisfactory
MAY										
10	03-05-21	64	28	9	14	0.09	14.3	BDL	64	Satisfactory
11	06-05-21	61	29	8	13	0.09	13.9	BDL	61	Satisfactory
12	10-05-21	52	24	7	12	0.08	13.8	BDL	52	Satisfactory
13	13-05-21	54	28	6	12	0.08	13.7	BDL	54	Satisfactory
14	18-05-21	55	25	7	12	0.08	13.5	BDL	55	Satisfactory
15	21-05-21	59	27	7	12	0.07	13.2	BDL	59	Satisfactory
16	24-05-21	55	25	7	13	0.08	13.2	BDL	55	Satisfactory
17	27-05-21	52	23	6	12	0.07	13.2	BDL	52	Satisfactory
18	31-05-21	56	25	7	12	0.07	13.1	BDL	56	Satisfactory
JUNE										
19	03-06-21	51	20	9	13	0.06	13.7	BDL	51	Satisfactory
20	07-06-21	52	21	8	13	0.06	13.2	BDL	52	Satisfactory
21	10-06-21	52	21	7	12	0.06	13.6	BDL	52	Satisfactory
22	14-06-21	50	22	6	12	0.06	13.4	BDL	50	Good
23	17-06-21	49	21	7	12	0.06	13.5	BDL	49	Good
24	21-06-21	51	20	7	13	0.06	13.3	BDL	51	Satisfactory

25	24-06-21	50	20	7	13	0.06	13.2	BDL	50	Satisfactory
26	28-06-21	50	21	6	12	0.06	13.1	BDL	50	Satisfactory
JULY										
27	01-07-21	52	20	7	12	0.05	13.7	BDL	52	Satisfactory
28	05-07-21	51	21	6	12	0.05	13.6	BDL	51	Satisfactory
29	08-07-21	51	20	6	12	0.05	13.7	BDL	51	Satisfactory
30	12-07-21	54	22	6	12	0.05	13.6	BDL	54	Satisfactory
31	15-07-21	49	19	6	12	0.05	13.3	BDL	49	Good
32	20-07-21	48	19	6	12	0.06	13.4	BDL	48	Good
33	22-07-21	49	19	6	12	0.06	13.2	BDL	49	Good
34	26-07-21	47	20	7	12	0.06	13.2	BDL	47	Good
35	29-07-21	46	19	6	12	0.05	13.3	BDL	46	Good
AUGUST										
36	02-08-21	46	19	7	12	0.06	13.5	BDL	46	Good
37	05-08-21	49	20	6	12	0.06	13.6	BDL	49	Good
38	09-08-21	47	20	6	12	0.06	13.7	BDL	47	Good
39	12-08-21	49	19	6	12	0.06	13.7	BDL	49	Good
40	16-08-21	48	20	6	12	0.06	13.4	BDL	48	Good
41	19-08-21	49	20	6	12	0.06	13.3	BDL	49	Good
42	23-08-21	49	19	6	12	0.06	13.0	BDL	49	Good
43	26-08-21	49	20	7	12	0.06	13.2	BDL	49	Good
44	30-08-21	50	20	6	12	0.06	13.2	BDL	50	Satisfactory
SEPTEMBER										
45	02-09-21	50	25	7	12	0.06	13.5	BDL	50	Good
46	06-09-21	50	22	6	12	0.07	13.3	BDL	50	Satisfactory
47	09-09-21	51	20	6	12	0.07	13.6	BDL	51	Satisfactory
48	13-09-21	52	22	6	12	0.07	13.8	BDL	52	Satisfactory
49	16-09-21	49	22	7	12	0.07	14.1	BDL	49	Good
50	20-09-21	55	23	6	12	0.07	13.7	BDL	55	Satisfactory
51	23-09-21	52	22	6	12	0.08	14.0	BDL	52	Satisfactory
52	27-09-21	56	24	6	12	0.08	14.1	BDL	56	Satisfactory
53	30-09-21	53	22	6	12	0.07	14.2	BDL	53	Satisfactory

OCTOBER										
54	04-10-21	54	24	7	12	0.07	12.6	BDL	54	Satisfactory
55	07-10-21	53	26	7	12	0.07	12.9	BDL	53	Satisfactory
56	11-10-21	53	24	6	13	0.08	12.9	BDL	53	Satisfactory
57	14-10-21	55	24	7	13	0.08	12.8	BDL	55	Satisfactory
58	18-10-21	54	25	7	12	0.07	12.6	BDL	54	Satisfactory
59	21-10-21	56	27	7	12	0.07	12.5	BDL	56	Satisfactory
60	25-10-21	57	25	7	12	0.08	12.4	BDL	57	Satisfactory
61	28-10-21	58	25	7	12	0.07	12.7	BDL	58	Satisfactory
NOVEMBER										
62	01-11-21	55	25	7	13	0.07	12.6	BDL	55	Satisfactory
63	04-11-21	58	26	7	12	0.07	12.5	BDL	58	Satisfactory
64	08-11-21	58	25	7	12	0.07	12.4	BDL	58	Satisfactory
65	11-11-21	55	25	7	12	0.08	12.2	BDL	55	Satisfactory
66	15-11-21	56	26	7	13	0.08	12.6	BDL	56	Satisfactory
67	18-11-21	57	26	7	13	0.08	12.9	BDL	57	Satisfactory
68	22-11-21	56	26	8	12	0.08	13.0	BDL	56	Satisfactory
69	25-11-21	62	27	7	13	0.08	12.6	BDL	62	Satisfactory
70	29-11-21	59	26	7	13	0.08	12.9	BDL	59	Satisfactory
DECEMBER										
71	02-12-21	47	24	7	13	0.08	12.8	BDL	47	Good
72	06-12-21	58	25	7	13	0.08	13.1	BDL	58	Satisfactory
73	09-12-12	62	27	7	12	0.08	12.9	BDL	62	Satisfactory
74	13-12-21	61	26	7	13	0.08	12.6	BDL	61	Satisfactory
75	16-12-21	59	29	7	13	0.08	12.8	BDL	59	Satisfactory
76	20-12-21	62	25	6	13	0.09	12.9	BDL	62	Satisfactory
77	23-12-21	61	28	7	13	0.09	12.9	BDL	61	Satisfactory
78	27-12-21	57	29	8	13	0.08	12.8	BDL	57	Satisfactory
79	30-12-21	59	26	8	13	0.09	13.0	BDL	59	Satisfactory
JANUARY										
80	03-01-22	53	26	6	13	0.08	13.6	BDL	53	Satisfactory
81	06-01-22	56	28	7	14	0.08	13.8	BDL	56	Satisfactory
82	10-01-22	62	28	6	13	0.08	13.5	BDL	62	Satisfactory

83	13-01-22	58	28	6	13	0.08	12.9	BDL	58	Satisfactory
84	17-01-22	57	25	6	13	0.07	13.1	BDL	57	Satisfactory
85	20-01-22	55	24	6	13	0.08	13.4	BDL	55	Satisfactory
86	24-01-22	59	28	7	13	0.08	13.2	BDL	59	Satisfactory
87	27-01-22	62	28	6	13	0.08	13.3	BDL	62	Satisfactory
88	31-01-22	58	29	6	13	0.09	13.4	BDL	58	Satisfactory
FEBRUARY										
89	03-02-22	57	26	6	13	0.08	13.6	BDL	57	Satisfactory
90	07-02-22	59	28	7	13	0.08	13.7	BDL	59	Satisfactory
91	10-02-22	64	28	6	13	0.08	13.5	BDL	64	Satisfactory
92	15-02-22	59	30	6	13	0.08	13.6	BDL	59	Satisfactory
93	17-02-22	58	29	6	13	0.08	13.3	BDL	58	Satisfactory
94	21-02-22	59	27	7	14	0.08	13.1	BDL	59	Satisfactory
95	24-02-22	57	28	6	13	0.08	13.4	BDL	57	Satisfactory
96	28-02-22	58	26	7	13	0.08	13.6	BDL	58	Satisfactory
MARCH										
97	03-03-22	60	28	6	13	0.08	13.4	BDL	60	Satisfactory
98	07-03-22	62	28	6	13	0.08	13.3	BDL	62	Satisfactory
99	10-03-22	60	31	6	13	0.08	13.5	BDL	60	Satisfactory
100	14-03-22	63	33	6	13	0.08	13.2	BDL	63	Satisfactory
101	17-03-22	65	31	6	13	0.08	13.6	BDL	65	Satisfactory
102	21-03-22	63	31	6	13	0.08	13.2	BDL	63	Satisfactory
103	24-03-22	61	33	6	13	0.08	13.7	BDL	61	Satisfactory
104	28-03-22	65	30	7	13	0.09	13.8	BDL	65	Satisfactory
105	31-03-22	59	30	6	13	0.08	13.6	BDL	59	Satisfactory
* No Monitoring										

ANNUAL AAQM DATA OF NAMP STATION FROM APRIL 2021 to MARCH 2022										
Station: Near Ajoba temple, Honda junction									City: Honda	
		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)							AQI	AIR QLTY
	Parameters	PM10	PM2.5	SO2	NO2	*CO	O3	Pb		
Sr. No	Date	24-hr avg	24-hr avg	24-hr avg	24-hr avg	1-hr avg	1-hr avg	24-hr avg		
APRIL										
2	06-04-21	65	31	10	14	0.08	15	BDL	65	Satisfactory
3	09-04-21	69	30	9	13	0.09	15	BDL	69	Satisfactory
4	13-04-21	73	35	8	13	0.08	15	BDL	73	Satisfactory
5	16-04-21	61	30	9	14	0.08	14	BDL	61	Satisfactory
6	20-04-21	72	35	9	14	0.08	15	BDL	72	Satisfactory
7	23-04-21	66	34	10	14	0.08	15	BDL	66	Satisfactory
8	27-04-21	68	33	10	14	0.07	15	BDL	68	Satisfactory
9	30-04-21	65	34	9	14	0.08	14	BDL	65	Satisfactory
MAY										
10	04-05-21	64	33	9	13	0.09	14	BDL	64	Satisfactory
11	07-05-21	64	33	8	13	0.09	14	BDL	64	Satisfactory
12	11-05-21	61	30	7	13	0.08	14	BDL	61	Satisfactory
13	14-05-21	65	30	7	13	0.08	14	BDL	65	Satisfactory
14	18-05-21	56	25	7	12	0.07	13	BDL	56	Satisfactory
15	21-05-21	52	26	7	13	0.07	13	BDL	52	Satisfactory
16	25-05-21	54	23	6	12	0.07	13	BDL	54	Satisfactory
17	28-05-21	60	26	7	13	0.07	13	BDL	60	Satisfactory
JUNE										
18	01-06-21	53	22	7	13	0.08	15	BDL	53	Satisfactory
19	04-06-21	51	23	7	13	0.07	14	BDL	51	Satisfactory
20	08-06-21	53	21	7	13	0.07	14	BDL	53	Satisfactory
21	11-06-21	52	21	7	13	0.07	14	BDL	52	Satisfactory
22	15-06-21	51	23	6	13	0.07	14	BDL	51	Satisfactory
23	18-06-21	50	22	7	13	0.07	14	BDL	50	Good
24	22-06-21	49	20	7	13	0.07	14	BDL	49	Good
25	25-06-21	51	22	7	13	0.07	14	BDL	51	Satisfactory
26	29-06-21	51	20	6	13	0.07	14	BDL	51	Satisfactory

JULY										
27	02-07-21	51	21	8	12	0.06	14	BDL	51	Satisfactory
28	07-07-21	51	21	7	13	0.06	14	BDL	51	Satisfactory
29	09-07-21	53	22	6	12	0.06	13	BDL	53	Satisfactory
30	13-07-21	52	22	7	12	0.06	13	BDL	52	Satisfactory
31	16-07-21	50	20	6	12	0.06	13	BDL	50	Satisfactory
32	20-07-21	49	20	7	13	0.06	13	BDL	49	Good
33	24-07-21	48	19	6	12	0.06	13	BDL	48	Good
34	27-07-21	48	18	6	12	0.06	13	BDL	48	Good
35	30-07-21	49	19	6	12	0.06	13	BDL	49	Good
AUGUST										
36	03-08-21	47	19	8	12	0.07	14	BDL	47	Good
37	06-08-21	46	20	7	12	0.07	14	BDL	46	Good
38	10-08-21	45	19	7	12	0.07	13	BDL	45	Good
39	13-08-21	46	19	6	12	0.07	13	BDL	46	Good
40	17-08-21	47	19	6	12	0.06	13	BDL	47	Good
41	20-08-21	48	20	6	11	0.07	13	BDL	48	Good
42	24-08-21	49	21	6	12	0.06	13	BDL	49	Good
43	27-08-21	51	19	6	12	0.06	13	BDL	51	Satisfactory
44	31-08-21	49	21	6	12	0.07	13	BDL	49	Good
SEPTEMBER										
45	03-09-21	53	22	7	12	0.07	14	BDL	53	Satisfactory
46	07-09-21	51	21	7	12	0.07	14	BDL	51	Satisfactory
47	10-09-21	51	21	7	12	0.08	14	BDL	51	Satisfactory
48	14-09-21	52	22	6	12	0.08	14	BDL	52	Satisfactory
49	17-09-21	53	21	6	12	0.08	14	BDL	53	Satisfactory
50	21-09-21	52	22	7	13	0.07	14	BDL	52	Satisfactory
51	24-09-21	51	23	6	12	0.08	14	BDL	51	Satisfactory
52	28-09-21	52	21	6	12	0.06	14	BDL	52	Satisfactory
OCTOBER										
53	01-10-21	53	24	7	13	0.08	13	BDL	53	Satisfactory
54	05-10-21	54	25	7	13	0.07	12	BDL	54	Satisfactory

55	08-10-21	55	25	8	13	0.07	12	BDL	55	Satisfactory
56	12-10-21	53	24	7	12	0.08	13	BDL	53	Satisfactory
57	15-10-21	60	29	7	13	0.08	12	BDL	60	Satisfactory
58	19-10-21	59	27	7	13	0.07	13	BDL	59	Satisfactory
59	22-10-21	60	26	6	13	0.07	12	BDL	60	Satisfactory
60	26-10-21	56	24	7	12	0.08	13	BDL	56	Satisfactory
61	29-10-21	55	27	7	13	0.07	12	BDL	55	Satisfactory
NOVEMBER										
62	02-11-21	55	25	7	12	0.07	12	BDL	55	Satisfactory
63	05-11-21	57	27	7	13	0.07	13	BDL	57	Satisfactory
64	09-11-21	55	28	7	12	0.08	12	BDL	55	Satisfactory
65	12-11-21	54	26	7	12	0.08	13	BDL	54	Satisfactory
66	16-11-21	56	27	7	13	0.08	13	BDL	56	Satisfactory
67	19-11-21	58	27	7	13	0.08	13	BDL	58	Satisfactory
68	23-11-21	57	27	7	12	0.07	13	BDL	57	Satisfactory
69	26-11-21	53	24	6	12	0.08	13	BDL	53	Satisfactory
70	30-11-21	54	24	7	13	0.07	13	BDL	54	Satisfactory
DECEMBER										
71	03-12-21	55	27	7	13	0.08	13	BDL	55	Satisfactory
72	07-12-21	57	28	7	13	0.08	13	BDL	57	Satisfactory
73	10-12-21	57	28	7	12	0.08	13	BDL	57	Satisfactory
74	14-12-21	60	30	7	12	0.08	13	BDL	60	Satisfactory
75	17-12-21	58	28	7	13	0.08	13	BDL	58	Satisfactory
76	21-12-21	55	27	7	13	0.08	13	BDL	55	Satisfactory
77	24-12-21	61	28	7	13	0.08	13	BDL	61	Satisfactory
78	26-12-21	59	28	7	13	0.08	13	BDL	59	Satisfactory
79	31-12-21	62	29	7	13	0.07	13	BDL	62	Satisfactory
JANUARY										
80	04-01-22	60	29	6	13	0.08	13	BDL	60	Satisfactory
81	07-01-22	60	30	6	12	0.08	13	BDL	60	Satisfactory
82	11-01-22	64	29	6	13	0.08	14	BDL	64	Satisfactory
83	14-01-22	54	25	6	13	0.07	13	BDL	54	Satisfactory
84	18-01-22	57	26	7	13	0.08	13	BDL	57	Satisfactory

85	21-01-22	58	26	6	13	0.08	13	BDL	58	Satisfactory
86	25-01-22	55	27	7	13	0.08	13	BDL	55	Satisfactory
87	28-01-22	58	28	6	13	0.08	13	BDL	58	Satisfactory
FEBRUARY										
88	01-02-22	61	28	6	13	0.08	13	BDL	61	Satisfactory
89	04-02-22	58	29	6	13	0.08	14	BDL	58	Satisfactory
90	08-02-22	57	29	6	13	0.08	14	BDL	57	Satisfactory
91	11-02-22	60	31	6	13	0.08	13	BDL	60	Satisfactory
92	15-02-22	56	28	6	13	0.08	13	BDL	56	Satisfactory
93	18-02-22	58	26	6	13	0.08	14	BDL	58	Satisfactory
94	22-02-22	57	27	6	13	0.08	14	BDL	57	Satisfactory
95	25-02-22	60	28	6	14	0.08	14	BDL	60	Satisfactory
MARCH										
96	01-03-22	57	27	6	13	0.08	14	BDL	57	Satisfactory
97	04-03-22	60	27	6	13	0.08	13	BDL	60	Satisfactory
98	08-03-22	58	26	6	13	0.08	14	BDL	58	Satisfactory
99	11-03-22	61	33	6	13	0.08	14	BDL	61	Satisfactory
100	15-03-22	65	30	6	13	0.08	14	BDL	65	Satisfactory
101	18-03-22	62	29	6	13	0.09	14	BDL	62	Satisfactory
102	22-03-22	63	30	6	12	0.08	13	BDL	63	Satisfactory
103	25-03-22	61	28	6	13	0.08	14	BDL	61	Satisfactory
104	29-03-22	62	28	6	13	0.09	14	BDL	62	Satisfactory
* No Monitoring										

ANNUAL AAQM DATA OF NAMP STATION FROM APRIL 2021 to MARCH 2022										
Station: Residence of J. Natekar, Usgao Junction									City: Usgao	
		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)							AQI	AIR QLTY
	Parameters	PM10	PM2.5	SO2	NO2	*CO	O3	Pb		
Sr. No	Date	24-hr avg	24-hr avg	24-hr avg	24-hr avg	1-hr avg	1-hr avg	24-hr avg		
APRIL										
1	02-04-2021	81	41	10	14	0.09	15.5	BDL	81	Satisfactory
2	06-04-2021	82	41	10	15	0.08	15.3	BDL	82	Satisfactory
3	09-04-2021	77	38	8	14	0.08	14.7	BDL	77	Satisfactory
4	13-04-2021	77	38	11	14	0.08	14.8	BDL	77	Satisfactory
5	16-04-2021	79	41	11	14	0.09	14.4	BDL	79	Satisfactory
6	20-04-2021	77	39	10	14	0.09	14.9	BDL	77	Satisfactory
7	22-04-2021	66	32	11	14	0.09	15.0	BDL	66	Satisfactory
8	27-04-2021	84	42	11	14	0.08	15.1	BDL	84	Satisfactory
9	30-04-2021	76	38	10	14	0.08	14.3	BDL	76	Satisfactory
MAY										
10	04-05-2021	64	32	9	14	0.09	14.3	BDL	64	Satisfactory
11	07-05-2021	74	35	7	14	0.09	14.0	BDL	74	Satisfactory
12	11-05-2021	70	35	7	14	0.08	13.9	BDL	70	Satisfactory
13	14-05-2021	71	32	7	13	0.07	13.7	BDL	71	Satisfactory
14	18-05-2021	68	29	8	13	0.07	13.4	BDL	68	Satisfactory
15	21-05-2021	56	24	7	12	0.07	13.1	BDL	56	Satisfactory
16	25-05-2021	55	26	7	12	0.07	13.2	BDL	55	Satisfactory
17	28-05-2021	55	26	7	12	0.07	13.2	BDL	55	Satisfactory
JUNE										
18	01-06-2021	53	20	8	13	0.07	14	BDL	53	Satisfactory
19	04-06-2021	55	22	7	12	0.07	14	BDL	55	Satisfactory
20	08-06-2021	53	22	7	12	0.07	14	BDL	53	Satisfactory
21	11-06-2021	52	22	7	13	0.07	13	BDL	52	Satisfactory
22	15-06-2021	50	22	7	13	0.07	13	BDL	50	Satisfactory
23	18-06-2021	52	20	7	13	0.07	13	BDL	52	Satisfactory
24	22-06-2021	49	19	7	13	0.06	13	BDL	49	Good

25	25-06-2021	51	21	6	13	0.06	13	BDL	51	Satisfactory
26	29-06-2021	53	21	7	13	0.06	13	BDL	53	Satisfactory
JULY										
27	02-07-2021	51	23	7	12	0.06	14	BDL	51	Satisfactory
28	06-07-2021	51	24	6	12	0.07	14	BDL	51	Satisfactory
29	09-07-2021	53	22	6	12	0.07	14	BDL	53	Satisfactory
30	13-07-2021	51	19	6	12	0.06	14	BDL	51	Satisfactory
31	16-07-2021	50	19	6	12	0.06	14	BDL	50	Good
32	20-07-2021	49	20	6	12	0.06	14	BDL	49	Good
33	23-07-2021	49	19	6	12	0.06	13	BDL	49	Good
34	27-07-2021	48	19	6	12	0.05	13	BDL	48	Good
35	30-07-2021	49	20	6	12	0.06	13	BDL	49	Good
AUGUST										
36	03-08-2021	50	20	7	13	0.06	14	BDL	50	Good
37	06-08-2021	51	20	7	12	0.07	14	BDL	51	Satisfactory
38	10-08-2021	49	19	7	12	0.07	14	BDL	49	Good
39	13-08-2021	45	19	7	12	0.06	14	BDL	45	Good
40	17-08-2021	48	20	6	12	0.06	14	BDL	48	Good
41	20-08-2021	50	20	7	12	0.06	14	BDL	50	Satisfactory
42	24-08-2021	50	20	7	13	0.05	13	BDL	50	Satisfactory
43	27-08-2021	50	19	6	12	0.06	13	BDL	50	Satisfactory
44	31-08-2021	49	21	6	12	0.06	13	BDL	49	Good
SEPTEMBER										
45	03-09-2021	50	21	7	13	0.06	14	BDL	50	Good
46	06-09-2021	50	23	7	12	0.06	14	BDL	50	Satisfactory
47	08-09-2021	49	22	7	13	0.06	14	BDL	49	Good
48	14-09-2021	52	22	7	12	0.07	14	BDL	52	Satisfactory
49	17-09-2021	52	23	7	12	0.06	14	BDL	52	Satisfactory
50	21-09-2021	55	22	7	12	0.07	14	BDL	55	Satisfactory
51	24-09-2021	51	22	7	12	0.07	13	BDL	51	Satisfactory
52	28-09-2021	53	22	8	13	0.06	13	BDL	53	Satisfactory

OCTOBER										
53	01-10-2021	56	23	7	13	0.08	13	BDL	56	Satisfactory
54	05-10-2021	55	23	7	13	0.08	13	BDL	55	Satisfactory
55	08-10-2021	59	24	7	13	0.08	12	BDL	59	Satisfactory
56	12-10-2021	54	21	7	13	0.07	12	BDL	54	Satisfactory
57	15-10-2021	59	27	7	13	0.06	13	BDL	59	Satisfactory
58	19-10-2021	60	29	6	12	0.08	13	BDL	60	Satisfactory
59	22-10-2021	62	24	6	12	0.08	13	BDL	62	Satisfactory
60	26-10-2021	55	23	7	13	0.08	13	BDL	55	Satisfactory
61	29-10-2021	60	30	7	13	0.08	13	BDL	60	Satisfactory
NOVEMBER										
62	02-11-2021	58	28	7	13	0.08	13	BDL	58	Satisfactory
63	05-11-2021	59	26	7	12	0.08	13	BDL	59	Satisfactory
64	09-11-2021	59	28	7	12	0.08	12	BDL	59	Satisfactory
65	12-11-2021	59	27	7	12	0.08	13	BDL	59	Satisfactory
66	16-11-2021	59	26	7	13	0.08	13	BDL	59	Satisfactory
67	19-11-2021	59	30	7	13	0.08	13	BDL	59	Satisfactory
68	23-11-2021	58	28	7	13	0.09	13	BDL	58	Satisfactory
69	26-11-2021	59	30	7	13	0.09	13	BDL	59	Satisfactory
70	30-11-2021	58	28	7	13	0.08	13	BDL	58	Satisfactory
DECEMBER										
71	03-12-2021	65	31	7	13	0.09	13	BDL	65	Satisfactory
72	07-12-2021	64	29	7	13	0.09	13	BDL	64	Satisfactory
73	10-12-2021	61	30	7	13	0.09	13	BDL	61	Satisfactory
74	14-12-2021	61	29	7	12	0.09	13	BDL	61	Satisfactory
75	17-12-2021	63	27	7	13	0.92	13	BDL	63	Satisfactory
76	21-12-2021	66	30	7	12	0.09	13	BDL	66	Satisfactory
77	24-12-2021	71	28	7	13	0.09	13	BDL	71	Satisfactory
78	28-12-2021	67	31	7	13	0.08	13	BDL	67	Satisfactory
79	31-12-2021	61	26	7	13	0.09	13	BDL	61	Satisfactory
JANUARY										
80	04-01-2022	63	32	6	13	0.08	14	BDL	63	Satisfactory
81	07-01-2022	67	31	6	13	0.08	14	BDL	67	Satisfactory

82	11-01-2022	65	29	6	13	0.08	14	BDL	65	Satisfactory
83	14-01-2022	63	26	6	12	0.08	14	BDL	63	Satisfactory
84	18-01-2022	58	26	6	13	0.07	13	BDL	58	Satisfactory
85	21-01-2022	64	29	6	12	0.08	13	BDL	64	Satisfactory
86	25-01-2022	56	29	7	13	0.08	14	BDL	56	Satisfactory
87	28-01-2022	63	29	7	13	0.09	13	BDL	63	Satisfactory
FEBRUARY										
88	01-02-2022	58	28	7	13	0.08	14	BDL	58	Satisfactory
89	04-02-2022	60	29	6	13	0.08	14	BDL	60	Satisfactory
90	08-02-2022	60	30	7	12	0.08	14	BDL	60	Satisfactory
91	11-02-2022	65	30	7	13	0.08	14	BDL	65	Satisfactory
92	15-02-2022	61	30	6	13	0.08	14	BDL	61	Satisfactory
93	18-02-2022	62	30	7	12	0.09	13	BDL	62	Satisfactory
94	22-02-2022	65	31	7	13	0.08	14	BDL	65	Satisfactory
95	25-02-2022	59	30	7	13	0.09	13	BDL	59	Satisfactory
MARCH										
96	01-03-2022	61	31	7	13	0.08	13	BDL	61	Satisfactory
97	04-03-2022	62	29	6	13	0.08	13	BDL	62	Satisfactory
98	08-03-2022	66	31	7	13	0.08	13	BDL	66	Satisfactory
99	11-03-2022	68	29	7	13	0.08	13	BDL	68	Satisfactory
100	15-03-2022	65	32	6	13	0.08	13	BDL	65	Satisfactory
101	18-03-2022	69	33	6	13	0.09	14	BDL	69	Satisfactory
102	22-03-2022	63	31	7	13	0.08	14	BDL	63	Satisfactory
103	25-03-2022	65	28	6	13	0.08	14	BDL	65	Satisfactory
104	29-03-2022	66	28	7	14	0.09	14	BDL	66	Satisfactory
* No Monitoring										

ANNUAL AAQM DATA OF NAMP STATION FROM APRIL 2021 to MARCH 2022										
Station: Premises of Somnath English High School									City: Codli	
		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)							AQI	AIR QLTY
	Parameters	PM10	PM2.5	SO2	NO2	*CO	O3	Pb		
Sr. No	Date	24-hr avg	24-hr avg	24-hr avg	24-hr avg	1-hr avg	1-hr avg	24-hr avg		
APRIL										
1	03-04-2021	79	37	10	14	0.08	14.69	BDL	79	Satisfactory
2	07-04-2021	72	37	10	14	0.08	14.86	BDL	72	Satisfactory
3	09-04-2021	75	38	10	14	0.09	14.95	BDL	75	Satisfactory
4	14-04-2021	65	32	10	14	0.09	15.03	BDL	65	Satisfactory
5	17-04-2021	76	39	9	14	0.09	15.12	BDL	76	Satisfactory
6	21-04-2021	74	38	9	14	0.09	14.78	BDL	74	Satisfactory
7	24-04-2021	75	37	10	14	0.08	14.52	BDL	75	Satisfactory
8	27-04-2021	70	36	9	14	0.08	14.44	BDL	70	Satisfactory
MAY										
9	01-05-2021	65	30	8	13	0.08	14.26	BDL	65	Satisfactory
10	05-05-2021	62	28	8	14	0.09	13.75	BDL	62	Satisfactory
11	08-05-2021	66	26	7	13	0.08	14.00	BDL	66	Satisfactory
12	12-05-2021	63	28	7	12	0.08	14.17	BDL	63	Satisfactory
13	15-05-2021	55	23	8	13	0.08	14.09	BDL	55	Satisfactory
14	19-05-2021	51	28	7	12	0.07	13.92	BDL	51	Satisfactory
15	22-05-2021	54	24	8	13	0.07	13.84	BDL	54	Satisfactory
16	26-05-2021	52	25	7	13	0.07	13.67	BDL	52	Satisfactory
17	29-05-2021	52	25	7	13	0.07	13.75	BDL	52	Satisfactory
JUNE										
18	02-06-2021	51	22	7	13	0.06	13	BDL	51	Satisfactory
19	05-06-2021	52	23	7	12	0.05	13	BDL	52	Satisfactory
20	09-06-2021	51	22	7	13	0.06	13	BDL	51	Satisfactory
21	12-06-2021	53	20	7	12	0.06	13	BDL	53	Satisfactory
22	16-06-2021	49	21	7	12	0.06	13	BDL	49	Good
23	19-06-2020	51	22	7	12	0.06	13	BDL	51	Satisfactory
24	23-06-2021	50	21	6	13	0.06	13	BDL	50	Good

25	26-06-2021	51	22	6	12	0.06	13	BDL	51	Satisfactory
26	29-06-2021	51	21	7	13	0.06	13	BDL	51	Satisfactory
JULY										
27	03-07-2021	52	20	7	12	0.06	14	BDL	52	Satisfactory
28	07-07-2021	49	19	7	12	0.06	14	BDL	49	Good
29	10-07-2021	49	19	6	12	0.06	13	BDL	49	Good
30	14-07-2021	49	21	6	12	0.06	13	BDL	49	Good
31	17-07-2021	48	18	6	12	0.06	13	BDL	48	Good
32	21-07-2021	50	20	7	12	0.06	13	BDL	50	Good
33	24-07-2021	48	20	7	12	0.06	13	BDL	48	Good
34	28-07-2021	51	20	6	12	0.06	13	BDL	51	Satisfactory
35	31-07-2021	50	20	6	12	0.06	13	BDL	50	Satisfactory
AUGUST										
36	04-08-2021	48	19	7	12	0.06	14	BDL	48	Good
37	07-08-2021	51	19	7	12	0.06	13	BDL	51	Satisfactory
38	11-08-2021	48	21	6	12	0.06	13	BDL	48	Good
39	14-08-2021	47	19	6	12	0.06	13	BDL	47	Good
40	18-08-2021	46	19	6	12	0.06	13	BDL	46	Good
41	21-08-2021	49	20	7	12	0.06	13	BDL	49	Good
42	25-08-2021	50	20	7	12	0.06	13	BDL	50	Good
43	28-08-2021	51	20	7	12	0.06	13	BDL	51	Satisfactory
SEPTEMBER										
44	01-09-2021	50	21	7	12	0.06	14	BDL	50	Good
45	04-09-2021	50	21	7	12	0.06	14	BDL	50	Good
46	08-09-2021	51	20	6	11	0.07	13	BDL	51	Satisfactory
47	11-09-2021	50	20	6	12	0.06	13	BDL	50	Satisfactory
48	15-09-2021	52	22	6	12	0.07	13	BDL	52	Satisfactory
49	18-09-2021	49	20	7	12	0.06	14	BDL	49	Good
50	22-09-2021	52	22	7	12	0.07	14	BDL	52	Satisfactory
51	25-09-2021	50	23	6	12	0.06	14	BDL	50	Satisfactory
52	29-09-2021	53	21	6	12	0.06	14	BDL	53	Satisfactory

OCTOBER										
53	02-10-2021	55	24	7	13	0.08	12	BDL	55	Satisfactory
54	06-10-2021	57	26	7	13	0.07	12	BDL	57	Satisfactory
55	09-10-2021	57	25	7	13	0.08	13	BDL	57	Satisfactory
56	13-10-2021	55	24	7	13	0.08	12	BDL	55	Satisfactory
57	16-10-2021	55	25	7	13	0.07	13	BDL	55	Satisfactory
58	20-10-2021	56	25	7	13	0.08	13	BDL	56	Satisfactory
59	23-10-2021	55	26	7	13	0.08	13	BDL	55	Satisfactory
60	27-10-2021	56	25	7	13	0.08	13	BDL	56	Satisfactory
61	30-10-2021	57	26	7	13	0.08	13	BDL	57	Satisfactory
NOVEMBER										
62	03-11-2021	56	25	7	13	0.08	13	BDL	56	Satisfactory
63	06-11-2021	58	25	7	13	0.07	13	BDL	58	Satisfactory
64	10-11-2021	53	24	7	12	0.08	13	BDL	53	Satisfactory
65	13-11-2021	56	26	7	13	0.07	12	BDL	56	Satisfactory
66	17-11-2021	56	26	7	13	0.08	13	BDL	56	Satisfactory
67	20-11-2021	56	26	7	12	0.07	13	BDL	56	Satisfactory
68	24-11-2021	53	24	7	13	0.07	13	BDL	53	Satisfactory
69	27-11-2021	54	25	7	13	0.07	12	BDL	54	Satisfactory
DECEMBER										
70	01-12-2021	62	28	7	13	0.08	13	BDL	62	Satisfactory
71	04-12-2021	64	28	7	13	0.07	13	BDL	64	Satisfactory
72	08-12-2021	61	30	7	13	0.08	13	BDL	61	Satisfactory
73	11-12-2021	72	33	7	13	0.07	13	BDL	72	Satisfactory
74	15-12-2021	64	28	7	12	0.08	13	BDL	64	Satisfactory
75	18-12-2021	61	27	7	12	0.08	13	BDL	61	Satisfactory
76	22-12-2021	59	29	7	13	0.07	13	BDL	59	Satisfactory
77	25-12-2021	65	30	7	13	0.08	13	BDL	65	Satisfactory
78	29-12-2021	61	31	7	13	0.08	13	BDL	61	Satisfactory
JANUARY										
79	01-01-2022	57	28	8	13	0.08	13	BDL	57	Satisfactory
80	05-01-2022	57	28	6	14	0.08	13	BDL	57	Satisfactory
81	08-01-2022	58	26	6	13	0.09	13	BDL	58	Satisfactory

82	12-01-2022	55	28	6	13	0.08	13	BDL	55	Satisfactory
83	15-01-2022	57	26	6	12	0.08	13	BDL	57	Satisfactory
84	19-01-2022	55	24	6	13	0.08	13	BDL	55	Satisfactory
85	22-01-2022	55	24	6	12	0.08	13	BDL	55	Satisfactory
86	26-01-2022	60	30	6	13	0.08	13	BDL	60	Satisfactory
87	29-01-2022	62	28	6	13	0.08	13	BDL	62	Satisfactory
FEBRUARY										
88	02-02-2022	58	29	6	13	0.08	13	BDL	58	Satisfactory
89	05-02-2022	57	25	7	13	0.08	13	BDL	57	Satisfactory
90	09-02-2022	54	26	7	13	0.08	14	BDL	54	Satisfactory
91	12-02-2022	61	29	7	13	0.08	14	BDL	61	Satisfactory
92	16-02-2022	57	29	7	13	0.08	13	BDL	57	Satisfactory
93	19-02-2022	58	27	7	14	0.08	14	BDL	58	Satisfactory
94	23-02-2022	56	29	7	13	0.09	14	BDL	56	Satisfactory
95	26-02-2022	58	29	6	13	0.09	13	BDL	58	Satisfactory
MARCH										
96	02-03-2022	58	28	6	13	0.08	13	BDL	58	Satisfactory
97	05-03-2022	63	29	6	13	0.08	13	BDL	63	Satisfactory
98	09-03-2022	62	31	6	13	0.09	13	BDL	62	Satisfactory
99	12-03-2022	64	30	6	13	0.09	13	BDL	64	Satisfactory
100	16-03-2022	62	33	6	13	0.08	13	BDL	62	Satisfactory
101	19-03-2022	63	30	6	14	0.08	14	BDL	63	Satisfactory
102	23-03-2022	56	27	6	13	0.08	13	BDL	56	Satisfactory
103	26-03-2022	61	31	6	13	0.08	14	BDL	61	Satisfactory
104	30-03-2022	66	32	6	13	0.08	14	BDL	66	Satisfactory

ANNUAL AAQM DATA OF NAMP STATION FROM APRIL 2021 to MARCH 2022

Station: Rooftop of PWD Office, Near Bus Stand

City: Sanguem

		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)							AQI	AIR QLTY
	Parameters	PM10	PM2.5	SO2	NO2	*CO	O3	Pb		
Sr. No	Date	24-hr avg	24-hr avg	24-hr avg	24-hr avg	1-hr avg	1-hr avg	24-hr avg		
APRIL										
1	03-04-2021	71	33	9	14	0.08	15.2	BDL	71	Satisfactory
2	07-04-2021	66	34	10	14	0.08	15.1	BDL	66	Satisfactory
3	10-04-2021	71	36	9	14	0.08	14.9	BDL	71	Satisfactory
4	14-04-2021	61	31	9	14	0.08	14.8	BDL	61	Satisfactory
5	17-04-2021	69	34	8	13	0.08	14.7	BDL	69	Satisfactory
6	21-04-2021	65	34	7	13	0.08	14.5	BDL	65	Satisfactory
7	24-04-2021	73	34	8	13	0.07	14.6	BDL	73	Satisfactory
8	28-04-2021	80	40	8	14	0.07	14.4	BDL	80	Satisfactory
MAY										
9	01-05-2021	58	24	8	13	0.08	14.2	BDL	58	Satisfactory
10	05-05-2021	77	35	7	12	0.08	13.8	BDL	77	Satisfactory
11	08-05-2021	63	32	7	13	0.08	13.4	BDL	63	Satisfactory
12	12-05-2021	57	26	7	13	0.08	13.5	BDL	57	Satisfactory
13	15-05-2021	52	27	7	13	0.08	13.3	BDL	52	Satisfactory
14	19-05-2021	54	26	7	13	0.08	13.2	BDL	54	Satisfactory
15	22-05-2021	70	25	7	13	0.07	13.2	BDL	70	Satisfactory
16	26-05-2021	67	24	6	13	0.08	13.1	BDL	67	Satisfactory
17	29-05-2021	62	30	7	13	0.07	13.2	BDL	62	Satisfactory
JUNE										
18	02-06-2021	51	22	6	12	0.07	14	BDL	51	Satisfactory
19	05-06-2021	52	22	7	12	0.07	13	BDL	52	Satisfactory
20	09-06-2021	52	22	7	13	0.07	14	BDL	52	Satisfactory
21	12-06-2021	52	22	7	13	0.06	14	BDL	52	Satisfactory
22	16-06-2021	51	20	7	13	0.06	13	BDL	51	Satisfactory
23	19-06-2021	50	21	6	13	0.06	13	BDL	50	Good
24	23-06-2021	48	21	7	12	0.06	13	BDL	48	Good

25	26-06-2021	47	20	7	13	0.06	13	BDL	47	Good
26	30-06-2021	51	22	6	13	0.06	13	BDL	51	Satisfactory
JULY										
27	03-07-2021	50	22	6	12	0.06	14	BDL	50	Satisfactory
28	07-07-2021	52	22	6	12	0.06	14	BDL	52	Satisfactory
29	10-07-2021	51	20	6	12	0.06	14	BDL	51	Satisfactory
30	14-07-2021	49	19	6	12	0.06	13	BDL	49	Good
31	17-07-2021	50	19	6	12	0.06	13	BDL	50	Satisfactory
32	21-07-2021	49	20	6	12	0.06	13	BDL	49	Good
33	24-07-2021	50	21	6	12	0.06	13	BDL	50	Satisfactory
34	28-07-2021	47	19	6	12	0.06	13	BDL	47	Good
35	31-07-2021	47	19	6	12	0.06	13	BDL	47	Good
AUGUST										
36	04-08-2021	47	19	6	12	0.06	14	BDL	47	Good
37	07-08-2021	48	19	6	12	0.06	14	BDL	48	Good
OCTOBER										
38	13-10-2021	55	25	7	13	0.07	13	BDL	55	Satisfactory
39	16-10-2021	54	24	7	13	0.07	13	BDL	54	Satisfactory
40	20-10-2021	57	27	7	13	0.06	13	BDL	57	Satisfactory
41	23-10-2021	59	25	7	13	0.06	13	BDL	59	Satisfactory
42	27-10-2021	61	27	7	13	0.07	13	BDL	61	Satisfactory
43	30-10-2021	58	24	7	13	0.07	13	BDL	58	Satisfactory
NOVEMBER										
44	03-11-2021	56	26	7	13	0.07	13	BDL	56	Satisfactory
45	06-11-2021	57	28	7	13	0.07	13	BDL	57	Satisfactory
46	10-11-2021	59	29	7	13	0.07	13	BDL	59	Satisfactory
47	13-11-2021	54	24	7	13	0.07	13	BDL	54	Satisfactory
48	17-11-2021	53	26	7	13	0.07	13	BDL	53	Satisfactory
49	20-11-2021	51	24	8	13	0.08	13	BDL	51	Satisfactory
50	24-11-2021	51	24	7	13	0.07	13	BDL	51	Satisfactory
51	27-11-2021	54	23	7	13	0.07	13	BDL	54	Satisfactory

DECEMBER										
52	01-12-2021	62	25	7	13	0.08	13	BDL	62	Satisfactory
53	04-12-2021	58	27	7	13	0.08	13	BDL	58	Satisfactory
54	08-12-2021	54	28	7	13	0.08	13	BDL	54	Satisfactory
55	11-12-2021	56	25	7	13	0.08	13	BDL	56	Satisfactory
56	15-12-2021	56	24	7	13	0.08	13	BDL	56	Satisfactory
57	18-12-2021	53	23	8	13	0.08	13	BDL	53	Satisfactory
58	22-12-2021	54	27	7	13	0.08	13	BDL	54	Satisfactory
59	25-12-2021	60	28	8	13	0.08	13	BDL	60	Satisfactory
60	29-12-2021	58	26	7	13	0.08	13	BDL	58	Satisfactory
JANUARY										
61	01-01-2022	56	26	6	13	0.07	13	BDL	56	Satisfactory
62	05-01-2022	57	26	7	14	0.08	13	BDL	57	Satisfactory
63	08-01-2022	55	25	6	13	0.07	13	BDL	55	Satisfactory
64	12-01-2022	56	28	7	14	0.07	13	BDL	56	Satisfactory
65	15-01-2022	60	27	6	13	0.08	13	BDL	60	Satisfactory
66	19-01-2022	56	25	6	13	0.08	13	BDL	56	Satisfactory
67	22-01-2022	57	28	6	13	0.08	13	BDL	57	Satisfactory
68	26-01-2022	57	28	6	13	0.08	13	BDL	57	Satisfactory
69	29-01-2022	60	28	6	13	0.08	13	BDL	60	Satisfactory
FEBRUARY										
70	02-02-2022	56	25	7	13	0.08	14	BDL	56	Satisfactory
71	05-02-2022	52	27	7	13	0.08	13	BDL	52	Satisfactory
72	09-02-2022	60	28	7	14	0.08	13	BDL	60	Satisfactory
73	12-02-2022	56	28	6	13	0.08	14	BDL	56	Satisfactory
74	16-02-2022	58	28	7	13	0.08	14	BDL	58	Satisfactory
75	19-02-2022	58	28	7	13	0.08	13	BDL	58	Satisfactory
76	23-02-2022	59	28	6	13	0.08	14	BDL	59	Satisfactory
77	26-02-2022	60	28	6	14	0.08	13	BDL	60	Satisfactory
MARCH										
78	02-03-2022	57	32	6	14	0.08	13	BDL	57	Satisfactory
79	05-03-2022	60	29	6	13	0.08	13	BDL	60	Satisfactory
80	09-03-2022	58	28	6	14	0.08	13	BDL	58	Satisfactory

81	12-03-2022	59	28	6	13	0.08	13	BDL	59	Satisfactory
82	16-03-2022	59	29	6	13	0.08	14	BDL	59	Satisfactory
83	19-03-2022	56	29	6	13	0.08	13	BDL	56	Satisfactory
84	23-03-2022	64	30	6	13	0.08	14	BDL	64	Satisfactory
85	26-03-2022	61	27	7	14	0.08	13	BDL	61	Satisfactory
86	30-03-2022	60	29	7	14	0.07	14	BDL	60	Satisfactory

* No Monitoring

ANNUAL AAQM DATA OF NAMP STATION FROM APRIL 2021 to MARCH 2022

Station: Residence of D. Rivonkar, Tilamol Junction

City: Tilamol

		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
	Parameters	PM10	PM2.5	SO2	NO2	*CO	O3	Pb	AQI	AIR QLTY
Sr. No	Date	24-hr avg	24-hr avg	24-hr avg	24-hr avg	1-hr avg	1-hr avg	24-hr avg		
APRIL										
2	07-04-2021	77	39	11	15	0.09	15.0	BDL	77	Satisfactory
3	10-04-2021	79	42	10	15	0.09	15.2	BDL	79	Satisfactory
4	14-04-2021	76	39	11	15	0.09	15.0	BDL	76	Satisfactory
5	17-04-2021	68	34	10	14	0.09	14.7	BDL	68	Satisfactory
6	21-04-2021	73	35	9	14	0.09	14.8	BDL	73	Satisfactory
7	24-04-2021	70	34	10	14	0.08	14.4	BDL	70	Satisfactory
8	28-04-2021	76	38	10	14	0.08	15.4	BDL	76	Satisfactory
MAY										
9	01-05-2021	67	36	8	14	0.09	14.3	BDL	67	Satisfactory
10	05-05-2021	70	33	8	13	0.09	14.1	BDL	70	Satisfactory
11	08-05-2021	62	33	8	14	0.08	13.9	BDL	62	Satisfactory
12	12-05-2021	59	27	7	13	0.08	14.3	BDL	59	Satisfactory
13	15-05-2021	63	29	7	13	0.07	14.0	BDL	63	Satisfactory
14	19-05-2021	53	27	7	13	0.08	13.8	BDL	53	Satisfactory
15	22-05-2021	55	25	7	13	0.07	13.7	BDL	55	Satisfactory
16	26-05-2021	57	24	7	13	0.08	13.6	BDL	57	Satisfactory
17	29-05-2021	53	24	7	13	0.08	13.8	BDL	53	Satisfactory
JUNE										
18	02-06-2021	53	22	7	14	0.06	14	BDL	53	Satisfactory
19	05-06-2021	54	22	7	13	0.06	14	BDL	54	Satisfactory
20	09-06-2021	53	24	7	12	0.06	13	BDL	53	Satisfactory
21	12-06-2021	53	21	7	13	0.06	13	BDL	53	Satisfactory
22	16-06-2021	50	21	7	13	0.06	13	BDL	50	Good
23	19-06-2021	51	21	7	13	0.06	13	BDL	51	Satisfactory
24	23-06-2021	54	22	7	13	0.06	13	BDL	54	Satisfactory

25	26-06-2021	50	22	7	13	0.06	13	BDL	50	Satisfactory
26	29-06-2021	55	22	7	13	0.06	13	BDL	55	Satisfactory
JULY										
27	03-07-2021	50	20	6	13	0.06	14	BDL	50	Satisfactory
28	07-07-2021	52	22	6	12	0.07	14	BDL	52	Satisfactory
29	10-07-2021	51	22	6	12	0.06	13	BDL	51	Satisfactory
30	14-07-2021	50	20	7	12	0.06	13	BDL	50	Satisfactory
31	17-07-2021	51	21	6	12	0.06	12	BDL	51	Satisfactory
32	21-07-2021	46	19	6	12	0.06	13	BDL	46	Good
33	24-07-2021	45	21	6	12	0.06	12	BDL	45	Good
34	28-07-2021	46	19	6	12	0.06	13	BDL	46	Good
35	31-07-2021	43	19	6	12	0.06	13	BDL	43	Good
AUGUST										
36	04-08-2021	49	21	6	12	0.07	14	BDL	49	Good
37	07-08-2021	50	21	6	12	0.06	13	BDL	50	Good
38	11-08-2021	49	21	6	12	0.07	13	BDL	49	Good
39	14-08-2021	49	20	6	12	0.06	13	BDL	49	Good
40	18-08-2021	48	20	6	12	0.06	13	BDL	48	Good
41	21-08-2021	52	23	7	12	0.06	13	BDL	52	Satisfactory
42	25-08-2021	51	22	7	12	0.06	13	BDL	51	Satisfactory
43	28-08-2021	49	19	6	12	0.06	13	BDL	49	Good
SEPTEMBER										
44	01-09-2021	47	24	6	13	0.07	14	BDL	47	Good
45	04-09-2021	49	21	6	12	0.07	14	BDL	49	Good
46	08-09-2021	49	20	7	13	0.07	13	BDL	49	Good
47	11-09-2021	51	21	6	12	0.06	14	BDL	51	Satisfactory
48	15-09-2021	51	23	7	13	0.06	14	BDL	51	Satisfactory
49	18-09-2021	52	22	6	12	0.06	14	BDL	52	Satisfactory
50	22-09-2021	50	21	6	13	0.06	14	BDL	50	Satisfactory
51	25-09-2021	51	23	6	12	0.06	14	BDL	51	Satisfactory
52	29-09-2021	55	24	6	12	0.06	14	BDL	55	Satisfactory

OCTOBER										
53	02-10-2021	57	28	7	13	0.08	13	BDL	57	Satisfactory
54	06-10-2021	52	27	7	13	0.07	12	BDL	52	Satisfactory
55	09-10-2021	59	24	7	13	0.07	12	BDL	59	Satisfactory
56	13-10-2021	57	27	7	13	0.08	12	BDL	57	Satisfactory
57	16-10-2021	58	22	7	13	0.08	13	BDL	58	Satisfactory
58	20-10-2021	56	25	7	13	0.08	12	BDL	56	Satisfactory
59	23-10-2021	58	27	7	13	0.08	12	BDL	58	Satisfactory
60	27-10-2021	55	26	7	13	0.08	13	BDL	55	Satisfactory
61	30-10-2021		25	7	13	0.08	13	BDL	41	Good
NOVEMBER										
62	03-11-2021	57	25	7	13	0.08	13	BDL	57	Satisfactory
63	06-11-2021	57	26	7	13	0.08	13	BDL	57	Satisfactory
64	10-11-2021	58	26	7	12	0.08	13	BDL	58	Satisfactory
65	13-11-2021	54	27	7	12	0.07	13	BDL	54	Satisfactory
66	17-11-2021	56	25	7	13	0.08	13	BDL	56	Satisfactory
67	20-11-2021	58	26	7	12	0.08	12	BDL	58	Satisfactory
68	24-11-2021	54	27	7	13	0.08	13	BDL	54	Satisfactory
69	27-11-2021	56	26	7	13	0.08	13	BDL	56	Satisfactory
DECEMBER										
70	01-12-2021	64	29	7	13	0.08	13	BDL	64	Satisfactory
71	04-12-2021	58	28	7	13	0.08	13	BDL	58	Satisfactory
72	08-12-2021	63	31	7	13	0.08	13	BDL	63	Satisfactory
73	11-12-2021	65	31	7	13	0.08	13	BDL	65	Satisfactory
74	15-12-2021	62	27	7	12	0.08	13	BDL	62	Satisfactory
75	18-12-2021	62	28	7	12	0.08	13	BDL	62	Satisfactory
76	22-12-2021	62	28	7	13	0.08	13	BDL	62	Satisfactory
77	25-12-2021	62	28	7	13	0.09	13	BDL	62	Satisfactory
78	29-12-2021	60	29	8	12	0.09	13	BDL	60	Satisfactory
JANUARY										
79	01-01-2022	59	27	7	13	0.08	14	BDL	59	Satisfactory
80	05-01-2022	57	29	7	14	0.08	14	BDL	57	Satisfactory
81	08-01-2022	61	30	6	13	0.08	14	BDL	61	Satisfactory

82	12-01-2022	56	26	6	13	0.07	13	BDL	56	Satisfactory
83	15-01-2022	56	28	6	13	0.08	13	BDL	56	Satisfactory
84	19-01-2022	58	27	6	13	0.08	13	BDL	58	Satisfactory
85	22-01-2022	55	27	6	12	0.08	13	BDL	55	Satisfactory
86	26-01-2022	59	30	7	13	0.08	13	BDL	59	Satisfactory
87	29-01-2022	60	30	6	13	0.08	14	BDL	60	Satisfactory
FEBRUARY										
88	01-02-2022	59	27	6	13	0.08	14	BDL	59	Satisfactory
89	05-02-2022	60	29	6	13	0.08	13	BDL	60	Satisfactory
90	09-02-2022	60	29	6	13	0.08	14	BDL	60	Satisfactory
91	12-02-2022	62	29	6	13	0.09	14	BDL	62	Satisfactory
92	16-02-2022	58	29	7	13	0.08	14	BDL	58	Satisfactory
93	19-02-2022	59	26	7	13	0.08	14	BDL	59	Satisfactory
94	23-02-2022	57	29	6	13	0.09	13	BDL	57	Satisfactory
95	26-02-2022	59	27	6	13	0.09	13	BDL	59	Satisfactory
MARCH										
96	02-03-2022	61	30	6	13	0.08	13	BDL	61	Satisfactory
97	05-03-2022	58	28	6	13	0.07	13	BDL	58	Satisfactory
98	09-03-2022	57	29	6	13	0.08	13	BDL	57	Satisfactory
99	12-03-2022	60	31	7	13	0.08	14	BDL	60	Satisfactory
100	16-03-2022	60	28	6	13	0.08	14	BDL	60	Satisfactory
101	19-03-2022	62	31	6	13	0.08	13	BDL	62	Satisfactory
102	23-03-2022	62	30	6	13	0.08	14	BDL	62	Satisfactory
103	26-03-2022	58	29	6	13	0.08	13	BDL	58	Satisfactory
104	30-03-2022	63	31	6	13	0.07	13	BDL	63	Satisfactory
* No Monitoring										

ANNUAL AAQM DATA OF NAMP STATION FROM APRIL 2021 to MARCH 2022										
Station: Rooftop of Power Station, Cuncolim Ind Estate									City: Cuncolim	
		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)							AQI	AIR QLTY
	Parameters	PM10	PM2.5	SO2	NO2	*CO	O3	Pb		
Sr. No	Date	24-hr avg	24-hr avg	24-hr avg	24-hr avg	1-hr avg	1-hr avg	24-hr avg		
APRIL										
1	03-04-2021	82	42	10	14	0.09	16	BDL	82	Satisfactory
2	07-04-2021	79	42	10	14	0.09	15	BDL	79	Satisfactory
3	10-04-2021	79	39	10	14	0.09	15	BDL	79	Satisfactory
4	14-04-2021	72	36	11	14	0.09	15	BDL	72	Satisfactory
5	17-04-2021	80	37	10	15	0.09	15	BDL	80	Satisfactory
6	21-04-2021	74	33	10	14	0.08	16	BDL	74	Satisfactory
7	24-04-2021	74	32	11	15	0.08	15	BDL	74	Satisfactory
8	27-04-2021	77	35	10	14	0.08	15	BDL	77	Satisfactory
MAY										
9	01-05-2021	62	28	9	14	0.09	15	BDL	62	Satisfactory
10	05-05-2021	65	33	9	12	0.08	14	BDL	65	Satisfactory
11	08-05-2021	70	35	8	14	0.08	14	BDL	70	Satisfactory
12	12-05-2021	73	31	8	13	0.08	14	BDL	73	Satisfactory
13	15-05-2021	54	24	8	14	0.07	14	BDL	54	Satisfactory
14	19-05-2021	60	27	7	13	0.08	13	BDL	60	Satisfactory
15	21-05-2021	60	28	7	13	0.08	13	BDL	60	Satisfactory
16	26-05-2021	68	32	7	13	0.07	13	BDL	68	Satisfactory
17	29-05-2021	62	29	7	12	0.07	13	BDL	62	Satisfactory
JUNE										
18	02-06-2021	55	25	8	12	0.08	14	BDL	55	Satisfactory
19	05-06-2021	56	24	7	13	0.08	14	BDL	56	Satisfactory
20	09-06-2021	59	22	8	13	0.08	14	BDL	59	Satisfactory
21	11-06-2021	54	24	8	13	0.07	14	BDL	54	Satisfactory
22	16-06-2021	54	22	8	13	0.07	14	BDL	54	Satisfactory
23	19-06-2021	53	23	8	13	0.07	14	BDL	53	Satisfactory

24	23-06-2021	54	23	7	12	0.07	13	BDL	54	Satisfactory
25	26-06-2021	55	24	6	13	0.07	13	BDL	55	Satisfactory
26	30-06-2021	51	21	6	12	0.07	13	BDL	51	Satisfactory
JULY										
27	03-07-2021	51	21	7	13	0.07	14	BDL	51	Satisfactory
28	07-07-2021	53	21	6	13	0.07	14	BDL	53	Satisfactory
29	10-07-2021	55	24	6	12	0.07	13	BDL	55	Satisfactory
30	14-07-2021	67	33	6	13	0.07	13	BDL	67	Satisfactory
31	17-07-2021	50	19	6	13	0.06	13	BDL	50	Satisfactory
32	21-07-2021	66	33	7	13	0.06	13	BDL	66	Satisfactory
33	24-07-2021	67	33	8	13	0.07	13	BDL	67	Satisfactory
34	29-07-2021	84	40	7	13	0.07	13	BDL	84	Satisfactory
35	31-07-2021	74	37	7	13	0.07	14	BDL	74	Satisfactory
AUGUST										
36	04-08-2021	70	33	7	13	0.07	14	BDL	70	Satisfactory
37	06-08-2021	56	27	7	13	0.07	14	BDL	56	Satisfactory
38	11-08-2021	59	29	7	13	0.07	14	BDL	59	Satisfactory
39	14-08-2021	54	25	6	12	0.07	13	BDL	54	Satisfactory
40	18-08-2021	55	23	6	13	0.07	13	BDL	55	Satisfactory
41	21-08-2021	53	25	7	13	0.06	13	BDL	53	Satisfactory
42	25-08-2021	55	25	7	13	0.07	13	BDL	55	Satisfactory
43	28-08-2021	59	26	7	13	0.07	13	BDL	59	Satisfactory
SEPTEMBER										
44	01-09-2021	49	20	7	13	0.08	14	BDL	49	Good
45	04-09-2021	47	21	7	13	0.08	14	BDL	47	Good
46	06-09-2021	56	22	7	13	0.08	14	BDL	56	Satisfactory
47	08-09-2021	55	24	7	12	0.07	14	BDL	55	Satisfactory
48	15-09-2021	52	22	7	12	0.07	14	BDL	52	Satisfactory
49	18-09-2021	54	22	7	12	0.07	14	BDL	54	Satisfactory
50	22-09-2021	55	22	6	13	0.07	14	BDL	55	Satisfactory
51	25-09-2021	61	27	6	12	0.07	14	BDL	61	Satisfactory
52	29-09-2021	52	23	6	13	0.07	14	BDL	52	Satisfactory

OCTOBER										
53	02-10-2021	63	30	8	12	0.08	13	BDL	63	Satisfactory
54	06-10-2021	66	33	7	13	0.08	12	BDL	66	Satisfactory
55	09-10-2021	62	31	8	13	0.08	12	BDL	62	Satisfactory
56	13-10-2021	62	31	8	13	0.08	13	BDL	62	Satisfactory
57	16-10-2021	63	29	8	13	0.07	13	BDL	63	Satisfactory
58	20-10-2021	70	33	7	13	0.08	13	BDL	70	Satisfactory
59	23-10-2021	66	31	8	13	0.08	13	BDL	66	Satisfactory
60	27-10-2021	73	33	7	13	0.08	13	BDL	73	Satisfactory
61	30-10-2021	74	34	7	13	0.08	14	BDL	74	Satisfactory
NOVEMBER										
62	03-11-2021	59	26	7	13	0.09	13	BDL	59	Satisfactory
63	06-11-2021	64	26	7	12	0.09	13	BDL	64	Satisfactory
64	10-11-2021	64	31	6	12	0.08	13	BDL	64	Satisfactory
65	13-11-2021	58	26	7	13	0.08	13	BDL	58	Satisfactory
66	17-11-2021	61	30	7	13	0.08	13	BDL	61	Satisfactory
67	20-11-2021	62	30	7	13	0.08	13	BDL	62	Satisfactory
68	24-11-2021	67	33	8	13	0.08	13	BDL	67	Satisfactory
69	27-11-2021	62	33	7	13	0.09	13	BDL	62	Satisfactory
DECEMBER										
70	01-12-2021	66	32	7	13	0.09	13	BDL	66	Satisfactory
71	04-12-2021	72	35	7	12	0.09	13	BDL	72	Satisfactory
72	08-12-2021	75	36	7	12	0.08	13	BDL	75	Satisfactory
73	11-12-2021	67	34	7	13	0.09	13	BDL	67	Satisfactory
74	15-12-2021	75	44	7	13	0.08	13	BDL	75	Satisfactory
75	18-12-2021	72	33	7	13	0.08	13	BDL	72	Satisfactory
76	22-12-2021	73	32	7	13	0.09	13	BDL	73	Satisfactory
77	25-12-2021	74	33	7	13	0.09	13	BDL	74	Satisfactory
78	29-12-2021	62	30	7	13	0.09	13	BDL	62	Satisfactory
JANUARY										
79	01-01-2022	67	31	6	14	0.09	14	BDL	67	Satisfactory
80	05-01-2022	71	34	6	14	0.09	14	BDL	71	Satisfactory
81	08-01-2022	73	33	7	13	0.09	14	BDL	73	Satisfactory

82	12-01-2022	67	32	7	13	0.08	13	BDL	67	Satisfactory
83	15-01-2022	78	31	6	14	0.09	14	BDL	78	Satisfactory
84	19-01-2022	71	31	6	13	0.08	14	BDL	71	Satisfactory
85	22-01-2022	70	32	7	13	0.08	14	BDL	70	Satisfactory
86	26-01-2022	68	30	7	13	0.08	14	BDL	68	Satisfactory
87	29-01-2022	66	33	7	13	0.09	14	BDL	66	Satisfactory
FEBRUARY										
88	02-02-2022	70	32	6	13	0.09	14	BDL	70	Satisfactory
89	05-02-2022	71	36	6	13	0.08	13	BDL	71	Satisfactory
90	09-02-2022	70	31	7	13	0.08	13	BDL	70	Satisfactory
91	12-02-2022	66	33	7	13	0.08	14	BDL	66	Satisfactory
92	16-02-2022	74	33	6	13	0.08	14	BDL	74	Satisfactory
93	19-02-2022	71	35	6	13	0.09	14	BDL	71	Satisfactory
94	23-02-2022	67	34	7	13	0.09	14	BDL	67	Satisfactory
95	26-02-2022	66	35	7	14	0.08	14	BDL	66	Satisfactory
MARCH										
96	02-03-2022	83	38	6	13	0.08	14	BDL	83	Satisfactory
97	05-03-2022	88	40	6	13	0.08	13	BDL	88	Satisfactory
98	09-03-2022	75	32	6	13	0.08	14	BDL	75	Satisfactory
99	12-03-2022	76	36	6	13	0.08	14	BDL	76	Satisfactory
100	16-03-2022	72	35	7	13	0.08	13	BDL	72	Satisfactory
101	19-03-2022	78	31	7	13	0.08	14	BDL	78	Satisfactory
102	23-03-2022	81	33	6	13	0.08	14	BDL	81	Satisfactory
103	26-03-2022	67	31	7	14	0.09	14	BDL	67	Satisfactory
104	30-03-2022	78	35	8	14	0.09	14	BDL	78	Satisfactory
* No Monitoring										

ANNUAL AAQM DATA OF NAMP STATION FROM APRIL 2021 to MARCH 2022										
Station: Near IDC Office									City: Kundaim	
		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)							AQI	AIR QLTY
	Parameters	PM10	PM2.5	SO2	NO2	*CO	O3	Pb		
Sr. No	Date	24-hr avg	24-hr avg	24-hr avg	24-hr avg	1-hr avg	1-hr avg	24-hr avg		
APRIL										
1	01-04-21	73	37	11	14	0.08	15	BDL	73	Satisfactory
2	05-04-21	75	37	11	14	0.09	15	BDL	75	Satisfactory
3	08-04-21	76	35	8	14	0.08	15	BDL	76	Satisfactory
4	12-04-21	62	30	8	14	0.08	15	BDL	62	Satisfactory
5	15-04-21	67	35	11	14	0.08	15	BDL	67	Satisfactory
6	19-04-21	73	37	10	13	0.08	14	BDL	73	Satisfactory
7	22-04-21	78	38	10	14	0.08	15	BDL	78	Satisfactory
8	26-04-21	77	39	10	14	0.09	15	BDL	77	Satisfactory
9	29-04-21	65	30	10	14	0.08	15	BDL	65	Satisfactory
MAY										
10	03-05-21	65	31	7	13	0.09	14	BDL	65	Satisfactory
11	06-05-21	71	36	7	14	0.09	14	BDL	71	Satisfactory
12	10-05-21	66	33	7	13	0.08	14	BDL	66	Satisfactory
13	13-05-21	63	33	7	13	0.08	13	BDL	63	Satisfactory
14	17-05-21	51	24	8	14	0.08	14	BDL	51	Satisfactory
15	20-05-21	51	28	7	12	0.08	13	BDL	51	Satisfactory
16	24-05-21	55	27	8	13	0.08	13	BDL	55	Satisfactory
17	27-05-21	53	27	7	12	0.07	13	BDL	53	Satisfactory
18	31-05-21	55	26	7	12	0.07	13	BDL	55	Satisfactory
JUNE										
19	03-06-21	50	21	7	13	0.07	14	BDL	50	Satisfactory
20	07-06-21	54	23	7	13	0.06	14	BDL	54	Satisfactory
21	10-06-21	53	22	7	13	0.07	14	BDL	53	Satisfactory
22	14-06-21	50	21	7	13	0.07	13	BDL	50	Good
23	17-06-21	51	22	7	13	0.07	14	BDL	51	Satisfactory
24	21-06-21	51	22	7	13	0.07	13	BDL	51	Satisfactory

25	24-06-21	53	21	7	12	0.07	13	BDL	53	Satisfactory
26	28-06-21	56	23	6	12	0.07	13	BDL	56	Satisfactory
JULY										
27	01-07-21	51	22	6	12	0.06	14	BDL	51	Satisfactory
28	05-07-21	52	21	6	12	0.06	14	BDL	52	Satisfactory
29	08-07-21	53	22	6	12	0.06	14	BDL	53	Satisfactory
30	12-07-21	53	22	6	12	0.06	13	BDL	53	Satisfactory
31	15-07-21	50	21	6	12	0.06	14	BDL	50	Good
32	19-07-21	50	20	6	12	0.06	14	BDL	50	Good
33	22-07-21	49	18	6	12	0.06	13	BDL	49	Good
34	26-07-21	49	19	6	12	0.06	13	BDL	49	Good
35	29-07-21	50	20	6	12	0.06	13	BDL	50	Good
AUGUST										
36	02-08-21	51	21	7	12	0.07	14	BDL	51	Satisfactory
37	05-08-21	50	21	7	13	0.07	14	BDL	50	Satisfactory
38	09-08-21	52	22	7	12	0.07	14	BDL	52	Satisfactory
39	12-08-21	51	18	7	12	0.07	14	BDL	51	Satisfactory
40	16-08-21	51	21	7	12	0.07	14	BDL	51	Satisfactory
41	19-08-21	52	21	7	12	0.07	14	BDL	52	Satisfactory
42	23-08-21	51	22	7	12	0.07	14	BDL	51	Satisfactory
43	26-08-21	53	23	7	12	0.07	13	BDL	53	Satisfactory
44	30-08-21	56	20	6	13	0.07	14	BDL	56	Satisfactory
SEPTEMBER										
45	02-09-21	48	23	7	13	0.07	14	BDL	48	Good
46	06-09-21	51	21	7	13	0.07	14	BDL	51	Satisfactory
47	09-09-21	48	21	7	12	0.07	14	BDL	48	Good
48	13-09-21	51	21	7	13	0.07	14	BDL	51	Satisfactory
49	16-09-21	50	22	7	13	0.07	14	BDL	50	Good
50	20-09-21	51	21	7	12	0.08	14	BDL	51	Satisfactory
51	23-09-21	52	22	6	12	0.08	14	BDL	52	Satisfactory
52	27-09-21	54	26	7	12	0.08	14	BDL	54	Satisfactory
53	30-09-21	54	24	6	12	0.08	14	BDL	54	Satisfactory

OCTOBER										
54	04-10-21	53	23	8	13	0.08	13	BDL	53	Satisfactory
55	07-10-21	52	23	8	13	0.08	13	BDL	52	Satisfactory
56	11-10-21	53	22	8	13	0.08	12	BDL	53	Satisfactory
57	14-10-21	54	28	7	14	0.08	12	BDL	54	Satisfactory
58	18-10-21	60	23	7	12	0.07	13	BDL	60	Satisfactory
59	21-10-21	59	24	7	12	0.08	12	BDL	59	Satisfactory
60	25-10-21	56	26	7	13	0.08	13	BDL	56	Satisfactory
61	28-10-21	59	27	7	13	0.08	13	BDL	59	Satisfactory
NOVEMBER										
62	01-11-21	58	26	7	13	0.08	13	BDL	58	Satisfactory
63	04-11-21	57	27	6	13	0.08	13	BDL	57	Satisfactory
64	08-11-21	59	27	7	12	0.08	13	BDL	59	Satisfactory
65	11-11-21	58	26	7	12	0.08	13	BDL	58	Satisfactory
66	15-11-21	59	25	7	13	0.08	13	BDL	59	Satisfactory
67	18-11-21	57	26	7	13	0.09	13	BDL	57	Satisfactory
68	22-11-21	58	28	7	13	0.09	13	BDL	58	Satisfactory
69	25-11-21	59	26	7	13	0.08	13	BDL	59	Satisfactory
70	29-11-21	57	26	7	13	0.08	13	BDL	57	Satisfactory
DECEMBER										
71	02-12-21	72	34	7	13	0.08	13	BDL	72	Satisfactory
72	06-12-21	73	36	7	13	0.08	13	BDL	73	Satisfactory
73	09-12-21	77	37	7	13	0.08	13	BDL	77	Satisfactory
74	13-12-21	69	31	7	13	0.08	13	BDL	69	Satisfactory
75	16-12-21	76	29	7	13	0.08	13	BDL	76	Satisfactory
76	21-12-21	77	29	7	13	0.09	13	BDL	77	Satisfactory
77	23-12-21	68	29	7	12	0.09	13	BDL	68	Satisfactory
78	27-12-21	69	28	7	13	0.09	13	BDL	69	Satisfactory
79	30-12-21	67	28	7	13	0.08	13	BDL	67	Satisfactory

JANUARY										
80	03-01-22	62	28	7	14	0.08	14	BDL	62	Satisfactory
81	06-01-22	60	29	7	14	0.09	13	BDL	60	Satisfactory
82	10-01-22	62	27	7	13	0.09	14	BDL	62	Satisfactory
83	13-01-22	58	27	6	13	0.08	14	BDL	58	Satisfactory
84	17-01-22	55	28	7	13	0.08	14	BDL	55	Satisfactory
85	20-01-22	58	29	7	13	0.08	14	BDL	58	Satisfactory
86	24-01-22	62	28	7	13	0.09	14	BDL	62	Satisfactory
87	27-01-22	61	28	6	13	0.08	14	BDL	61	Satisfactory
88	31-01-22	63	30	7	13	0.09	14	BDL	63	Satisfactory
FEBRUARY										
89	03-02-22	63	32	6	13	0.08	14	BDL	63	Satisfactory
90	07-02-22	60	27	6	13	0.09	14	BDL	60	Satisfactory
91	10-02-22	65	29	7	13	0.08	14	BDL	65	Satisfactory
92	14-02-22	60	32	6	13	0.09	14	BDL	60	Satisfactory
93	17-02-22	59	30	6	14	0.08	13	BDL	59	Satisfactory
94	21-02-22	59	30	7	14	0.09	14	BDL	59	Satisfactory
95	24-02-22	56	27	7	13	0.09	14	BDL	56	Satisfactory
96	28-02-22	60	31	7	13	0.09	14	BDL	60	Satisfactory
MARCH										
97	03-03-22	61	29	7	14	0.08	14	BDL	61	Satisfactory
98	07-03-22	63	30	6	13	0.09	14	BDL	63	Satisfactory
99	10-03-22	66	32	6	13	0.08	13	BDL	66	Satisfactory
100	14-03-22	59	32	6	14	0.08	14	BDL	59	Satisfactory
101	17-03-22	65	31	7	13	0.09	14	BDL	65	Satisfactory
102	21-03-22	62	33	7	13	0.08	14	BDL	62	Satisfactory
103	24-03-22	63	34	7	13	0.08	13	BDL	63	Satisfactory
104	28-03-22	63	32	6	13	0.09	14	BDL	63	Satisfactory
105	31-03-22	67	30	6	13	0.09	13	BDL	67	Satisfactory
* No Monitoring										

ANNUAL AAQM DATA OF NAMP STATION FROM APRIL 2021 to MARCH 2022

Station: Tuem Industrial Estate Near ESIC Hospital

City: Tuem

		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)							AQI	AIR QLTY
	Parameters	PM10	PM2.5	SO2	NO2	*CO	O3	Pb		
Sr. No	Date	24-hr avg	24-hr avg	24-hr avg	24-hr avg	1-hr avg	1-hr avg	24-hr avg		
APRIL										
1	01-04-21	68	34	9	13	0.08	14.9	BDL	68	Satisfactory
2	05-04-21	71	35	9	13	0.08	14.7	BDL	71	Satisfactory
3	08-04-21	69	36	9	13	0.08	14.9	BDL	69	Satisfactory
4	12-04-21	72	35	9	13	0.07	14.5	BDL	72	Satisfactory
5	15-04-21	71	34	9	13	0.08	14.7	BDL	71	Satisfactory
6	19-04-21	66	33	9	14	0.07	14.4	BDL	66	Satisfactory
7	22-04-21	70	34	9	14	0.07	14.8	BDL	70	Satisfactory
8	26-04-21	72	36	9	14	0.07	14.2	BDL	72	Satisfactory
9	29-04-21	72	32	8	13	0.07	14.6	BDL	72	Satisfactory
MAY										
10	03-05-21	67	29	8	14	0.08	14.3	BDL	67	Satisfactory
11	06-05-21	62	29	8	14	0.07	14.0	BDL	62	Satisfactory
12	10-05-21	63	30	9	14	0.08	14.1	BDL	63	Satisfactory
13	14-05-21	52	25	8	13	0.08	13.8	BDL	52	Satisfactory
14	19-05-21	58	29	8	13	0.07	13.7	BDL	58	Satisfactory
15	22-05-21	56	29	7	13	0.07	13.9	BDL	56	Satisfactory
16	25-05-21	57	25	7	12	0.07	13.8	BDL	57	Satisfactory
17	27-05-21	50	26	7	13	0.07	13.9	BDL	50	Satisfactory
18	31-05-21	54	23	7	12	0.08	14.0	BDL	54	Satisfactory
JUNE										
19	03-06-21	52	21	7	13	0.06	13.8	BDL	52	Satisfactory
20	07-06-21	54	22	7	13	0.06	13.7	BDL	54	Satisfactory
21	10-06-21	54	22	7	14	0.07	13.6	BDL	54	Satisfactory
22	14-06-21	53	22	7	13	0.07	13.4	BDL	53	Satisfactory
23	17-06-21	55	22	7	13	0.07	13.5	BDL	55	Satisfactory

24	21-06-21	51	21	7	12	0.06	13.2	BDL	51	Satisfactory
25	24-06-21	51	21	7	12	0.07	13.3	BDL	51	Satisfactory
26	29-06-21	52	22	7	12	0.07	13.1	BDL	52	Satisfactory
JULY										
27	01-07-21	51	21	7	12	0.07	13.2	BDL	51	Satisfactory
28	05-07-21	51	21	7	13	0.07	13.1	BDL	51	Satisfactory
29	08-07-21	52	22	6	12	0.07	13.0	BDL	52	Satisfactory
30	13-07-21	51	22	6	12	0.07	12.8	BDL	51	Satisfactory
31	15-07-21	49	20	6	11	0.06	12.5	BDL	49	Good
32	19-07-21	50	20	6	11	0.06	12.4	BDL	50	Good
33	23-07-21	48	19	7	13	0.07	12.7	BDL	48	Good
34	26-07-21	49	19	6	12	0.06	12.6	BDL	49	Good
35	29-07-21	49	19	6	12	0.06	12.5	BDL	49	Good
AUGUST										
36	02-08-21	54	23	7	12	0.07	13.3	BDL	54	Satisfactory
37	05-08-21	52	23	7	13	0.07	13.0	BDL	52	Satisfactory
38	09-08-21	52	23	6	12	0.07	13.1	BDL	52	Satisfactory
39	12-08-21	49	21	6	12	0.07	13.2	BDL	49	Good
40	16-08-21	51	23	7	12	0.07	13.2	BDL	51	Satisfactory
41	19-08-21	51	22	7	12	0.06	12.8	BDL	51	Satisfactory
42	23-08-21	53	23	7	12	0.07	12.9	BDL	53	Satisfactory
43	26-08-21	54	23	7	12	0.06	12.7	BDL	54	Satisfactory
44	30-08-21	52	20	6	12	0.07	12.8	BDL	52	Satisfactory
SEPTEMBER										
45	02-09-21	50	21	7	12	0.07	13.2	BDL	50	Satisfactory
46	06-09-21	47	23	6	12	0.07	13.0	BDL	47	Good
47	09-09-21	50	22	6	12	0.07	13.3	BDL	50	Good
48	13-09-21	51	20	7	12	0.07	13.4	BDL	51	Satisfactory
49	16-09-21	52	22	7	13	0.07	13.9	BDL	52	Satisfactory
50	20-09-21	54	21	7	12	0.06	13.8	BDL	54	Satisfactory
51	23-09-21	52	22	6	12	0.07	13.9	BDL	52	Satisfactory
52	27-09-21	56	25	7	13	0.07	13.7	BDL	56	Satisfactory
53	30-09-21	55	24	7	12	0.08	14.1	BDL	55	Satisfactory

OCTOBER										
54	04-10-21	54	25	7	13	0.07	13.3	BDL	54	Satisfactory
55	07-10-21	55	25	7	13	0.07	13.1	BDL	55	Satisfactory
56	11-10-21	54	24	7	13	0.08	13.1	BDL	54	Satisfactory
57	14-10-21	54	26	7	13	0.07	12.9	BDL	54	Satisfactory
58	18-10-21	55	25	7	13	0.08	12.9	BDL	55	Satisfactory
59	21-10-21	57	24	8	13	0.08	12.9	BDL	57	Satisfactory
60	26-10-21	54	25	8	14	0.08	13.2	BDL	54	Satisfactory
61	28-10-21	53	24	7	13	0.08	12.7	BDL	53	Satisfactory
NOVEMBER										
62	01-11-21	57	26	7	13	0.07	12.9	BDL	57	Satisfactory
63	04-11-21	57	26	7	13	0.07	13.0	BDL	57	Satisfactory
64	08-11-21	58	28	7	13	0.08	12.9	BDL	58	Satisfactory
65	11-11-21	56	25	7	13	0.08	13.4	BDL	56	Satisfactory
66	15-11-21	56	26	7	13	0.08	13.5	BDL	56	Satisfactory
67	18-11-21	56	25	7	13	0.08	13.7	BDL	56	Satisfactory
68	22-11-21	55	25	7	13	0.08	13.7	BDL	55	Satisfactory
69	25-11-21	54	24	7	13	0.08	13.4	BDL	54	Satisfactory
70	29-11-21	53	24	7	13	0.08	13.1	BDL	53	Satisfactory
DECEMBER										
71	02-12-21	57	29	7	14	0.09	13.6	BDL	57	Satisfactory
72	06-12-21	62	28	7	13	0.08	13.3	BDL	62	Satisfactory
73	09-12-21	56	32	7	13	0.08	13.7	BDL	56	Satisfactory
74	13-12-21	58	24	7	13	0.09	13.7	BDL	58	Satisfactory
75	16-12-21	59	26	7	13	0.09	13.1	BDL	59	Satisfactory
76	20-12-21	61	29	7	13	0.09	13.9	BDL	61	Satisfactory
77	23-12-21	60	28	7	13	0.08	14.2	BDL	60	Satisfactory
78	27-12-21	58	27	7	13	0.09	13.1	BDL	58	Satisfactory
79	30-12-21	55	25	7	13	0.08	12.9	BDL	55	Satisfactory
JANUARY										
80	03-01-22	52	28	7	13	0.08	13.9	BDL	52	Satisfactory
81	06-01-22	59	26	7	13	0.08	13.9	BDL	59	Satisfactory
82	10-01-22	58	29	7	13	0.08	13.3	BDL	58	Satisfactory

83	13-01-22	56	25	6	14	0.08	13.5	BDL	56	Satisfactory
84	17-01-22	59	26	6	13	0.07	13.1	BDL	59	Satisfactory
85	20-01-22	57	28	6	13	0.07	12.8	BDL	57	Satisfactory
86	24-01-22	57	26	6	13	0.07	13.2	BDL	57	Satisfactory
87	27-01-22	58	29	6	14	0.08	13.2	BDL	58	Satisfactory
88	31-01-22	58	28	6	14	0.08	13.4	BDL	58	Satisfactory
FEBRUARY										
89	03-02-22	63	26	7	13	0.08	13.9	BDL	63	Satisfactory
90	07-02-22	62	28	7	13	0.08	13.4	BDL	62	Satisfactory
91	10-02-22	59	31	7	13	0.08	13.2	BDL	59	Satisfactory
92	14-02-22	60	29	7	14	0.08	13.7	BDL	60	Satisfactory
93	17-02-22	57	26	7	13	0.08	13.8	BDL	57	Satisfactory
94	21-02-22	58	28	6	14	0.08	13.5	BDL	58	Satisfactory
95	24-02-22	59	26	7	14	0.07	13.6	BDL	59	Satisfactory
96	28-02-22	55	26	7	13	0.08	13.8	BDL	55	Satisfactory
MARCH										
97	03-03-22	56	26	8	13	0.08	13.7	BDL	56	Satisfactory
98	07-03-22	58	28	7	14	0.08	13.6	BDL	58	Satisfactory
99	10-03-22	62	30	7	14	0.08	13.4	BDL	62	Satisfactory
100	14-03-22	62	27	6	14	0.08	13.5	BDL	62	Satisfactory
101	17-03-22	64	28	6	14	0.08	13.6	BDL	64	Satisfactory
102	21-03-22	60	29	7	14	0.08	13.2	BDL	60	Satisfactory
103	24-03-22	60	31	7	14	0.09	13.3	BDL	60	Satisfactory
104	28-03-22	58	28	6	14	0.08	13.4	BDL	58	Satisfactory
105	31-03-22	60	28	7	14	0.08	13.6	BDL	60	Satisfactory

ANNUAL AAQM DATA OF NAMP STATION FROM					APRIL 2021 to MARCH 2022		
Station: Fire Station, MPT					City: Marmugoa		
		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)				AQI	AIR QLTY
	Parameters	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
Sr.No	Date	24-hr avg	24-hr avg	24-hr avg	24-hr avg		
APRIL							
1	01-04-2021	76	13	2	25	76	Satisfactory
2	07-04-2021	43	12	2	15	43	Good
3	09-04-2021	51	33	2	21	55	Satisfactory
4	12-04-2021	68	20	2	22	68	Satisfactory
5	15-04-2021	53	13	2	27	53	Satisfactory
6	21-04-2021	46	6	2	19	46	Good
7	23-04-2021	58	13	2	16	58	Satisfactory
8	28-04-2021	71	11	2	18	71	Satisfactory
9	30-04-2021	75	21	2	19	75	Satisfactory
MAY							
10	05-05-2021	36	11	2	21	36	Good
11	07-05-2021	33	8	2	21	33	Good
12	11-05-2021	54	8	2	19	54	Satisfactory
13	13-05-2021	77	13	2	19	77	Satisfactory
14	19-05-2021	60	6	2	23	60	Satisfactory
15	21-05-2021	51	3	2	22	51	Satisfactory
16	26-05-2021	105	MB	2	15	103	Moderate
JUNE							
17	02-06-2021	28	13	2	18	28	Good
18	04-06-2021	34	Monitoring stopped due to Rainy Season	2	18	34	Good
19	11-06-2021	29		2	12	29	Good
20	18-06-2021	44		2	11	44	Good
21	23-06-2021	49		2	21	49	Good
22	25-06-2021	35		2	12	35	Good
23	30-06-2021	22		2	13	22	Good

JULY							
24	02-07-2021	27	Monitoring stopped due to Rainy Season	2	16	27	Good
25	07-07-2021	19		2	10	19	Good
26	09-07-2021	7		2	13	16	Good
27	23-07-2021	56		2	9	56	Satisfactory
28	28-07-2021	63		2	12	63	Satisfactory
29	30-07-2021	57		2	9	57	Satisfactory
AUGUST							
30	04-08-2021	41	Monitoring stopped due to Rainy Season	2	5	41	Good
31	06-08-2021	26		2	9	26	Good
32	11-08-2021	51		2	9	51	Satisfactory
33	13-08-2021	45		2	11	45	Good
34	18-08-2021	30		2	15	30	Good
35	20-08-2021	32		2	16	32	Good
36	25-08-2021	41		2	10	41	Good
37	27-08-2021	22		2	13	22	Good
SEPTEMBER							
38	01-09-2021	24	Monitoring stopped due to Rainy Season	2	5	24	Good
39	03-09-2021	27		2	5	27	Good
40	09-09-2021	43		2	5	43	Good
41	15-09-2021	50		2	5	50	Good
42	17-09-2021	39		2	5	39	Good
43	22-09-2021	20		2	5	20	Good
44	24-09-2021	26		2	5	26	Good
45	29-09-2021	17		2	5	17	Good
OCTOBER							
46	01-10-2021	29	38	2	5	63	Satisfactory
47	06-10-2021	26	*	2	5	26	Good
48	08-10-2021	20	*	2	15	20	Good
49	12-10-2021	55	*	2	12	55	Satisfactory
50	14-10-2021	36	*	2	5	36	Good
51	20-10-2021	70	28	2	13	70	Satisfactory

52	22-10-2021	45	35	2	10	58	Satisfactory
53	27-10-2021	92	60	2	11	100	Satisfactory
54	29-10-2021	84	67	2	10	123	Moderate
NOVEMBER							
55	03-11-2021	25	15	2	5	25	Good
56	05-11-2021	18	14	2	5	23	Good
57	10-11-2021	207	74	2	12	171	Moderate
58	12-11-2021	155	33	2	12	137	Moderate
59	17-11-2021	58	25	2	14	58	Satisfactory
60	19-11-2021	42	26	2	14	43	Good
61	24-11-2021	31	23	2	22	38	Good
62	26-11-2021	80	11	2	18	80	Satisfactory
63	30-11-2021	54	17	2	13	54	Satisfactory
DECEMBER							
64	02-12-2021	27	16	2	13	27	Good
65	08-12-2021	133	46	2	14	122	Moderate
66	10-12-2021	67	34	2	18	67	Satisfactory
67	15-12-2021	76	41	2	14	76	Satisfactory
68	17-12-2021	141	59	2	15	127	Moderate
69	21-12-2021	128	64	2	15	119	Moderate
70	23-12-2021	134	91	2	17	203	Poor
71	28-12-2021	104	49	2	5	103	Moderate
72	30-12-2021	69	38	2	5	69	Satisfactory
JANUARY							
73	05-01-2022	98	41	2	17	98	Satisfactory
74	07-01-2022	108	55	2	16	105	Moderate
75	12-01-2022	61	46	2	11	77	Satisfactory
76	14-01-2022	48	21	2	18	48	Good
77	19-01-2022	90	19	2	9	90	Satisfactory
78	21-01-2022	70	31	2	10	70	Satisfactory
79	25-01-2022	118	46	2	16	112	Moderate
80	28-01-2022	123	108	2	11	260	Poor

FEBRUARY							
81	02-02-2022	87	31	2	12	87	Satisfactory
82	04-02-2022	66	20	2	5	66	Satisfactory
83	09-02-2022	100	91	2	16	203	Poor
84	11-02-2022	100	53	2	14	100	Satisfactory
85	16-02-2022	105	11	2	5	103	Moderate
86	18-02-2022	121	29	2	13	114	Moderate
87	23-02-2022	69	56	2	5	93	Satisfactory
88	25-02-2022	72	39	2	9	72	Satisfactory
MARCH							
89	02-03-2022	72	43	2	15	72	Satisfactory
90	04-03-2022	129	MB	2	13	119	Moderate
91	09-03-2022	60	MB	2	13	60	Satisfactory
92	11-03-2022	105	MB	2	10	103	Moderate
93	15-03-2022	146	MB	2	13	131	Moderate
94	17-03-2022	62	MB	2	5	62	Satisfactory
95	23-03-2022	60	MB	2	13	60	Satisfactory
96	25-03-2022	37	MB	2	12	37	Good
97	30-03-2022	38	MB	2	21	38	Good
* No Monitoring MB-Machine Breakdown							

ANNEXURE VII

NWMP ANNUAL REPORT 2021-2022

RIVER CHAPORA NEAR ALORNA FORT, PERNEM														Limit for class C river as per CPCB classification based on designated best use of rivers
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	
1	Temperature°C	28	29	29	27	28	28	29	28	27	28	28	29	4 mg/l or more 6-9
2	Dissolved Oxygen(mg/l)	7.1	6.0	6.7	7.6	7.8	7.9	7.4	7.9	7.4	7.0	7.1	7.6	
3	pH	6.80	6.70	6.85	6.88	6.74	6.34	6.5	6.83	6.2	7.29	7.14	6.71	
4	Conductivity(µs/cm)	3260.0	5817.0	155.52	48.4	66.4	78.1	59.2	96.06	1078.0	3956.0	6162.0	3.349	3 mg/l or less
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.23	0.124	0.12	0.18	0.18	0.13	0.17	BDL	BDL	0.12	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.021	0.007	BDL	0.01	0.008	0.005	0.005	0.005	0.016	0.009	0.007	5000 or less MPN/100 ml
8	Total Coliform(MPN/100ml)	2200	1700	2200	2300	3300	2200	3300	2700	2400	3300	1400	1700	
9	Fecal Coliform(MPN/100ml)	1400	780	1400	1300	1300	1700	1700	1700	1300	1700	940	1100	
10	Fecal Streptococci(MPN/100ml)	121	351	281	490	330	490	330	310	330	460	130	140	
11	Turbidity(NTU)	3.74	3.10	5.07	5.82	22.50	11.34	16.62	6.60	6.0	3.69	3.03	4.07	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	28.0	26.0	22.0	22.0	16.0	18.0	22.0	24.0	28.0	36.0	36.0	36.0	1272.0
14	Chlorides(mg/l)	1174.0	1760.0	29.5	8.0	4.5	4.5	6.0	13.9	291.0	1562.5	1467.6	1272.0	
15	COD(mg/l)	4.0	6.0	4.0	6.0	6.0	6.0	BDL	4.0	4.0	10.0	10.0	18.0	
16	Total Kjeldahl Nitrogen(mg/l)	1.12	1.1	3.4	2.8	0.56	1.12	1.68	0.56	BDL	2.80	1.7	0.56	BDL
17	Ammonia (mg/l)	0.05	BDL	BDL	BDL	0.07	0.06	BDL	BDL	BDL	BDL	0.05	BDL	
18	Total Hardness(mg/l)	270.0	900.0	24.0	22.0	16.0	20.0	18.0	30.0	106.0	378.0	600.0	342.0	
19	Calcium(mg/l)	24.0	160.0	5.6	3.2	4.8	4.8	6.0	6.4	12.0	63.3	160.3	26.5	67.1
20	Magnesium(mg/l)	51.0	121.0	2.4	3.4	BDL	BDL	BDL	3.4	18.5	53.5	48.6	67.1	
21	Sulphate(mg/l)	82.5	117.0	4.59	3.7	4.0	2.29	2.00	BDL	49.00	376.25	15.53	82.1	
22	Sodium(mg/l)	-	-	-	-	-	-	19.0	27.9	162.7	709.1	1176.0	451.6	2042.0
23	Total Dissolved Solids(mg/l)	2035.0	4071.0	92.0	30.0	41.0	48.0	41.0	56.0	755.0	2361.0	3652.0	2042.0	
24	Total Fixed Solids(mg/l)	1445.0	2440.0	88.0	18.0	24.0	28.0	24.0	33.0	380.0	401.0	1503.0	1433.0	
25	Total Suspended Solids(mg/l)	14.0	22.0	10.0	14.0	21.0	22.0	5.0	12.0	12.0	4.0	7.0	12.0	0.26
26	Phosphate(mg/l)	BDL	BDL	BDL	BDL	0.02	BDL	0.02	0.06	BDL	BDL	BDL	BDL	
27	Boron(mg/l)	0.58	BDL	BDL	BDL	BDL	BDL	0.29	BDL	BDL	BDL	0.20	BDL	
28	Potassium(mg/l)	-	-	-	-	-	-	15.6	11.5	16.5	47.4	88.1	35.0	0.2
29	Fluoride(mg/l)	BDL	BDL	BDL	0.37	BDL	BDL	BDL	BDL	BDL	2.55	0.20	0.2	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	0.054
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	0.018	-	-	-	-	-	0.054	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	BDL
34	Chromium(mg/l)	0.067	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.092	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.012	-	-	-	-	-	BDL	-	-	-	-	-	BDL
37	Iron Total(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	BDL
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	BDL
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	BDL
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	BDL
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	BDL
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-

Sr. No	Parameters	RIVER KALNA AT CHANDEL, PERNEM												Limit for class C river as per CPCB classification based on designated best use of rivers
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	
1	Temperature°C	28	29	29	28	28	28	29	28	27	28	28	28	4 mg/l or more 6-9
2	Dissolved Oxygen(mg/l)	6.9	6.1	7.2	7.9	7.3	7.8	7.7	8.1	8.0	7.4	6.7	7.1	
3	pH	6.88	6.50	7.3	6.91	6.82	6.29	6.4	6.85	7.3	7.22	7.13	6.49	
4	Conductivity(us/cm)	105.10	98.55	78.64	54.0	53.92	63.26	59.23	90.80	66.25	68.97	80.24	85.92	3 mg/l or less
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.21	0.169	BDL	0.22	0.12	BDL	0.2	BDL	BDL	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N(mg/l)	BDL	0.012	BDL	BDL	0.01	BDL	0.005	BDL	BDL	BDL	BDL	BDL	5000 or less MPN/100 ml
8	Total Coliform(MPN/100ml)	2300	3300	2700	3300	2300	2300	2300	2200	2200	2600	3500	2800	
9	Fecal Coliform(MPN/100ml)	1300	1700	2200	2300	1300	1300	1300	1300	1700	2100	1700	2200	
10	Fecal Streptococci (MPN/100ml)	541	221	351	68	78	230	330	230	310	490	220	170	4.10
11	Turbidity(NTU)	3.31	2.05	6.27	6.50	24.70	11.83	19.22	7.47	5.83	5.75	3.61	4.10	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	6.85 6.0 1.7
13	Total Alkalinity(mg/l)	26.0	28.0	30.0	24.0	18.0	18.0	20.0	22.0	26.0	40.0	30.0	34.0	
14	Chlorides(mg/l)	6.4	7.0	2.5	6.0	4.5	5.5	6.0	10.2	5.3	8.3	6.85	127.70	
15	COD(mg/l)	4.0	6.0	4.0	6.0	6.0	6.0	4.0	4.0	BDL	6.0	8.0	6.0	0.06 BDL 42.0
16	Total Kjeldahl Nitrogen(mg/l)	1.12	BDL	5.00	2.2	1.12	1.12	1.68	1.68	BDL	2.24	1.1	1.7	
17	Ammonia (mg/l)	BDL	BDL	BDL	BDL	BDL	0.13	BDL	BDL	BDL	BDL	0.06	BDL	
18	Total Hardness(mg/l)	30.0	28.0	24.0	18.0	16.0	22.0	16.0	26.0	20.0	38.0	32.0	42.0	8.0 11.2 5.4
19	Calcium(mg/l)	7.2	10.0	4.8	4.8	4.8	4.81	5.00	8.00	6.4	8.0	8.0	8.0	
20	Magnesium(mg/l)	2.92	BDL	2.90	BDL	BDL	2.43	BDL	BDL	BDL	4.37	BDL	5.4	
21	Sulphate(mg/l)	2.5	4.0	2.05	5.5	2.8	2.25	3.00	BDL	BDL	14.85	3.7	3.7	5.4
22	Sodium(mg/l)	-	-	-	-	-	-	18.3	28.2	26.0	122.0	25.4	5.4	
23	Total Dissolved Solids(mg/l)	71.0	66.0	46.0	32.0	31.0	35.0	40.0	54.0	45.0	43.0	52.0	50.0	
24	Total Fixed Solids(mg/l)	41.0	38.0	43.0	20.0	18.0	21.0	24.0	36.0	25.0	19.0	22.0	30.0	0.73
25	Total Suspended Solids(mg/l)	10.0	20.0	5.0	10.0	22.0	19.0	23.0	12.0	8.0	5.0	10.0	11.0	
26	Phosphate(mg/l)	0.05	0.07	0.061	0.03	0.02	BDL	0.02	BDL	BDL	BDL	BDL	BDL	
27	Boron(mg/l)	0.92	0.2	BDL	BDL	BDL	BDL	0.27	BDL	BDL	BDL	BDL	BDL	8.1 0.1 BDL
28	Potassium(mg/l)	-	-	-	-	-	-	15.5	12	2.1	54.4	8.1	0.1	
29	Fluoride(mg/l)	0.33	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.2	0.24	BDL	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	-
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.054	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	-
34	Chromium(mg/l)	0.058	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.074	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	-
37	Iron Total(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
40	DDT-o,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfant(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
43	beta Endosulfant(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

RIVER ASSANORA AT ASSANORA														Limit for class C river as per CPCB classification based on designated best use of rivers
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	
1	Temperature°C	31	29	29	28	28	28	27	30	30	30	28	29	4 mg/l or more
2	Dissolved Oxygen(mg/l)	8.6	6.7	6.5	7.0	6.6	6.8	6.8	7.4	6.9	7.0	6.9	7.1	
3	pH	6.36	6.70	6.97	6.21	6.69	6.52	6.9	6.21	6.7	6.75	6.82	6.84	
4	Conductivity(µs/cm)	60.5	57.93	63.73	56.96	69.18	54.38	51.77	71.41	62.83	60.19	54.36	59.48	3 mg/l or less
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.0	BDL	BDL	BDL	2.0	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	0.78	BDL	0.46	0.25	0.15	0.15	BDL	BDL	0.14	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	BDL	BDL	0.006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	5000 or less MPN/100 ml
8	Total Coliform(MPN/100ml)	1700	1400	1300	23	130	240	350	490	790	940	1400	1700	
9	Fecal Coliform(MPN/100ml)	1100	790	790	13	23	79	240	330	490	490	940	1100	
10	Fecal Streptococci (MPN/100ml)	95	281	47	2.0	4.5	23	33	79	49	130	170	140	
11	Turbidity(NTU)	4.71	1.27	8.44	5.99	6.87	7.28	5.94	7.78	1.27	3.4	3.04	3.32	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	20.0	18.0	20.0	16.0	12.0	16.0	16.0	24.0	20.0	20.0	20.0	20.0	
14	Chlorides(mg/l)	13.20	6.0	6.50	5.87	10.9	6.5	5.0	10.7	9.0	18.1	7.83	6.9	
15	COD(mg/l)	6.0	BDL	4.0	6.0	6.0	6.0	6.0	6.0	BDL	8.0	6.0	BDL	
16	Total Kjeldahl Nitrogen(mg/l)	BDL	2.2	2.8	1.68	1.12	1.12	1.68	2.24	BDL	2.80	1.7	1.68	
17	Ammonia (mg/l)	BDL	0.11	BDL	BDL	BDL	BDL	0.05	BDL	BDL	BDL	BDL	BDL	
18	Total Hardness(mg/l)	26.0	18.0	14.0	18.0	18.0	16.0	16.0	26.0	16.0	26.0	18.0	22.0	
19	Calcium(mg/l)	4.80	4.0	4.81	10.0	4.0	4.0	5.0	5.6	3.2	5.6	5.6	4.81	
20	Magnesium(mg/l)	3.4	2.0	BDL	2.0	BDL	BDL	BDL	2.92	BDL	2.92	BDL	2.4	
21	Sulphate(mg/l)	BDL	2.0	6.46	5.04	BDL	2.82	3.00	BDL	BDL	4.22	2.70	3.2	
22	Sodium(mg/l)	-	-	-	-	-	-	34.7	28.6	25.7	121.8	25.5	5.9	
23	Total Dissolved Solids(mg/l)	37.0	38.0	37.0	36.0	44.0	34.0	34.0	43.0	42.0	36.0	35.0	40.0	
24	Total Fixed Solids(mg/l)	26.0	22.0	31.0	19.0	26.0	17.0	20.0	33.0	25.0	16.0	21.0	30.0	
25	Total Suspended Solids(mg/l)	12.0	37.0	5.0	10.0	10.0	7.0	3.0	17.0	8.0	4.0	6.0	29.0	
26	Phosphate(mg/l)	BDL	0.05	0.06	BDL	0.02	BDL	BDL	BDL	BDL	0.02	BDL	BDL	
27	Boron(mg/l)	0.86	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
28	Potassium(mg/l)	-	-	-	-	-	-	16.5	12.5	2.9	57.9	8.0	0.1	
29	Flouride(mg/l)	BDL	BDL	0.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.010	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.038	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	0.025	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.051	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
37	IronTotal(mg/l)	0.053	-	-	-	-	-	0.268	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

RIVER VALVANTI AT SANQUELIM														Limit for class C river as per CPCB classification based on designated best use of rivers
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	
1	Temperature°C	32	29	28	28	28	28	27	30	30	30	29	29	4 mg/l or more 6-9
2	Dissolved Oxygen(mg/l)	7.5	8.0	7.0	7.0	7.9	7.9	6.9	7.9	8.2	8.0	7.2	8.4	
3	pH	6.20	6.90	6.85	6.60	6.66	6.33	6.80	6.26	6.70	6.56	6.75	7.55	
4	Conductivity(µs/cm)	63.02	83.71	52.21	49.80	47.16	51.70	49.41	60.36	128.90	54.51	67.8	70.19	3 mg/l or less
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.11	0.16	BDL	0.27	0.31	0.14	0.1	BDL	BDL	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	BDL	BDL	0.008	BDL	BDL	BDL	BDL	BDL	BDL	BDL	5000 or less MPN/100 ml
8	Total Coliform(MPN/100ml)	2200	1700	1700	1700	1300	1700	2200	1700	1300	2200	1300	1400	
9	Fecal Coliform(MPN/100ml)	1400	1300	1400	1300	790	1100	1700	1300	790	1700	790	790	
10	Fecal Streptococci (MPN/100ml)	80	241	171	78	22	78	110	220	170	350	170	130	
11	Turbidity(NTU)	3.43	1.01	13.78	9.92	5.23	3.71	12.43	5.34	2.17	9.20	2.48	4.01	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	20.0	14.0	16.0	10.0	12.0	16.0	16.0	22.0	22.0	24.0	24.0	30.0	
14	Chlorides(mg/l)	6.50	10.0	7.00	3.42	5.50	4.5	6.0	6.0	24.0	6.4	6.85	7.3	
15	COD(mg/l)	6.0	6.0	4.0	4.0	4.0	6.0	4.0	6.0	BDL	4.0	8.0	4.0	
16	Total Kjeldahl Nitrogen(mg/l)	2.2	2.2	2.8	1.7	1.12	0.56	1.68	1.68	BDL	2.24	1.1	1.12	
17	Ammonia (mg/l)	0.06	BDL	0.12	BDL	0.09	BDL	BDL	BDL	BDL	0.17	0.05	BDL	
18	Total Hardness(mg/l)	10.0	22.0	18.0	8.0	16.0	14.0	14.0	28.0	20.0	18.0	14.0	24.0	
19	Calcium(mg/l)	BDL	4.0	4.81	4.0	4.0	4.0	8.0	6.41	5.6	4.0	4.0	4.0	
20	Magnesium(mg/l)	BDL	3.0	BDL	BDL	BDL	BDL	2.0	2.9	BDL	1.9	BDL	3.4	
21	Sulphate(mg/l)	3.33	2	4.74	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.44	3.60	
22	Sodium(mg/l)	-	-	-	-	-	-	31.0	29.5	26.5	122.9	27.3	14.5	
23	Total Dissolved Solids(mg/l)	38.0	58.0	31.0	31.0	30.0	33.0	33.0	34.0	87.0	33.0	40.0	39.0	
24	Total Fixed Solids(mg/l)	30.0	35.0	23.0	17.0	18.0	22.0	20.0	26.0	52.0	13.0	31.0	29.0	
25	Total Suspended Solids(mg/l)	7.0	36.0	5.0	8.0	7.0	8.0	3.0	16.0	10.0	9.0	9.0	7.0	
26	Phosphate(mg/l)	BDL	0.02	0.05	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.02	
27	Boron(mg/l)	0.68	0.52	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
28	Potassium(mg/l)	-	-	-	-	-	-	16.8	13.2	6.8	17.3	8.5	0.8	
29	Flouride(mg/l)	BDL	BDL	0.4	BDL	BDL	BDL	BDL	BDL	BDL	0.82	BDL	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.050	-	-	-	-	-	
33	Lead(mg/l)	0.082	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.058	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
37	Iron Total(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

RIVER MADEI AT DABOSE, VALPOI														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature °C	32	30	28	28	28	27	28	31	31	31	30	28	4 mg/l or more
2	Dissolved Oxygen(mg/l)	7.5	5.4	6.5	7.5	6.9	8.2	8.7	8.7	8.1	7.5	7.4	7.5	
3	pH	6.45	6.90	6.91	6.56	6.85	6.61	6.8	6.36	7.1	7.05	7.03	7.82	
4	Conductivity(µs/cm)	129.36	67.82	99.59	71.76	37.34	64.97	63.97	71.82	71.59	79.18	91.0	104.3	3 mg/l or less
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	0.11	0.10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	BDL	BDL	0.01	0.05	BDL	BDL	BDL	BDL	BDL	BDL	5000 or less MPN/100 ml
8	Total Coliform(MPN/100ml)	1400	790	1100	490	790	940	630	790	1300	280	1300	1100	
9	Fecal Coliform(MPN/100ml)	790	490	700	330	490	490	460	490	790	220	790	790	
10	Fecal Streptococci (MPN/100ml)	351	921	431	4.5	23	49	49	140	130	110	130	130	2.7
11	Turbidity(NTU)	4.52	BDL	3.62	2.3	12.23	4.5	3.87	7.81	1.68	2.84	1.57	2.7	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	40.0	29.0	30.0	20.0	18.0	24.0	24.0	36.0	32.0	36.0	34.0	46.0	11.7
14	Chlorides(mg/l)	5.50	10.0	8.00	3.42	6.90	4.5	6.0	7.0	4.4	5.87	8.32	11.7	
15	COD(mg/l)	4.0	4.0	4.0	8.0	4.0	4.0	4.0	6.0	BDL	4.0	10.0	4.0	
16	Total Kjeldahl Nitrogen(mg/l)	6.2	3.92	1.70	2.80	1.68	0.56	2.24	1.68	BDL	2.24	2.2	2.24	0.06
17	Ammonia (mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.06	BDL	
18	Total Hardness(mg/l)	42.0	20.0	38.0	28.0	24.0	22.0	22.0	32.0	18.0	28.0	32.0	50.0	
19	Calcium(mg/l)	4.81	5.0	8.82	14.00	6.4	5.61	8.00	7.21	7.20	4.80	10.4	12.0	4.9
20	Magnesium(mg/l)	7.3	2.0	3.9	3.40	BDL	BDL	BDL	3.40	BDL	3.89	BDL	4.9	
21	Sulphate(mg/l)	2.56	2.0	4.1	BDL	3.2	BDL	2.0	BDL	BDL	3.7	3.19	3.3	
22	Sodium(mg/l)	-	-	-	-	-	-	18.7	29.8	26.1	132.0	25.5	11.8	47.0
23	Total Dissolved Solids(mg/l)	75.0	47.0	59.0	46.0	25.0	40.0	42.0	50.0	48.0	47.0	59.0	62.0	
24	Total Fixed Solids(mg/l)	62.0	28.0	51.0	22.0	15.0	28.0	25.0	34.0	22.0	20.0	39.0	42.0	
25	Total Suspended Solids(mg/l)	4.0	22.0	7.0	9.0	6.0	5.0	6.0	20.0	6.0	3.0	8.0	12.0	0.02
26	Phosphate(mg/l)	BDL	0.02	0.03	BDL	0.03	BDL	0.02	BDL	BDL	0.02	BDL	BDL	
27	Boron(mg/l)	0.36	0.35	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
28	Potassium(mg/l)	-	-	-	-	-	-	15.5	13.5	1.8	67.3	8.3	0.7	BDL
29	Flouride(mg/l)	BDL	BDL	0.4	BDL	BDL	BDL	BDL	BDL	BDL	0.61	BDL	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.021	-	-	-	-	-	BDL	-	-	-	-	-	0.054
32	Copper(mg/l)	BDL	-	-	-	-	-	0.054	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	0.022	-	-	-	-	-	BDL	-	-	-	-	-	BDL
35	Nickel(mg/l)	0.096	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.035	-	-	-	-	-	
37	Iron Total(mg/l)	BDL	-	-	-	-	-	0.115	-	-	-	-	-	BDL
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	BDL
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfant(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfant(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	BDL
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	BDL
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	BDL
50	DDT(o,p & isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	BDL
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

RIVER KHANDEPAR, OPA, PONDA														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	31	28	28	27	27.5	26.5	30	30	29	29	30	30	4 mg/l or more 6-9
2	Dissolved Oxygen(mg/l)	7.4	6.1	4.7	7.6	7.0	7.0	7.5	8.2	7.0	8.4	6.8	8.1	
3	pH	6.98	6.50	6.94	6.90	6.69	6.3	6.27	7.08	7.14	7.25	6.89	7.22	
4	Conductivity(µs/cm)	172.2	128.86	93.16	64.34	62.31	45.03	54.35	61.76	71.6	90.5	169.7	103.3	3 mg/l or less
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	0.149	0.12	0.14	0.13	BDL	BDL	0.11	BDL	0.11	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.017	BDL	0.012	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.01	5000 or less MPN/100 ml
8	Total Coliform(MPN/100ml)	1300	1300	1100	790	390	270	490	700	490	790	790	350	
9	Fecal Coliform(MPN/100ml)	790	790	700	490	330	220	330	460	330	490	490	280	
10	Fecal Streptococci (MPN/100ml)	85	95	44	79	49	79	280	240	220	280	280	94	
11	Turbidity(NTU)	6.72	7.99	5.10	6.77	6.34	23.20	7.87	3.19	1.61	2.98	2.8	1.98	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	38.0	38.0	30.0	14.0	8.0	10.0	20.0	30.0	34.0	34.0	32.0	48.0	
14	Chlorides(mg/l)	11.00	13.0	13.50	7.0	10.00	5.0	5.87	4.50	10.27	6.0	33.0	10.5	
15	COD(mg/l)	4.00	4.0	4.00	BDL	BDL	BDL	BDL	4.0	4.0	4.0	4.0	4.0	
16	Total Kjeldahl Nitrogen(mg/l)	15.70	1.10	1.10	0.56	1.10	1.68	2.24	3.40	0.60	1.10	1.1	2.24	
17	Ammonia (mg/l)	0.05	BDL	BDL	BDL	0.12	BDL	BDL	BDL	BDL	BDL	0.11	BDL	
18	Total Hardness(mg/l)	38.0	42.0	18.0	12.0	20.0	12.0	18.0	14.0	22.0	34.0	42.0	40.0	
19	Calcium(mg/l)	7.20	7.21	4.81	3.00	4.00	3.0	14.0	4.8	7.2	3.21	8.8	8.0	
20	Magnesium(mg/l)	4.9	5.8	1.5	BDL	2.4	BDL	BDL	BDL	BDL	6.3	4.8	4.86	
21	Sulphate(mg/l)	4.9	BDL	3.73	2.0	2.3	BDL	2.0	BDL	2.64	BDL	4.8	2.1	
22	Sodium(mg/l)	-	-	-	-	-	30.0	4.3	18.1	27.1	22.4	31.9	27.9	
23	Total Dissolved Solids(mg/l)	106.0	76.0	55.0	45.0	35.0	30.0	33.0	37.0	42.0	54.0	115.0	66.0	
24	Total Fixed Solids(mg/l)	72.0	67.0	41.0	27.0	25.0	18.0	18.0	32.0	23.0	44.0	46.0	37.0	
25	Total Suspended Solids(mg/l)	10.0	7.0	7.0	8.0	6.0	3.0	7.0	3.0	23.0	3.0	8.0	10.0	
26	Phosphate(mg/l)	0.03	BDL	0.062	BDL	BDL	BDL	BDL	0.05	BDL	0.05	0.68	BDL	
27	Boron(mg/l)	0.54	BDL	BDL	BDL	BDL	0.84	BDL	BDL	BDL	0.2	BDL	BDL	
28	Potassium(mg/l)	-	-	-	-	-	15.4	1.0	16.6	2.3	16.6	9.4	1.4	
29	Flouride(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	0.8	0.2	BDL	BDL	0.24	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.031	-	-	-	-	-	
33	Lead(mg/l)	0.042	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	0.077	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.058	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.040	-	-	-	-	-	
37	Iron Total(mg/l)	BDL	-	-	-	-	-	0.164	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

RIVER KHANDEPAR AT CODLI														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for Class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	31	28	28	27.5	28	26	30	30	28	29	31	30	
2	Dissolved Oxygen(mg/l)	7.1	7.1	5.0	7.6	6.9	7.3	7.5	8.1	7.3	7.5	7.0	8.1	4 mg/l or more
3	pH	6.93	6.21	6.81	7.20	6.48	6.2	6.55	7.09	7.19	7.31	6.7	7.43	6-9
4	Conductivity(µs/cm)	95.94	75.08	67.09	11.62	43.21	38.0	48.55	61.52	70.55	81.82	67.06	70.85	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.13	BDL	0.301	0.1	0.14	0.10	BDL	BDL	0.13	BDL	0.13	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.015	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
8	Total Coliform(MPN/100ml)	1100	790	2200	1700	1300	1300	1700	1300	1400	1400	1400	920	5000 or less MPN/100 ml
9	Fecal Coliform(MPN/100ml)	790	490	1300	1300	790	790	1300	790	790	1100	940	540	
10	Fecal Streptococci (MPN/100ml)	211	131	85	49	46	110	140	280	350	350	240	110	
11	Turbidity(NTU)	3.14	2.55	1.99	9.87	4.27	11.58	9.11	2.14	1.81	2.02	3.63	2.67	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	36	38.0	24.0	16.0	10.0	12.0	20	28.0	32.0	34.0	26.0	44.0	
14	Chlorides(mg/l)	8.5	6.5	6.0	4.0	4.5	4.0	4.40	7.50	8.81	6.50	21.0	5.5	
15	COD(mg/l)	4.0	4.0	4.0	8.0	4.0	BDL	4.0	4.0	6.0	4.0	4.0	4.0	
16	Total Kjeldahl Nitrogen(mg/l)	14.9	1.1	1.1	2.8	1.1	1.7	1.68	2.20	0.60	1.10	1.1	2.24	
17	Ammonia (mg/l)	0.05	0.07	0.078	BDL	0.09	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
18	Total Hardness(mg/l)	32	20	24	6.0	16.0	12	28	14	14	38	26.0	30.0	
19	Calcium(mg/l)	6.4	6.41	6.41	BDL	3.2	3	18	4.81	4.8	4.01	5.6	7.2	
20	Magnesium(mg/l)	3.9	BDL	1.9	BDL	BDL	BDL	2.43	BDL	BDL	6.8	2.9	2.9	
21	Sulphate(mg/l)	4.6	BDL	BDL	2.4	2.6	BDL	BDL	BDL	2.21	2.03	2.4	BDL	
22	Sodium(mg/l)	-	-	-	-	-	32.1	3.1	17.9	28.7	22.3	23.0	7.1	
23	Total Dissolved Solids(mg/l)	60.0	45.0	40	7.0	26.0	25.0	30.0	36.0	41.0	48.0	45.0	45.0	
24	Total Fixed Solids(mg/l)	42.0	41.0	36	3.0	16.0	15.0	15.0	32.0	21.0	38.0	18.0	28.0	
25	Total Suspended Solids(mg/l)	8.0	5.0	4.0	6.0	5.0	5.0	5.0	3.0	22.0	3.0	16.0	11.0	
26	Phosphate(mg/l)	0.04	BDL	0.028	0.03	BDL	BDL	BDL	BDL	BDL	0.02	BDL	0.04	
27	Boron(mg/l)	1.26	0.90	BDL	BDL	BDL	0.12	BDL	BDL	BDL	0.20	BDL	BDL	
28	Potassium(mg/l)	-	-	-	-	-	16.40	0.8	16.6	3.4	16.6	8.4	0.4	
29	Fluoride(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	1.17	BDL	BDL	BDL	0.20	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	0.049	-	-	-	-	-	0.047	-	-	-	-	-	
35	Nickel(mg/l)	0.212	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.012	-	-	-	-	-	0.072	-	-	-	-	-	
37	Iron Total(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

RIVER KUSHAWATI NEAR BUND AT KEVONA, RIVONA, SANGUEM														Limit for class C river as per CPCB classification based on designated best use of rivers	
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22		
1	Temperature ^o C	31	29	29	29	28	28	31	28	28	30	29	30		
2	Dissolved Oxygen(mg/l)	6.2	6.0	7.10	7.2	7.20	7.5	7.9	7.7	8.7	7.5	7.6	8.1	4 mg/l or more	
3	pH	6.67	7.20	7.16	6.78	6.88	6.68	6.42	7.06	7.70	7.23	7.25	7.6	6-9	
4	Conductivity(us/cm)	243.52	57.40	126.16	53.85	48.91	52.40	57.82	62.61	69.34	89.64	110.2	133.6	3 mg/l or less	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.13	BDL	0.83	BDL	0.11	0.19	0.11	BDL	0.2	0.23	BDL	BDL		
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.052	BDL	BDL	BDL	BDL	0.008	BDL	BDL	BDL	BDL	BDL	BDL		
8	Total Coliform(MPN/100ml)	1700	1300	2200	1700	1300	790	1100	1400	1700	1700	1100	940	5000 or less MPN/100 ml	
9	Fecal Coliform(MPN/100ml)	1300	790	1400	1100	790	490	790	1100	1400	1300	790	700		
10	Fecal Streptococci (MPN/100ml)	131	351	221	70	49	79	94	120	79	120	94	79		
11	Turbidity(NTU)	1.57	BDL	1.99	2.34	4.02	2.73	3.6	0.81	3.12	2.45	1.76	1.71		
12	Phenolphthaleim Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		
13	Total Alkalinity(mg/l)	54.0	22.0	28.0	14.0	14.0	16.0	30.0	34.0	30.0	40.0	44.0	56.0		
14	Chlorides(mg/l)	6.5	4.99	8.90	5.0	6.5	4.5	5.99	4.99	5.40	14.0	5.5	4.3		
15	COD(mg/l)	10.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0	BDL	2.0	4.0	BDL		
16	Total Kjeldahl Nitrogen(mg/l)	33.0	1.1	1.7	3.9	1.1	1.7	1.1	1.12	BDL	1.7	2.2	1.12		
17	Ammonia (mg/l)	0.06	BDL	BDL	BDL	0.05	BDL	0.09	BDL	0.08	BDL	0.13	BDL		
18	Total Hardness(mg/l)	52.0	18.0	38.0	22.0	16.0	118.0	20.0	20.0	26.0	50.0	48.0	60.0		
19	Calcium(mg/l)	8.00	4.8	8.0	2.4	3.2	30.5	4.8	4.8	4.8	10.4	11.22	11.2		
20	Magnesium(mg/l)	7.8	BDL	4.4	3.9	BDL	37.7	BDL	BDL	3.4	5.8	4.9	7.8		
21	Sulphate(mg/l)	BDL	BDL	3.05	BDL	BDL	2.0	BDL	2.27	2.00	2.66	2.17	2.6		
22	Sodium(mg/l)	-	-	-	-	-	31.0	18.1	37.7	26.0	30.0	25.7	5.8		
23	Total Dissolved Solids(mg/l)	151.0	36.0	76.0	34.0	30.0	30.0	35.0	38.0	46.0	56.0	65.0	90.0		
24	Total Fixed Solids(mg/l)	97.0	22.0	49.0	30.0	21.0	20.0	20.0	23.0	36.0	36.0	60.0	54.0		
25	Total Suspended Solids(mg/l)	23.0	8.0	4.0	8.0	6.0	7.0	10.0	12.0	10.0	4.0	3.0	6.0		
26	Phosphate(mg/l)	0.04	BDL	0.07	BDL	BDL	0.05	BDL	BDL	BDL	BDL	BDL	BDL		
27	Boron(mg/l)	0.89	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		
28	Potassium(mg/l)	-	-	-	-	-	15.5	15.4	7.9	1.7	2.3	7.8	0.4		
29	Flouride(mg/l)	BDL	BDL	BDL	0.14	BDL	-	BDL	BDL	BDL	0.53	0.45	BDL		
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
31	Cadmium(mg/l)	0.016	-	-	-	-	-	BDL	-	-	-	-	-		
32	Copper(mg/l)	BDL	-	-	-	-	-	0.043	-	-	-	-	-		
33	Lead(mg/l)	0.053	-	-	-	-	-	BDL	-	-	-	-	-		
34	Chromium(mg/l)	0.073	-	-	-	-	-	0.091	-	-	-	-	-		
35	Nickel(mg/l)	0.100	-	-	-	-	-	BDL	-	-	-	-	-		
36	Zinc(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
37	Iron Total(mg/l)	BDL	-	-	-	-	-	0.097	-	-	-	-	-		
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
40	DDT-op' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
41	DDT-p-p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-		
51	Gammie-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		

RIVER TALPONA AT CANACONA														Limit for class C river as per CPCB classification based on designated best use of rivers	
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22		
1	Temperature°C	32	29	28	28	28	28	28	29	31	30	29	29		
2	Dissolved Oxygen(mg/l)	5.4	7.0	7.6	7.9	7.6	7.3	7.5	7.9	7.0	7.6	6.5	6.4	4 mg/l or more	
3	pH	6.91	6.75	7.1	7.89	7.67	6.28	7.27	7.13	7.11	7.01	6.04	6.43	6-9	
4	Conductivity(µs/cm)	72.8	56.73	77.72	65.42	83.21	49.48	49.36	59.0	52.91	54.36	54.90	59.32		
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	0.13	BDL	0.12	0.13	0.17	BDL	BDL	BDL	BDL	BDL		
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	0.005	BDL	BDL	BDL	0.005	BDL	BDL	BDL	0.006	BDL		
8	Total Coliform(MPN/100ml)	490	790	140	110	170	220	170	490	490	1100	790	940	5000 or less MPN/100 ml	
9	Fecal Coliform(MPN/100ml)	330	490	78	78	110	130	140	330	330	490	490	700		
10	Fecal Streptococci (MPN/100ml)	48	121	151	4.5	13	33	17	49	70	94	70	79		
11	Turbidity(NTU)	BDL	5.1	2.9	4.26	4.46	9.0	29.4	1.27	1.34	3.48	1.44	2.47		
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		
13	Total Alkalinity(mg/l)	22.0	20.0	18.0	20.0	10.0	16.0	20.0	22.0	20.0	22.0	40.0	26.0		
14	Chlorides(mg/l)	6.50	8.93	12.00	8.0	15.5	6.0	5.50	8.4	8.81	6.4	8.32	5.50		
15	COD(mg/l)	12.0	10.0	10.0	8.0	4.0	4.0	4.0	4.0	6.0	4.0	4.0	6.0		
16	Total Kjeldahl Nitrogen(mg/l)	2.8	3.4	BDL	7.3	1.7	1.1	1.1	1.12	BDL	3.36	2.24	1.7		
17	Ammonia (mg/l)	BDL	0.07	0.24	BDL	0.21	BDL	0.05	BDL	BDL	BDL	0.05	0.09		
18	Total Hardness(mg/l)	24.0	26.0	18.0	10.0	14.0	12.0	6.0	22.0	6.0	22.0	48.0	18.0		
19	Calcium(mg/l)	3.21	3.20	5.00	1.6	BDL	2.4	3.2	4.81	BDL	4.0	8.0	BDL		
20	Magnesium(mg/l)	3.9	4.4	BDL	1.5	BDL	BDL	BDL	2.43	BDL	2.90	6.80	3.4		
21	Sulphate(mg/l)	BDL	BDL	3.0	BDL	2.6	BDL	2.7	BDL	9.0	BDL	BDL	BDL		
22	Sodium(mg/l)	-	-	-	-	-	28.5	100.8	29.1	78.9	4.2	25.4	7.1		
23	Total Dissolved Solids(mg/l)	42.0	36.0	54.0	39.0	53.0	30	30.0	40	30.0	30.0	34	39.0		
24	Total Fixed Solids(mg/l)	34.0	19.0	30.0	36.0	50.0	27.0	27.0	30.0	20.0	20.0	14.0	32.0		
25	Total Suspended Solids(mg/l)	13.0	20.0	14.0	10.0	4.0	5.0	40.0	12.0	23.0	10.0	5.0	3.0		
26	Phosphate(mg/l)	0.08	0.02	0.04	0.045	BDL	0.04	0.04	BDL	0.055	BDL	BDL	0.11		
27	Boron(mg/l)	0.76	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		
28	Potassium(mg/l)	-	-	-	-	-	14.8	19.5	13.1	10.3	BDL	8.0	0.2		
29	Fluoride(mg/l)	0.30	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
32	Copper(mg/l)	BDL	-	-	-	-	-	0.020	-	-	-	-	-		
33	Lead(mg/l)	BDL	-	-	-	-	-	0.016	-	-	-	-	-		
34	Chromium(mg/l)	0.014	-	-	-	-	-	BDL	-	-	-	-	-		
35	Nickel(mg/l)	0.037	-	-	-	-	-	BDL	-	-	-	-	-		
36	Zinc(mg/l)	0.038	-	-	-	-	-	BDL	-	-	-	-	-		
37	Iron Total(mg/l)	0.094	-	-	-	-	-	0.112	-	-	-	-	-		
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
44	Ambiofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-		
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		

Sr. No	Parameters	HARWALE WATERFALL										Limit for class C river as per CPCB classification based on designated best use of rivers	
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
1	Temperature°C	32	29	30	28	28	27	28	31	31	31	30	27
2	Dissolved Oxygen(mg/l)	7.2	5.9	7.0	8.0	7.7	7.8	7.9	8.4	7.8	7.6	7.3	7.2
3	pH	6.23	6.90	6.90	7.21	6.83	6.63	7.10	7.08	7.40	7.12	7.48	7.1
4	Conductivity(µs/cm)	147.45	167.0	161.30	59.07	55.41	60.31	53.42	70.36	116.80	96.18	93.22	110.1
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.0	BDL
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.34	BDL	0.34	0.10	0.42	0.25	0.33	0.20	BDL	BDL	0.12	BDL
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.008	BDL	0.009	BDL	0.007	BDL	BDL	BDL	0.006	BDL	BDL	0.005
8	Total Coliform(MPN/100ml)	4900	4600	4900	4900	4600	3300	6300	4600	3300	4900	3500	2400
9	Fecal Coliform(MPN/100ml)	3300	3300	3300	3300	3300	2300	4600	2300	2300	2300	2400	1300
10	Fecal Streptococci (MPN/100ml)	141	95	151	790	790	490	460	790	700	790	240	170
11	Turbidity(NTU)	4.30	1.37	3.71	4.19	8.38	12.04	8.57	10.51	3.46	4.78	2.51	4.27
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
13	Total Alkalinity(mg/l)	42.0	36.0	26.0	16.0	18.0	16.0	16.0	36.0	26.0	30.0	14.0	54.0
14	Chlorides(mg/l)	9.5	9.0	23.0	5.87	6.90	6.50	6.0	7.0	9.0	5.9	7.8	15.0
15	COD(mg/l)	18.0	BDL	8.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0	6.0	BDL
16	Total Kjeldahl Nitrogen(mg/l)	2.2	2.8	2.8	2.24	2.24	0.56	1.68	2.24	BDL	2.24	1.1	1.12
17	Ammonia (mg/l)	0.16	BDL	BDL	BDL	BDL	0.05	BDL	BDL	BDL	0.06	BDL	0.07
18	Total Hardness(mg/l)	54.0	68.0	48.0	18.0	16.0	16.0	16.0	30.0	20.0	30.0	34.0	40.0
19	Calcium(mg/l)	8.02	20.00	16.03	10.0	5.6	4.81	4.0	7.2	8.0	5.87	9.6	9.6
20	Magnesium(mg/l)	8.3	4.0	BDL	2.0	BDL	BDL	BDL	2.9	BDL	3.89	2.43	4.00
21	Sulphate(mg/l)	5.41	3.0	5.62	3.57	2.71	BDL	3.00	BDL	BDL	5.88	4.08	BDL
22	Sodium(mg/l)	-	-	-	-	-	-	18.2	29.7	25.8	122.1	25.5	9.2
23	Total Dissolved Solids(mg/l)	91.0	115.0	95.0	39.0	36.0	37.0	36.0	46.0	80.0	56.0	63.0	71.0
24	Total Fixed Solids(mg/l)	84.0	69.0	90.0	17.0	21.0	26.0	22.0	33.0	38.0	24.0	41.0	42.0
25	Total Suspended Solids(mg/l)	50.0	48.0	11.0	11.0	13.0	10.0	18.0	17.0	11.0	5.0	9.0	2.0
26	Phosphate(mg/l)	0.06	0.02	0.05	BDL	0.05	BDL	BDL	BDL	BDL	BDL	BDL	0.31
27	Boron(mg/l)	1.68	0.42	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
28	Potassium(mg/l)	-	-	-	-	-	-	15.5	13.0	1.9	87.0	8.0	8.5
29	Fluoride(mg/l)	BDL	BDL	0.8	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
31	Cadmium(mg/l)	0.017	-	-	-	-	-	BDL	-	-	-	-	-
32	Copper(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
34	Chromium(mg/l)	0.077	-	-	-	-	-	BDL	-	-	-	-	-
35	Nickel(mg/l)	0.095	-	-	-	-	-	BDL	-	-	-	-	-
36	Zinc(mg/l)	0.016	-	-	-	-	-	0.010	-	-	-	-	-
37	Iron Total(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
40	DDT-o,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
41	DDT-p,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
44	Ambiofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-

RIVER BICHOLIM, BARAZAN NAGAR, BICHOLIM														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	29	29	31	30	28	28	29	28	28	29	29	30	
2	Dissolved Oxygen(mg/l)	5.0	5.0	6.9	6.9	6.7	7.0	7.2	7.0	8.1	8.5	10.5	8.5	4 mg/l or more
3	pH	6.65	6.60	7.01	6.29	6.82	6.95	6.06	6.83	6.89	7.09	7.82	6.64	6-9
4	Conductivity(µs/cm)	124.60	1843.00	132.72	74.73	62.75	58.56	58.61	80.24	87.55	132.00	126.0	143.20	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.14	0.49	BDL	0.27	0.15	BDL	0.10	BDL	BDL	BDL	BDL	0.12	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.045	0.016	BDL	0.005	BDL	BDL	BDL	BDL	BDL	BDL	0.010	0.007	
8	Total Coliform(MPN/100ml)	9400	7000	13000	7000	4900	4900	7000	4900	7000	7000	7000	4900	5000 or less MPN/100 ml
9	Fecal Coliform(MPN/100ml)	4900	4900	7900	4600	3300	2300	4900	3300	4600	4900	4600	3300	
10	Fecal Streptococci (MPN/100ml)	111	431	241	330	230	330	460	490	790	1300	790	790	
11	Turbidity(NTU)	8.93	7.43	6.82	4.54	4.06	5.37	11.37	6.21	5.74	4.14	3.58	4.06	
12	Phenolphthalein Alkalinity(mg/l)	BDL	4.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	46.0	40.0	36.0	24.0	10.0	16.0	16.0	26.0	78.0	36.0	40.0	64.0	
14	Chlorides(mg/l)	19.85	447.0	13.20	7.9	7.5	5.5	24.50	6.0	14.7	14.0	8.3	13.5	
15	COD(mg/l)	10.0	12.0	6.0	6.0	14.0	10.0	8.0	8.5	6.0	8.0	8.0	14.0	
16	Total Kjeldahl Nitrogen(mg/l)	19.1	6.7	2.8	2.8	1.1	1.7	1.7	2.2	3.92	2.20	2.24	3.9	
17	Ammonia (mg/l)	BDL	BDL	0.06	BDL	BDL	BDL	BDL	0.07	BDL	BDL	BDL	BDL	
18	Total Hardness(mg/l)	66.0	200.0	42.0	20.0	22.0	14.0	14.0	24.0	28.0	44.0	58.0	64.0	
19	Calcium(mg/l)	11.2	56.0	11.2	5.6	4.81	2.4	2.4	6.41	6.4	8.82	12	11.22	
20	Magnesium(mg/l)	9.2	15.0	3.4	BDL	BDL	BDL	BDL	BDL	2.9	5.3	6.80	8.7	
21	Sulphate(mg/l)	5.35	62.0	3.71	2.90	2.68	BDL	5.3	BDL	3.3	4.0	BDL	4.82	
22	Sodium(mg/l)	-	-	-	-	-	28.60	18.4	28.50	220.5	82.2	101.3	10.8	
23	Total Dissolved Solids(mg/l)	78.0	1290.0	84.0	48.0	38.0	35.0	36.0	48.0	50.0	79.0	75.0	93.0	
24	Total Fixed Solids(mg/l)	54.0	774.0	54.0	28.0	33.0	32.0	32.0	28.0	33.0	60.0	27.0	90.0	
25	Total Suspended Solid(mg/l)	21.0	8.0	8.0	17.0	6.0	4.0	6.0	10.0	10.0	17.0	14.0	15.0	
26	Phosphate(mg/l)	0.24	0.05	0.03	BDL	0.03	0.04	0.02	0.02	0.02	0.09	BDL	0.07	
27	Boron(mg/l)	0.75	0.11	BDL	0.48	BDL	BDL	BDL	BDL	BDL	0.8	BDL	0.20	
28	Potassium(mg/l)	-	-	-	-	-	14.8	15.5	11.7	23	57.8	13.6	0.6	
29	Flouride(mg/l)	BDL	0.26	BDL	BDL	BDL	BDL	BDL	BDL	0.60	2.80	BDL	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.030	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	0.048	-	-	-	-	-	BDL	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	0.021	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.071	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.013	-	-	-	-	-	
37	Iron Total(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

MAYEM LAKE AT MAYEM														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	29	30	31	29	28	28	29	28	28	29	28	30	4 mg/l or more 6-9
2	Dissolved Oxygen mg/l	6.5	6.8	7.4	7.8	7.8	7.0	7.8	5.9	8.2	8.6	8.0	7.8	
3	pH	6.56	6.40	7.31	6.44	6.87	6.89	5.60	6.15	6.45	6.80	7.10	6.38	
4	Conductivity(µs/cm)	41.8	62.29	63.85	50.71	42.82	50.08	43.01	39.67	41.95	51.27	45.02	67.52	3 mg/l or less
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.16	BDL	BDL	0.11	0.18	BDL	BDL	BDL	0.11	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	5000 or less MPN/100 ml
8	Total Coliform(MPN/100ml)	1400	1300	380	1300	2200	1300	2200	2700	2200	1700	2200	1700	
9	Fecal Coliform(MPN/100ml)	1100	790	220	780	1400	780	1700	2200	1300	1300	1700	1300	
10	Fecal Streptococci MPN/100ml	59	71	111	78	130	17	93	220	280	220	230	220	
11	Turbidity(NTU)	5.38	4.21	4.6	3.69	3.08	3.12	2.6	2.08	2.46	3.12	4.55	5.24	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	18.0	16.0	24.0	16.0	6.0	10.0	14.0	24.0	32.0	24.0	20.0	26.0	
14	Chloride mg/l	8.44	8.0	8.30	6.9	6.5	9.0	6.50	7.0	8.3	7.5	5.87	12.0	
15	COD(mg/l)	6.0	4.0	4.0	6.0	4.0	4.0	6.0	6.0	6.0	4.0	4.0	4.0	
16	Total Kjeldhal Nitrogen(mg/l)	18.5	1.7	2.8	3.4	1.1	1.1	0.6	3.9	3.9	1.1	1.68	0.6	
17	Ammonia mg/l	BDL	BDL	BDL	BDL	BDL	BDL	0.05	BDL	BDL	BDL	BDL	0.18	
18	Hardness(mg/l)	14.0	18.0	18.0	12.0	8.0	16.0	10.0	18.0	14.0	18.0	58.0	16.0	
19	Calcium(mg/l)	4.8	4.0	5.6	4.0	2.40	2.40	BDL	4.01	4.00	3.21	12.00	4.81	
20	Magnesium(mg/l)	BDL	2.0	BDL	BDL	BDL	2.4	BDL	BDL	BDL	2.4	6.8	BDL	
21	Sulphate(mg/l)	4.47	BDL	2.50	3.9	2.48	BDL	2.30	BDL	2.3	BDL	BDL	3.10	
22	Sodium(mg/l)	-	-	-	-	-	28.60	27.7	29.30	25.3	21.8	25.5	9.4	
23	Total Dissolved Solids(mg/l)	27.0	43.0	42.0	31.0	23.0	30.0	26.0	27.0	31.0	28.0	28.0	44.0	
24	Total Fixed Solids(mg/l)	14.0	25.0	27.0	19.0	18.0	27.0	22.0	19.0	17.0	26.0	13.0	40.0	
25	Total Suspended Solid	8.0	17.0	8.0	12.0	9.0	5.0	4.0	10.0	8.0	11.0	4.0	3.0	
26	Phosphate(mg/l)	0.02	0.035	0.050	BDL	0.020	0.030	BDL	BDL	0.02	0.06	BDL	BDL	
27	Boron(mg/l)	1.30	BDL	BDL	0.51	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.24	
28	Potassium(mg/l)	-	-	-	-	-	15.40	19.60	13.80	2.80	17.20	7.90	0.2	
29	Fluoride(mg/l)	BDL	0.24	BDL	0.32	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	0.029	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.063	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.022	-	-	-	-	-	
37	Iron Total(mg/l)	0.144	-	-	-	-	-	0.213	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

Sr. No	Parameters	CREEK AT DANDO MOLLO, VELSAO, MORMUGAO											Limit for class C river as per CPCB classification based on designated best use of rivers	
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	
1	Temperature°C	30	29	29	25	29	28	29	29	30	29	28	29	
2	Dissolved Oxygen(mg/l)	4.3	7.5	7.0	7.0	4.2	5.2	6.0	5.5	5.7	6.9	8.3	8.5	4 mg/l or more
3	pH	6.67	7.75	7.61	7.12	7.03	7.33	6.63	7.55	7.76	8.07	6.82	7.87	6-9
4	Conductivity(us/cm)	11120.0	51530.0	3630.0	311.2	708.7	861.7	1447.0	9000.0	4825.0	23860.0	4716.0	6665.0	
5	BOD(mg/l)	2.0	BDL	BDL	BDL	2.4	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	1.79	1.46	2.43	0.257	0.534	0.73	1.0	0.8	3.78	BDL	BDL	0.587	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.008	BDL	BDL	0.016	BDL	0.022	0.04	0.981	0.053	0.057	0.09	0.105	
8	Total Coliform(MPN/100ml)	2600	2700	4900	2700	2300	2100	1700	1700	2100	3400	2200	2700	5000 or less MPN/100 ml
9	Fecal Coliform(MPN/100ml)	2100	1700	2300	2200	1400	1300	1300	1400	1300	2200	1300	1700	
10	Fecal Streptococci (MPN/100ml)	351	921	1601	540	220	170	230	460	230	330	130	220	
11	Turbidity(NTU)	8.96	6.51	3.93	12.94	6.41	3.29	3.94	6.55	9.25	2.53	1.25	1.01	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	90.0	20.0	40.0	14.0	26.0	54.0	42.0	50.0	68.0	60.0	26.0	50.0	
14	Chlorides(mg/l)	3998.8	2870.1	1048.2	244.61	999.7	249.6	3065.0	2944.9	2745.3	8683.5	1565.5	2079.14	
15	COD(mg/l)	-	-	4.0	10.0	10.0	4.0	-	-	-	-	8.0	-	
16	Total Kjeldahl Nitrogen(mg/l)	2.24	2.2	2.8	6.16	1.1	1.7	1.12	2.8	2.8	3.4	1.12	3.92	
17	Ammonia (mg/l)	0.05	0.06	BDL	0.08	0.127	0.22	0.05	0.2	BDL	BDL	BDL	0.15	
18	Total Hardness(mg/l)	2200.0	500.0	1600.0	48.0	1380.0	120.0	600.0	592.0	500.0	2600.0	1000.0	4500.0	
19	Calcium(mg/l)	240.5	80.2	320.6	24.0	107.4	27.3	32.1	114.6	40.1	802.0	157.1	1202.4	
20	Magnesium(mg/l)	388.80	72.90	194.40	5.83	270.20	12.6	126.4	74.4	97.2	145.8	147.7	364.8	
21	Sulphate(mg/l)	927.10	135.90	45.30	0.73	270.70	8.64	158.30	48.96	914.40	1346.40	176.3	1135.05	
22	Sodium(mg/l)	-	-	-	-	-	471.8	345.1	1637.0	419.2	5228.0	868.2	870.8	
23	Total Dissolved Solids(mg/l)	6921.0	3203.60	2287.0	179.0	418.00	490.0	896.0	558.0	2360.0	14357.0	2894.0	3970.0	
24	Total Fixed Solids(mg/l)	4707.0	31652.0	2013.0	54.0	402.0	343.0	696.0	4017.0	1604.0	9996.0	2172.0	604.0	
25	Total Suspended Solids(mg/l)	49.0	9.0	6.0	14.0	16.0	8.0	31.0	10.0	17.0	32.0	202.0	11.0	
26	Phosphate(mg/l)	0.20	0.67	0.30	0.081	0.369	0.02	0.06	0.22	0.09	0.03	0.12	0.123	
27	Boron(mg/l)	0.77	BDL	BDL	0.59	BDL	BDL	2.0	0.240	BDL	BDL	0.2	BDL	
28	Potassium(mg/l)	-	-	-	-	-	11.7	35.0	125.0	36.7	2058.0	73.1	87.3	
29	Flouride(mg/l)	BDL	1.5	0.97	0.57	BDL	0.32	0.20	0.63	1.31	0.20	0.3	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.071	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.042	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	0.04	-	-	-	-	-	0.071	-	-	-	-	-	
35	Nickel(mg/l)	0.094	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.022	-	-	-	-	-	0.094	-	-	-	-	-	
37	Iron Total(mg/l)	0.186	-	-	-	-	-	0.122	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfant(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfant(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

SELAULIM RESERVOIR AT SELAULIM, SANGUEM														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for Class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	31	29	30	29	27.5	29	31	29	28	29	29	30	
2	Dissolved Oxygen mg/l	7.5	7.5	7.8	7.5	7.4	7.6	7.7	8.0	8.1	7.5	7.1	8.0	4 mg/l or more
3	pH	7.06	6.70	6.84	7.42	7.47	7.14	6.72	7.23	7.68	7.21	7.29	6.8	6-9
4	Conductivity(µs/cm)	58.43	54.66	89.89	44.9	38.57	41.32	42.27	39.12	56.13	41.26	47.06	53.72	
5	BOD(mg/l) mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	0.98	BDL	0.18	0.46	BDL	BDL	0.1	0.15	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
8	Total Coliform(MPN/100ml)	4.0	11	33	49	23	33	63	49	79	130	79	49	5000 or less MPN/100 ml
9	Fecal Coliform(MPN/100ml)	NIL	4.5	13	13	NIL	13	21	23	49	79	33	23	
10	Fecal Streptococci MPN/100ml	18	22	59	NIL	<1.8	2.0	2.0	4.5	6.8	6.8	7.8	13.0	
11	Turbidity(NTU)	1.51	1.04	1.63	1.64	3.25	1.7	6.02	1.13	1.34	2.09	1.62	2.24	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	13	16.0	16.0	18.0	16.0	10.0	26.0	34.0	18.0	30.0	20.0	20.0	
14	Chloride mg/l	6.95	5.99	4.90	4.0	3.5	5.0	3.99	3.99	5.40	8.5	5.0	6.3	
15	COD(mg/l)	8.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0	BDL	2.0	4.0	6.0	
16	Total Kjeldhal Nitrogen(mg/l)	52.1	2.2	1.1	2.2	0.6	1.1	1.12	1.12	3.92	1.1	1.1	1.12	
17	Ammonia mg/l	0.29	BDL	BDL	BDL	0.06	BDL	0.09	BDL	BDL	0.05	BDL	BDL	
18	Hardness(mg/l)	34.0	16.0	20.0	18.0	10.0	96.0	14.0	10.0	16.0	40.0	16.0	14.0	
19	Calcium(mg/l)	3.20	3.2	3.2	BDL	2.4	26.5	3.2	3.21	3.2	9.6	3.21	2.4	
20	Magnesium(mg/l)	6.3	BDL	2.9	3.4	BDL	7.3	BDL	BDL	2.0	3.9	2.0	BDL	
21	Sulphate(mg/l)	BDL	BDL	2.57	BDL	BDL	BDL	BDL	BDL	3.17	3.28	BDL	2.0	
22	Sodium(mg/l)	-	-	-	-	-	33.5	18.1	30.6	26.0	30.0	188.2	7.3	
23	Total Dissolved Solids(mg/l)	37.0	32.0	54.0	29.0	22.0	26.0	28.0	24.0	34.0	25.0	27.8	34.0	
24	Total Fixed Solids(mg/l)	21.0	19.0	33.0	26.0	12.0	18.0	17.0	14.0	24.0	18.0	23.8	22.0	
25	Total Suspended Solid (mg/l)	14.0	7.0	6.0	5.0	6.0	4.0	8.0	10.0	12.0	3.0	3.0	29.0	
26	Phosphate(mg/l)	BDL	BDL	0.05	BDL	BDL	BDL	BDL	BDL	0.03	0.08	0.04	BDL	
27	Boron(mg/l)	0.98	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
28	Potassium(mg/l)	-	-	-	-	-	15.7	15.5	14.4	1.7	2.3	18.4	0.3	
29	Fluoride(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.016	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	0.012	-	-	-	-	-	BDL	-	-	-	-	-	
33	Lead(mg/l)	0.070	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	0.087	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.048	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.019	-	-	-	-	-	
37	Iron Total(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

Sr. No	Parameters	RAJA LAKE										Limit for class C river as per CPCB classification based on designated best use of rivers	
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
1	Temperature°C	30		29	28	27	29	30	30	27	28	28	29
2	Dissolved Oxygen mg/l	4.4		5.1	7.6	7.0	6.3	7.0	3.8	7.7	6.3	7.1	6.6
3	pH	6.44		6.42	6.66	6.79	6.50	6.85	6.91	7.65	7.18	7.63	7.70
4	Conductivity(µscm)	169.53		149.34	90.88	93.25	96.37	100.4	103.2	108.96	126.4	116.6	125.7
5	BOD(mg/l)	2.5		BDL	BDL	BDL	BDL	BDL	2.6	BDL	BDL	BDL	BDL
6	Nitrate Nitrogen as NO ₃ -N (mg/l)	0.16		1.15	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.10	BDL
7	Nitrite Nitrogen as NO ₂ -N (mg/l)	0.082		0.005	0.008	BDL	0.005	BDL	BDL	BDL	BDL	0.005	0.006
8	Total Coliform(MPN/100ml)	170		3400	790	1300	1700	2200	2700	3900	3200	2600	2400
9	Fecal Coliform(MPN/100ml)	130		1700	490	790	1100	1300	2200	2700	2200	2200	1300
10	Fecal Streptococci MPN/100ml	34		80	13	33	130	140	220	170	230	330	220
11	Turbidity(NTU)	8.67		4.18	5.24	5.22	5.5	4.74	2.28	7.54	5.88	9.95	11.36
12	Phenolphthalein Alkalinity(mg/l)	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
13	Total Alkalinity(mg/l)	30.0		26.0	24.0	20.0	16.0	32.0	36.0	32.0	36.0	40.0	38.0
14	Chloride mg/l	21.34		19.90	9.50	10.00	10.5	11.49	9.99	11.70	18.00	13.5	4.6
15	COD(mg/l)	14.0		6.0	8.0	4.0	4.0	10.0	12.0	8.0	2.0	8.0	26.0
16	Total Kjeldhal Nitrogen(mg/l)	25.2		1.1	3.9	0.6	1.1	1.7	2.80	1.68	1.10	2.8	2.24
17	Ammonia mg/l	0.18		0.47	BDL	0.08	BDL	0.48	BDL	0.06	BDL	0.26	0.10
18	Hardness(mg/l)	32.0		40.0	14.0	26.0	166.0	26.0	30.0	30.0	70.0	42.0	34.0
19	Calcium(mg/l)	8.80		8.00	BDL	5.60	37.7	6.4	7.21	5.6	17.6	8.82	8.0
20	Magnesium(mg/l)	2.4		4.9	2.4	2.9	17.5	2.4	2.92	3.9	6.3	4.9	3.4
21	Sulphate(mg/l)	15.25		12.96	7.03	6.48	4.12	3.87	4.87	5.97	7.27	7.44	10.0
22	Sodium(mg/l)	-		-	-	-	28.4	20.4	28.0	25.3	27.0	26.1	13.3
23	Total Dissolved Solids(mg/l)	103.0		87.0	58.0	60.0	60.0	61.0	62.0	64.0	82.0	65.8	85.0
24	Total Fixed Solids(mg/l)	76.0		57.0	53.0	48.0	43.0	37.0	38.0	44.0	64.0	65.4	44.0
25	Total Suspended Solid(mg/l)	36.0		16.0	10.0	8.0	11.0	14.0	18.0	28.0	10.0	11.0	11.0
26	Phosphate(mg/l)	0.06		0.05	0.08	0.03	BDL	BDL	0.07	0.03	BDL	0.03	0.06
27	Boron(mg/l)	0.86		BDL	BDL	BDL	BDL	0.34	BDL	0.2	BDL	BDL	BDL
28	Potassium(mg/l)	-		-	-	-	13.8	15.8	9.6	3.7	5.6	9.5	2.2
29	Fluoride(mg/l)	BDL		BDL	0.12	BDL	0.24	BDL	BDL	BDL	0.89	BDL	BDL
30	Arsenic(mg/l)	BDL		-	-	-	-	BDL	-	-	-	-	-
31	Cadmium(mg/l)	0.012		-	-	-	-	BDL	-	-	-	-	-
32	Copper(mg/l)	BDL		-	-	-	-	0.031	-	-	-	-	-
33	Lead(mg/l)	BDL		-	-	-	-	0.045	-	-	-	-	-
34	Chromium(mg/l)	0.064		-	-	-	-	BDL	-	-	-	-	-
35	Nickel(mg/l)	0.060		-	-	-	-	BDL	-	-	-	-	-
36	Zinc(mg/l)	BDL		-	-	-	-	BDL	-	-	-	-	-
37	Iron Total(mg/l)	BDL		-	-	-	-	BDL	-	-	-	-	-
38	Mercury (mg/l)	BDL		-	-	-	-	BDL	-	-	-	-	-
39	Carbaryl (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
40	DDT-o,p' (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
41	DDT-p,p' (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
42	alpha Endosulfan(mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
43	beta Endosulfan(mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
44	Anilofos (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
46	Aldrin/Dieldrin (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
47	Alpha HCH (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
48	Beta HCH (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
49	Chlorpyrifos (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL		-	-	-	-	-	-	-	-	-	-
51	Gamma-HCH (Lindane) (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
52	Malathion (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
53	Methyl parathion(mg/L)	BDL		-	-	-	-	-	-	-	-	-	-

DRY

Sr. No	Parameters	SAIPENT LAKE, NAVELM										Limit for class C river as per CPCB classification based on designated best use of rivers			
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22		
1	Temperature°C				29	28	29	30	28	28				4 ng/l or more	
2	Dissolved Oxygen mg/l				2.8	2.0	3.6	2.4	1.2	1.6				6-9	
3	pH				7.01	6.53	7.37	6.9	7.01	7.43					
4	Conductivity(µs/cm)				196	287.4	291.9	289.1	289.1	288.8					
5	BOD(mg/l) mg/l				8.0	4.2	4.4	4.0	4.0	4.6				3 mg/l or less	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)				1.17	0.47	0.1	BDL	0.22	0.12					
7	Nitrite Nitrogen as NO ₂ -N mg/l				0.085	BDL	0.194	0.017	0.006	0.009					
8	Total Coliform(MPN/100ml)				2200	3300	4900	4600	4900	940				5000 or less MPN/100 ml	
9	Fecal Coliform(MPN/100ml)				1700	1700	3300	2300	3300	700					
10	Fecal Streptococci MPN/100ml				110	230	330	490	790	170					
11	Turbidity(NTU)				15.52	17.35	16.09	9.4	6.16	12.06					
12	Phenolphthalein Alkalinity(mg/l)				BDL	BDL	BDL	BDL	BDL	BDL					
13	Total Alkalinity(mg/l)				38.0	26.0	24.0	80.0	82.0	70.0					
14	Chloride mg/l				20.0	39.1	17.6	48.40	32.0	29.5					
15	COD(mg/l)				24.0	10.0	12.0	10.0	12.0	12.0					
16	Ammonia mg/l				1.68	1.12	0.56	1.1	2.80	0.56					
17	Total Kjeldhal Nitrogen(mg/l)				0.06	0.12	0.16	0.25	1.77	0.05					
18	Hardness(mg/l)				52.0	78.0	66.0	66.0	66.0	80.0					
19	Calcium(mg/l)				16.0	21.6	18.4	16.0	22.0	13.6					
20	Magnesium(mg/l)				3.0	5.83	4.90	6.30	3.0	11.2					
21	Sulphate(mg/l)				32.0	32.3	14.1	40.32	7.0	7.5					
22	Sodium(mg/l)				-	-	29.0	41.6	60.5	37.1					
23	Total Dissolved Solids(mg/l)				137.0	187.0	187.0	170.0	185.0	183.0					
24	Total Fixed Solids(mg/l)				82.0	127.0	117.0	110	70.0	113.0					
25	Total Suspended Solid(mg/l)				8.0	27.0	20.0	20.0	51.0	31.0					
26	Phosphate(mg/l)				0.14	0.34	0.1	0.17	0.34	0.27					
27	Boron(mg/l)				BDL	BDL	BDL	0.28	0.2	BDL				DRY	
28	Potassium(mg/l)				-	-	10.2	11.3	11.8	11.4					
29	Fluoride(mg/l)				BDL	BDL	BDL	0.24	BDL	0.26					
30	Arsenic(mg/l)				-	-	-	BDL	-	-					
31	Cadmium(mg/l)				-	-	-	BDL	-	-					
32	Copper(mg/l)				-	-	-	0.019	-	-					
33	Lead(mg/l)				-	-	-	BDL	-	-					
34	Chromium(mg/l)				-	-	-	BDL	-	-					
35	Nickel(mg/l)				-	-	-	BDL	-	-					
36	Zinc(mg/l)				-	-	-	0.013	-	-					
37	Iron Total(mg/l)				-	-	-	0.218	-	-					
38	Mercury (mg/l)				-	-	-	BDL	-	-					
39	Carbaryl (mg/L)				-	-	-	-	-	-					
40	DDT-o,p' (mg/L)				-	-	-	-	-	-					
41	DDT-p,p' (mg/L)				-	-	-	-	-	-					
42	alpha Endosulfan(mg/L)				-	-	-	-	-	-					
43	beta Endosulfan(mg/L)				-	-	-	-	-	-					
44	Ambiofos (mg/L)				-	-	-	-	-	-					
45	2,4-Dichlorophenoxyacetic acid(mg/L)				-	-	-	-	-	-					
46	Aldrin/Dieldrin (mg/L)				-	-	-	-	-	-					
47	Alpha HCH (mg/L)				-	-	-	-	-	-					
48	Beta HCH (mg/L)				-	-	-	-	-	-					
49	Chlorpyrifos (mg/L)				-	-	-	-	-	-					
50	DDT(o,p' & Isomers of DDT, DDE & DDD)				-	-	-	-	-	-					
51	Gamma-HCH (Lindane) (mg/L)				-	-	-	-	-	-					
52	Malathion (mg/L)				-	-	-	-	-	-					
53	Methyl parathion(mg/L)				-	-	-	-	-	-					

LOCATION WAS INACCESSIBLE

DRY

DRY

DRY

Sr. No	Parameters	CURTORM LAKE, CURTORM												Limit for class C river as per CPCB classification based on designated best use of rivers	
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22		
1	Temperature°C	30		29	30	27	27	30	29	27	28	28	29		
2	Dissolved Oxygen mg/l	4.0		6.3	6.1	6.0	6.1	2.7	1.6	4.2	7.3	4.0	4.8		
3	pH	6.53		6.13	6.62	6.56	6.54	6.25	6.79	7.68	6.89	7.02	6.60		4 ng/l or more
4	Conductivity(µs/cm)	167.30		163.26	78.09	84.10	90.95	167.6	98.2	96.83	112.20	115.8	48.59		6-9
5	BOD(mg/l)	BDL		BDL	BDL	BDL	BDL	2.3	BDL	2.0	BDL	BDL	BDL		3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.14		1.23	0.47	BDL	BDL	BDL	BDL	0.1	0.16	BDL	BDL		
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.080		0.020	0.034	0.016	BDL	BDL	BDL	BDL	0.014	BDL	BDL		
8	Total Coliform(MPN/100ml)	3300		4900	2300	3300	490	940	1300	2200	1700	2800	2200		5000 or less MPN/100 ml
9	Fecal Coliform(MPN/100ml)	2300		2300	1300	2300	130	260	790	1300	1400	2200	1700		
10	Fecal Streptococci(MPN/100ml)	241		541	110	130	230	140	220	170	220	350	240		
11	Turbidity(NTU)	4.87		7.82	47.4	24.8	4.12	24.3	2.34	10.39	5.6	4.88	10.57		
12	Phenolphthalein Alkalinity(mg/l)	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		
13	Total Alkalinity(mg/l)	30.0		20.0	20.0	20.0	16.0	58.0	42.0	32.0	40.0	38.0	44.0		
14	Chloride mg/l	18.86		12.9	10.0	7.0	9.0	21.49	9.49	9.3	11.0	12.0	12.6		
15	COD(mg/l)	16.0		6.0	12.0	6.0	4.0	10.0	12.0	10.0	4.0	10.0	12.0		
16	Total Kjeldhal Nitrogen(mg/l)	18.5		3.9	5.0	1.1	1.7	2.80	2.24	1.12	1.7	2.2	1.68		
17	Ammonia mg/l	BDL		0.08	0.23	0.42	BDL	0.39	BDL	BDL	BDL	0.15	0.09		
18	Hardness(mg/l)	38.0		24.0	44.0	26.0	198.0	40.0	24.0	28.0	80.0	46.0	66.0		
19	Calcium(mg/l)	9.6		4.8	4.0	5.6	44.9	8.8	6.4	7.2	18.4	11.22	6.4		
20	Magnesium(mg/l)	3.4		2.9	8.3	2.9	20.9	4.4	BDL	2.4	8.3	4.4	12.0		
21	Sulphate(mg/l)	7.70		11.23	19.65	5.16	4.23	4.73	3.63	3.6	6.52	4.0	3.4		
22	Sodium(mg/l)	-		-	-	-	28.6	25.5	27.9	25.4	28.0	26.1	11.8		
23	Total Dissolved Solids(mg/l)	97.0		98.0	50.0	51.0	54.0	101.0	61.0	56.0	83.0	68.3	30.0		
24	Total Fixed Solids(mg/l)	69.0		62.0	45.0	40.0	40.0	61.0	39.0	40.0	50.0	64.3	18.0		
25	Total Suspended Solid (mg/l)	27.0		35.0	30.0	34.0	9.0	20.0	26.0	32.0	9.0	6.0	16.0		
26	Phosphate(mg/l)	0.02		0.03	0.14	0.12	BDL	0.02	0.07	0.03	BDL	BDL	0.05		
27	Boron(mg/l)	0.67		BDL	BDL	BDL	BDL	0.36	BDL	0.8	BDL	BDL	BDL		
28	Potassium(mg/l)	-		-	-	-	14.0	16.5	7.7	4.0	7.0	9.3	1.6		
29	Fluoride(mg/l)	BDL		BDL	0.30	BDL	BDL	0.53	BDL	0.30	0.56	0.72	BDL		
30	Arsenic(mg/l)	BDL		-	-	-	-	BDL	-	-	-	-	-		
31	Cadmium(mg/l)	0.019		-	-	-	-	BDL	-	-	-	-	-		
32	Copper(mg/l)	BDL		-	-	-	-	0.026	-	-	-	-	-		
33	Lead(mg/l)	BDL		-	-	-	-	BDL	-	-	-	-	-		
34	Chromium(mg/l)	0.018		-	-	-	-	BDL	-	-	-	-	-		
35	Nickel(mg/l)	0.087		-	-	-	-	BDL	-	-	-	-	-		
36	Zinc(mg/l)	0.013		-	-	-	-	0.035	-	-	-	-	-		
37	Iron Total(mg/l)	BDL		-	-	-	-	0.115	-	-	-	-	-		
38	Mercury (mg/l)	BDL		-	-	-	-	BDL	-	-	-	-	-		
39	Carbaryl (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-		
40	DDT-o,p' (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-		
41	DDT-p,p' (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-		
42	alpha Endosulfan(mg/L)	BDL		-	-	-	-	-	-	-	-	-	-		
43	beta Endosulfan(mg/L)	BDL		-	-	-	-	-	-	-	-	-	-		
44	Anilofos (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-		
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL		-	-	-	-	-	-	-	-	-	-		
46	Aldrin/Dieldrin (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-		
47	Alpha HCH (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-		
48	Beta HCH (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-		
49	Chlorpyrifos (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-		
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL		-	-	-	-	-	-	-	-	-	-		
51	Gamma-HCH (Lindane) (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-		
52	Malathion (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-		
53	Methyl parathion(mg/L)	BDL		-	-	-	-	-	-	-	-	-	-		

DRY

Sr. No	Parameters	CARAMBOLIM LAKE												Limit for class C river as per CPCB classification based on designated best use of rivers	
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22		
1	Temperature°C	29	29	30	27	29	28	29	29	27	28	28	29		
2	Dissolved Oxygen mg/l	7.6	8.3	4.3	7.8	7.7	6.4	6.0	7.5	8.8	10.0	9.7	7.1	4 mg/l or more	
3	pH	8.06	8.33	7.75	6.34	6.60	7.07	6.88	7.85	7.50	8.87	7.7	7.28	6-9	
4	Conductivity(us/cm)	285.65	603.00	216.22	99.18	125.6	111.4	114.7	130.8	129.7	229.4	199.0	193.4		
5	BOD(mg/l)	2.8	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.1	BDL	3 mg/l or less	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.12	BDL	0.117	BDL	0.006	BDL	BDL	BDL	0.37	BDL	BDL	BDL		
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.007	BDL	0.006	0.006	BDL	0.005	BDL	BDL	BDL	0.007	BDL		
8	Total Coliform(MPN/100ml)	1300	1700	2300	1300	2300	3300	2200	1700	2300	1700	2200	1700	5000 or less MPN/100 ml	
9	Fecal Coliform(MPN/100ml)	780	1300	1300	780	1300	1300	1700	1100	1300	1300	1700	1300		
10	Fecal Streptococci(MPN/100ml)	151	1601	541	170	140	33	82	230	490	330	230	230		
11	Turbidity(NTU)	6.97	6.4	6.17	9.17	7.53	6.09	6.67	6.94	6.45	6.16	8.04	19.02		
12	Phenolphthalein Alkalinity(mg/l)	12.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	4.0		
13	Total Alkalinity(mg/l)	36.0	50.0	44.0	46.0	12.0	16.0	40.0	48.0	50.0	40.0	44.0	66.0		
14	Chloride mg/l	35.24	38.0	78.98	8.30	10.5	9.0	7.83	15.0	49.9	22.99	27.0	21.9		
15	COD(mg/l)	12.0	6.0	16.0	BDL	8.0	6.0	6.0	6.0	4.0	4.0	12.0	6.0		
16	Total Kjeldhal Nitrogen(mg/l)	2.80	1.70	1.70	3.36	1.7	1.12	1.12	1.70	2.2	2.2	2.4	1.12		
17	Ammonia mg/l	0.05	0.14	0.124	0.07	BDL	BDL	BDL	BDL	BDL	BDL	0.11	0.09		
18	Hardness(mg/l)	62.0	54.0	68.0	28.0	40.0	38.0	48.0	38.0	52.0	58.0	50.0	56.0		
19	Calcium(mg/l)	18.4	14.43	17.64	8.8	8.02	13.0	26.0	12.83	12.0	11.20	16.0	16.8		
20	Magnesium(mg/l)	3.90	4.40	5.80	BDL	4.9	BDL	5.35	BDL	5.3	7.29	2.4	3.4		
21	Sulphate(mg/l)	11.99	9.60	5.27	3.30	7.29	5.0	2.9	8.3	5.76	6.74	11.0	11.9		
22	Sodium(mg/l)	-	-	-	-	-	28.5	6.3	205.50	28.4	224.6	35.8	33.8		
23	Total Dissolved Solids(mg/l)	173.0	362.0	132.0	66.0	76.0	69.0	69.0	79.0	88.0	139.0	135.0	120.0		
24	Total Fixed Solids(mg/l)	95.0	355.0	117.0	46.0	70.0	45.0	35.0	67.0	55.0	41.0	54.0	72.0		
25	Total Suspended Solid (mg/l)	27.0	13.0	10.0	9.0	10.0	4.0	14.0	11.0	11.0	15.0	32.0	15.0		
26	Phosphate(mg/l)	0.020	0.120	0.064	0.040	0.050	0.02	0.03	0.07	0.04	BDL	0.06	0.09		
27	Boron(mg/l)	0.92	1.560	BDL	BDL	BDL	0.57	0.24	BDL	BDL	BDL	BDL	BDL		
28	Potassium(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-		
29	Fluoride(mg/l)	BDL	0.45	BDL	0.96	0.2	BDL	0.2	BDL	BDL	BDL	0.32	0.23		
30	Arsenic(mg/l)	BDL	-	-	-	-	-	-	-	-	-	-	-		
31	Cadmium(mg/l)	0.044	-	-	-	-	-	0.012	-	-	-	-	-		
32	Copper(mg/l)	BDL	-	-	-	-	-	0.033	-	-	-	-	-		
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.044	-	-	-	-	-		
35	Nickel(mg/l)	0.124	-	-	-	-	-	-	-	-	-	-	-		
36	Zinc(mg/l)	0.024	-	-	-	-	-	0.064	-	-	-	-	-		
37	Iron Total(mg/l)	0.267	-	-	-	-	-	0.050	-	-	-	-	-		
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
40	DDT-op (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
41	DDT-pp (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-		
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		

ANJUNEM LAKE														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	32	29	28	29	28	27	28	30	30	31	29	28	4 mg/l or more
2	Dissolved Oxygen mg/l	5.4	7.0	5.8	7.0	7.4	6.6	4.9	5.4	4.8	5.5	4.2	5.1	
3	pH	6.41	6.60	6.55	7.36	6.01	6.55	7.1	6.28	6.6	6.95	6.44	6.96	
4	Conductivity(µs/cm)	50.16	140.0	43.94	41.07	70.74	51.35	39.30	43.59	40.18	49.61	43.76	47.70	3 mg/l or less
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.11	0.30	BDL	0.18	0.20	0.17	0.10	BDL	BDL	0.15	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	BDL	BDL	0.01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	5000 or less MPN/100 ml
8	Total Coliform(MPN/100ml)	350	280	170	170	79	70	49	110	140	240	17	23	
9	Fecal Coliform(MPN/100ml)	170	220	110	49	49	49	33	70	110	130	7.8	13	
10	Fecal Streptococci MPN/100ml	102	59	85	4.0	4.5	13.0	21	23	49	49	2.0	4.5	
11	Turbidity(NTU)	3.80	3.22	1.09	4.32	15.92	5.10	2.33	6.30	2.61	4.95	2.25	5.08	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	16.0	40.0	20.0	10.0	16.0	18.0	14.0	22.0	16.0	20.0	42.0	22.0	
14	Chloride mg/l	5.0	11.0	7.0	9.78	3.50	5.50	4.0	6.0	2.4	4.4	5.38	6.4	
15	COD(mg/l) mg/l	8.0	BDL	6.0	4.0	4.0	4.0	4.0	6.0	BDL	4.0	8.0	8.0	
16	Total Kjeldhal Nitrogen(mg/l)	3.4	4.48	2.80	1.12	1.12	1.12	1.68	1.12	BDL	2.24	1.1	2.24	
17	Ammonia mg/l	0.05	BDL	0.01	BDL	BDL	BDL	BDL	BDL	BDL	0.07	BDL	BDL	
18	Hardness(mg/l)	32.0	50.0	8.0	18.0	10.0	12.0	8.0	20.0	12.0	14.0	12.0	22.0	
19	Calcium(mg/l)	4.81	12.0	BDL	8.0	3.2	4.0	3.0	4.01	2.4	2.4	4.0	4.0	
20	Magnesium(mg/l)	4.9	5.0	BDL	2.43	BDL	BDL	BDL	2.43	BDL	1.94	BDL	2.9	
21	Sulphate(mg/l)	2.36	2.0	2.69	2.95	BDL	BDL	BDL	BDL	BDL	6.38	4.08	3.8	
22	Sodium(mg/l)	-	-	-	-	-	-	18.0	29.9	26.3	122.3	25.8	5.2	
23	Total Dissolved Solids(mg/l)	30.0	98.0	26.0	27.0	43.0	31.0	26.0	30.0	27.0	30.0	27.0	30.0	
24	Total Fixed Solids(mg/l)	26.0	58.0	20.0	12.0	26.0	18.0	15.0	20.0	12.0	12.0	19.0	20.0	
25	Total Suspended Solid (mg/l)	9.0	30.0	6.0	7.0	6.0	6.0	18.0	11.0	8.0	5.0	8.0	11.0	
26	Phosphate(mg/l)	BDL	0.02	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
27	Boron(mg/l)	1.78	BDL	BDL	BDL	BDL	BDL	BDL	1.8	BDL	BDL	BDL	BDL	
28	Potassium(mg/l)	-	-	-	-	-	-	15.4	13.7	1.7	79.5	7.7	0.1	
29	Fluoride(mg/l)	BDL	BDL	0.6	BDL	BDL	BDL	BDL	BDL	BDL	0.39	BDL	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.014	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.054	-	-	-	-	-	
33	Lead(mg/l)	0.085	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	0.070	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.083	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.077	-	-	-	-	-	0.081	-	-	-	-	-	
37	Iron Total(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfant(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfant(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

Sr. No	Parameters	CHAPOLI DAM												Limit for class C river as per CPCB classification based on designated best use of rivers	
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22		
1	Temperature°C	32	29	28	28	28	28	29	29	31	30	28	29		
2	Dissolved Oxygen(mg/l)	7.4	6.9	7.6	7.7	7.5	6.8	8.3	8.8	6.8	8.1	8.0	7.7	4 mg/l or more	
3	pH	7.07	6.81	7.2	7.26	7.78	7.02	6.93	7.59	7.59	7.56	6.53	6.67	6-9	
4	Conductivity(us/cm)	73.67	80.70	80.73	62.21	160.2	59.73	115.30	60.26	68.70	62.72	63.18	63.18		
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	0.13	BDL	0.13	0.13	0.13	BDL	BDL	BDL	BDL	BDL		
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		
8	Total Coliform(MPN/100ml)	280	350	130	170	220	280	170	350	240	350	170	350	5000 or less MPN/100 ml	
9	Fecal Coliform(MPN/100ml)	130	240	79	130	170	130	130	240	130	240	110	240		
10	Fecal Streptococci (MPN/100ml)	10.3	21	34	4.5	7.8	<1.8	4.5	49	79	170	46	79		
11	Turbidity(NTU)	2.60	4.02	4.42	4.40	3.66	3.88	2.83	1.31	2.82	4.11	1.51	2.34		
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		
13	Total Alkalinity(mg/l)	22.0	20.0	22.0	20.0	12.0	16.0	22.0	22.0	28.0	24.0	30.0	28.0		
14	Chlorides(mg/l)	7.50	7.44	10.00	7.0	10.5	7.5	21.50	8.4	9.8	7.8	5.87	6.0		
15	COD(mg/l)	6.0	8.0	BDL	10.0	4.0	4.0	4.0	4.0	8.0	4.0	4.0	4.0		
16	Total Kjeldahl Nitrogen(mg/l)	1.7	4.5	1.12	3.4	1.1	1.1	1.10	2.24	1.70	3.92	2.80	1.70		
17	Ammonia (mg/l)	0.10	BDL	0.08	0.112	0.06	BDL	BDL	BDL	BDL	BDL	0.08	0.11		
18	Total Hardness(mg/l)	30.0	26.0	18.0	16.0	16.0	16.0	22.0	22.0	16.0	26.0	30.0	24.0		
19	Calcium(mg/l)	3.21	4.0	5.0	4.0	3.21	3.21	3.21	6.41	4.80	4.80	5.60	6.4		
20	Magnesium(mg/l)	5.3	3.9	BDL	1.5	BDL	BDL	3.4	BDL	BDL	3.4	3.89	2.0		
21	Sulphate(mg/l)	3.62	2.51	3.50	BDL	3.95	2.37	2.83	BDL	11.99	BDL	BDL	BDL		
22	Sodium(mg/l)	-	-	-	-	-	28.60	23.1	29.3	25.3	BDL	125.4	7.6		
23	Total Dissolved Solids(mg/l)	44.0	52.0	56.0	37.0	110.0	35.0	68.0	37.0	41.0	35.0	37.0	41.0		
24	Total Fixed Solids(mg/l)	38.0	28.0	32.0	30.0	103.0	32.0	65.0	28.0	23.0	21.0	13.0	35.0		
25	Total Suspended Solids(mg/l)	7.0	11.0	6.0	11.0	3.0	4.0	4.0	10.0	25.0	18.0	4.0	3.0		
26	Phosphate(mg/l)	0.02	0.02	0.03	BDL	BDL	0.03	BDL	BDL	0.073	BDL	0.101	0.02		
27	Boron(mg/l)	0.70	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		
28	Potassium(mg/l)	-	-	-	-	-	14.9	15.7	13.1	4.3	BDL	14.4	0.2		
29	Flouride(mg/l)	0.29	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.76	BDL	BDL		
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.033	-	-	-	-	-		
32	Copper(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
33	Lead(mg/l)	0.042	-	-	-	-	-	BDL	-	-	-	-	-		
34	Chromium(mg/l)	0.043	-	-	-	-	-	BDL	-	-	-	-	-		
35	Nickel(mg/l)	0.054	-	-	-	-	-	BDL	-	-	-	-	-		
36	Zinc(mg/l)	0.036	-	-	-	-	-	0.010	-	-	-	-	-		
37	Iron Total(mg/l)	BDL	-	-	-	-	-	0.132	-	-	-	-	-		
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-		
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		

Sr. No	Parameters	RUMDER LAKE, NUVEM												Limit for class C river as per CPCB classification based on designated best use of rivers
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	
1	Temperature°C	30	29	28	29	28	28	28	28	30	29	28	28	
2	Dissolved Oxygen (mg/l)	4.0	4.2	5.0	4.7	5.4	5.2	5.7	4.2	6.0	4.2	4.0	4.1	4 mg/l or more
3	pH	6.14	7.53	6.9	6.77	7.75	6.17	6.80	6.72	6.69	6.64	6.01	7.20	6-9
4	Conductivity µs/cm	113.00	141.27	137.80	117.8	106.5	115.4	97.12	122.90	95.94	103.30	106.0	113.7	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.11	0.1	0.266	0.14	0.19	0.18	0.22	BDL	BDL	BDL	0.13	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	BDL	0.026	0.005	BDL	0.005	0.02	BDL	0.005	BDL	0.007	
8	Total Coliform(MPN/100ml)	330	790	330	230	1100	1400	1700	2300	3300	3300	2300	2200	5000 or less MPN/100 ml
9	Fecal Coliform(MPN/100ml)	230	490	230	130	780	780	1300	1300	2300	2300	1300	1700	
10	Fecal Streptococci(MPN/100ml)	141	171	35	79	130	240	490	790	790	1100	230	330	
11	Turbidity(NTU)	5.40	21.50	7.75	18.06	12.55	2.59	16.81	2.81	3.69	9.14	11.58	23.60	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	28.0	22.0	26.0	28.0	12.0	26.0	22.0	28.0	34.0	32.0	50.0	72.0	
14	Chloride mg/l	17.00	19.85	31.00	20.49	22.50	13.0	14.50	16.99	2201.5	12.7	3.92	18.5	
15	COD(mg/l)	4.0	12.0	14.0	12.0	12.0	10.0	12.0	10.0	-	8.0	8.0	20.0	
16	Total Kjeldhal Nitrogen(mg/l)	0.6	2.8	1.12	4.5	1.7	1.7	2.2	1.68	1.7	3.9	3.92	3.9	
17	Ammonia mg/l	0.10	BDL	0.06	0.174	0.08	BDL	BDL	0.06	BDL	BDL	BDL	0.37	
18	Hardness(mg/l)	38.0	16.0	58.0	18.0	28.0	28.0	12.0	30.0	20.0	36.0	58.0	40.0	
19	Calcium(mg/l)	7.21	5.6	6	5.61	10.42	7.21	2.40	8.02	6.4	8.02	11.20	11.22	
20	Magnesium(mg/l)	4.9	0.5	10	1.0	BDL	2.4	BDL	2.4	BDL	3.9	7.29	2.9	
21	Sulphate(mg/l)	3.62	14.68	5.00	13.82	8.73	4.41	4.90	11.16	9.96	BDL	BDL	12.0	
22	Sodium(mg/l)	-	-	-	-	-	32.60	21.0	29.5	28.2	17.6	147.0	21.5	
23	Total Dissolved Solids(mg/l)	67.0	87.0	94.0	64.0	67.0	68.0	57.0	76.0	60.0	67.0	64.0	74.0	
24	Total Solids(mg/l)	59.0	53.0	56.0	61.0	60.0	61.0	52.0	45.0	40.0	47.0	24.0	68.0	
25	Total Suspended Solid (mg/l)	41.0	26.0	7.0	26.0	33.0	16.0	29.0	20.0	43.0	26.0	19.0	30.0	
26	Phosphate(mg/l)	0.03	0.05	0.07	0.132	0.11	0.06	0.14	0.03	0.08	0.18	0.703	0.13	
27	Boron(mg/l)	0.62	BDL	BDL	BDL	BDL	BDL	BDL	0.22	BDL	BDL	BDL	0.30	
28	Potassium(mg/l)	-	-	-	-	-	10.4	16.3	4.8	2.6	BDL	16.9	1.4	
29	Fluoride(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.12	0.24	0.2	BDL	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
33	Lead(mg/l)	0.062	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	0.095	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.105	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.010	-	-	-	-	-	
37	Iron Total(mg/l)	0.081	-	-	-	-	-	BDL	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

Sr. No	Parameters	BATIM LAKE											Limit for class C river as per CPCB classification based on designated best use of rivers
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
1	Temperature°C	28		29	25	29	28	29	30	30	31	29	30
2	Dissolved Oxygen(mg/l)	1.8		6.5	5.5	5.3	2.4	7.1	4.0	5.8	4.0	6.1	5.0
3	pH	6.28		6.56	7.44	6.29	6.56	6.93	6.82	7.1	6.41	6.84	6.08
4	Conductivity(us/cm)	104.74		308.5	93.6	120.5	55.94	127.5	155.2	138.2	83.51	128.4	149.5
5	BOD(mg/l)	2.8		BDL	BDL	4.0	5.4	BDL	BDL	BDL	BDL	BDL	BDL
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.18		0.54	0.151	0.242	BDL	0.2	0.73	0.11	0.12	BDL	0.120
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL		BDL	0.012	0.028	BDL	BDL	0.519	BDL	0.007	BDL	0.021
8	Total Coliform(MPN/100ml)	350		2400	920	540	920	1100	700	940	1300	790	1300
9	Fecal Coliform(MPN/100ml)	170		1300	540	350	540	700	460	460	790	490	790
10	Fecal Streptococci (MPN/100ml)	48		42	49	79	110	170	220	130	240	170	140
11	Turbidity(NTU)	5.10		7.42	19.16	5.99	3.28	2.64	5.84	6.76	12.89	6.36	3.34
12	Phenolphthalein Alkalinity(mg/l)	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
13	Total Alkalinity(mg/l)	30		16	200	16.0	10.0	54.0	38.0	40.0	24.0	22.0	40.0
14	Chlorides(mg/l)	13.5		349.4	122.0	15.5	11.7	13.9	99.8	499.1	1223.0	28.9	30.33
15	COD(mg/l)	10.0		4.0	6.0	6.0	10.0	4.0	4.0	4.0	8.0	BDL	10.0
16	Total Kjeldahl Nitrogen(mg/l)	0.56		3.9	3.92	0.6	0.56	0.56	2.8	2.8	2.2	0.56	2.802
17	Ammonia (mg/l)	0.06		0.09	0.14	0.137	BDL	BDL	0.06	0.10	0.07	BDL	BDL
18	Total Hardness(mg/l)	32		34	28.0	272.0	68.0	38.0	42.0	128.0	12.0	34.0	38.0
19	Calcium(mg/l)	6.4		7.2	12	262	3.2	8.8	9.6	32.1	4.0	5.61	5.6
20	Magnesium(mg/l)	3.9		3.9	3.89	2.4	14.58	3.9	4.4	11.7	BDL	4.9	5.83
21	Sulphate(mg/l)	3.3		6.04	3.89	27.69	7.3	39.7	23.04	46.08	84.5	4.2	4.97
22	Sodium(mg/l)	-		-	-	-	28.7	26.8	178.4	50.5	355.6	44.2	33.9
23	Total Dissolved Solids(mg/l)	68		185	60.0	72.0	36.0	74.0	99.0	83.0	48.0	72.0	89.0
24	Total Solids(mg/l)	30		94	20.0	62.0	26.0	54.0	64.0	57.0	22.0	42.0	42.0
25	Total Suspended Solids(mg/l)	28		13	21.0	21.0	17.0	19.0	8.0	10.0	14.0	48.0	8.0
26	Phosphate(mg/l)	BDL		0.04	0.062	0.122	BDL	BDL	0.02	1.79	0.11	0.02	0.062
27	Boron(mg/l)	0.46		BDL	0.86	BDL	BDL	BDL	0.26	BDL	BDL	BDL	BDL
28	Potassium(mg/l)	-		-	-	-	13	16.6	23.8	9.1	187.5	10.2	2.8
29	Flouride(mg/l)	BDL		1.0	0.56	BDL	BDL	0.3	BDL	0.4	BDL	BDL	BDL
30	Arsenic(mg/l)	BDL		-	-	-	-	BDL	-	-	-	-	-
31	Cadmium(mg/l)	0.017		-	-	-	-	0.012	-	-	-	-	-
32	Copper(mg/l)	0.011		-	-	-	-	0.018	-	-	-	-	-
33	Lead(mg/l)	BDL		-	-	-	-	0.088	-	-	-	-	-
34	Chromium(mg/l)	0.02		-	-	-	-	0.039	-	-	-	-	-
35	Nickel(mg/l)	0.132		-	-	-	-	0.085	-	-	-	-	-
36	Zinc(mg/l)	0.034		-	-	-	-	0.071	-	-	-	-	-
37	Iron Total(mg/l)	0.255		-	-	-	-	0.129	-	-	-	-	-
38	Mercury (mg/l)	BDL		-	-	-	-	BDL	-	-	-	-	-
39	Carbaryl (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
40	DDT-o-p (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
41	DDT-p-p (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
42	alpha Endosulfan(mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
43	beta Endosulfan(mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
44	Anilofos (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
46	Aldrin/Dieldrin (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
47	Alpha HCH (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
48	Beta HCH (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
49	Chlorpyrifos (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL		-	-	-	-	-	-	-	-	-	-
51	Gamma-HCH (Lindane) (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
52	Malathion (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-
53	Methyl parathion(mg/L)	BDL		-	-	-	-	-	-	-	-	-	-

DRY

AMBULOR LAKE														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature°C	30		28	28	28	28	28	29	30	29	28	28	
2	Dissolved Oxygen(mg/l)	4.0		5.9	5.6	5.4	6.5	7.2	4.5	6.9	4.4	5.0	5.7	4 mg/l or more
3	pH	5.98		6.9	7.05	7.64	6.03	7.48	6.57	6.27	6.64	6.0	6.21	6-9
4	Conductivity(µs/cm)	85.36		59.62	91.34	237.6	48.07	72.70	69.64	105.30	42.05	52.81	91.35	
5	BOD(mg/l)	BDL		BDL	BDL	BDL	BDL	BDL	3.2	2.1	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL		0.25	BDL	0.12	0.11	0.18	0.15	BDL	BDL	BDL	0.10	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.005		BDL	BDL	BDL	BDL	0.005	0.02	BDL	BDL	BDL	0.005	
8	Total Coliform(MPN/100ml)	920		540	240	350	540	330	790	1300	1100	350	540	5000 or less MPN/100 ml
9	Fecal Coliform(MPN/100ml)	240		170	130	240	350	230	330	790	790	240	350	
10	Fecal Streptococci (MPN/100ml)	39		27	49	49	79	49	70	110	140	33	49	
11	Turbidity(NTU)	1.35		3.5	5.96	4.41	8.98	9.48	4.26	3.9	6.44	5.98	10.36	
12	Phenolphthalein Alkalinity(mg/l)	BDL		BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	16.0		14.0	12.0	8.0	4.0	24.0	20.0	26.0	20.0	20.0	26.0	
14	Chlorides(mg/l)	11.0		12.0	13.0	18.5	8.5	15.5	9.49	12.23	20.10	8.32	13.0	
15	COD(mg/l)	8.0		BDL	14.0	8.0	8.0	6.0	10.0	4.0	6.0	4.0	18.0	
16	Total Kjeldahl Nitrogen(mg/l)	0.6		2.24	3.4	1.1	1.7	1.7	2.24	0.6	3.36	2.24	2.8	
17	Ammonia (mg/l)	0.09		0.1	0.134	0.07	0.06	BDL	0.117	BDL	BDL	0.05	0.12	
18	Total Hardness(mg/l)	22.0		14.0	14.0	10.0	6.0	26.0	16.0	16.0	28.0	58.0	20.0	
19	Calcium(mg/l)	4.01		3.0	3.21	3.21	BDL	4.01	5.61	4.8	4.01	11.2	6.41	
20	Magnesium(mg/l)	2.9		BDL	1.5	BDL	BDL	3.9	BDL	BDL	4.37	7.29	BDL	
21	Sulphate(mg/l)	3.25		6.0	4.25	3.49	BDL	9.3	BDL	13.6	BDL	BDL	6.0	
22	Sodium(mg/l)	-		-	-	-	33.9	20.9	29.5	26.3	13.7	25.4	16.8	
23	Total Dissolved Solids(mg/l)	50.0		40.0	54.0	138.0	29.0	44.0	44.0	64.0	28.0	33.0	59.0	
24	Total Fixed Solids(mg/l)	43.0		24.0	49.0	127.0	27.0	39.0	25.0	31.0	18.0	12.0	55.0	
25	Total Suspended Solids(mg/l)	12.0		12.0	7.0	7.0	5.0	4.0	29.0	40.0	18.0	9.0	18.0	
26	Phosphate(mg/l)	BDL		0.03	BDL	0.02	0.05	0.04	0.03	BDL	0.02	0.02	0.03	
27	Boron(mg/l)	0.86		BDL	BDL	BDL	BDL	BDL	0.23	BDL	BDL	BDL	0.22	
28	Potassium(mg/l)	-		-	-	-	12.8	15.7	7.2	2.6	3.4	8.4	0.7	
29	Flouride(mg/l)	BDL		BDL	BDL	BDL	BDL	0.533	0.55	0.26	1.14	BDL	BDL	
30	Arsenic(mg/l)	BDL		-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL		-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	0.016		-	-	-	-	BDL	-	-	-	-	-	
33	Lead(mg/l)	0.058		-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	0.026		-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.094		-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL		-	-	-	-	BDL	-	-	-	-	-	
37	Iron Total(mg/l)	BDL		-	-	-	-	0.533	-	-	-	-	-	
38	Mercury (mg/l)	BDL		-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL		-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL		-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL		-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL		-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL		-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL		-	-	-	-	-	-	-	-	-	-	

DRY

SARZORA LAKE														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for class C river as per CPCB classification based on designated best use of rivers
1	Temperature °C	-	-	-	-	-	-	-	-	-	-	30	29	4 mg/l or more 6-9
2	Dissolved Oxygen(mg/l)	-	-	-	-	-	-	-	-	-	-	8.4	6.4	
3	pH	-	-	-	-	-	-	-	-	-	-	6.70	7.63	
4	Conductivity(µs/cm)	-	-	-	-	-	-	-	-	-	-	62.44	493.0	3 mg/l or less
5	BOD(mg/l)	-	-	-	-	-	-	-	-	-	-	BDL	BDL	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	-	-	-	-	-	-	-	-	-	-	0.12	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	-	-	-	-	-	-	-	-	-	-	BDL	0.007	5000 or less MPN/100 ml
8	Total Coliform(MPN/100ml)	-	-	-	-	-	-	-	-	-	-	1400	490	
9	Fecal Coliform(MPN/100ml)	-	-	-	-	-	-	-	-	-	-	790	330	
10	Fecal Streptococci (MPN/100ml)	-	-	-	-	-	-	-	-	-	-	220	17	
11	Turbidity(NTU)	-	-	-	-	-	-	-	-	-	-	2.47	6.66	
12	Phenolphthalein Alkalinity(mg/l)	-	-	-	-	-	-	-	-	-	-	BDL	BDL	
13	Total Alkalinity(mg/l)	-	-	-	-	-	-	-	-	-	-	18.0	36.0	
14	Chlorides(mg/l)	-	-	-	-	-	-	-	-	-	-	6.0	49.9	
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	6.0	4.0	
16	Total Kjeldahl Nitrogen(mg/l)	-	-	-	-	-	-	-	-	-	-	1.7	1.1	
17	Ammonia (mg/l)	-	-	-	-	-	-	-	-	-	-	BDL	0.21	
18	Total Hardness(mg/l)	-	-	-	-	-	-	-	-	-	-	18.0	300.0	
19	Calcium(mg/l)	-	-	-	-	-	-	-	-	-	-	2.40	40.1	
20	Magnesium(mg/l)	-	-	-	-	-	-	-	-	-	-	2.9	48.6	
21	Sulphate(mg/l)	-	-	-	-	-	-	-	-	-	-	2.10	9.09	
22	Sodium(mg/l)	-	-	-	-	-	-	-	-	-	-	25.4	72.1	
23	Total Dissolved Solids(mg/l)	-	-	-	-	-	-	-	-	-	-	37.0	281.0	
24	Total Fixed Solids(mg/l)	-	-	-	-	-	-	-	-	-	-	31.0	182.0	
25	Total Suspended Solids(mg/l)	-	-	-	-	-	-	-	-	-	-	3.0	12.0	
26	Phosphate(mg/l)	-	-	-	-	-	-	-	-	-	-	0.03	0.08	
27	Boron(mg/l)	-	-	-	-	-	-	-	-	-	-	BDL	BDL	
28	Potassium mg/l)	-	-	-	-	-	-	-	-	-	-	7.9	5.2	
29	Flouride(mg/l)	-	-	-	-	-	-	-	-	-	-	0.20	BDL	
30	Arsenic(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
31	Cadmium(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
32	Copper(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
33	Lead(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
34	Chromium(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
35	Nickel(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
36	Zinc(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
37	Iron Total(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
38	Mercury (mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
39	Carbaryl (mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfant(mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfant(mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & Isomers of DDT, DDE & DDD)	-	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	-	-	-	-	-	-	-	-	-	-	-	-	

Sr. No	Parameters	AGRICULTURAL CANAL UPSTREAM OF CUNCOLIM INDUSTRIAL ESTATE										Limit for Class E, as per CPCB classification based on designated best use			
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22		
1	Temperature ^o C	31	28	28	27		28				30	29	30		
2	Dissolved Oxygen(mg/l)	6.8	6.2	7.3	5.2		5.0				7.9	7.2	7.0		
3	pH	7.94	6.17	6.39	6.50		6.81				7.16	6.37	6.19		6-8.5
4	Conductivity(μs/cm)	60.81	79.19	410.2	366.0		331.2				51.74	47.61	60.19		Max 2250 μs/cm
5	BOD(mg/l)	BDL	BDL	BDL	BDL		BDL				BDL	BDL	BDL		
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.11	BDL	1.64		BDL				BDL	BDL	0.49		
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	0.03	0.007		0.005				BDL	BDL	BDL		
8	Total Coliform(MPN/100ml)	2400	1700	2400	2200		1300				1300	1700	270		
9	Fecal Coliform(MPN/100ml)	1300	1300	1300	1300		790				790	1100	220		
10	Fecal Streptococci (MPN/100ml)	921	>1601	>1601	350		240				170	220	130		
11	Turbidity(NTU)	3.19	4.51	1.49	4.04		3.72				2.48	1.32	1.24		
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL		BDL				BDL	BDL	BDL		
13	Total Alkalinity(mg/l)	16.0	20.0	26.0	12.0		16.0				22	18.0	38.0		
14	Chlorides(mg/l)	5.40	7.90	67.00	28.30		25.44				4.9	6.36	6.5		
15	COD(mg/l)	6.0	6.0	4.0	4.0		4.0				BDL	6.0	4.0		
16	Total Kjeldahl Nitrogen(mg/l)	BDL	1.1	1.7	1.7		2.8				1.12	0.6	0.6		
17	Ammonia (mg/l)	BDL	0.09	0.11	BDL		0.05				BDL	BDL	BDL		
18	Total Hardness(mg/l)	26.0	26.0	92.0	46.0		98.0				38	18.0	20.0		
19	Calcium(mg/l)	3.2	5.6	22.44	8.8		44				11.2	6.4	4.8		
20	Magnesium(mg/l)	4.37	2.90	8.70	5.80		13.12				2.43	BDL	BDL		
21	Sulphate(mg/l)	BDL	3.90	28.50	29.80		47.28				4.0	2.17	BDL		
22	Sodium(mg/l)	-	-	-	-		42.4				0.6	25.5	7.4		
23	Total Dissolved Solids(mg/l)	37.0	45.0	246.0	227.0		200.0				32.0	29.0	39.0		
24	Total Fixed Solids(mg/l)	27.0	29.0	234.0	198.0		97.0				22.0	19.0	25.0		
25	Total Suspended Solids(mg/l)	10.0	8.0	7.0	8.0		6.0				12.0	10.0	3.0		
26	Phosphate(mg/l)	BDL	BDL	0.14	0.02		BDL				0.02	0.023	0.04		
27	Boron(mg/l)	0.88	BDL	0.37	BDL		BDL				BDL	BDL	BDL		Max 2mg/l
28	Potassium(mg/l)	-	-	-	-		6.70				BDL	7.8	0.1		
29	Flouride(mg/l)	BDL	BDL	0.53	BDL		0.31				0.95	BDL	BDL		
30	Arsenic(mg/l)	BDL	-	-	-		-				-	-	-		
31	Cadmium(mg/l)	0.021	-	-	-		-				-	-	-		
32	Copper(mg/l)	BDL	-	-	-		-				-	-	-		
33	Lead(mg/l)	BDL	-	-	-		-				-	-	-		
34	Chromium(mg/l)	BDL	-	-	-		-				-	-	-		
35	Nickel(mg/l)	0.198	-	-	-		-				-	-	-		
36	Zinc(mg/l)	0.02	-	-	-		-				-	-	-		
37	Iron Total(mg/l)	0.236	-	-	-		-				-	-	-		
38	Mercury (mg/l)	BDL	-	-	-		-				-	-	-		
39	Carbaryl (mg/L)	BDL	-	-	-		-				-	-	-		
40	DDT-o,p' (mg/L)	BDL	-	-	-		-				-	-	-		
41	DDT-p,p' (mg/L)	BDL	-	-	-		-				-	-	-		
42	alpha Endosulfan(mg/L)	BDL	-	-	-		-				-	-	-		
43	beta Endosulfan(mg/L)	BDL	-	-	-		-				-	-	-		
44	Anilofos (mg/L)	BDL	-	-	-		-				-	-	-		
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-		-				-	-	-		
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-		-				-	-	-		
47	Alpha HCH (mg/L)	BDL	-	-	-		-				-	-	-		
48	Beta HCH (mg/L)	BDL	-	-	-		-				-	-	-		
49	Chlorpyrifos (mg/L)	BDL	-	-	-		-				-	-	-		
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-		-				-	-	-		
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-		-				-	-	-		
52	Malathion (mg/L)	BDL	-	-	-		-				-	-	-		
53	Methyl parathion(mg/L)	BDL	-	-	-		-				-	-	-		

AGRICULTURAL CANAL DOWNSTREAM OF CUNCOLIM INDUSTRIAL ESTATE														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for Class E as per CPCB classification based on designated best use
1	Temperature°C	31	28	28	27	28	28	30	29	30	30	29	30	
2	Dissolved Oxygen(mg/l)	7.4	6.4	7.2	6.5	6.0	4.5	7.1	7.0	8.0	7.8	7.8	6.9	
3	pH	7.85	6.78	6.4	6.53	6.81	6.94	6.41	7.46	7.32	7.21	6.40	6.15	6-8.5
4	Conductivity(µs/cm)	56.3	140.84	406.3	311.8	206	330.8	388.2	105.7	379.5	49.77	53.50	50.2	Max 2250 µs/cm
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.12	BDL	1.57	0.365	BDL	0.90	0.91	0.1	BDL	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.008	0.028	0.007	0.026	0.005	BDL	BDL	0.007	BDL	BDL	BDL	
8	Total Coliform(MPN/100ml)	2800	3500	2800	3500	2200	1700	2400	2200	3500	2400	2200	1300	
9	Fecal Coliform(MPN/100ml)	2200	1700	1700	2400	1700	1300	1300	1400	1700	1300	1300	790	
10	Fecal Streptococci (MPN/100ml)	541	>1601	1601	540	350	350	350	240	350	240	350	170	
11	Turbidity(NTU)	3.11	4.36	1.23	14.5	1.47	4.71	2.01	2.47	2.22	1.62	1.91	1.19	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	16.0	20.0	32.0	14.0	20.0	14.0	74.0	32.0	24.0	20.0	22.0	30.0	
14	Chlorides(mg/l)	6.40	12.90	70.0	27.0	32.78	27.88	37.20	21.0	126.0	5.9	6.0	4.0	
15	COD(mg/l)	6.0	6.0	8.0	6.0	4.0	4.0	6.0	BDL	6.0	BDL	6.0	4.0	
16	Total Kjeldahl Nitrogen(mg/l)	BDL	1.1	2.2	1.1	2.24	2.24	1.68	2.8	1.1	1.12	1.7	0.6	
17	Ammonia (mg/l)	BDL	0.13	0.12	BDL	0.08	0.06	BDL	BDL	0.06	BDL	BDL	BDL	
18	Total Hardness(mg/l)	22.0	38.0	140.0	54.0	70.0	78.0	176.0	40.0	82.0	24.0	24.0	20.0	
19	Calcium(mg/l)	3.2	5.6	16.0	8.8	32.0	28.0	19.2	10.4	3.21	4.8	4.01	4.8	
20	Magnesium(mg/l)	3.40	5.80	24.30	7.80	9.23	12.15	31.10	3.40	18.0	2.9	3.4	BDL	
21	Sulphate(mg/l)	BDL	18.4	31	29.8	11.47	47.82	41.60	BDL	5.32	2.0	2.25	2.15	
22	Sodium(mg/l)	-	-	-	-	-	42.8	56.4	25.1	48.1	0.9	26.3	6.8	
23	Total Dissolved Solids(mg/l)	36.0	80.0	244.0	200.0	127.0	197.1	270.0	66.0	225.0	31.0	32.0	32.0	
24	Total Fixed Solids(mg/l)	22.0	48.0	238.0	189.0	67.0	93.1	177.0	40.0	218.0	21.0	28.0	22.0	
25	Total Suspended Solids(mg/l)	11.0	10.0	13.0	19.0	3.0	5.0	48.0	6.0	4.0	10.0	3.0	2.0	
26	Phosphate(mg/l)	BDL	0.02	0.03	BDL	0.077	BDL	BDL	BDL	0.07	BDL	0.04	0.06	
27	Boron(mg/l)	0.82	BDL	0.35	BDL	0.31	BDL	BDL	BDL	0.20	BDL	BDL	BDL	Max 2mg/l
28	Potassium(mg/l)	-	-	-	-	-	6.7	20.2	6.1	39.7	BDL	7.4	0.1	
29	Flouride(mg/l)	BDL	BDL	0.32	BDL	0.22	0.22	BDL	BDL	BDL	0.85	BDL	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.059	-	-	-	-	-	0.011	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.076	-	-	-	-	-	
34	Chromium(mg/l)	0.077	-	-	-	-	-	0.058	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.025	-	-	-	-	-	0.050	-	-	-	-	-	
37	Iron Total(mg/l)	0.153	-	-	-	-	-	0.094	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

RIVER MAPUSA ON CULVERT ON HIGHWAY MAPUSA-PANAJI														Limit for SW II river as per CPCB classification based on designated best use of rivers	
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22		
1	Temperature(°C)	29	30	30	28	28	29	30	29	28	29	29	30		
2	Dissolved Oxygen(mg/l)	6.9	6.5	2.7	3.2	4.2	4.3	3.7	4.6	3.8	6.5	4.3	4.4	4 mg/l or more	
3	pH	6.76	6.70	6.53	6.39	6.30	6.17	5.9	6.28	6.9	7.11	6.88	7.47	6.5 - 8.5	
4	Conductivity(µs/cm)	7340.0	9700.0	487.45	69.70	198.5	173.9	139.1	258.0	353.0	205.2	326.4	102.2		
5	BOD(mg/l)	BDL	BDL	2.0	BDL	2.2	2.7	BDL	BDL	2.6	BDL	BDL	BDL	3 mg/l or less	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.37	0.292	BDL	0.21	0.71	0.28	0.3	BDL	0.1	BDL	BDL		
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.005	0.224	0.02	0.03	BDL	0.006	0.081	0.007	BDL	BDL	BDL		
8	Total Coliform(MPN/100ml)	7000	9400	9400	4900	4900	7000	3100	3300	4900	7000	11000	9400		
9	Fecal Coliform(MPN/100ml)	4600	3300	4900	3300	3300	3300	1700	1700	3300	3300	7000	4900	100 or less MPN/100 ml	
10	Fecal Streptococci (MPN/100ml)	221	541	1601	78	130	330	230	330	430	790	1100	1300		
11	Turbidity(NTU)	14.20	10.34	11.61	28.0	26.6	16.2	8.5	6.55	6.13	9.43	4.75	5.05	30 NTU	
12	Phenolphthalein Alkalinity(mg/l)	6.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		
13	Total Alkalinity(mg/l)	64.0	62.0	50.0	34.0	22.0	22.0	26.0	36.0	50.0	38.0	36.0	30.0		
14	Chlorides(mg/l)	2104.0	2695.0	86.47	13.5	33.9	28.9	19.0	38.5	66.0	10.0	90.5	16.6		
15	COD(mg/l)	-	-	4.0	8.0	8.0	10.0	8.0	10.0	6.0	6.0	8.0	6.0		
16	Total Kjeldahl Nitrogen(mg/l)	1.12	1.1	3.4	4.5	1.68	1.68	2.24	3.90	1.12	3.36	1.1	2.2		
17	Ammonia (mg/l)	BDL	0.07	BDL	0.12	0.51	0.15	0.09	0.21	BDL	BDL	BDL	BDL		
18	Total Hardness(mg/l)	36.0	800.0	72.0	32.0	42.0	38.0	240.0	60.0	58.0	38.0	50.0	44.0		
19	Calcium(mg/l)	2.4	208.0	19.2	9.6	13.6	9.62	37.0	14.40	15.2	7.2	17.6	6.4		
20	Magnesium(mg/l)	7.29	68.00	5.80	BDL	BDL	3.40	36.0	5.80	5.00	4.86	BDL	6.8		
21	Sulphate(mg/l)	249.50	116.0	19.60	10.0	11.69	7.81	4.0	31.20	26.00	4.41	2.56	5.90		
22	Sodium(mg/l)	-	-	-	-	-	-	23.7	36.80	44.8	32.1	61.7	9.8		
23	Total Dissolved Solids(mg/l)	4171.0	6790.0	288.0	45.0	119.0	103.0	94.0	164.0	244	124.0	194.0	60.0		
24	Total Fixed Solids(mg/l)	3071.0	4074.0	268.0	28.0	76.0	61.0	56.0	106.0	120.0	58.0	102.0	40.0		
25	Total Suspended Solids(mg/l)	16.0	46.0	15.0	22.2	31.0	25.0	5.0	33.0	14.0	10.0	10.0	68.0		
26	Phosphate(mg/l)	0.07	BDL	0.043	0.13	0.05	0.09	0.02	0.04	0.06	BDL	0.038	0.26		
27	Boron(mg/l)	0.98	0.4	BDL	BDL	BDL	BDL	BDL	0.40	BDL	BDL	BDL	BDL		
28	Potassium(mg/l)	-	-	-	-	-	-	16.3	2.8	8.7	16.1	11.8	0.5		
29	Fluoride(mg/l)	BDL	0.37	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.64	BDL	BDL		
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
32	Copper(mg/l)	0.012	-	-	-	-	-	0.054	-	-	-	-	-		
33	Lead(mg/l)	0.079	-	-	-	-	-	BDL	-	-	-	-	-		
34	Chromium(mg/l)	0.044	-	-	-	-	-	BDL	-	-	-	-	-		
35	Nickel(mg/l)	0.110	-	-	-	-	-	BDL	-	-	-	-	-		
36	Zinc(mg/l)	0.017	-	-	-	-	-	BDL	-	-	-	-	-		
37	Iron total(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
50	DDT(o,p & isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-		
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		

Sr. No	Parameters	RIVER SAL AT PAZORCONI, CUNCOLIM												Limit for SW II river as per CPCB classification based on designated best use of rivers
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	
1	Temperature°C	31	29	28	28	28	29	29	28	30	30	29	29	4 mg/l or more 6.5 - 8.5
2	Dissolved Oxygen(mg/l)	4.9	5.4	6.1	5.4	6.5	6.0	7.8	6.8	7.5	5.2	5.5	5.9	
3	pH	6.97	6.91	6.57	7.46	7.23	7.16	6.78	7.15	6.81	6.65	6.30	6.50	
4	Conductivity(µs/cm)	124.27	96.13	82.33	65.03	57.70	62.92	185.30	73.21	107.1	92.45	74.0	63.46	3 mg/l or less
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.30	0.22	0.40	0.30	0.339	BDL	0.26	0.22	BDL	0.26	1.65	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.005	0.01	0.006	0.012	0.024	0.007	0.005	BDL	BDL	BDL	0.13	BDL	100 or less MPN/100 ml
8	Total Coliform(MPN/100ml)	3300	2200	1700	2300	2200	2600	3300	3300	3400	3900	2600	2300	
9	Fecal Coliform(MPN/100ml)	1700	1300	1300	1300	1700	2100	2200	2700	2700	2600	2200	1300	
10	Fecal Streptococci (MPN/100ml)	47	141	95	350	240	250	390	940	700	790	460	330	30 NTU
11	Turbidity(NTU)	5.48	13.60	11.68	24.60	6.69	8.65	7.9	5.99	5.43	7.93	8.91	5.47	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	16.0	20.0	28.0	10.0	22.0	10.0	78.0	20.0	38.0	24.0	16.0	28.0	6.4
14	Chlorides(mg/l)	12.0	10.90	11.70	13.00	13.21	8.32	278.60	6.50	31.00	11.70	7.5	8.0	
15	COD(mg/l)	6.0	6.0	8.0	4.0	6.0	6.0	6.0	BDL	4.0	BDL	12.0	4.0	
16	Total Kjeldahl Nitrogen(mg/l)	BDL	0.6	1.7	1.1	2.80	2.24	1.68	2.8	1.1	1.12	2.2	1.1	BDL
17	Ammonia (mg/l)	BDL	BDL	BDL	BDL	BDL	0.06	BDL	BDL	0.05	BDL	BDL	BDL	
18	Total Hardness(mg/l)	22.0	24.0	18.0	26.0	28.0	24.0	32.0	24.0	52.0	26.0	22.0	24.0	
19	Calcium(mg/l)	4.0	4.8	4.8	6.4	16.0	8.0	6.4	4.8	16.83	6.41	4.01	6.4	BDL
20	Magnesium(mg/l)	3.4	2.9	BDL	2.4	2.92	3.89	3.9	2.9	2.4	2.43	2.9	BDL	
21	Sulphate(mg/l)	9.60	10.1	3.4	9.1	9.98	14.91	10.8	BDL	22.25	9.1	6.57	5.21	
22	Sodium(mg/l)	-	-	-	-	-	28.6	28.1	26	24.4	BDL	25.6	10.1	41.0
23	Total Dissolved Solids(mg/l)	79.0	53.0	46.0	38.0	34.0	38.0	120.0	45.0	64.0	63.0	44.0	41.0	
24	Total Fixed Solids(mg/l)	53.0	33.0	30.0	29.0	18.0	17.0	78.0	28.0	60.0	43.0	35.0	31.0	
25	Total Suspended Solids(mg/l)	22.0	15.0	BDL	35.0	30.0	8.0	37.0	7.0	8.0	26.0	4.0	10.0	0.06
26	Phosphate(mg/l)	0.03	0.08	0.03	2.63	0.01	BDL	0.02	0.02	BDL	0.04	0.12	0.06	
27	Boron(mg/l)	0.44	BDL	0.80	BDL	0.32	BDL	1.70	BDL	BDL	BDL	BDL	BDL	
28	Potassium(mg/l)	-	-	-	-	-	14.4	16.4	6.7	48.5	BDL	7.8	0.4	BDL
29	Fluoride(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.55	0.54	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.022	-	-	-	-	-	BDL	-	-	-	-	-	BDL
32	Copper(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.088	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.059	-	-	-	-	-	BDL
35	Nickel(mg/l)	BDL	-	-	-	-	-	0.077	-	-	-	-	-	
36	Zinc(mg/l)	0.031	-	-	-	-	-	0.060	-	-	-	-	-	
37	Iron Total(mg/l)	0.289	-	-	-	-	-	0.179	-	-	-	-	-	BDL
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	BDL
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	BDL
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	BDL
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	BDL
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	BDL
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

Sr. No		RIVER SAL. AT MOHOR												Limit for SW II river as per CPCB classification based on designated best use of rivers	
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22		
1	Temperature°C	32	28	29	29	27	27	28	27	28	28	29	31		
2	Dissolved Oxygen(mg/l)	5.3	4.0	5.8	6.9	7.5	6.3	6.6	6.2	5.6	5.7	6.0	6.9	4 mg/l or more	
3	pH	7.36	6.10	7.60	6.90	7.08	7.39	7.10	7.40	7.04	7.49	7.42	8.13	6.5 - 8.5	
4	Conductivity(us/cm)	55020.0	51060.0	39980.0	15340.0	35910.0	44250	49560.0	49360.0	44250.0	23300.0	47660.0	50960.0		
5	BOD(mg/l)	BDL	2.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.2	BDL	BDL	3 mg/l or less	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.43	1.03	0.13	0.25	BDL	BDL	BDL	BDL	0.11	BDL	BDL	BDL		
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	0.016	0.01	0.007	0.01	BDL	BDL	0.01	BDL	0.005	0.006		
8	Total Coliform(MPN/100ml)	1400	2200	3200	790	1300	1700	2200	2800	1300	1700	1400	1100		
9	Fecal Coliform(MPN/100ml)	1100	1300	2200	490	790	790	1300	2200	790	1300	940	790	100 or less MPN/100 ml	
10	Fecal Streptococci (MPN/100ml)	541	351	281	130	130	140	170	220	70	140	240	170		
11	Turbidity(NTU)	11.74	9.54	7.74	8.95	4.86	10.41	6.85	1.49	5.14	4.84	20.5	5.04	30 NTU	
12	Phenolphthalein Alkalinity(mg/l)	32.0	6.0	8.0	BDL	BDL	6.0	6.0	18.0	8.0	10.0	8.0	12.0		
13	Total Alkalinity(mg/l)	80.0	68.0	62.0	44.0	32.0	40.0	94.0	82.0	86.0	90.0	88.0	102.0		
14	Chlorides(mg/l)	18834.6	16471.6	14813.0	6702.0	15018.7	17024.5	17719.50	18819.0	17994.4	17869.5	17994.4	18712.3		
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-		
16	Total Kjeldahl Nitrogen(mg/l)	BDL	2.80	2.24	2.24	0.56	1.12	1.70	1.12	1.12	1.12	1.12	2.8		
17	Ammonia (mg/l)	0.06	0.38	0.14	BDL	0.16	0.12	0.23	BDL	0.09	BDL	BDL	BDL		
18	Total Hardness(mg/l)	6100.0	5600.0	4400.0	1640.0	4300.0	6000.0	4000.0	6000.0	6000.0	5800.0	6800.0	6000.0		
19	Calcium(mg/l)	561.1	881.8	561.0	144.0	288.6	320.6	561.1	481.0	641.3	641.3	641.3	1924.0		
20	Magnesium(mg/l)	1142.0	826.2	729.0	311.0	869.9	1263.6	631.8	1166.0	1069.2	1020.6	1263.6	291.6		
21	Sulphate(mg/l)	4107.0	770.1	1316.0	917.0	1754.0	1693.0	1108.8	2976.0	3078.3	2509.5	3417.2	3417.2		
22	Sodium(mg/l)	-	-	-	-	-	10319.0	2176.0	29624.0	14024.0	1621.0	11541.0	9940.0		
23	Total Dissolved Solids(mg/l)	33310.0	31992.0	27986.0	10738.0	21894.0	29694.0	33320.0	34552.0	26628.0	13653.0	28704.0	30059.0		
24	Total Fixed Solids(mg/l)	23722.0	31009.0	16792.0	6442.0	16594.0	20694.0	26556.0	20731.0	15672.0	8121.0	17842.0	21600.0		
25	Total Suspended Solids(mg/l)	43.0	15.0	75.0	33.0	64.0	54.0	12.0	78.0	61.0	63.0	71.0	28.0		
26	Phosphate(mg/l)	0.10	0.16	0.08	0.09	0.07	0.05	0.05	0.08	0.03	0.04	0.64	0.18		
27	Boron(mg/l)	1.96	BDL	0.25	1.02	0.92	1.3	BDL	2.30	1.33	0.56	0.52	0.23		
28	Potassium(mg/l)	-	-	-	-	-	276.1	545.4	1141.0	756.6	450.30	618.2	697.2		
29	Flouride(mg/l)	BDL	1.34	1.31	0.82	0.76	0.9	0.35	2.95	0.76	1.7	0.71	0.27		
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
32	Copper(mg/l)	0.016	-	-	-	-	-	0.081	-	-	-	-	-		
33	Lead(mg/l)	0.043	-	-	-	-	-	0.050	-	-	-	-	-		
34	Chromium(mg/l)	0.090	-	-	-	-	-	BDL	-	-	-	-	-		
35	Nickel(mg/l)	0.120	-	-	-	-	-	0.093	-	-	-	-	-		
36	Zinc(mg/l)	0.025	-	-	-	-	-	0.047	-	-	-	-	-		
37	Iron Total(mg/l)	0.045	-	-	-	-	-	1.420	-	-	-	-	-		
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
40	DDT-op (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
41	DDT-pp (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-		
51	Gammah-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		

Sr. No	Parameters	CUMBHARIUA CANAL, CORLIM											Limit for SW II river as per CPCB classification based on designated best use of rivers
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
1	Temperature°C	28	29	30	27	28	29	29	28	27	28	28	29
2	Dissolved Oxygen(mg/l)	6.8	7.0	4.2	7.4	6.4	8.1	7.0	6.8	5.5	5.0	5.4	5.8
3	pH	7.06	6.84	7.21	6.14	6.39	7.7	7.3	7.3	7.2	7.33	7.3	7.41
4	Conductivity(us/cm)	46570.0	10790.0	2689.0	149.6	294.0	118.2	192.0	12370.0	12280.0	30620.0	32770.0	38900.0
5	BOD(mg/l)	2.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.29	BDL	0.434	0.33	0.10	0.10	1.005	BDL	0.40	0.228	0.180	BDL
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.03	0.009	0.202	0.005	BDL	BDL	0.137	BDL	0.016	0.036	0.031	0.01
8	Total Coliform(MPN/100ml)	3300	3900	2200	1700	2200	2200	3300	2200	2700	330	2300	2100
9	Fecal Coliform(MPN/100ml)	1300	2200	1700	1100	1300	1300	2200	1700	2200	230	1300	1700
10	Fecal Streptococci (MPN/100ml)	241	541	141	140	110	49	230	330	230	22	220	230
11	Turbidity(NTU)	9.63	3.3	6.85	23.09	13.20	13.50	13.24	5.0	5.15	6.28	5.15	12.01
12	Phenolphthalein Alkalinity(mg/l)	6.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
13	Total Alkalinity(mg/l)	60.0	64.0	50.0	18.0	8.0	12.0	40.0	44.0	58.0	80.0	80.0	104.0
14	Chlorides(mg/l)	16744.8	6598	9847	27.9	80.0	23.0	26.91	4748.5	5390.7	12915.14	11899.0	15495.2
15	COD(mg/l)	-	-	-	8.0	12.0	4.0	8.0	-	-	-	-	-
16	Total Kjeldahl Nitrogen(mg/l)	5.04	2.2	2.2	1.7	2.2	2.24	1.68	2.8	2.8	6.16	2.4	2.24
17	Ammonia (mg/l)	0.15	0.07	0.056	BDL	BDL	BDL	BDL	0.09	BDL	0.06	BDL	BDL
18	Total Hardness(mg/l)	6400.0	3000.0	2800.0	24.0	26.0	18.0	34.0	1480.0	2000.0	5800.0	3800.0	4640.0
19	Calcium(mg/l)	561.1	168.3	176.35	4.8	4.8	5.6	16.0	96.2	280.6	721.4	240.0	320.6
20	Magnesium(mg/l)	1215.00	627.0	573.50	2.9	3.4	BDL	4.4	301.3	315.9	534.60	778.0	933.1
21	Sulphate(mg/l)	2914.3	1045.6	1025.64	5.3	11.87	5.0	2.3	132.0	305.28	1963.40	1835.0	1802.8
22	Sodium(mg/l)	-	-	-	-	-	29.2	18.4	2055.0	1543.0	6484.0	8360.0	6177.0
23	Total Dissolved Solids(mg/l)	27838.0	6478.0	1588.0	90.0	174.0	81.0	115.0	7422.0	6720.0	18363.0	22939.0	22414.0
24	Total Fixed Solids(mg/l)	16330.0	6403.0	1478.0	57.0	159.0	48.0	33.0	7226.0	4636.0	9923.0	9176.0	13294.0
25	Total Suspended Solids(mg/l)	69.0	40.0	36.0	22.0	7.0	3.0	16.0	39.0	10.0	13.0	62.0	35.0
26	Phosphate(mg/l)	0.040	0.054	BDL	0.050	0.04	0.22	0.04	0.07	0.90	BDL	0.05	0.07
27	Boron(mg/l)	0.78	0.51	4.92	0.39	BDL	0.02	BDL	0.68	0.44	BDL	2.0	0.92
28	Potassium(mg/l)	-	-	-	-	-	13.70	4.2	187.5	122.5	2645.0	468.8	466.3
29	Fluoride(mg/l)	0.81	0.41	BDL	BDL	BDL	BDL	0.27	0.18	0.71	0.37	1.4	0.77
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
31	Cadmium(mg/l)	0.018	-	-	-	-	-	0.016	-	-	-	-	-
32	Copper(mg/l)	0.017	-	-	-	-	-	BDL	-	-	-	-	-
33	Lead(mg/l)	BDL	-	-	-	-	-	0.067	-	-	-	-	-
34	Chromium(mg/l)	0.029	-	-	-	-	-	0.039	-	-	-	-	-
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
36	Zinc(mg/l)	0.036	-	-	-	-	-	0.063	-	-	-	-	-
37	Iron Total(mg/l)	0.162	-	-	-	-	-	0.092	-	-	-	-	-
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-

Sr. No	Parameters	RIVER ZUARI AT PANCHAWADI												Limit for SW II river as per CPCB classification based on designated best use of rivers	
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22		
1	Temperature ^o C	30	29	29	28	27	27	29	29	30	30	29	29		
2	Dissolved Oxygen(mg/l)	4.7	5.2	4.5	6.5	7.6	6.9	6.0	5.6	6.3	7.7	5.4	5.8	4 mg/l or more	
3	pH	6.55	6.25	7.09	6.80	6.55	6.1	6.1	6.82	6.91	6.91	6.9	6.79	6.5 - 8.5	
4	Conductivity(us/cm)	14950.0	7882.0	10930.0	146.2	76.02	81.03	82.65	2707.0	1637.0	8890.0	6273.0	7586.0		
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.13	0.23	BDL	0.10	0.13	0.10	0.1	BDL	0.10	0.44	0.17	BDL		
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.027	0.056	0.060	0.005	BDL	BDL	0.006	BDL	0.005	0.030	0.012	0.009		
8	Total Coliform(MPN/100ml)	940	490	2300	3300	2600	2200	3400	2300	2200	2600	2200	1300		
9	Fecal Coliform(MPN/100ml)	700	230	1300	1700	1400	1300	2200	1300	1700	2200	1700	780	100 or less MPN/100 ml	
10	Fecal Streptococci (MPN/100ml)	131	1601	351	33	27	70	170	460	490	1300	330	170		
11	Turbidity(NTU)	5.25	7.18	3.66	10.06	4.33	7.93	13.11	2.22	3.80	7.22	11.87	4.63	30 NTU	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		
13	Total Alkalinity(mg/l)	52.0	90.0	34.0	18.0	6.0	10.0	20.0	34.0	32.0	46.0	30.0	52.0		
14	Chlorides (mg/l)	7986.2	5648.0	4624	29.0	249.6	14.0	13.21	2124	8316.6	3374.0	1943.0	2849.1		
15	COD(mg/l)	-	-	-	8.0	4.0	8.0	6.0	-	-	-	4.0	-		
16	Total Kjeldahl Nitrogen(mg/l)	23.8	2.8	1.7	2.8	1.70	1.12	1.68	1.10	0.60	2.8	1.1	1.12		
17	Ammonia (mg/l)	BDL	0.05	0.06	BDL	0.15	BDL	BDL	0.09	0.07	BDL	0.06	BDL		
18	Total Hardness(mg/l)	2000.0	164.0	800.0	84.0	10.0	10.0	18.0	280.0	400.0	1260.0	900.0	620.0		
19	Calcium(mg/l)	320.6	56.1	80.2	6.0	BDL	5.0	12.0	20.04	80.20	88.2	120.0	56.1		
20	Magnesium(mg/l)	291.6	5.8	146.0	16.0	BDL	BDL	BDL	55.9	48.6	252.70	598.0	116.6		
21	Sulphate(mg/l)	117.8	82.6	105.4	6.0	302.4	4.0	2.0	66.0	2505.9	145.0	146.0	233.3		
22	Sodium(mg/l)	-	-	-	-	-	27.9	8.0	431.8	213.2	1662.0	1049.0	997.0		
23	Total Dissolved Solids(mg/l)	10016.0	4636.0	6455.0	102.0	48.0	54.0	51.0	1593.0	950.0	5247.0	4265.0	4260.0		
24	Total Fixed Solids(mg/l)	9985.0	3748.0	5460.0	61.0	30.0	32.0	23.0	1297.0	460.0	4747.0	1706.0	2499.0		
25	Total Suspended Solids(mg/l)	7.0	47.0	46.0	12.0	4.0	6.0	7.0	18.0	41.0	42.0	25.0	51.0		
26	Phosphate(mg/l)	0.03	0.05	0.04	0.03	0.04	BDL	0.043	0.1	0.05	0.14	0.05	0.05		
27	Boron(mg/l)	0.96	0.64	0.66	BDL	BDL	2.24	0.26	0.26	0.26	3.6	0.58	BDL		
28	Potassium(mg/l)	-	-	-	-	-	14.5	1.9	44.1	18.9	68.4	77.2	87.2		
29	Flouride(mg/l)	0.53	0.25	0.32	BDL	BDL	BDL	0.40	BDL	0.31	0.24	0.53	0.28		
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.010	-	-	-	-	-		
32	Copper(mg/l)	0.015	-	-	-	-	-	BDL	-	-	-	-	-		
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
34	Chromium(mg/l)	0.036	-	-	-	-	-	0.053	-	-	-	-	-		
35	Nickel(mg/l)	0.081	-	-	-	-	-	BDL	-	-	BDL	-	-		
36	Zinc(mg/l)	0.020	-	-	-	-	-	0.061	-	-	-	-	-		
37	Iron Total(mg/l)	0.104	-	-	-	-	-	0.076	-	-	-	-	-		
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-		
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		

Sr. No	Parameters	RIVER ZUARI AT CORTALIM												Limit for SW II river as per CPCB classification based on designated best use of rivers	
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22		
1	Temperature°C	30	30	29	25	30	29	28	30	29	30	29	31		
2	Dissolved Oxygen(mg/l)	5.5	6.8	6.0	6.5	6.6	6.7	5.9	5.5	5.9	6.1	6.5	6.0	4 mg/l or more	
3	pH	7.45	7.02	7.02	7.16	7.20	7.35	6.85	7.90	7.18	7.89	7.66	7.42	6.5 - 8.5	
4	Conductivity(us/cm)	45570.0	53380.0	41510.0	791.9	12670.0	4127.0	19650.0	36360.0	40550.0	43960.0	45150.0	45030.0		
5	BOD(mg/l)	2.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.19	0.21	3.63	0.250	BDL	0.012	0.1	0.19	0.28	0.21	BDL	BDL		
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.06	BDL	BDL	0.021	0.007	0.009	BDL	0.066	0.008	0.023	0.005	0.023		
8	Total Coliform(MPN/100ml)	4900	3300	4600	4900	4600	4900	4800	4600	4300	4900	4900	3300		
9	Fecal Coliform(MPN/100ml)	3300	2300	3300	3300	2300	3300	3400	2300	2300	3300	3300	2300	100 or less MPN/100 ml	
10	Fecal Streptococci (MPN/100ml)	211	1601	921	920	350	540	790	940	940	940	700	490		
11	Turbidity(NTU)	12.15	10.67	17.2	178	26.8	27.7	30.8	8.06	25.2	13.20	6.01	3.31	30 NTU	
12	Phenolphthalein Alkalinity(mg/l)	4.0	4.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	6.0	6.0	BDL		
13	Total Alkalinity(mg/l)	84.0	70.0	70.0	8.0	24.0	34.0	38.0	84.0	96.0	84.0	96.0	110.0		
14	Chlorides(mg/l)	18244.30	15473.30	17719.50	244.61	487.40	1123.10	6780.20	13352.00	14225.5	15410.1	17367.0	17366.96		
15	COD(mg/l)	-	-	-	14.0	-	4.0	-	-	-	-	-	-		
16	Total Kjeldahl Nitrogen(mg/l)	3.92	1.7	0.6	2.802	1.10	1.10	1.68	4.50	4.5	1.1	1.68	2.24		
17	Ammonia (mg/l)	0.07	0.08	1.0	0.31	BDL	0.11	BDL	0.09	BDL	BDL	BDL	BDL		
18	Total Hardness(mg/l)	7600.0	2800.0	5000.0	78.0	1300.0	420.0	2300.0	4800.0	6400.0	6400.0	6000.0	7000.0		
19	Calcium(mg/l)	721.4	481.0	801.6	38.0	86.6	96.2	673.3	641.3	881.8	2325.0	400.8	1603.2		
20	Magnesium(mg/l)	1409.40	388.80	729.0	9.72	263.00	43.7	150.7	777.6	1020.6	145.8	1215.0	729.0		
21	Sulphate(mg/l)	3171.00	709.70	1434.50	2.38	405.90	93.6	841.7	3232.8	1339.2	193.2	2702.4	1533.5		
22	Sodium(mg/l)	-	-	-	-	-	1266.0	3606.0	6828.0	3703.0	8452.0	8841.0	7063.00		
23	Total Dissolved Solids(mg/l)	28437.0	32028.0	24075.0	443.0	749.0	2520.0	13294.0	21088.0	25200.0	26508.0	25127.0	21042.0		
24	Total Fixed Solids(mg/l)	17264.0	31459.0	23859.0	153.0	711.0	1518.0	9034.0	15816.0	16380.0	20005.0	18007.0	11812.0		
25	Total Suspended Solids(mg/l)	25.0	17.0	23.0	54.0	51.0	38.0	66.0	12.0	43.0	30.0	200.0	26.0		
26	Phosphate(mg/l)	0.06	0.04	0.81	0.285	0.245	0.03	0.03	0.05	0.02	0.09	0.06	0.051		
27	Boron(mg/l)	1.20	BDL	BDL	0.09	0.32	BDL	BDL	0.29	1.41	BDL	1.3	BDL		
28	Potassium(mg/l)	-	-	-	-	-	48.0	298.5	446.0	283.4	4102.0	506.9	537.4		
29	Flouride(mg/l)	BDL	1.5	1.2	0.54	BDL	0.27	1.0	1.07	1.33	BDL	1.3	1.73		
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
31	Cadmium(mg/l)	0.051	-	-	-	-	-	BDL	-	-	-	-	-		
32	Copper(mg/l)	0.032	-	-	-	-	-	0.022	-	-	-	-	-		
33	Lead(mg/l)	0.036	-	-	-	-	-	0.057	-	-	-	-	-		
34	Chromium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
35	Nickel(mg/l)	0.471	-	-	-	-	-	0.083	-	-	-	-	-		
36	Zinc(mg/l)	0.026	-	-	-	-	-	0.068	-	-	-	-	-		
37	Iron Total(mg/l)	0.234	-	-	-	-	-	0.122	-	-	-	-	-		
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-		
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		

RIVER MANDOWI NEAR MANDOWI BRIDGE.														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	31	29	29	30	28	29	30	28	27	28	29	31	
2	Dissolved Oxygen(mg/l)	5.4	5.8	7.3	7.3	7.2	7.5	7.6	6.0	6.0	6.9	6.0	5.2	4 mg/l or more
3	pH	7.74	6.80	7.97	7.31	7.63	6.74	6.8	7.28	7.21	8.14	7.80	8.01	6.5 - 8.5
4	Conductivity(µs/cm)	27900.0	15110.0	54010.0	19100.0	14140.0	5109.0	7820.0	36840.0	37820.0	44510.0	48200.0	48810.0	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.23	1.08	BDL	BDL	0.22	0.18	0.12	0.11	0.30	BDL	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.546	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.005	0.007	0.02	0.007	
8	Total Coliform(MPN/100ml)	110	170	130	490	700	330	140	170	350	220	130	220	
9	Fecal Coliform(MPN/100ml)	78	110	78	230	460	130	94	110	170	130	79	140	100 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	121	351	59	11	33	23	33	49	43	46	46	79	
11	Turbidity(NTU)	4.01	3.16	7.06	3.05	3.32	9.09	10.74	4.38	4.1	2.81	7.33	9.49	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	8.0	BDL	BDL	BDL	BDL	6.0	BDL	10.0	10.0	10.0	
13	Total Alkalinity(mg/l)	74.0	80.0	94.0	42.0	28.0	24.0	36.0	82.0	84.0	96.0	100.0	108.0	
14	Chlorides(mg/l)	17220.0	11729.8	17611.6	6897.8	7398.0	2149.3	2914.0	10762.6	14475.1	16694.8	17366.96	17464.8	
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	2.8	2.2	1.68	2.8	2.2	2.24	1.68	5.6	4.5	2.24	2.24	0.56	
17	Ammonia (mg/l)	0.18	BDL	BDL	0.05	BDL	BDL	0.05	0.11	BDL	0.11	0.15	BDL	
18	Total Hardness(mg/l)	5800.0	1200.0	5200.0	2400.0	2200.0	440.0	680.0	4200.0	5100.0	8000.0	7000.0	6500.0	
19	Calcium(mg/l)	1483.0	240.5	400.8	160.3	240.0	72.1	80.0	481.0	641.3	801.6	1603.2	320.6	
20	Magnesium(mg/l)	510.3	145.8	1020.6	486.0	389.0	63.2	117.0	729.0	850.5	1458.0	729.0	1385.1	
21	Sulphate(mg/l)	709.7	906.0	3207.2	812.2	397.4	86.04	423.0	4472.3	1735.2	3272.8	5367.34	2782.1	
22	Sodium(mg/l)	-	-	-	-	-	-	1172.0	3521.4	4432.0	1702.0	10185.0	7802.0	
23	Total Dissolved Solids(mg/l)	17298.0	8914.0	37071.0	11037.0	8602.0	3193.0	5474.0	21998.0	24583.0	26293.0	28846.0	29100.0	
24	Total Fixed Solids(mg/l)	16891.0	8123.0	26881.0	8937.0	4973.0	1944.0	3284.0	13540.0	17945.0	15516.0	10421.0	20200.0	
25	Total Suspended Solids(mg/l)	7.0	5.0	119.0	67.0	28.0	29.0	24.0	40.0	7.0	81.0	7.0	140.0	
26	Phosphate(mg/l)	0.08	0.06	0.05	0.02	0.06	BDL	0.021	0.055	0.03	0.09	0.183	0.12	
27	Boron(mg/l)	3.76	BDL	1.4	0.7	BDL	BDL	1.42	1.92	1.06	0.48	BDL	1.6	
28	Potassium(mg/l)	-	-	-	-	-	-	103.2	224.1	307.4	404.8	716.2	521.3	
29	Flouride(mg/l)	1.22	0.98	1.90	2.5	BDL	0.98	0.38	0.21	1.35	1.26	BDL	1.21	
30	Arsenic(mg/l)	0.092	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.085	-	-	-	-	-	
32	Copper(mg/l)	0.091	-	-	-	-	-	0.056	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.099	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.061	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.156	-	-	-	-	-	0.017	-	-	-	-	-	
37	Iron Total(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

RIVER MANDUOVI AT TONCA MARCELA														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	29	29	30	27	28	28	29	28	27	28	28	29	
2	Dissolved Oxygen(mg/l)	6.1	5.9	5.4	7.7	7.1	7.4	7.5	6.7	6.3	6.0	5.4	6.1	4 mg/l or more
3	pH	7.18	6.76	7.15	6.33	6.60	7.05	5.67	7.22	7.18	7.38	7.25	7.39	6.5 - 8.5
4	Conductivity(us/cm)	41300.0	12800.0	17350.0	93.89	100.90	67.07	87.91	5143.0	5128.0	22890.0	24980.0	32470.0	
5	BOD(mg/l)	2.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.10	0.16	BDL	0.18	0.13	0.10	0.139	BDL	0.36	0.210	0.14	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.11	0.12	0.06	BDL	BDL	0.006	0.013	BDL	0.015	0.06	0.057	0.04	
8	Total Coliform(MPN/100ml)	1300	1400	1700	1400	1700	1300	1700	1300	1100	1300	790	490	
9	Fecal Coliform(MPN/100ml)	490	790	1400	1100	1400	790	1100	790	790	790	490	330	100 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	95	351	1601	220	170	240	350	220	350	280	170	130	
11	Turbidity(NTU)	7.74	4.29	6.8	21.9	9.16	19.13	56.3	4.3	3.45	3.74	4.56	8.81	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	76.0	32.0	46.0	14.0	14.0	14.0	16.0	38.0	52.0	76.0	62.0	100.0	
14	Chlorides(mg/l)	16994.70	6640.0	5748.00	17.5	35.0	10.5	4.19	2374.00	3868.30	13195.90	8985.0	13745.7	
15	COD(mg/l)	-	-	-	10.0	10.0	4.0	6.0	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	4.48	2.2	1.1	1.1	2.8	1.68	2.8	3.4	4.5	1.68	1.1	2.24	
17	Ammonia (mg/l)	0.06	BDL	0.15	BDL	0.14	BDL	BDL	0.09	BDL	BDL	BDL	BDL	
18	Total Hardness(mg/l)	7200.0	3000.0	1300.0	16.0	24.0	12.0	20.0	420.0	1400.0	3800.0	3200.0	4600.0	
19	Calcium(mg/l)	721.4	304.6	80.2	3.2	5.61	3.0	10.00	42.48	200.4	320.6	200.0	480.9	
20	Magnesium(mg/l)	1312.20	344.30	267.30	BDL	2.4	BDL	2.43	76.30	218.7	729.00	656.0	826.2	
21	Sulphate(mg/l)	2114.0	2741.0	2393.20	3.20	4.06	3.00	6.86	120.0	5270.40	1161.60	1272.0	1257.4	
22	Sodium(mg/l)	-	-	-	-	-	28.10	8.7	822.40	1134.0	1212.0	4953.0	4691.0	
23	Total Dissolved Solids(mg/l)	24183.0	7693.0	10417.0	57.0	61.0	45.0	52.0	3086.0	3150.0	13153.0	17486.0	19471.0	
24	Total Fixed Solids(mg/l)	14171.0	7580.0	9466.0	34.0	57.0	27.0	21.0	2685.0	2110.0	7689.0	6994.0	11844.0	
25	Total Suspended Solids(mg/l)	45.0	63.0	59.0	18.0	7.0	3.0	8.0	17.0	6.0	59.0	69.0	41.0	
26	Phosphate(mg/l)	0.12	0.034	0.11	0.02	0.02	0.02	BDL	0.07	0.03	BDL	0.04	0.004	
27	Boron(mg/l)	0.75	0.56	0.42	0.32	BDL	BDL	BDL	0.49	BDL	0.26	2.47	0.71	
28	Potassium(mg/l)	-	-	-	-	-	14.5	2.0	80.5	91.9	278.2	305.0	376.0	
29	Flouride(mg/l)	BDL	0.3	0.23	BDL	BDL	BDL	BDL	BDL	1.19	0.49	0.89	0.71	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.021	-	-	-	-	-	0.011	-	-	-	-	-	
32	Copper(mg/l)	0.020	-	-	-	-	-	BDL	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.077	-	-	-	-	-	
34	Chromium(mg/l)	0.033	-	-	-	-	-	0.085	-	-	-	-	-	
35	Nickel(mg/l)	0.125	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.022	-	-	-	-	-	0.075	-	-	-	-	-	
37	Iron Total(mg/l)	0.220	-	-	-	-	-	0.145	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

Sr. No	Parameters	RIVER SAL AT ORLIM BRIDGE												Limit for SW II river as per CPCB classification based on designated best use of rivers	
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22		
1	Temperature°C	31	29	29	29	28	27	29	28	27	29	28	30		
2	Dissolved Oxygen(mg/l)	6.3	7.0	5.2	4.1	4.3	4.2	4.0	3.8	3.4	4.2	4.5	7.0	4 mg/l or more	
3	pH	7.45	7.50	7.02	6.6	7.53	7.36	6.66	7.07	7.05	7.38	6.98	6.92	6.5 - 8.5	
4	Conductivity(us/cm)	28460.0	24310.0	2394.0	406.2	463.4	296.6	1057.0	16980.0	1838.0	9120.0	20330.0	19310.0		
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	2.5	BDL	BDL	BDL	BDL	BDL	3 mg/l or less	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	1.54	1.05	0.66	0.4	0.4	0.14	0.1	0.05	0.84	1.01	0.28		
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	0.73	0.024	BDL	0.01	0.168	0.008	0.03	0.03	0.04	0.032		
8	Total Coliform(MPN/100ml)	1100	1300	2200	2200	2800	2200	1700	2200	1700	2200	1700	1400		
9	Fecal Coliform(MPN/100ml)	780	780	1100	1700	1700	1300	1100	1400	1300	1700	1100	920	100 or less MPN/100 ml	
10	Fecal Streptococci (MPN/100ml)	151	241	95	130	220	700	350	280	220	210	130	110		
11	Turbidity(NTU)	12.57	9.83	8.19	47.5	6.08	9.36	7.13	2.39	6.72	4.64	9.04	4.73	30 NTU	
12	Phenolphthalein Alkalinity(mg/l)	BDL	4.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		
13	Total Alkalinity(mg/l)	64.0	38.0	40.0	28.0	18.0	16.0	48.0	66.0	50.0	70.0	74.0	88.0		
14	Chlorides (mg/l)	9099.0	8235.8	971.0	14.0	137.0	60.2	623.90	6071.0	434.9	6697.9	16294.9	7240.3		
15	COD(mg/l)	-	-	6.0	18.0	6.0	10.0	6.0	-	12.0	-	-	-		
16	Total Kjeldahl Nitrogen(mg/l)	0.56	3.4	1.12	2.8	1.12	1.12	1.7	1.7	1.12	1.7	1.1	1.1		
17	Ammonia (mg/l)	BDL	0.35	0.05	0.26	BDL	0.07	0.12	0.05	0.11	BDL	BDL	BDL		
18	Total Hardness(mg/l)	3600.0	2400.0	160.0	52.0	66.0	48.0	104.0	1560	184	1580.0	3800.0	2000.0		
19	Calcium(mg/l)	280.60	400.80	36.0	10.0	10.4	8.8	24.0	128.0	28.1	148.3	400.8	400.8		
20	Magnesium(mg/l)	704.7	340.2	17.0	7.0	9.72	6.30	10.70	301.0	27.7	294.0	680.4	243.0		
21	Sulphate(mg/l)	640.2	249.15	56.0	22.0	31.9	19.2	72.0	866.0	478.0	669.2	812.6	425.0		
22	Sodium(mg/l)	-	-	-	-	-	49.7	331.6	9421.0	623.7	1085.0	4844.0	3974.0		
23	Total Dissolved Solids(mg/l)	1985.0	14343.0	1676.0	284.0	266.0	178.0	602.0	11546.0	1071.0	5441.0	12911.0	11027.0		
24	Total Fixed Solids(mg/l)	15085.0	1389.0	1004.0	170.0	166.0	108.0	380.0	6927.0	648.0	3341.0	7608.0	8004.0		
25	Total Suspended Solids(mg/l)	27.0	19.0	30.0	42.0	36.0	40.0	12.0	57.0	46.0	57.0	59.0	34.0		
26	Phosphate(mg/l)	0.20	0.79	0.23	0.15	0.09	0.07	0.12	0.03	0.09	0.04	0.11	0.31		
27	Boron(mg/l)	0.62	BDL	BDL	BDL	BDL	BDL	0.14	1.52	BDL	0.46	0.31	BDL		
28	Potassium(mg/l)	-	-	-	-	-	8.8	39.8	491.00	50.10	243.0	297.2	334.5		
29	Flouride(mg/l)	BDL	1.01	0.22	BDL	BDL	0.2	0.2	2.05	BDL	0.20	0.42	BDL		
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
31	Cadmium(mg/l)	0.019	-	-	-	-	-	BDL	-	-	-	-	-		
32	Copper(mg/l)	0.046	-	-	-	-	-	BDL	-	-	-	-	-		
33	Lead(mg/l)	BDL	-	-	-	-	-	0.054	-	-	-	-	-		
34	Chromium(mg/l)	0.064	-	-	-	-	-	BDL	-	-	-	-	-		
35	Nickel(mg/l)	0.052	-	-	-	-	-	BDL	-	-	-	-	-		
36	Zinc(mg/l)	0.032	-	-	-	-	-	0.020	-	-	-	-	-		
37	Iron Total(mg/l)	0.103	-	-	-	-	-	0.079	-	-	-	-	-		
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-		
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		

RIVER SAL AT KHAREBAND, MARGAO														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	31	29	29	29	27	27	29	28	27	29	28	29	
2	Dissolved Oxygen(mg/l)	BDL	BDL	1.2	3.9	4.6	4.4	2.7	BDL	2.1	BDL	BDL	3.6	4 mg/l or more
3	pH	7.02	7.80	7.5	6.9	6.52	7.37	6.50	6.70	7.04	7.12	7.64	6.98	6.5 - 8.5
4	Conductivity(µs/cm)	263.47	245.48	176.9	86.19	68.88	102.50	144.0	255.40	143.60	110.10	280.9	264.8	
5	BOD(mg/l)	4.8	5.6	4.8	BDL	BDL	BDL	3.2	6.0	BDL	5.8	6.1	2.2	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.77	1.36	1.11	0.3	0.4	BDL	0.24	BDL	4.0	2.11	0.24	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	1.190	0.062	BDL	BDL	0.381	0.011	0.040	0.020	0.07	0.014	
8	Total Coliform(MPN/100ml)	7900	13000	7900	13000	9400	7000	6300	7000	9400	7000	7900	7000	
9	Fecal Coliform(MPN/100ml)	4900	7900	4900	7900	7000	4900	4600	4900	4900	4900	4900	4900	100 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	1601	>1601	>1601	790	1300	790	940	1100	1400	1100	1300	790	
11	Turbidity(NTU)	59.5	22.7	70.5	88.8	17.38	19.21	12.74	10.6	21.0	12.84	20.9	20.0	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	24.0	36.0	24.0	18.0	12.0	14.0	38.0	54.0	46.0	50.0	70.0	84.0	
14	Chlorides(mg/l)	50.4	499.1	31.0	11.0	68.5	11.3	23.50	44.0	16.5	31.5	39.9	2201.5	
15	COD(mg/l)	15	8.0	14.0	10.0	22.0	6.0	12.0	16.0	14.0	16.0	16.0	-	
16	Total Kjeldahl Nitrogen(mg/l)	BDL	2.8	1.68	2.8	1.68	1.68	1.7	BDL	1.12	1.68	0.56	1.7	
17	Ammonia (mg/l)	BDL	1.26	BDL	0.34	0.05	0.09	0.11	2.36	0.12	0.05	BDL	BDL	
18	Total Hardness(mg/l)	46.0	44.0	114.0	68.0	40.0	34.0	26.0	50.0	40.0	64.0	52.0	608.0	
19	Calcium(mg/l)	12.0	7.2	13.0	8.0	10.4	7.2	5.6	14.0	12.0	10.4	12.8	184.4	
20	Magnesium(mg/l)	3.89	6.3	20.0	12.0	3.4	3.9	2.9	4.0	2.43	9.2	4.86	36.0	
21	Sulphate(mg/l)	10.2	173.65	8.0	12.0	13.0	7.9	28.0	17.0	12.2	10.1	9.1	1678.4	
22	Sodium(mg/l)	-	-	-	-	-	27.8	245.6	72.9	45.2	24.7	41.5	321.6	
23	Total Dissolved Solids(mg/l)	134.0	142.0	124.0	60.0	47.0	62.0	90.0	163.0	87.0	70.0	177.0	160.0	
24	Total Fixed Solids(mg/l)	24.0	91.0	74.0	36.0	38.0	42.0	55.0	65.0	52.0	43.0	105.0	85.0	
25	Total Suspended Solids(mg/l)	32.0	44.0	44.0	11.0	31.0	36.0	14.0	80.0	39.0	27.0	62.0	20.0	
26	Phosphate(mg/l)	0.56	0.38	0.12	0.09	0.11	0.07	0.05	0.30	0.09	0.20	0.58	0.38	
27	Boron(mg/l)	0.96	BDL	BDL	BDL	BDL	BDL	0.10	BDL	BDL	BDL	BDL	BDL	
28	Potassium(mg/l)	-	-	-	-	-	12.5	27.1	8.4	10.4	4.0	12.4	28.8	
29	Flouride(mg/l)	BDL	0.30	BDL	BDL	BDL	BDL	0.27	BDL	BDL	BDL	BDL	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.011	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.010	-	-	-	-	-	
33	Lead(mg/l)	0.078	-	-	-	-	-	0.023	-	-	-	-	-	
34	Chromium(mg/l)	0.016	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.092	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
37	Iron Total(mg/l)	BDL	-	-	-	-	-	0.333	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

RIVER TIRACOL AT KERI, PERNEM														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	29	29	31	30	28	28	29	28	27	28	28	29	4 mg/l or more 6.5 - 8.5
2	Dissolved Oxygen(mg/l)	6.2	7.0	6.0	7.4	6.9	7.1	7.0	6.2	6.8	6.9	6.1	6.7	
3	pH	7.72	7.65	7.34	7.13	7.03	7.36	7.37	7.72	8.12	8.07	8.10	8.10	
4	Conductivity(µs/cm)	51560.0	56330.0	12140.0	11650.0	5860.0	10990.0	15160.0	29410.0	36030.0	47730.0	48950.0	49900.0	3 mg/l or less
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.51	0.34	0.22	0.12	BDL	BDL	BDL	BDL	0.26	0.34	0.12	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.01	0.009	0.06	BDL	0.01	0.005	BDL	BDL	BDL	0.008	0.006	BDL	100 or less MPN/100 ml
8	Total Coliform(MPN/100ml)	790	330	490	700	790	1100	1200	1400	1100	920	1300	1300	
9	Fecal Coliform(MPN/100ml)	490	230	330	460	490	700	940	1100	790	540	790	790	
10	Fecal Streptococci(MPN/100ml)	121	431	131	70	94	110	140	70	79	140	110	140	30 NTU
11	Turbidity(NTU)	17.03	7.02	8.08	7.15	10.04	12.60	5.18	3.83	4.12	3.93	6.71	11.3	
12	Phenolphthalein Alkalinity(mg/l)	8.0	4.0	6.0	BDL	BDL	BDL	BDL	BDL	6.0	6.0	10.0	14.0	
13	Total Alkalinity(mg/l)	64.0	76.0	90.0	20.0	20.0	28.0	62.0	80.0	84.0	70.0	96.0	122.0	15473.0
14	Chlorides(mg/l)	15673.0	17494.6	8121.0	3993.1	1622.2	3868.3	7237.50	11746.4	13355.0	17994.0	17994.0	18698.0	
15	COD(mg/l)	-	-	-	-	6.0	-	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	1.7	13.4	0.56	2.2	1.1	0.6	0.6	1.12	1.12	0.6	1.7	1.12	BDL
17	Ammonia (mg/l)	BDL	BDL	BDL	BDL	0.21	BDL	0.19	BDL	0.05	BDL	BDL	BDL	
18	Total Hardness(mg/l)	6000.0	7000.0	2400.0	400.0	1200.0	5300.0	660.0	3800.0	4600.0	7200.0	5760.0	6200.0	
19	Calcium(mg/l)	1002.0	480.9	320.0	80.2	200.4	721.4	144.3	400.8	320.6	1002.0	280.6	481.0	1215.0
20	Magnesium(mg/l)	850.5	1409.4	388.8	48.6	170.1	850.5	72.9	680.4	923.0	1142.1	1229.6	1215.0	
21	Sulphate(mg/l)	1346.9	1812.0	1008.7	241.92	64.80	684.0	388.8	1153.2	2213.0	845.25	1497.3	3700.0	
22	Sodium(mg/l)	-	-	-	-	-	2565.0	1054.0	7476.0	6888.0	7002.0	11071.0	7910.0	34431.0
23	Total Dissolved Solids(mg/l)	30930.0	33337.0	8071.0	6757.0	3340.0	6923.0	9854.0	17379.0	24714.0	27730.0	29370.0	29370.0	
24	Total Fixed Solids(mg/l)	30020.0	20083.0	5971.0	6133.0	22.0	5192.0	7783.0	10283.0	18714.0	22184.0	27371.0	20656.0	
25	Total Suspended Solids(mg/l)	30.0	62.0	61.0	13.0	16.0	18.0	10.0	32.0	26.0	5.0	192.0	118.0	0.03
26	Phosphate(mg/l)	0.13	0.03	0.07	0.076	0.23	BDL	0.03	0.02	0.04	BDL	0.03	0.03	
27	Boron(mg/l)	0.67	0.47	0.81	BDL	BDL	BDL	BDL	BDL	1.57	1.2	2.08	4.77	
28	Potassium(mg/l)	-	-	-	-	-	96.0	242.7	406.1	433.2	465.1	615.1	588.5	2.10
29	Fluoride(mg/l)	0.85	0.39	1.31	1.25	0.49	0.33	BDL	0.6	2.1	1.14	0.87	2.10	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.022	-	-	-	-	-	0.052	-	-	-	-	-	-
32	Copper(mg/l)	0.083	-	-	-	-	-	0.058	-	-	-	-	-	
33	Lead(mg/l)	0.037	-	-	-	-	-	0.065	-	-	-	-	-	
34	Chromium(mg/l)	0.078	-	-	-	-	-	BDL	-	-	-	-	-	-
35	Nickel(mg/l)	0.084	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.068	-	-	-	-	-	0.050	-	-	-	-	-	
37	Iron Total(mg/l)	0.141	-	-	-	-	-	0.305	-	-	-	-	-	-
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

RIVER CHAPORA NEAR SIOLIM BRIDGE														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	28	29	31	30	28	29	30	29	28	28	29	30	
2	Dissolved Oxygen(mg/l)	6.1	5.8	7.4	7.2	7.3	7.5	6.7	5.7	6.1	6.8	5.4	6.5	4 mg/l or more
3	pH	7.66	7.41	7.73	7.30	7.13	7.48	7.65	7.92	8.28	8.12	8.09	8.20	6.5 - 8.5
4	Conductivity(µs/cm)	37590.0	42150.0	15300.0	10930.0	433.70	14120.0	13260.0	32580.0	47030.0	48950.0	49560.0	49470.0	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.53	0.36	0.21	0.11	0.1	0.06	BDL	BDL	0.2	0.23	0.19	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.010	0.170	BDL	0.008	0.006	BDL	BDL	0.008	0.011	0.011	BDL	
8	Total Coliform(MPN/100ml)	2400	490	390	1300	1300	1700	2200	2200	2800	350	2200	1700	
9	Fecal Coliform(MPN/100ml)	1300	230	320	790	790	1100	1300	1300	2200	240	1700	1100	100 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	85	171	111	130	230	330	490	280	280	130	240	130	
11	Turbidity(NTU)	3.36	2.77	6.47	4.0	22.80	8.91	6.12	4.18	5.04	6.74	6.83	3.5	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	4.0	BDL	BDL	BDL	BDL	BDL	2.0	6.0	4.0	10.0	10.0	22.0	
13	Total Alkalinity(mg/l)	54.0	66.0	42.0	20.0	14.0	28.0	72.0	86.0	96.0	74.0	96.0	110.0	
14	Chlorides(mg/l)	11355.4	16244.9	10762.6	3543.9	124.8	4617.0	7112.70	12371.2	17661.0	16222.1	17994.0	17970.0	
15	COD(mg/l)	-	-	-	-	4.0	-	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	0.6	0.6	1.68	1.1	0.6	0.6	0.6	1.68	0.56	1.1	2.2	1.12	
17	Ammonia (mg/l)	0.07	BDL	BDL	BDL	0.16	BDL	0.15	0.09	0.07	BDL	0.14	BDL	
18	Total Hardness(mg/l)	3500.0	5800.0	3200.0	800.0	44.0	9000.00	6800.00	4200.00	10000.0	7500.0	6320.0	6800.0	
19	Calcium(mg/l)	601.2	320.6	320.0	160.3	7.2	1282.6	160.3	481.0	3206.4	921.8	320.6	481.0	
20	Magnesium(mg/l)	486.0	1215.0	583.2	97.2	6.3	1409.4	68.0	729.0	486.0	1263.6	1341.4	1361.0	
21	Sulphate(mg/l)	679.5	1223.1	1491.8	204.48	28.80	388.8	792.0	1218.9	3129.0	688.28	1666.4	3115.0	
22	Sodium(mg/l)	-	-	-	-	-	3377.00	1537.0	8586.0	9450.0	9850.0	13676.0	7879.0	
23	Total Dissolved Solids(mg/l)	23680.0	25583.0	10235.0	6121.0	277.0	9460.0	7800.0	19378.0	28161.0	30720.0	29743.0	34629.0	
24	Total Fixed Solids(mg/l)	22798.0	15155.0	6125.0	5973.0	206.0	7378.0	6140.0	11480.0	20661.0	23961.0	27739.0	20775.0	
25	Total Suspended Solids(mg/l)	8.0	42.0	74.0	6.0	30.0	15.0	12.0	34.0	23.0	13.0	203.0	188.0	
26	Phosphate(mg/l)	0.08	0.18	0.06	0.021	0.08	BDL	0.05	0.03	0.05	BDL	0.13	0.02	
27	Boron(mg/l)	0.82	0.28	0.95	BDL	BDL	BDL	BDL	1.32	1.2	2.10	4.74	3.16	
28	Potassium(mg/l)	-	-	-	-	-	122.0	377.3	448.4	568.8	587.3	725.6	579	
29	Flouride(mg/l)	0.7	BDL	1.56	1.20	BDL	0.38	BDL	0.97	2.40	0.97	1.23	2.13	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.014	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	0.052	-	-	-	-	-	0.072	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.056	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.104	-	-	-	-	-	0.087	-	-	-	-	-	
36	Zinc(mg/l)	0.059	-	-	-	-	-	0.080	-	-	-	-	-	
37	Iron Total(mg/l)	0.087	-	-	-	-	-	0.248	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/l)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

RIVER SINQUERIM, CANDOLIM SIDE														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	28	29	30	29	27	28	29	29	28	28	29	29	
2	Dissolved Oxygen(mg/l)	5.0	4.8	5.5	6.8	5.7	6.8	6.4	5.0	5.5	6.2	5.8	7.1	4 mg/l or more
3	pH	7.48	7.52	7.49	7.70	6.95	7.75	7.39	7.04	7.15	8.08	7.87	8.02	6.5 - 8.5
4	Conductivity(µs/cm)	60050.0	53750.0	26700.0	19990.0	22880.0	27290.0	36280.0	42680.0	45870.0	49260.0	49970.0	51630.0	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.11	BDL	0.30	0.1	0.12	0.1	0.61	BDL	0.12	BDL	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.030	BDL	0.022	0.005	0.006	0.005	BDL	0.005	0.01	0.009	0.02	0.005	
8	Total Coliform(MPN/100ml)	790	490	790	490	790	490	1100	1400	1700	1300	790	1100	
9	Fecal Coliform(MPN/100ml)	330	330	490	330	490	330	790	1100	1300	790	490	790	100 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	59	141	241	68	130	110	140	220	280	140	130	130	
11	Turbidity(NTU)	10.69	BDL	6.67	8.06	4.98	5.55	5.21	6.02	5.73	2.85	0.81	2.54	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	6.0	BDL	BDL	BDL	BDL	2.0	BDL	6.0	10.0	12.0	8.0	12.0	
13	Total Alkalinity(mg/l)	74.0	82.0	92.0	48.0	32.0	28.0	88.0	88.0	98.0	90.0	98.0	96.0	
14	Chlorides(mg/l)	17744.5	17611.6	17869.5	7240.0	811.0	9784.2	16244.90	17848.0	16994.7	16794.8	17869.5	18834.6	
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	1.12	2.24	2.8	2.24	0.6	4.48	1.12	2.8	1.68	1.12	2.24	1.7	
17	Ammonia (mg/l)	0.07	BDL	0.08	0.08	0.12	0.08	0.33	BDL	0.06	BDL	BDL	BDL	
18	Total Hardness(mg/l)	6400.0	6600.0	6400.0	2700.0	2000.0	3400.0	4200.0	4800.0	5600.0	5400.0	5600.0	6000.0	
19	Calcium(mg/l)	641.3	481.0	216.4	152.3	240.5	280.6	641.3	321.0	721.4	721.4	641.3	2004.0	
20	Magnesium(mg/l)	1166.4	1312.2	1424.0	563.8	340.2	656.1	631.8	972.0	923.4	874.8	972.0	243.0	
21	Sulphate(mg/l)	1608.1	2619.8	2287.7	944.6	540.0	1076.7	1039.6	3109.0	1601.3	2834.5	2428.2	2390.9	
22	Sodium(mg/l)	-	-	-	-	-	6236.0	5334.0	23033.0	9258.0	1745.0	9730.0	9470.0	
23	Total Dissolved Solids(mg/l)	34657.0	34347.0	14693.0	13984.0	14872.0	18594.0	21381.0	29876.0	27427.0	29200.0	29626.0	30552.0	
24	Total Fixed Solids(mg/l)	20087.0	23971.0	13589.0	10784.0	11898.0	13594.0	12811.0	17920.0	16797.0	17603.0	17223.0	22004.0	
25	Total Suspended Solids(mg/l)	78.0	43.0	123.0	58.0	6.0	68.0	58.0	73.0	61.0	88.0	79.0	20.0	
26	Phosphate(mg/l)	0.12	0.08	0.05	0.03	BDL	BDL	0.03	0.06	0.02	BDL	0.09	0.55	
27	Boron(mg/l)	0.60	2.1	2.10	0.9	BDL	0.98	0.23	3.64	1.67	0.59	0.51	BDL	
28	Potassium(mg/l)	-	-	-	-	-	204.3	443.1	935.0	563.6	418.5	539.4	685.5	
29	Flouride(mg/l)	BDL	1.9	BDL	2.2	0.31	0.08	BDL	2.6	0.82	1.2	0.69	0.24	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.017	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.088	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.067	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.029	-	-	-	-	-	0.078	-	-	-	-	-	
36	Zinc(mg/l)	0.071	-	-	-	-	-	0.069	-	-	-	-	-	
37	Iron Total(mg/l)	0.157	-	-	-	-	-	0.448	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

RIVER SINQUERIM, NEAR GANPATI TEMPLE														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	28	29	30	29	27	28	29	29	28	28	29	29	4 mg/l or more
2	Dissolved Oxygen(mg/l)	5.0	4.9	5.5	6.8	5.9	7.0	6.5	5.4	5.3	6.6	7.0	6.3	6.5 - 8.5
3	pH	7.51	7.57	7.37	7.72	7.45	7.38	7.42	7.04	7.22	8.12	7.89	8.07	
4	Conductivity(µs/cm)	60090.0	53650.0	27500.0	29920.0	28510.0	29850.0	34520.0	43780.0	47140.0	49440.0	49910.0	51780.0	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.12	BDL	0.33	0.2	0.11	0.2	0.66	0.16	0.22	BDL	0.12	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.03	BDL	0.010	0.006	0.017	0.01	BDL	0.005	0.010	0.009	0.01	0.006	
8	Total Coliform(MPN/100ml)	270	270	330	320	940	700	940	1100	1400	1700	940	790	
9	Fecal Coliform(MPN/100ml)	220	220	270	220	700	490	700	700	1100	1400	700	490	100 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	27	71	221	45	230	170	170	130	170	240	130	79	
11	Turbidity(NTU)	9.67	BDL	10.85	6.28	11.18	6.88	4.75	5.17	6.12	3.2	0.78	5.43	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	6.0	BDL	BDL	4.0	BDL	2.0	BDL	8.0	12.0	12.0	8.0	14.0	
13	Total Alkalinity(mg/l)	80.0	78.0	40.0	58.0	36.0	32.0	90.0	84.0	98.0	86.0	100.0	98.0	
14	Chlorides(mg/l)	17994.4	17415.9	17994.5	11447.5	10107.6	10469.0	16494.90	17727.0	17194.7	16894.8	17994.4	18590.0	
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	0.56	BDL	2.8	3.36	0.6	1.12	1.68	2.24	1.68	1.12	2.24	1.7	
17	Ammonia (mg/l)	0.06	BDL	0.08	0.07	0.14	0.13	0.23	0.05	0.06	BDL	BDL	BDL	
18	Total Hardness(mg/l)	7000.0	6200.0	6000.0	3800.0	3600.0	3700.0	4800.0	4800.0	4800.0	5200.0	5400.0	6000.0	
19	Calcium(mg/l)	721.4	400.8	200.4	232.5	481.0	320.0	721.4	561.0	641.3	721.4	641.3	1924.0	
20	Magnesium(mg/l)	1263.6	1263.6	1336.5	782.5	583.2	704.7	729.0	826.0	777.6	826.2	923.4	291.6	
21	Sulphate(mg/l)	1510.0	2174.4	2302.8	1595.5	1065.6	1055.1	681.1	2660.0	1799.7	3126.1	2681.6	2306.3	
22	Sodium(mg/l)	-	-	-	-	-	6447.0	5843.0	22912.0	10804.0	1854.0	11080.0	10180.0	
23	Total Dissolved Solids(mg/l)	34460.0	33275.0	15130.0	20800.0	18760.0	20078.0	20166.0	30208.0	28282.0	29666.0	29609.0	30652.0	
24	Total Fixed Solids(mg/l)	20175.0	23165.0	14124.0	13800.0	15008.0	14078.0	12079.0	18125.0	16921.0	17796.0	17049.0	20500.0	
25	Total Suspended Solids(mg/l)	70.0	46.0	109.0	94.0	20.0	84.0	62.0	72.0	70.0	84.0	82.0	29.0	
26	Phosphate(mg/l)	0.07	0.07	0.05	0.04	BDL	0.03	0.03	0.03	0.03	0.04	0.23	0.46	
27	Boron(mg/l)	0.70	2.0	2.11	1.1	BDL	1.2	0.2	3.9	1.74	0.6	0.60	BDL	
28	Potassium(mg/l)	-	-	-	-	-	206.7	214.3	954.0	641.7	445.2	612.8	708.8	
29	Flouride(mg/l)	BDL	1.9	BDL	2.4	0.58	0.9	BDL	2.5	0.9	1.5	0.63	0.23	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	0.064	-	-	-	-	-	0.085	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.057	-	-	-	-	-	
34	Chromium(mg/l)	0.043	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.070	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.061	-	-	-	-	-	0.087	-	-	-	-	-	
37	IronTotal(mg/l)	0.099	-	-	-	-	-	0.464	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfant(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfant(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

		RIVER MANDOVAI AT IFTH JETTY												Limit for SW II river as per CPCB classification based on designated best use of rivers	
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22		
1	Temperature°C	32	28	29	30	27	28	29	28	28	29	29	29		
2	Dissolved Oxygen(mg/l)	6.5	6.5	7.3	7.1	7.1	8.0	6.0	6.4	6.7	7.0	7.0	7.4	4 mg/l or more	
3	pH	7.84	6.90	7.93	7.77	7.74	7.24	7.8	7.15	7.0	8.21	8.13	8.15	6.5 - 8.5	
4	Conductivity(us/cm)	29800.0	17610.0	54790.0	35950.0	19420.0	16071.0	46150.0	24010.0	23100.0	48470.0	49500.0	50620.0		
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.18	0.44	BDL	BDL	0.78	BDL	BDL	BDL	0.105	BDL	BDL	BDL		
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.008	0.325	BDL	BDL	BDL	0.010	BDL	BDL	0.006	BDL	0.02	BDL		
8	Total Coliform(MPN/100ml)	110	120	78	170	330	490	84	220	170	140	170	220		
9	Fecal Coliform(MPN/100ml)	78	93	45	110	230	220	63	63	110	110	140	140	100 or less MPN/100 ml	
10	Fecal Streptococci (MPN/100ml)	85	171	121	6.8	23	33	23	33	94	70	70	94		
11	Turbidity(NTU)	19.21	1.0	6.59	4.81	6.09	14.21	10.4	6.3	6.25	4.51	6.45	7.8	30 NTU	
12	Phenolphthalein Alkalinity(mg/l)	8.0	4.0	16.0	8.0	BDL	BDL	8.0	BDL	10.0	8.0	16.0	12.0		
13	Total Alkalinity(mg/l)	70.0	60.0	104.0	62.0	28.0	18.0	88.0	68.0	80.0	84.0	100	124		
14	Chlorides(mg/l)	17719.5	13963.0	17709.4	13697.8	8347.0	6971.24	17612.0	13453.30	14871.98	17856.2	17978.47	17494.6		
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-		
16	Total Kjeldahl Nitrogen(mg/l)	3.9	1.68	2.8	BDL	2.2	3.36	1.12	1.7	3.36	1.7	2.802	0.6		
17	Ammonia (mg/l)	0.11	BDL	BDL	0.05	BDL	0.08	0.08	0.10	BDL	0.11	0.16	0.05		
18	Total Hardness(mg/l)	6700.0	3800.0	5400.0	4800.0	2400.0	2000.0	5520.0	2200.0	6400.0	5400.0	7000.0	7200.0		
19	Calcium(mg/l)	1202.4	321.0	400.8	304.6	240.0	1500.0	369.0	481.0	3600.0	1844.0	1603.2	961.9		
20	Magnesium(mg/l)	899.1	729.0	1069.2	981.7	437.4	121.50	1118.0	243.00	680.04	194.40	729.0	1066.4		
21	Sulphate(mg/l)	1011.70	672.0	3225.40	2085.0	996.5	704.45	2803.0	2398.00	1341.94	2511.60	5415.64	1696.80		
22	Sodium(mg/l)	-	-	-	-	-	266.3	9486.0	3485.0	2816.0	12385.0	9601.0	7792.0		
23	Total Dissolved Solids(mg/l)	17582.0	12327.0	35157.0	24371.0	11420.0	9989.0	13843.0	13719.0	27229.0	29690.0	30510.0			
24	Total Fixed Solids(mg/l)	17009.0	7396.0	22157.0	17371.0	6451.0	3018.0	19106.0	9994.0	6725.0	20670.0	11915.0	21967.0		
25	Total Suspended Solids(mg/l)	34.0	46.0	109.0	97.0	29.0	22.0	84.0	36.0	39.0	31.0	8.0	16.0		
26	Phosphate(mg/l)	0.08	0.05	0.05	0.03	0.07	BDL	0.02	0.034	0.067	BDL	0.197	0.12		
27	Boron(mg/l)	4.26	0.95	1.4	1.3	BDL	BDL	4.27	1.81	BDL	0.25	BDL	6.03		
28	Potassium(mg/l)	-	-	-	-	-	4.6	758.0	265	245.1	6556.0	683.9	559.0		
29	Flouride(mg/l)	1.38	1.25	1.70	2.8	0.54	0.33	1.80	0.31	0.22	0.23	BDL	1.83		
30	Arsenic(mg/l)	0.086	-	-	-	-	-	BDL	-	-	-	-	-		
31	Cadmium(mg/l)	0.034	-	-	-	-	-	BDL	-	-	-	-	-		
32	Copper(mg/l)	0.06	-	-	-	-	-	0.010	-	-	-	-	-		
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.099	-	-	-	-	-		
35	Nickel(mg/l)	0.082	-	-	-	-	-	BDL	-	-	-	-	-		
36	Zinc(mg/l)	0.17	-	-	-	-	-	0.06	-	-	-	-	-		
37	Iron Total(mg/l)	0.321	-	-	-	-	-	BDL	-	-	-	-	-		
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
40	DDT-o,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
41	DDT-p,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
50	DDT(o,p & isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-		
51	Gammma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		

Sr. No	Parameters	RIVER MANDOVINEAR HOTEL MARIOTT											Limit for SW II river as per CPCB classification based on designated best use of rivers
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
1	Temperature°C	32	28	29	30	27	28	29	28	28	29	29	29
2	Dissolved Oxygen(mg/l)	5.9	6.0	7.2	7.6	7.6	7.6	5.9	6.0	6.0	6.7	7.0	6.3
3	pH	7.82	7.02	8.0	7.83	7.69	7.27	7.8	7.13	7.15	8.19	8.10	7.74
4	Conductivity(us/cm)	30300.0	17240.0	55450.0	36210.0	35600.0	23405.0	46990.0	36690.0	36400.0	48380.0	49610.0	50710.0
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.21	1.12	BDL	BDL	0.16	BDL	0.10	BDL	0.10	BDL	BDL	BDL
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.361	BDL	BDL	0.005	0.009	BDL	0.005	0.005	BDL	0.02	BDL
8	Total Coliform(MPN/100ml)	220	270	330	140	460	330	170	210	170	130	240	280
9	Fecal Coliform(MPN/100ml)	130	130	130	110	210	170	110	120	140	79	130	220
10	Fecal Streptococci (MPN/100ml)	111	431	47	40	13.0	17	13	46	79	49	49	79
11	Turbidity(NTU)	7.34	1.28	5.68	4.89	10.57	16.63	7.05	4.29	4.30	1.82	4.04	5.54
12	Phenolphthalein Alkalinity(mg/l)	8.0	4.0	10.0	6.0	4.0	BDL	12.0	6.0	10.0	10.0	20.0	16.0
13	Total Alkalinity(mg/l)	70.0	58.0	100.0	64.0	40.0	24.0	84.0	76.0	80.0	86.0	100.0	132.0
14	Chlorides(mg/l)	17969.0	14206.0	17905.1	13991.0	15395.0	13575.58	17856.0	15410.10	15850.40	18100.8	18100.0	17744.5
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-
16	Total Kjeldahl Nitrogen(mg/l)	3.9	1.12	2.8	1.68	2.8	3.36	1.12	1.7	2.8	1.7	2.802	0.6
17	Ammonia (mg/l)	0.15	BDL	BDL	0.05	BDL	0.08	0.07	0.18	BDL	0.06	0.14	0.05
18	Total Hardness(mg/l)	6000.0	4200.0	4600.0	5100.0	5600.0	4500.0	5240.0	4200.0	6400.0	6000.0	9500.0	7000.0
19	Calcium(mg/l)	1282.6	401.0	400.8	280.6	480.9	3000.0	401.0	561.1	3500.0	2164.0	2004.0	1042.1
20	Magnesium(mg/l)	680.4	778.0	874.8	1069.2	1069.0	364.5	1030.0	680.4	704.7	145.8	1093.5	1069.2
21	Sulphate(mg/l)	996.60	559.0	3080.40	2079.4	2021.8	1311.2	2815.0	3205.3	2216.7	2402.9	5331.11	1863.45
22	Sodium(mg/l)	-	-	-	-	-	450.3	7678.0	1903.0	2959.0	10585.0	8715.0	6327.0
23	Total Dissolved Solids(mg/l)	19695.0	12068.0	38037.0	24557.0	21714.0	14018.0	32893.0	20950.0	21136.0	28272.0	29263.0	30500.0
24	Total Fixed Solids(mg/l)	19002.0	7240.0	26137.0	17657.0	13225.0	5689.0	19736.0	12500.0	12272.0	20044.0	13250.0	20740.0
25	Total Suspended Solids(mg/l)	12.0	58.0	107.0	30.0	25.0	25.0	75.0	43.0	32.0	21.0	6.0	11.0
26	Phosphate(mg/l)	0.11	0.03	0.05	0.03	0.08	BDL	0.03	0.084	0.932	0.03	0.178	0.33
27	Boront(mg/l)	4.28	0.72	1.2	1.4	0.34	BDL	4.11	1.01	BDL	0.22	BDL	3.96
28	Potassium(mg/l)	-	-	-	-	-	16.6	616	255.7	236.4	5530.0	622.5	489
29	Flouride(mg/l)	1.20	1.16	2.0	2.7	BDL	BDL	1.64	0.24	0.2	0.22	BDL	1.79
30	Arsenic(mg/l)	0.098	-	-	-	-	-	BDL	-	-	-	-	-
31	Cadmium(mg/l)	0.035	-	-	-	-	-	BDL	-	-	-	-	-
32	Copper(mg/l)	0.055	-	-	-	-	-	BDL	-	-	-	-	-
33	Lead(mg/l)	BDL	-	-	-	-	-	0.081	-	-	-	-	-
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.038	-	-	-	-	-
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
36	Zinc(mg/l)	0.166	-	-	-	-	-	0.075	-	-	-	-	-
37	Iron Total(mg/l)	0.124	-	-	-	-	-	0.105	-	-	-	-	-
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
40	DDT-op' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-

RIVER MANDOLI AT RIBANDAR-CHODAN FERRY, PANAJI														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	30	29	29	29	28	29	30	28	27	28	28	31	4 mg/l or more 6.5 - 8.5
2	Dissolved Oxygen(mg/l)	5.8	7.0	6.7	7.1	7.9	7.7	7.1	6.8	5.7	6.4	6.0	5.7	
3	pH	7.74	6.83	7.84	7.34	7.68	6.52	6.8	7.24	7.22	8.03	7.95	7.65	
4	Conductivity(µs/cm)	27200.0	14220.0	46040.0	13850.0	4189.0	4617.0	4812.0	25060.0	29100.0	38770.0	47250.0	47140.0	3 mg/l or less
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.21	0.27	BDL	0.10	0.19	0.13	0.44	0.10	0.19	BDL	0.142	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.68	BDL	BDL	BDL	BDL	0.14	0.007	BDL	0.008	0.02	0.010	0.01	100 or less MPN/100 ml
8	Total Coliform(MPN/100ml)	490	460	490	330	490	330	210	170	170	220	280	350	
9	Fecal Coliform(MPN/100ml)	230	170	130	170	330	170	110	120	110	130	170	220	
10	Fecal Streptococci (MPN/100ml)	151	921	-	17	22	49	32	70	70	79	79	110	30 NTU
11	Turbidity(NTU)	9.18	2.90	5.94	3.97	4.65	11.75	28.4	6.12	5.6	2.97	3.80	5.98	
12	Phenolphthalein Alkalinity(mg/l)	4.0	BDL	8.0	BDL	BDL	BDL	BDL	BDL	BDL	6.0	14.0	8.0	
13	Total Alkalinity(mg/l)	76.0	46.0	94.0	38.0	18.0	28.0	44.0	72.0	130.0	92.0	80.0	104.0	
14	Chlorides(mg/l)	16721.2	5490.5	17415.9	4990.0	2099.0	1799.4	1651.0	10518.0	12079.2	15995.0	16143.93	17318.0	
15	COD(mg/l)	-	-	-	-	-	10.0	6.0	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	2.8	2.2	2.8	BDL	1.7	2.80	1.68	1.70	3.9	1.68	2.24	1.12	
17	Ammonia (mg/l)	0.08	BDL	0.06	0.07	BDL	0.05	0.05	0.07	BDL	0.17	0.17	BDL	
18	Total Hardness(mg/l)	6000.0	2000.0	4800.0	2100.0	440.0	400.0	360.0	1600.0	4000.0	6600.0	5500.0	6200.0	
19	Calcium(mg/l)	1122.2	320.6	320.6	96.2	16.0	64.1	64.0	400.8	521.0	480.9	1002.0	440.9	
20	Magnesium(mg/l)	777.6	291.6	972.0	451.9	97.0	58.3	49.0	145.8	656.1	1312.2	729.0	1239.3	
21	Sulphate(mg/l)	694.60	936.20	2941.00	483.8	28.8	50.19	145.0	4124.6	1252.8	2665.5	5059.43	2825.6	
22	Sodium(mg/l)	-	-	-	-	-	-	719.0	1850.2	3424.0	1611.0	9529.0	8370.0	
23	Total Dissolved Solids(mg/l)	17136.0	9243.0	27071.0	9571.0	2641.0	2751.0	3368.0	15101.0	19430.0	22584.0	28374.0	28007.0	
24	Total Fixed Solids(mg/l)	16856.0	9016.0	18971.0	6371.0	1507.0	1690.0	2021.0	12500.0	13212.0	13472.0	10287.0	18707.0	
25	Total Suspended Solids(mg/l)	13.0	4.0	88.0	54.0	32.0	33.0	24.0	41.0	10.0	78.0	5.0	189.0	
26	Phosphate(mg/l)	0.05	0.03	0.05	BDL	0.05	0.04	0.03	0.073	0.05	0.02	0.235	0.07	
27	Boron(mg/l)	4.14	BDL	1.3	0.5	BDL	BDL	0.39	1.32	1.23	0.49	BDL	1.4	
28	Potassium(mg/l)	-	-	-	-	-	-	65.5	233.7	245	376.8	670.6	537.7	
29	Fluoride(mg/l)	1.24	0.95	1.80	1.9	BDL	0.84	0.34	BDL	1.04	0.92	BDL	1.2	
30	Arsenic(mg/l)	0.089	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.013	-	-	-	-	-	
32	Copper(mg/l)	0.049	-	-	-	-	-	-	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.054	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.073	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	0.034	-	-	-	-	-	
36	Zinc(mg/l)	0.128	-	-	-	-	-	0.017	-	-	-	-	-	
37	Iron Total(mg/l)	0.935	-	-	-	-	-	BDL	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

RIVER MANDOLI AT AMONA														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	29	28	30	27	28	29	29	28	27	28	28	29	
2	Dissolved Oxygen(mg/l)	5.6	7.1	5.9	7.5	7.0	7.2	6.0	7.3	6.7	6.1	6.3	6.0	4 mg/l or more
3	pH	7.35	6.81	7.19	6.45	6.50	7.20	5.75	7.17	7.15	7.43	7.30	7.28	6.5 - 8.5
4	Conductivity(µs/cm)	38080.0	15620.0	14550.0	92.80	141.20	68.59	87.55	3000.0	3470.0	20390.0	19470.0	27610.0	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.0	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.10	BDL	0.25	0.18	BDL	0.10	0.10	BDL	0.32	0.28	0.13	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.130	0.110	0.040	BDL	BDL	BDL	0.016	BDL	0.011	0.060	0.069	0.06	
8	Total Coliform(MPN/100ml)	490	700	1700	1300	1700	1300	1400	1200	1100	1400	1100	790	
9	Fecal Coliform(MPN/100ml)	170	330	1300	790	1100	790	940	940	700	790	790	490	100 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	111	281	541	280	130	110	130	170	170	220	240	220	
11	Turbidity(NTU)	5.37	2.60	4.72	20.09	8.41	10.17	39.90	4.99	4.58	3.99	8.16	6.66	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	6.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	10.0	
13	Total Alkalinity(mg/l)	76.0	32.0	40.0	14.0	8.0	12.0	20.0	34.0	36.0	76.0	54.0	82.0	
14	Chlorides(mg/l)	16244.90	9097.20	5248.00	25.50	35.00	10.0	18.10	2249.00	2246.10	10096.9	6799.0	12871.0	
15	COD(mg/l)	-	-	-	10.0	12.0	4.0	8.0	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	4.48	2.8	1.1	1.1	2.8	1.12	3.36	2.8	4.5	1.12	1.7	2.8	
17	Ammonia (mg/l)	BDL	BDL	0.14	BDL	0.06	BDL	BDL	0.08	BDL	BDL	BDL	BDL	
18	Total Hardness(mg/l)	6000.0	2200.0	1400.0	20.0	20.0	14.0	14.0	320.0	800.0	3200.0	2500.0	2760.0	
19	Calcium(mg/l)	320.6	296.5	96.2	4.0	4.0	3.0	8.0	24.85	80.20	320.60	240.0	200.4	
20	Magnesium(mg/l)	1263.60	354.80	282.0	2.4	2.4	BDL	BDL	62.7	145.8	583.2	462.0	549.2	
21	Sulphate(mg/l)	1947.90	2476.0	2384.60	5.1	5.0	4.0	6.6	96.0	1526.4	896.5	786.0	1007.5	
22	Sodium(mg/l)	-	-	-	-	-	28.4	8.6	467.7	622.9	1119.0	4588.0	4151.0	
23	Total Dissolved Solids(mg/l)	22125.0	9374.0	8736.0	55.0	81.0	46.0	52.0	1800.0	2186.0	12027.0	13434.0	16408.0	
24	Total Fixed Solids(mg/l)	13794.0	9276.0	7731.0	32.0	76.0	26.0	20.0	1599.0	1530.0	7307.0	5374.0	9838.0	
25	Total Suspended Solids(mg/l)	51.0	57.0	61.0	16.0	9.0	5.0	9.0	11.0	8.0	44.0	57.0	0.25	
26	Phosphate(mg/l)	0.04	0.03	0.09	0.06	0.08	0.02	0.043	0.050	0.020	BDL	0.02	0.25	
27	Boron(mg/l)	0.59	0.49	0.43	0.31	BDL	BDL	BDL	0.26	BDL	0.23	1.80	0.59	
28	Potassium(mg/l)	-	-	-	-	-	15.0	2.0	49.3	49.8	249.6	287.4	342.7	
29	Flouride(mg/l)	0.69	0.45	0.22	BDL	BDL	BDL	BDL	BDL	0.47	0.62	0.96	0.61	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.012	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	0.024	-	-	-	-	-	BDL	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.066	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.084	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.024	-	-	-	-	-	0.040	-	-	-	-	-	
37	Iron Total(mg/l)	0.332	-	-	-	-	-	0.141	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

RIVER ZUARI AT MADKAI JETTY														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	30	29	28	29	30	29	30	28	29	29	29	31	
2	Dissolved Oxygen(mg/l)	5.4	4.7	6.6	7.2	5.0	6.8	5.0	5.4	6.5	5.0	5.2	5.0	4 mg/l or more
3	pH	6.87	7.20	7.02	6.67	7.13	6.5	7.7	7.8	7.31	7.15	7.35	6.93	6.5 - 8.5
4	Conductivity(µs/cm)	38630.0	52840	2645.0	1564.0	27830.0	799.6	23080.0	32250.0	27510.0	43440.0	42790.0	35160.0	
5	BOD(mg/l)	BDL	BDL	2.4	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.33	0.54	BDL	0.59	0.31	BDL	0.12	BDL	0.16	0.19	BDL	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.05	0.126	0.121	0.034	0.055	0.009	0.008	0.012	0.01	0.065	0.07	0.007	
8	Total Coliform(MPN/100ml)	2800	1700	5400	2800	2200	2800	1700	2200	1700	2700	2200	1300	
9	Fecal Coliform(MPN/100ml)	1300	790	2200	1700	1700	1300	1700	1300	1300	1700	1700	780	100 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	64	211	-	280	220	220	130	330	230	330	230	170	
11	Turbidity(NTU)	5.44	22.6	46.6	19.6	98.1	28.9	22.4	30.1	7.33	21.5	21.1	11.14	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	BDL	4.0	BDL	BDL	BDL	BDL	BDL	8.0	10.0	6.0	6.0	BDL	
13	Total Alkalinity(mg/l)	84.0	70.0	26	20.0	36.0	14.0	72.0	76.0	80.0	80.0	94.0	140.0	
14	Chlorides(mg/l)	8360.6	18577.0	1499.54	1000.0	4989.9	230.0	8247.0	14934.0	13893.6	15043.2	16437.5	14920.91	
15	COD(mg/l)	-	-	BDL	16.0	-	4.0	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	23	2.2	2.2	2.8	3.3	1.12	2.2	1.12	3.36	6.2	1.7	3.36	
17	Ammonia (mg/l)	BDL	BDL	BDL	0.10	0.04	BDL	0.14	BDL	BDL	BDL	BDL	BDL	
18	Total Hardness(mg/l)	2800	6000.0	180	280.0	3800	72.0	5800.0	4200.0	11800.0	7200.0	5500.0	9500.0	
19	Calcium(mg/l)	481	561.0	2.4	20.84	2000	14.0	481.0	320.0	5800.0	2485.0	360.7	2204.4	
20	Magnesium(mg/l)	388.8	1118.0	42.3	55.4	437.4	9.0	1117.8	826.0	1458.0	243.0	1117.8	972.0	
21	Sulphate(mg/l)	202.34	1759.0	8.83	69.14	967.53	26	755	1933	2123.98	664.1	2204.9	2734.58	
22	Sodium(mg/l)	-	-	-	-	-	197.9	4449.0	19652	8574	7661.0	7610.0	7591.0	
23	Total Dissolved Solids(mg/l)	21633	36988.0	1557	923.0	14536.0	543.0	13850.0	22575.0	22507.0	24418.0	23394.0	27002.0	
24	Total Fixed Solids(mg/l)	20992	22192.0	1453	831.0	4367.0	320.0	12610.0	13540.0	12209.0	20100.0	16394.0	11265.0	
25	Total Suspended Solids(mg/l)	8.0	52.0	77	72.0	44.0	11.0	85.0	63.0	26.0	40.0	228.0	26.0	
26	Phosphate(mg/l)	0.03	BDL	0.082	0.70	0.25	0.12	0.12	0.11	0.047	0.031	0.09	0.25	
27	Boron(mg/l)	0.90	1.13	0.43	0.63	0.21	0.32	BDL	BDL	BDL	BDL	1.3	BDL	
28	Potassium(mg/l)	-	-	-	-	-	4.0	280.3	953.0	527.4	3551.0	450.4	558.1	
29	Flouride(mg/l)	0.41	0.56	0.24	0.25	0.53	BDL	1.14	1.01	0.21	0.29	1.2	2.12	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.044	-	-	-	-	-	0.012	-	-	-	-	-	
32	Copper(mg/l)	0.076	-	-	-	-	-	0.019	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.048	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.046	-	-	-	-	-	
35	Nickel(mg/l)	0.415	-	-	-	-	-	-	-	-	-	-	-	
36	Zinc(mg/l)	0.024	-	-	-	-	-	0.077	-	-	-	-	-	
37	Iron Total(mg/l)	0.338	-	-	-	-	-	0.159	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

RIVER ZUARI AT BORIM BRIDGE														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature °C	30	29	28	28	27	27	29	29	30	30	29	29	
2	Dissolved Oxygen(mg/l)	4.1	5.5	4.7	5.1	7.3	6.6	7.0	5.1	6.5	5.5	5.4	5.9	4 mg/l or more
3	pH	6.75	7.02	7.02	6.80	6.89	6.62	6.43	7.15	6.85	6.97	6.83	7.37	6.5 - 8.5
4	Conductivity(µs/cm)	31920.0	18160.0	25380.0	8987.0	218.5	173.1	254.6	18350.0	12460.0	21760.0	21040.0	23760.0	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.27	0.15	0.13	0.2	0.1	0.18	0.1	BDL	0.5	0.15	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.023	0.06	0.21	0.007	0.014	BDL	0.019	0.006	0.036	0.06	0.046	0.03	
8	Total Coliform(MPN/100ml)	1400	790	2100	2200	2700	3900	4000	3900	3300	3400	3300	2600	
9	Fecal Coliform(MPN/100ml)	1100	490	1400	1700	1300	1300	2600	3300	2700	2700	2700	2100	100 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	71	921	431	23	49	130	260	490	700	940	460	490	
11	Turbidity(NTU)	14.49	27.00	7.22	27.60	7.50	10.50	45.90	14.95	4.24	7.66	8.37	4.27	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	80.0	100.0	48.0	28.0	14.0	10.0	20.0	74.0	46.0	66.0	58.0	80.0	
14	Chlorides(mg/l)	10606.7	7648.0	12121	3157.0	499.1	37.0	59.68	7498.0	5870.5	8747.3	7528.0	8122.6	
15	COD(mg/l)	-	-	-	-	4.0	4.0	8.0	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	24.4	3.4	1.7	0.56	1.7	1.1	2.8	1.7	1.7	2.8	1.1	1.68	
17	Ammonia (mg/l)	BDL	0.06	0.09	0.06	0.18	BDL	BDL	0.20	BDL	BDL	BDL	0.13	
18	Total Hardness(mg/l)	2800.0	220.0	7700.0	200.0	20.0	18.0	32.0	2200.0	600.0	1080.0	2500.0	3400.0	
19	Calcium(mg/l)	481.0	88.2	192.4	16.0	4.8	4.0	20.0	112.2	160.3	152.3	152.0	240.5	
20	Magnesium(mg/l)	388.8	4.9	1754.5	39.0	BDL	BDL	2.92	466.6	48.6	170.1	516.0	680.4	
21	Sulphate(mg/l)	229.5	120.0	171.0	271.0	259.2	6.0	7.71	275.80	3692.90	646.0	853	2264.9	
22	Sodium(mg/l)	-	-	-	-	-	34.4	35.3	2988.0	366.8	4751.0	4035.0	3128.0	
23	Total Dissolved Solids(mg/l)	20748.0	10710.0	14984.0	6290.0	135.0	118.0	154.0	10827.0	7388.0	12838.0	14728.0	13981.0	
24	Total Fixed Solids(mg/l)	19002.0	9634.0	13909.0	3774.0	81.0	70.0	87.0	9725.0	5300.0	12200.0	5891.0	8387.0	
25	Total Suspended Solids(mg/l)	20.0	45.0	40.0	25.0	8.0	3.0	18.0	66.0	42.0	70.0	51.0	55.0	
26	Phosphate(mg/l)	0.03	0.06	BDL	0.05	BDL	0.02	0.02	0.2	0.0	0.31	0.04	0.12	
27	Boron(mg/l)	0.84	1.98	1.13	0.76	BDL	BDL	BDL	1.0	0.24	4.3	1.25	0.59	
28	Potassium(mg/l)	-	-	-	-	-	12.5	5.4	262.1	27.9	1562.0	255.2	257.8	
29	Fluoride(mg/l)	0.69	0.64	0.41	BDL	BDL	BDL	0.43	1.32	0.32	0.3	0.93	0.48	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.010	-	-	-	-	-	0.016	-	-	-	-	-	
32	Copper(mg/l)	0.051	-	-	-	-	-	BDL	-	-	-	-	-	
33	Lead(mg/l)	0.066	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	0.085	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.074	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.034	-	-	-	-	-	0.077	-	-	-	-	-	
37	Iron Total(mg/l)	0.082	-	-	-	-	-	0.259	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfant(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfant(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

Sr. No	Parameters	TIRACOL BEACH											Limit for SW II river as per CPCB classification based on designated best use of rivers
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
1	Temperature°C	29	29	31	30	28	29	30	29	27	28	28	29
2	Dissolved Oxygen(mg/l)	6.4	6.7	6.4	7.0	6.5	6.7	6.7	6.7	7.7	7.1	6.2	6.7
3	pH	7.90	7.87	7.86	7.61	7.64	7.76	7.38	8.11	8.26	8.17	8.12	8.10
4	Conductivity(us/cm)	58920.0	61900.0	26000.0	49160.0	43820.0	46870.0	47090.0	49750.0	48690.0	50360.0	49110.0	50660.0
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.49	0.22	0.16	BDL	BDL	BDL	BDL	BDL	0.2	2.25	0.21	BDL
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.006	BDL	0.02	0.01	0.006	BDL	0.006	BDL	0.01	BDL	0.010	BDL
8	Total Coliform(MPN/100ml)	920	540	280	79	130	140	170	170	130	540	350	350
9	Fecal Coliform(MPN/100ml)	240	130	220	49	79	110	140	110	79	350	170	240
10	Fecal Streptococci (MPN/100ml)	15	>1601	351	3.7	6.8	23	33	70	49	70	70	79
11	Turbidity(NTU)	6.11	3.48	37.4	16.54	11.52	8.2	8.16	3.58	5.14	5.7	10.58	6.34
12	Phenolphthalein Alkalinity(mg/l)	10.0	14.0	14.0	6.0	4.0	2.0	6.0	10.0	6.0	14.0	8.0	20.0
13	Total Alkalinity(mg/l)	70.0	70.0	92.0	34.0	34.0	40.0	96.0	96.0	94.0	96.0	100.0	122.0
14	Chlorides(mg/l)	17844.3	17994.4	17807.0	17719.5	15722.9	17220.3	17719.50	17744.5	17612.0	17469.9	17744.5	17970.0
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-
16	Total Kjeldahl Nitrogen(mg/l)	0.6	1.7	1.68	3.4	1.1	1.1	1.7	2.24	BDL	1.1	1.7	1.68
17	Ammonia (mg/l)	0.07	0.06	0.05	BDL	0.11	BDL	0.10	0.14	0.08	BDL	0.06	BDL
18	Total Hardness(mg/l)	7000.0	8600.0	7200.0	6000.0	5000.0	20400.0	12000.0	5200.0	6800.0	9000.0	7600.0	6000.0
19	Calcium(mg/l)	1202.4	721.4	641.3	1282.6	721.4	2805.6	1683.4	801.6	881.8	1202.4	465.0	401.0
20	Magnesium(mg/l)	972.0	1652.4	1360.8	680.4	777.6	3256.2	1895.4	777.6	1117.8	1458.0	1565.0	1215.0
21	Sulphate(mg/l)	1796.9	2295.2	3328.0	3600.0	1080.0	1209.6	1152.0	2240.6	3445.9	1557.7	3436.0	1215.0
22	Sodium(mg/l)	-	-	-	-	-	13900.0	1900.0	14130.0	10281.0	10340.0	15396.0	8194.0
23	Total Dissolved Solids(mg/l)	37700.0	36542.0	17071.0	29004.0	26292.0	30465.0	29140.0	29179.0	30120.0	30000.0	29466.0	34955.0
24	Total Fixed Solids(mg/l)	36522.0	21252.0	11071.0	28812.0	25231.0	24372.0	23212.0	27051.0	21120.0	21600.0	27260.0	20973.0
25	Total Suspended Solids(mg/l)	10.0	71.0	178.0	22.0	21.0	14.0	11.0	39.0	33.0	10.0	210.0	183.0
26	Phosphate(mg/l)	0.12	0.04	0.11	0.04	0.15	BDL	0.08	0.08	0.08	0.02	0.08	0.43
27	Boron(mg/l)	1.04	0.52	1.5	BDL	BDL	0.28	0.257	1.75	1.5	2.44	4.49	3.0
28	Potassium(mg/l)	-	-	-	-	-	365	492.6	658.4	611.7	638.8	776.7	610
29	Fluoride(mg/l)	0.69	0.31	2.0	1.16	1.03	0.67	0.25	0.91	2.40	1.14	1.66	2.36
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
31	Cadmium(mg/l)	0.026	-	-	-	-	-	0.080	-	-	-	-	-
32	Copper(mg/l)	0.057	-	-	-	-	-	0.061	-	-	-	-	-
33	Lead(mg/l)	BDL	-	-	-	-	-	0.050	-	-	-	-	-
34	Chromium(mg/l)	0.049	-	-	-	-	-	BDL	-	-	-	-	-
35	Nickel(mg/l)	0.078	-	-	-	-	-	0.056	-	-	-	-	-
36	Zinc(mg/l)	0.030	-	-	-	-	-	0.094	-	-	-	-	-
37	Iron Total(mg/l)	0.149	-	-	-	-	-	0.720	-	-	-	-	-
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-
51	Gammah-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-

Sr. No	Parameters	MIRAMAR BEACH										Limit for SW II river as per CPCB classification based on designated best use of rivers	
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
1	Temperature°C	28	28	29	27	29	28	29	29	29	29	29	29
2	Dissolved Oxygen(mg/l)	6.2	6.9	6.4	7.5	7.0	7.5	6.9	6.2	6.0	5.9	6.8	6.1
3	pH	7.78	7.30	7.85	7.02	7.81	8.05	7.7	7.1	7.08	8.19	8.06	8.23
4	Conductivity(µs/cm)	56850.0	22700.0	50490.0	18900.0	42920.0	19370.0	40570.0	47430.0	46420.0	48590.0	48550.0	51180.0
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.0	BDL
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.19	0.46	0.39	0.13	0.196	0.13	BDL	BDL	0.1	BDL	BDL	BDL
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.072	0.585	0.008	0.032	0.005	BDL	0.005	0.005	BDL	0.01	BDL
8	Total Coliform(MPN/100ml)	350	280	280	220	170	220	170	140	220	240	350	170
9	Fecal Coliform(MPN/100ml)	240	130	140	130	130	130	110	110	170	130	130	110
10	Fecal Streptococci (MPN/100ml)	41	111	48	79	70	70	94	70	140	94	79	49
11	Turbidity(NTU)	1.9	BDL	21.4	44.2	10.78	18.11	11.37	5.78	6.48	4.43	9.78	9.18
12	Phenolphthalein Alkalinity(mg/l)	10.0	4.0	4.0	BDL	10.0	6.0	10.0	8.0	20.0	8.0	10.0	12.0
13	Total Alkalinity(mg/l)	74.0	64.0	80.0	24.0	30.0	16.0	76.0	84.0	100.0	80.0	102.0	142.0
14	Chlorides(mg/l)	18494.3	16124.0	15473.3	6248.0	16755.44	17333.86	18590.0	18819.0	18233.07	18589.90	17660.5	17994.4
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-
16	Total Kjeldahl Nitrogen(mg/l)	1.12	2.24	1.73	2.2	5.04	3.9	3.36	1.68	2.8	1.7	2.24	1.1
17	Ammonia (mg/l)	BDL	0.07	0.05	BDL	BDL	0.06	0.05	0.15	BDL	0.10	BDL	0.05
18	Total Hardness(mg/l)	8000.0	5000.0	6600.0	600.0	4200.0	5600.0	4760.0	5400.0	7900.0	6000.0	6700.0	7000.0
19	Calcium(mg/l)	721.4	401.0	1362.7	160.3	2200.0	3600.0	336.0	641.0	4500.0	2164.0	481.0	961.9
20	Magnesium(mg/l)	1506.6	972.0	777.6	48.6	486.0	486.0	952.0	923.0	826.2	145.8	1336.5	1117.8
21	Sulphate(mg/l)	1389.20	1498.0	1434.50	913.28	1935.05	1635.16	2536.0	2813.0	3984.66	2499.50	2902.8	2227.05
22	Sodium(mg/l)	-	-	-	-	-	3840.00	9577.0	18886.0	9218.0	11389.0	8704.0	7791.0
23	Total Dissolved Solids(mg/l)	34294.0	15890.0	28274.0	11151.0	24428.0	13108.0	28399.0	33201.0	27997.0	28003.0	29675.0	31360.0
24	Total Fixed Solids(mg/l)	20550.0	9534.0	27991.0	10148.0	10438.0	5813.0	17039.0	19821.0	14303.0	20810.0	19735.0	21975.0
25	Total Suspended Solids(mg/l)	69.0	62.0	29.0	93.0	29.0	14.0	72.0	54.0	41.0	33.0	233.0	20.0
26	Borate(mg/l)	BDL	0.10	0.10	0.12	2.57	BDL	0.02	0.03	0.062	BDL	0.19	0.14
27	Boron(mg/l)	1.78	0.83	BDL	0.98	1.41	0.82	2.91	0.35	BDL	0.24	0.2	4.50
28	Potassium(mg/l)	-	-	-	-	-	41.9	734	925	571.3	5713.0	497.7	551.8
29	Fluoride(mg/l)	BDL	1.27	1.24	0.6	0.60	0.56	1.50	0.84	0.28	BDL	1.4	1.6
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
31	Cadmium(mg/l)	0.035	-	-	-	-	-	0.018	-	-	-	-	-
32	Copper(mg/l)	0.042	-	-	-	-	-	0.047	-	-	-	-	-
33	Lead(mg/l)	0.041	-	-	-	-	-	0.089	-	-	-	-	-
34	Chromium(mg/l)	0.041	-	-	-	-	-	BDL	-	-	-	-	-
35	Nickel(mg/l)	0.588	-	-	-	-	-	0.076	-	-	-	-	-
36	Zinc(mg/l)	0.03	-	-	-	-	-	0.081	-	-	-	-	-
37	Iron Total(mg/l)	0.229	-	-	-	-	-	0.111	-	-	-	-	-
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
44	Ambiofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
50	DDT(op & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-

Sr. No	Parameters	CALANGUTE BEACH										Limit for SW II river as per CPCB classification based on designated best use of rivers	
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
1	Temperature°C	29	29	30	30	27	29	30	29	28	29	28	28
2	Dissolved Oxygen(mg/l)	6.3	6.2	6.1	6.7	6.9	7.0	7.2	6.4	6.8	7.3	7.0	7.3
3	pH	7.9	7.83	7.85	7.71	7.52	7.6	7.72	7.6	7.15	8.16	8.11	8.18
4	Conductivity(µs/cm)	61250.0	53590.0	31300.0	47310.0	49440.0	49430.0	44430.0	49270.0	49390.0	50100.0	50850.0	53010.0
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.3	0.13	0.1	0.12	0.1	0.34	0.2	0.21	0.1	BDL	0.25
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.02	0.137	0.011	BDL	0.022	0.055	BDL	BDL	0.02	BDL	0.05	0.007
8	Total Coliform(MPN/100ml)	170	220	130	240	130	240	220	280	280	350	79	170
9	Fecal Coliform(MPN/100ml)	110	170	79	79	79	79	130	170	220	170	49	110
10	Fecal Streptococci (MPN/100ml)	111	541	171	17	11	22	27	49	110	79	23	70
11	Turbidity(NTU)	6.68	1.33	11.31	6.22	12.92	25.0	4.4	2.10	4.51	2.99	1.19	2.68
12	Phenolphthalein Alkalinity(mg/l)	12	14.0	10.0	10.0	2.0	6.0	6.0	12.0	12.0	10.0	12.0	14.0
13	Total Alkalinity(mg/l)	72.0	80.0	102.0	74.0	40.0	44.0	90.0	92.0	100.0	90.0	98.0	102.0
14	Chlorides(mg/l)	17994.40	17709.40	17994.5	17513.7	17719.5	17514.0	17494.60	18819.0	17994.4	17869.5	18119.4	18590.0
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-
16	Total Kjeldahl Nitrogen(mg/l)	BDL	BDL	3.4	2.24	1.7	1.12	0.56	1.68	1.12	1.12	1.12	2.2
17	Ammonia (mg/l)	0.08	BDL	0.04	BDL	0.09	0.20	0.05	BDL	0.07	BDL	BDL	BDL
18	Total Hardness(mg/l)	7000.0	7200.0	8600.0	6500.0	2400.0	6700.0	7400.0	5600.0	5200.0	5400.0	6400.0	5600.0
19	Calcium(mg/l)	561.1	641.3	376.8	392.8	320.6	440.9	641.3	321.0	96.19	480.9	721.4	1523.0
20	Magnesium(mg/l)	1360.8	1360.8	1861.4	1341.4	388.8	1360.8	1408.4	1166.0	680.4	1020.6	1117.8	437.4
21	Sulphate(mg/l)	1404.3	1442.1	2174.4	3260.2	1800.0	2292.2	1386.2	3102.0	3360.3	2346.9	2490.4	3054.9
22	Sodium(mg/l)	-	-	-	-	-	12005.0	8371.0	27896.0	12157.0	1855.0	11799.0	9767.0
23	Total Dissolved Solids(mg/l)	36914.0	36037.0	17285.0	30660.2	32136.0	34687.0	26081.0	34489.0	30231.0	30137.0	30760.0	30035.0
24	Total Fixed Solids(mg/l)	22452.0	23027.0	16271.0	20750.0	25708.0	22587.0	15452.0	20693.0	18769.0	18094.0	18349.0	20050.0
25	Total Suspended Solids(mg/l)	82.0	40.0	138.0	37.0	21.0	46.0	73.0	85.0	52.0	81.0	85.0	36.0
26	Phosphate(mg/l)	0.05	0.04	0.05	0.12	BDL	0.12	0.03	0.04	BDL	BDL	0.06	0.22
27	Boron(mg/l)	1.52	1.7	2.37	1.7	BDL	1.63	BDL	4.60	1.31	0.72	0.61	0.20
28	Potassium(mg/l)	-	-	-	-	-	304	662.7	1080	675.2	446.0	629.2	700.0
29	Fluoride(mg/l)	BDL	1.9	BDL	2.8	0.94	0.9	BDL	2.89	0.70	1.4	0.65	0.23
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
32	Copper(mg/l)	0.071	-	-	-	-	-	BDL	-	-	-	-	-
33	Lead(mg/l)	BDL	-	-	-	-	-	0.053	-	-	-	-	-
34	Chromium(mg/l)	0.030	-	-	-	-	-	BDL	-	-	-	-	-
35	Nickel(mg/l)	0.080	-	-	-	-	-	0.084	-	-	-	-	-
36	Zinc(mg/l)	0.068	-	-	-	-	-	0.079	-	-	-	-	-
37	Iron Total(mg/l)	0.165	-	-	-	-	-	0.828	-	-	-	-	-
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
40	DDT-o,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
41	DDT-p,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
44	Amitofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
50	DDT (o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-

MORJIM BEACH														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	28	30	31	30	28	29	30	29	28	29	29	30	
2	Dissolved Oxygen(mg/l)	6.0	6.3	6.7	7.0	6.5	7.0	7.1	6.1	7.7	6.8	6.0	6.9	4 mg/l or more
3	pH	7.91	7.90	7.8	7.74	7.77	7.75	7.81	8.15	8.3	8.21	8.18	8.2	6.5 - 8.5
4	Conductivity(µs/cm)	58830.0	58150.0	25800.0	43710.0	33870.0	45270.0	43880.0	48420.0	48600.0	50200.0	49920.0	50330.0	3 mg/l or less
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.44	0.16	0.23	BDL	BDL	BDL	BDL	BDL	0.2	0.3	0.28	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.032	BDL	0.02	BDL	0.007	0.008	BDL	BDL	0.01	BDL	0.012	BDL	
8	Total Coliform(MPN/100ml)	23	33	79	79	140	79	170	220	280	79	170	280	
9	Fecal Coliform(MPN/100ml)	13	13	49	49	110	49	110	130	170	49	130	220	100 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	12	64	141	61	11.0	33	46	49	79	33	49	94	
11	Turbidity(NTU)	6.22	3.30	25.7	11.4	22.0	12.73	9.14	2.36	4.20	2.34	7.28	2.18	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	10.0	12.0	12.0	8.0	2.0	2.0	6.0	14.0	10.0	16.0	14.0	16.0	
13	Total Alkalinity(mg/l)	66.0	66.0	88.0	30.0	34.0	40.0	108.0	92.0	106.0	92.0	98.0	114.0	
14	Chlorides(mg/l)	17969.0	17994.4	17905.0	16471.6	12228.9	17220.3	17469.90	17994.4	17807.0	17220.3	17744.5	18212.0	
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	1.1	2.2	1.68	1.7	1.1	1.1	1.7	1.68	BDL	1.1	1.7	1.12	
17	Ammonia (mg/l)	BDL	BDL	BDL	BDL	0.14	BDL	0.25	0.08	BDL	BDL	BDL	BDL	
18	Total Hardness(mg/l)	4000.0	7600.0	5600.0	6000.0	3400.0	22200.0	4000.0	4000.0	8000.0	9600.0	8000.0	6400.0	
19	Calcium(mg/l)	801.6	641.3	400.0	961.9	481.0	3046.1	561.1	721.44	1202.0	1362.7	288.6	481.0	
20	Magnesium(mg/l)	486.0	1458.0	1117.8	874.8	534.6	3547.8	631.8	534.6	1215.0	1506.6	1769.0	1264.0	
21	Sulphate(mg/l)	1864.9	2098.9	3273.7	2088.0	734.4	1195.2	1267.2	1834.3	3642.6	1376.55	1799.2	4127.0	
22	Sodium(mg/l)	-	-	-	-	-	14728.0	2159.0	14373.0	10426.0	10521.0	15575.0	8122.0	
23	Total Dissolved Solids(mg/l)	34121.0	34147.0	18037.0	25790.0	21000.0	26709.0	29400.0	28381.0	31150.0	31360.0	29954.0	35231.0	
24	Total Fixed Solids(mg/l)	34084.0	20150.0	11337.0	25285.0	20011.0	20298.0	19852.0	17221.0	22150.0	21638.0	27935.0	21138.0	
25	Total Suspended Solids(mg/l)	11.0	78.0	174.0	18.0	30.0	20.0	12.0	54.0	30.0	4.0	188.0	165.0	
26	Phosphate(mg/l)	0.11	0.06	0.1	0.06	0.23	0.06	0.06	0.05	0.1	BDL	0.03	0.04	
27	Boron(mg/l)	1.78	0.4	1.1	BDL	BDL	0.82	0.3	1.72	1.7	2.48	4.91	3.77	
28	Potassium(mg/l)	-	-	-	-	-	373.5	547.3	672.2	610.8	720.4	788.2	599.7	
29	Flouride(mg/l)	0.71	BDL	1.90	1.08	0.99	0.74	0.27	0.87	2.6	BDL	1.23	2.34	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.012	-	-	-	-	-	0.094	-	-	-	-	-	
32	Copper(mg/l)	0.067	-	-	-	-	-	BDL	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.082	-	-	-	-	-	
34	Chromium(mg/l)	0.071	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.109	-	-	-	-	-	0.055	-	-	-	-	-	
36	Zinc(mg/l)	0.029	-	-	-	-	-	0.096	-	-	-	-	-	
37	Iron Total(mg/l)	0.158	-	-	-	-	-	0.981	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfant(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfant(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

Sr. No	Parameters	MOBOR BEACH												Limit for SW II river as per CPCB classification based on designated best use of rivers
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	
1	Temperature°C	32	30	29	30	27	27	30	29	29	30	29	31	
2	Dissolved Oxygen(mg/l)	6.2	6.5	6.5	6.5	7.1	6.8	6.9	6.1	6.8	7.0	7.1	7.7	4 mg/l or more
3	pH	7.88	6.75	7.7	7.7	7.45	7.46	6.52	7.04	7.07	7.62	7.72	8.16	6.5 - 8.5
4	Conductivity(us/cm)	57880.0	56340.0	49420.0	46510.0	43290.0	45460.0	50220.0	49220.0	48340.0	43510.0	50370.0	51100.0	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.47	0.20	0.17	0.84	BDL	0.1	BDL	BDL	0.12	BDL	BDL	0.29	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	0.021	0.007	BDL	0.04	BDL	BDL	0.01	BDL	0.009	BDL	
8	Total Coliform(MPN/100ml)	220	170	170	280	350	280	220	350	280	220	170	140	
9	Fecal Coliform(MPN/100ml)	110	110	110	130	140	130	170	240	220	170	140	110	100 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	7.1	48	121	23	33	23	33	79	23	79	22	94	
11	Turbidity(NTU)	4.19	3.42	10.15	7.59	10.07	15.48	12.7	1.53	4.24	2.4	15.69	10.59	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	32	12.0	14.0	12.0	8.0	8.0	6.0	16.0	14.0	8.0	12.0	14.0	
13	Total Alkalinity(mg/l)	82.0	68.0	64.0	64.0	36.0	42.0	94.0	84.0	92.0	98.0	90.0	104.0	
14	Chlorides(mg/l)	19128.00	16721.20	17970.0	22462.0	17611.0	16926.6	17719.50	18698.0	17994.4	17367.0	18244.3	18590.0	
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	BDL	3.2	2.24	2.8	1.12	1.12	1.7	1.68	1.12	1.68	1.68	2.2	
17	Ammonia (mg/l)	BDL	0.16	0.06	0.08	0.23	0.05	0.33	BDL	0.05	BDL	BDL	BDL	
18	Total Hardness(mg/l)	6700.0	4600.0	6400.0	5640.0	5800.0	6100.0	700.0	5800.0	5600.0	6040.0	7200.0	6200.0	
19	Calcium(mg/l)	320.6	801.6	641.0	353.0	480.9	400.8	176.4	561.0	1843.7	416.8	721.4	1924.0	
20	Magnesium(mg/l)	1433.7	631.8	1166.0	1157.0	1117.8	1239.3	63.2	1069.0	243.0	1215.0	1312.2	340.2	
21	Sulphate(mg/l)	2129.0	1510.0	1691.0	3666.0	1850.7	1952.0	1094.4	2906.0	3532.4	1907.8	3020.9	2946.3	
22	Sodium(mg/l)	-	-	-	-	-	11683.0	2164.0	26892.0	12546.0	1719.0	11861.0	9914.0	
23	Total Dissolved Solids(mg/l)	32543.0	37748.0	32557.0	32557.0	25144.0	31044.0	28500.0	34454.0	28977.0	26734.0	30142.0	29596.0	
24	Total Fixed Solids(mg/l)	23673.0	36996.0	20756.0	19534.0	17144.0	19044.0	19950.0	20672.0	17291.0	19894.0	18237.0	20470.0	
25	Total Suspended Solids(mg/l)	48.0	6.0	54.0	74.0	87.0	75.0	20.0	54.0	70.0	22.0	76.0	31.0	
26	Phosphate(mg/l)	0.04	0.02	0.11	0.04	0.16	0.06	0.11	0.02	0.07	0.04	0.12	0.22	
27	Boron(mg/l)	1.74	0.46	0.79	0.83	1.17	1.5	0.22	4.98	1.31	2.04	0.60	BDL	
28	Potassium(mg/l)	-	-	-	-	-	296.0	552.0	1058.0	656.9	410.0	637.5	680.4	
29	Fluoride(mg/l)	BDL	1.31	1.49	1.39	0.87	0.9	BDL	2.61	0.82	BDL	0.63	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	0.036	-	-	-	-	-	
32	Copper(mg/l)	0.061	-	-	-	-	-	0.095	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.052	-	-	-	-	-	
34	Chromium(mg/l)	0.054	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.102	-	-	-	-	-	0.080	-	-	-	-	-	
36	Zinc(mg/l)	0.025	-	-	-	-	-	0.070	-	-	-	-	-	
37	Iron Total(mg/l)	0.182	-	-	-	-	-	0.950	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-op' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p-p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4 Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Adrm/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

BAINA BEACH														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	31	30	29	26	29	30	28	30	29	30	29	30	4 mg/l or more 6.5 - 8.5
2	Dissolved Oxygen(mg/l)	5.6	6.6	6.8	7.0	7.0	6.3	7.9	7.0	6.5	7.0	7.0	6.0	
3	pH	7.65	7.06	7.85	7.2	7.84	7.8	7.83	8.40	7.68	8.31	8.04	8.02	
4	Conductivity(µs/cm)	57760.0	57250.0	53230.0	41840.0	46520.0	32930.0	47450.0	46290.0	49820.0	49010.0	50740.0	48930.0	3 mg/l or less
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.11	0.54	0.72	0.850	BDL	0.2	0.1	0.85	0.47	BDL	BDL	0.113	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.01	BDL	BDL	0.150	BDL	0.01	0.005	0.855	0.005	0.006	BDL	0.010	100 or less MPN/100 ml 30 NTU
8	Total Coliform(MPN/100ml)	220	280	350	540	350	540	350	280	220	350	220	220	
9	Fecal Coliform(MPN/100ml)	130	130	170	240	170	220	240	220	170	280	140	170	
10	Fecal Streptococci (MPN/100ml)	32	131	7.8	130	110	110	140	94	94	130	79	79	30 NTU
11	Turbidity(NTU)	8.96	9.58	2.81	22.3	2.76	4.06	2.65	4.16	4.15	4.73	2.37	3.63	
12	Phenolphthalein Alkalinity(mg/l)	10.0	4.0	6.0	4.0	6.0	BDL	BDL	BDL	8.0	8.0	14.0	24.0	
13	Total Alkalinity(mg/l)	88.0	72.0	90.0	30.0	34.0	38.0	50.0	96.0	104.0	88.0	106.0	140.0	18834.6
14	Chlorides(mg/l)	18494.30	17969.0	17220.30	11936.72	17994.0	12328.0	17461.0	17719.5	17469.0	18834.6	17856.0	18589.98	
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	1.12	3.9	2.2	0.06	0.6	1.12	1.12	3.9	3.9	2.2	2.24	2.24	3163.65
17	Ammonia (mg/l)	BDL	BDL	BDL	4.48	0.17	0.22	BDL	0.30	BDL	0.06	BDL	0.27	
18	Total Hardness(mg/l)	8000.0	7000.0	6000.0	15500.0	24200.0	4100.0	6200.0	6600.0	7600.0	6400.0	11200.0	9500.0	
19	Calcium(mg/l)	881.8	1202.4	961.9	7500.0	1779.6	360.7	481.0	881.8	881.8	2245.0	521.0	2605.2	729.0
20	Magnesium(mg/l)	1409.4	972.0	874.8	1944.0	4801.7	777.6	1215.0	1069.2	1312.2	194.4	2405.7	729.0	
21	Sulphate(mg/l)	4635.7	2325.4	1872.4	12.43	1638.20	1079.0	2992.70	734.40	1497.60	6013.0	3192.60	3163.65	
22	Sodium(mg/l)	-	-	-	-	-	7347.0	12219.0	10500.0	5721.0	10798.0	12760.0	8211.0	29354.0
23	Total Dissolved Solids(mg/l)	35022.0	32061.0	31405.0	24760.0	27447.0	22326.0	30010.0	31280.0	31360.0	28997.0	28335.0	29354.0	
24	Total Fixed Solids(mg/l)	21254.0	31357.0	30998.0	10935.0	26454.0	14236.0	21610.0	23772.0	19129.0	19300.0	20226.0	9849.0	
25	Total Suspended Solids(mg/l)	79.0	15.0	4.0	18.0	174.0	36.0	44.0	7.0	7.0	30.0	262.0	30.0	0.03
26	Phosphate(mg/l)	0.12	0.28	0.1	0.463	0.272	0.05	0.03	0.27	0.05	0.05	0.03	0.865	
27	Boron(mg/l)	1.73	BDL	BDL	1.67	0.97	0.9	1.0	0.50	1.88	BDL	1.50	BDL	
28	Potassium(mg/l)	-	-	-	-	-	224.1	896.3	615.2	377.2	5795	671.2	647.7	BDL
29	Fluoride(mg/l)	BDL	1.50	1.08	0.45	0.73	0.5	1.5	1.41	1.25	BDL	1.4	2.03	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.026	-	-	-	-	-	BDL	-	-	-	-	-	-
32	Copper(mg/l)	0.023	-	-	-	-	-	0.041	-	-	-	-	-	
33	Lead(mg/l)	0.071	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	-
35	Nickel(mg/l)	0.639	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.026	-	-	-	-	-	BDL	-	-	-	-	-	
37	Iron Total(mg/l)	0.139	-	-	-	-	-	0.195	-	-	-	-	-	-
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

Sr. No	Parameters	GALGIBAG BEACH										Limit for SW II river as per CPCB classification based on designated best use of rivers	
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
1	Temperature°C	32	30	29	29	27	29	29	29	31	31	29	29
2	Dissolved Oxygen(mg/l)	4.5	6.4	5.8	6.6	7.8	7.0	7.3	7.1	7.0	7.2	6.8	6.9
3	pH	7.78	7.02	7.1	7.56	7.59	7.69	7.22	7.04	8.14	8.17	8.08	7.61
4	Conductivity(us/cm)	57640.0	56010.0	49370.0	50730.0	46030.0	45630.0	48860.0	48420.0	49720.0	48310.0	49250.0	51780.0
5	BOD(mg/l)	BDL	BDL	BDL	2.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	BDL	0.23	BDL	0.23	0.29	BDL	BDL	BDL	BDL	0.118	BDL
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	BDL	0.012	0.005	0.02	0.022	BDL	BDL	0.032	BDL	0.008	BDL
8	Total Coliform(MPN/100ml)	<1.8	170	49	70	110	140	220	280	220	350	130	170
9	Fecal Coliform(MPN/100ml)	NIL	79	23	33	79	79	130	220	170	220	49	110
10	Fecal Streptococci (MPN/100ml)	15	85	71	22	27	34	70	79	110	140	13	94
11	Turbidity(NTU)	1.82	3.09	32.70	7.68	28.60	22.1	3.9	1.37	3.06	1.91	4.05	4.17
12	Phenolphthalein Alkalinity(mg/l)	8.0	BDL	8.0	4.0	2.0	2.0	2.0	14.0	12.0	12.0	10.0	14.0
13	Total Alkalinity(mg/l)	72.0	82.0	64.0	72.0	12.0	48.0	108.0	78.0	80.0	108.0	110.0	124.0
14	Chlorides(mg/l)	17994.0	16874.20	18334.0	21742.26	17495.0	17994.0	17995.0	17994.4	17856.2	17660.0	18345.38	17994.0
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-
16	Total Kjeldahl Nitrogen(mg/l)	2.8	9.0	2.24	3.9	2.8	3.4	1.70	1.68	7.80	1.12	8.9	3.4
17	Ammonia (mg/l)	0.05	0.30	0.06	0.114	0.14	0.22	BDL	BDL	BDL	BDL	0.40	0.14
18	Total Hardness(mg/l)	10000.0	9600.0	3600.0	6600.0	4500.0	4960.0	6600.0	5800.0	6800.0	5880.0	9500.0	7200.0
19	Calcium(mg/l)	881.76	801.60	962.00	4.81	681.36	320.6	881.8	2200.0	2405.0	400.8	1803.6	304.6
20	Magnesium(mg/l)	1895.4	1846.8	292.0	1600.9	680.4	1011.0	1069.2	874.7	194.4	1185.8	1215.0	1565.0
21	Sulphate(mg/l)	1666.7	4990.6	2318.0	2008.55	1743.00	660.00	1259.00	4325.90	2889.60	1956.15	3091.20	1091.0
22	Sodium(mg/l)	-	-	-	-	-	12673.0	7922.0	14277.0	2220.0	1722.0	10427.0	7646.0
23	Total Dissolved Solids(mg/l)	34004.0	34724.0	34549.0	29934.0	29030.0	26989.0	28754.0	28393.0	29360.0	28586.0	29456.0	33657.0
24	Total Fixed Solids(mg/l)	32000.0	25436.0	20729.0	28834.0	28030.0	24984.0	27754.0	17417.0	19996.0	18486.0	12877.0	31645.0
25	Total Suspended Solids(mg/l)	120.0	42.0	73.0	116.0	214.0	199.0	132.0	55.0	36.0	32.0	25.0	168.0
26	Phosphate(mg/l)	BDL	0.84	0.09	0.03	0.26	0.20	0.05	0.04	0.034	0.10	0.045	0.04
27	Boron(mg/l)	0.68	0.59	0.62	0.87	5.47	0.4	BDL	1.82	0.22	1.56	BDL	4.91
28	Potassium(mg/l)	-	-	-	-	-	307.8	640.0	663.9	136.6	423.0	563.4	576.0
29	Fluoride(mg/l)	BDL	BDL	0.27	BDL	0.71	0.30	0.72	0.93	BDL	BDL	BDL	1.35
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
31	Cadmium(mg/l)	0.028	-	-	0.028	-	-	BDL	-	-	-	-	-
32	Copper(mg/l)	0.080	-	-	-	-	-	0.091	-	-	-	-	-
33	Lead(mg/l)	0.040	-	-	-	-	-	0.069	-	-	-	-	-
34	Chromium(mg/l)	0.022	-	-	-	-	-	BDL	-	-	-	-	-
35	Nickel(mg/l)	0.061	-	-	-	-	-	0.095	-	-	-	-	-
36	Zinc(mg/l)	0.062	-	-	-	-	-	0.090	-	-	-	-	-
37	Iron Total(mg/l)	0.148	-	-	-	-	-	0.707	-	-	-	-	-
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-

COLVA BEACH														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature °C	32	30	29	28	29	29	30	30	29	29	28	29	4 mg/l or more 6.5 - 8.5
2	Dissolved Oxygen(mg/l)	6.3	6.2	6.1	6.8	7.0	6.0	6.6	6.3	7.2	7.2	7.0	6.6	
3	pH	7.90	6.30	7.60	7.05	8.06	7.75	7.68	7.22	6.78	8.25	8.09	8.12	
4	Conductivity(µs/cm)	58710.0	53000.0	48620.0	36400.0	23800.0	45090.0	48170.0	48400.0	50180.0	48070.0	50770.0	52150.0	3 mg/l or less
5	BOD(mg/l)	BDL	BDL	2.6	BDL	2.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.11	0.34	0.44	0.18	0.081	0.098	BDL	0.1	BDL	BDL	0.4	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.009	0.006	0.015	0.005	0.034	BDL	0.006	BDL	BDL	0.006	BDL	100 or less MPN/100 ml
8	Total Coliform(MPN/100ml)	140	110	220	350	220	280	220	350	540	540	350	170	
9	Fecal Coliform(MPN/100ml)	110	79	170	170	140	170	130	240	350	240	240	130	
10	Fecal Streptococci (MPN/100ml)	71	221	64	79	94	110	110	110	79	130	110	94	30 NTU
11	Turbidity(NTU)	4.92	265.0	34.0	31.7	2.85	13.79	8.71	4.82	2.54	1.57	3.39	1.87	
12	Phenolphthalein Alkalinity(mg/l)	14.0	12.0	18.0	2.0	10.0	16.0	12.0	8.0	10.0	12.0	14.0	10.0	
13	Total Alkalinity(mg/l)	90.0	74.0	62.0	34.0	28.0	36.0	62.0	86.0	96.0	106.0	116.0	140.0	
14	Chlorides(mg/l)	17905.00	17869.50	17848.00	14600.00	16143.93	17856.17	17647.0	17969.00	17495.00	17660.50	17758.3	17969.0	
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	BDL	BDL	2.24	0.6	3.92	5.04	1.68	2.8	1.1	1.68	2.24	1.1	BDL
17	Ammonia (mg/l)	0.18	0.13	0.34	BDL	0.11	0.10	BDL	BDL	BDL	BDL	BDL	BDL	
18	Total Hardness(mg/l)	7000.0	6800.0	5800.0	7000.0	5500.0	5600.0	6200.0	6400.0	5800.0	6400.0	6700.0	6800.0	
19	Calcium(mg/l)	481.0	801.6	802.0	881.8	1000.0	3200.0	440.9	881.8	425.0	480.96	400.8	961.9	
20	Magnesium(mg/l)	1409.00	1166.40	923.00	1166.40	1093.50	583.20	1239.00	1020.60	1152.0	1263.6	1385.1	1069.2	
21	Sulphate(mg/l)	1261.0	3388.4	3462.0	3110.6	2423.2	5455.7	3448.0	1339.2	1870.0	3236.0	2948.7	1575.6	
22	Sodium(mg/l)	-	-	-	-	-	10209.0	11108.0	10158.0	10547.0	1671.0	10558.0	6328.0	32854.0
23	Total Dissolved Solids(mg/l)	41071.0	31207.0	34034.0	21476.0	13706.0	25572.5	30120.0	30720.0	29606.0	33494.0	28830.0	28830.0	
24	Total Fixed Solids(mg/l)	23971.0	18914.0	20420.0	21124.0	5350.0	12270.0	21920.0	21811.0	28585.0	22094.0	20540.0	23654.0	
25	Total Suspended Solids(mg/l)	23.0	83.0	62.0	43.0	14.0	4.0	50.0	9.0	174.0	36.0	186.0	3.0	0.06
26	Phosphate(mg/l)	0.04	0.14	0.09	0.08	0.131	0.037	0.04	0.03	0.06	0.03	0.07	0.06	
27	Boron(mg/l)	1.4	0.59	0.57	BDL	1.11	0.86	1.8	0.52	3.71	4.5	1.5	4.5	
28	Potassium(mg/l)	-	-	-	-	-	275.8	824.5	614.6	8325	397.9	579.2	472.4	1.68
29	Fluoride(mg/l)	2.68	BDL	1.26	0.73	0.46	0.68	1.5	1.42	BDL	12.8	1.4		
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.067	-	-	-	-	-	0.010	-	-	-	-	-	-
32	Copper(mg/l)	0.038	-	-	-	-	-	0.056	-	-	-	-	-	
33	Lead(mg/l)	0.037	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	0.032	-	-	-	-	-	0.052	-	-	-	-	-	-
35	Nickel(mg/l)	0.175	-	-	-	-	-	0.079	-	-	-	-	-	
36	Zinc(mg/l)	0.038	-	-	-	-	-	0.074	-	-	-	-	-	
37	Iron Total(mg/l)	0.194	-	-	-	-	-	0.081	-	-	-	-	-	-
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
41	DDT-p,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

Sr. No	Parameters	VAGATOR BEACH												Limit for SW II river as per CPCB classification based on designated best use of rivers	
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sept-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22		
1	Temperature°C	29	29	30	30	27	29	30	29	27	28	28	28		
2	Dissolved Oxygen(mg/l)	6.2	6.4	6.4	6.8	7.3	7.1	7.9	6.4	6.7	6.7	6.9	7.3	4 mg/l or more	
3	pH	7.75	7.80	7.91	7.78	7.34	7.68	7.65	7.04	7.18	8.19	8.15	8.17	6.5 - 8.5	
4	Conductivity(us/cm)	62640.0	53760.0	31100.0	43070.0	45510.0	48370.0	49000.0	49440.0	49440.0	50240.0	50970.0	52940.0		
5	BO(Dmg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.0	BDL	BDL	BDL	BDL	3 mg/l or less	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.6	0.14	0.2	BDL	0.3	0.30	0.15	0.25	0.11	BDL	0.26		
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.031	0.010	0.005	0.009	0.03	0.005	BDL	0.009	BDL	0.01	0.008		
8	Total Coliform(MPN/100ml)	170	280	170	220	220	220	170	170	170	240	79	130		
9	Fecal Coliform(MPN/100ml)	79	170	110	110	110	130	140	130	140	130	49	79	100 or less MPN/100 ml	
10	Fecal Streptococci (MPN/100ml)	41	>1601	921	49	13	33	46	70	94	70	7.8	33		
11	Turbidity(NTU)	12.11	1.63	22.50	14.02	21.40	18.68	6.50	1.57	3.15	3.73	1.05	4.40	30 NTU	
12	Phenolphthalein Alkalinity(mg/l)	14.0	18.0	10.0	8.0	2.0	8.0	10.0	14.0	14.0	16.0	14.0	16.0		
13	Total Alkalinity(mg/l)	70.0	84.0	102.0	82.0	40.0	42.0	96.0	88.0	92.0	98.0	102.0	104.0		
14	Chlorides(mg/l)	17994.40	17995.10	16535.0	16535.0	17469.9	17318.0	17744.50	18698.0	17744.0	17619.5	18119.4	18345.4		
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-		
16	Total Kjeldahl Nitrogen(mg/l)	BDL	0.56	3.4	0.56	1.7	1.68	0.56	1.12	1.12	1.12	1.68	2.2		
17	Ammonia (mg/l)	BDL	0.14	0.14	0.14	0.14	0.14	0.06	BDL	0.06	BDL	BDL	BDL		
18	Total Hardness(mg/l)	7600.0	6800.0	7800.0	5320.0	4000.0	6600.0	7600.0	5600.0	4800.0	6000.0	6800.0	6400.0		
19	Calcium(mg/l)	641.3	561.1	360.7	296.6	561.1	400.8	721.4	481.0	641.3	561.1	641.3	2004.0		
20	Magnesium(mg/l)	1458.0	1312.2	1676.7	1112.9	361.8	1360.8	1409.4	1069.0	777.6	1117.8	1263.6	340.2		
21	Sulphate(mg/l)	1359.0	1374.1	2129.1	3052.8	1195.2	1916.0	1696.9	3112.0	3522.9	3408.1	3240.8	2741.0		
22	Sodium(mg/l)	-	-	-	-	-	10886.0	9483.0	27404.0	13888.0	1921.0	12530.0	10700.0		
23	Total Dissolved Solids(mg/l)	37295.0	30036.0	17110.0	30046.0	26390.0	32944.0	29012.0	34608.0	30125.0	30209.0	30817.0	30040.0		
24	Total Fixed Solids(mg/l)	22742.0	23252.0	16149.0	20146.0	21112.0	19944.0	17581.0	20765.0	18552.0	18130.0	18776.0	20028.0		
25	Total Suspended Solids(mg/l)	80.0	39.0	134.0	38.0	30.0	52.0	76.0	64.0	61.0	80.0	81.0	38.0		
26	Phosphate(mg/l)	0.02	0.05	0.12	0.12	BDL	0.06	0.05	0.02	0.03	BDL	0.10	0.16		
27	Boron(mg/l)	1.96	2.3	1.68	1.6	BDL	1.6	BDL	4.82	1.35	0.69	0.59	BDL		
28	Potassium(mg/l)	-	-	-	-	-	291.7	746	1074	776.6	458.3	667.0	745.5		
29	Fluoride(mg/l)	BDL	2.00	BDL	2.7	0.63	1.0	0.1	2.8	0.73	0.8	0.69	0.23		
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
31	Cadmium(mg/l)	0.013	-	-	-	-	-	0.04	-	-	-	-	-		
32	Copper(mg/l)	0.059	-	-	-	-	-	0.080	-	-	-	-	-		
33	Lead(mg/l)	0.040	-	-	-	-	-	0.090	-	-	-	-	-		
34	Chromium(mg/l)	0.021	-	-	-	-	-	BDL	-	-	-	-	-		
35	Nickel(mg/l)	0.079	-	-	-	-	-	0.099	-	-	-	-	-		
36	Zinc(mg/l)	0.062	-	-	-	-	-	0.068	-	-	-	-	-		
37	Iron Total(mg/l)	0.125	-	-	-	-	-	0.970	-	-	-	-	-		
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
49	Chlorpifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-		
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		

VELSAO BEACH														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature °C	31	30	29	26	29	29	29	29	29	29	28	29	
2	Dissolved Oxygen(mg/l)	6.1	5.3	6.7	6.0	6.7	7.1	7.6	7.2	6.5	6.9	6.8	6.5	4 mg/l or more
3	pH	7.8	7.25	7.73	7.17	7.86	7.56	7.68	8.48	7.73	8.26	8.03	8.10	6.5 - 8.5
4	Conductivity(µs/cm)	57410.0	57280.0	50180.0	41870.0	44730.0	38710.0	47960.0	46230.0	50100.0	49480.0	50380.0	52310.00	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.10	1.42	1.63	1.030	0.267	0.31	0.20	0.35	0.40	BDL	0.5	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.008	BDL	0.005	0.156	0.022	0.009	BDL	0.053	0.008	0.005	0.005	BDL	
8	Total Coliform(MPN/100ml)	140	140	220	350	220	280	220	170	170	220	220	170	
9	Fecal Coliform(MPN/100ml)	94	49	130	170	140	170	79	110	130	130	140	79	100 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	35	111	40	79	79	84	49	120	110	110	79	2	
11	Turbidity(NTU)	3.13	7.49	3.96	26.4	6.58	3.56	3.63	2.66	5.68	3.49	7.64	2.07	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	12.0	4.0	BDL	4.0	6.0	2.0	BDL	8.0	8.0	10.0	14.0	30.0	
13	Total Alkalinity(mg/l)	84.0	88.0	80.0	30.0	36.0	82.0	46.0	86.0	100.0	80.0	106.0	120.0	
14	Chlorides(mg/l)	18494.30	16471.60	17469.90	14871.98	18744.00	14475.1	17554.10	17969.0	17969.0	18345.4	17709.0	17366.96	
15	COD(mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	1.12	3.9	9	3.9	1.7	1.1	1.12	5.6	5.6	2.8	2.24	2.80	
17	Ammonia (mg/l)	BDL	BDL	BDL	0.19	0.347	0.22	BDL	0.07	BDL	0.06	BDL	BDL	
18	Total Hardness(mg/l)	8000.0	5000.0	6000.0	4400.0	18800.0	5000.0	6100.0	8000.0	7400.0	6400.0	6500.0	9500.0	
19	Calcium(mg/l)	961.9	801.6	1122.2	2400.0	1402.8	641.3	440.9	1122.2	961.9	2405.0	440.8	2404.8	
20	Magnesium(mg/l)	1360.80	729.0	777.60	486.00	3717.90	826.2	1215.0	1263.6	1215.0	97.2	1312.0	850.50	
21	Sulphate(mg/l)	5269.90	1887.0	1253.30	8.72	1595.40	662.4	3047.9	1036.8	1584.0	2958.4	4733.0	3707.03	
22	Sodium(mg/l)	-	-	-	-	-	13175.00	8426.0	10300.00	4891.0	10401.0	12885.0	7885.0	
23	Total Dissolved Solids(mg/l)	34170.0	32050.0	34122.0	24613.0	26390.0	24700.0	32064.0	29124.0	33500.0	29602.0	31869.0	31125.0	
24	Total Fixed Solids(mg/l)	20302.0	31299.0	33812.0	10880.0	25392.0	19266.0	20364.0	22134.0	21775.0	20195.0	22915.0	11350.0	
25	Total Suspended Solids(mg/l)	72.0	12.0	8.0	20.0	162.0	8.0	52.0	5.0	8.0	34.0	270.0	39.0	
26	Phosphate(mg/l)	0.16	0.31	0.51	0.440	0.404	0.02	0.03	0.07	0.05	BDL	0.10	0.129	
27	Boron(mg/l)	0.89	BDL	BDL	1.40	2.76	BDL	2.00	0.55	1.65	BDL	1.60	BDL	
28	Potassium(mg/l)	-	-	-	-	-	354.3	652.0	620.6	349.0	5282.0	675.0	593.8	
29	Fluoride(mg/l)	BDL	1.5	0.96	0.91	0.72	0.64	0.9	1.37	1.19	BDL	1.4	1.27	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.029	-	-	-	-	-	0.019	-	-	-	-	-	
32	Copper(mg/l)	0.033	-	-	-	-	-	0.037	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.058	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.084	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.026	-	-	-	-	-	0.093	-	-	-	-	-	
37	Iron Total(mg/l)	0.232	-	-	-	-	-	0.145	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Amifolofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p' & isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

UPSTREAM OF RIVER MANDOLI, M/S VEDANTA PVT. LTD.														Limit for SW II river as per CPCB classification based on designated best use of rivers	
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22		
1	Temperature°C	29	29.8	31	29	27	28	29	29	28	28	28	29		
2	Dissolved Oxygen(mg/l)	6.5	5.4	6.4	7.9	6.5	7.4	8.0	7.0	7.2	6.8	5.5	5.8	4 mg/l or more	
3	pH	7.12	7.13	7.39	7.10	7.24	6.87	6.08	7.18	7.18	7.44	6.97	7.26	6.5 - 8.5	
4	Conductivity(µs/cm)	17880.0	42120.0	13280.0	236.0	81.21	74.18	99.12	5334.0	3208.0	13130.0	18670.0	26800.0		
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.0	2.1	BDL	BDL	BDL	3 mg/l or less	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.15	0.37	0.22	0.11	0.21	0.24	0.21	BDL	0.10	1.34	0.606	1.66		
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.038	0.40	0.06	0.005	0.007	0.010	0.008	BDL	0.005	0.070	0.091	0.09		
8	Total Coliform(MPN/100ml)	2200	270	790	230	170	220	270	260	260	220	220	270		
9	Fecal Coliform(MPN/100ml)	1700	170	330	130	130	130	220	210	170	170	170	220	100 or less MPN/100 ml	
10	Fecal Streptococci (MPN/100ml)	64	351	921	13	23	49	79	46	70	94	49	79		
11	Turbidity(NTU)	3.02	3.57	3.28	4.23	12.24	18.14	30.3	3.97	5.47	4.86	3.30	5.02	30 NTU	
12	Phenolphthalein Alkalinity(mg/l)	6	4	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL		
13	Total Alkalinity(mg/l)	54.0	58.0	72.0	20.0	6.0	16.0	18.0	64.0	34.0	58.0	80.0	94.0		
14	Chlorides(mg/l)	12407.5	12263	4305.1	47.9	65.0	45.0	35.0	2043.0	2446.1	4499.0	7582.76	8747.3		
15	COD(mg/l)	-	-	-	12.0	12.0	14.0	10.0	-	-	-	-	-		
16	Total Kjeldahl Nitrogen(mg/l)	19.6	3.9	1.68	2.2	2.2	2.8	1.7	3.92	3.9	3.4	6.16	2.8		
17	Ammonia (mg/l)	0.17	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.05	BDL	BDL	0.05		
18	Total Hardness(mg/l)	3420.0	4240.0	1200.0	34.0	20.0	12.0	24.0	800.0	250.0	1180.0	5800.0	3000.0		
19	Calcium(mg/l)	232.5	289	160.3	4.8	4.01	3.21	3.21	80.16	98.6	114.63	1282.6	224.5		
20	Magnesium(mg/l)	690.1	855	194.4	5.3	2.4	BDL	3.9	145.8	BDL	217.2	631.80	593.0		
21	Sulphate(mg/l)	2159.3	5440	643.3	6.7	5.24	46.00	11.0	43.2	101.9	272.0	639.98	606.0		
22	Sodium(mg/l)	-	-	-	-	-	27.80	23.7	1269.0	925.3	2513.0	3596.0	3579.0		
23	Total Dissolved Solids(mg/l)	10907.0	29484.0	9276.0	143.0	47.0	46.0	63.0	3484.0	1861.0	7878.0	11100.0	17420.0		
24	Total Fixed Solids(mg/l)	7945.0	17690.0	6236.0	83.0	42.0	41.0	59.0	2576.0	1030.0	7673.0	3414.0	15417.0		
25	Total Suspended Solids(mg/l)	37.0	76.0	92.0	23.0	9.0	15.0	20.0	31.0	32.0	106.0	16.0	100.0		
26	Phosphate(mg/l)	0.03	0.11	0.04	0.05	0.08	0.07	0.05	BDL	0.03	0.07	0.026	0.10		
27	Boron(mg/l)	0.64	0.91	1.20	0.52	BDL	BDL	BDL	0.60	0.24	3.50	BDL	4.95		
28	Potassium(mg/l)	-	-	-	-	-	14.40	15.9	94.8	53.1	382.5	227.80	295.8		
29	Fluoride(mg/l)	BDL	1.23	0.70	BDL	BDL	BDL	BDL	0.50	BDL	0.32	BDL	1.13		
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
31	Cadmium(mg/l)	0.022	-	-	-	-	-	BDL	-	-	-	-	-		
32	Copper(mg/l)	0.062	-	-	-	-	-	BDL	-	-	-	-	-		
33	Lead(mg/l)	0.037	-	-	-	-	-	BDL	-	-	-	-	-		
34	Chromium(mg/l)	0.052	-	-	-	-	-	BDL	-	-	-	-	-		
35	Nickel(mg/l)	0.088	-	-	-	-	-	BDL	-	-	-	-	-		
36	Zinc(mg/l)	0.051	-	-	-	-	-	BDL	-	-	-	-	-		
37	Iron Total(mg/l)	0.164	-	-	-	-	-	BDL	-	-	-	-	-		
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
44	Amblofen (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-		
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		

DOWNSTREAM OF RIVER MANDOLI, M/S VEDANTA PVT. LTD.														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	29	29.9	31	29	27	28	29	29	28	28	28	29	5.7
2	Dissolved Oxygen(mg/l)	5.4	5.3	5.8	7.4	6.7	7.4	8.2	6.5	6.9	6.9	6.0	5.7	4 mg/l or more
3	pH	7.06	7.07	7.36	7.13	7.27	7.16	6.03	7.10	7.04	7.32	6.93	7.29	6.5 - 8.5
4	Conductivity(µs/cm)	17610.0	41750.0	13160.0	239.97	78.73	96.38	106.2	5541.0	3209.0	14160.0	19020.0	27130.0	
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.18	0.37	0.3	0.12	0.17	0.15	0.22	BDL	0.11	1.36	0.974	1.67	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.07	0.296	0.06	0.005	0.005	0.006	0.007	BDL	0.006	0.06	0.113	0.10	
8	Total Coliform(MPN/100ml)	2400	340	1300	700	490	490	330	460	490	940	330	700	
9	Fecal Coliform(MPN/100ml)	2100	220	790	490	330	230	230	230	330	700	230	490	100 or less MPN/100 ml
10	Fecal Streptococci (MPN/100ml)	34	151	221	17	23	49	94	79	110	140	79	130	
11	Turbidity(NTU)	2.93	3.19	3.21	4.12	12.28	19.09	29.9	4.45	6.79	5.12	3.45	10.32	30 NTU
12	Phenolphthalein Alkalinity(mg/l)	8.00	4.00	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
13	Total Alkalinity(mg/l)	52.0	56.0	74.0	24.0	8.0	10.0	22.0	72.0	38.0	56.0	60.0	92.0	
14	Chlorides(mg/l)	13896.4	12263	4109.4	50.5	40	30	35	2414.9	2201.5	3624	6971.24	10247.0	
15	COD(mg/l)	-	15	12.0	10.0	10.0	14.0	10.0	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	18.5	3.4	1.68	3.4	2.2	2.2	1.7	3.92	2.8	3.4	6.72	2.8	
17	Ammonia (mg/l)	0.06	BDL	BDL	0.09	0.05	BDL	BDL	0.07	0.06	BDL	0.10	BDL	
18	Total Hardness(mg/l)	3380.0	4560.0	1200.0	32.0	26.0	14.0	26.0	1100.0	254.0	1340.0	3800.0	3800.0	
19	Calcium(mg/l)	228.5	585	160.3	4.8	4.01	3.21	3.21	120.24	100.2	102.0	561.1	224.5	
20	Magnesium(mg/l)	682.8	753	194.4	4.9	3.9	35.3	9.0	50.4	131.9	452.8	542.38	485.0	
21	Sulphate(mg/l)	1899.6	891	767.1	8.4	6.08	28.2	23	1256	915	2458	231.1	4158.0	
22	Sodium(mg/l)	-	-	-	-	-	57.0	60.0	3480.0	1846.0	8496.0	11498.0	17635.0	
23	Total Dissolved Solids(mg/l)	10168.0	29225.0	9360.0	146.0	45.0	50.0	57.0	2581.0	1110.0	8292.0	3308.0	15621.0	
24	Total Fixed Solids(mg/l)	7418.0	17535.0	6380.0	88.0	45.0	50.0	57.0	2581.0	1110.0	8292.0	3308.0	15621.0	
25	Total Suspended Solids(mg/l)	32.0	78.0	49.0	36.0	8.0	14.0	21.0	34.0	36.0	101.0	10.0	95.0	
26	Phosphate(mg/l)	0.03	0.17	0.06	0.10	0.04	0.07	0.04	BDL	0.026	0.030	0.059	0.06	
27	Boron(mg/l)	0.68	0.73	1.20	0.52	BDL	BDL	BDL	BD	0.26	3.30	BDL	4.99	
28	Potassium(mg/l)	-	-	-	-	-	13.00	15.8	93.1	54.7	372.8	231.1	335.8	
29	Flouride(mg/l)	BDL	1.17	0.80	BDL	BDL	BDL	BDL	0.50	BDL	0.24	BDL	1.02	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.014	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	0.057	-	-	-	-	-	BDL	-	-	-	-	-	
33	Lead(mg/l)	0.051	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	0.068	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.071	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.050	-	-	-	-	-	BDL	-	-	-	-	-	
37	Iron Total(mg/l)	0.170	-	-	-	-	-	BDL	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT (o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

Sr. No	Parameters	COLVA CREK UPSTREAM												Limit for SW II river as per CPCB classification based on designated best use of rivers	
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22		
1	Temperature°C	32	29	29	27	29	28	30	30	29	29	28	29		
2	Dissolved Oxygen(mg/l)	6.4	2.8	7.0	4.7	5.5	6.0	5.0	6.0	3.1	5.2	4.5	3.8	4 mg/l or more	
3	pH	7.65	7.2	7.29	7.11	7.58	7.24	7.26	7.12	6.81	7.1	6.78	7.25	6.5 - 8.5	
4	Conductivity(µs/cm)	11380	1687.0	4723.0	187.6	2660.0	285.8	247.2	2107.0	1089.0	2379.0	2840.0	942.0		
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.4	3 mg/l or less	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.27	0.13	BDL	0.152	0.016	BDL	0.26	0.14	0.5	0.10	BDL		
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	0.01	0.008	0.005	0.009	0.003	0.005	0.09	0.009	0.019	0.01	BDL		
8	Total Coliform(MPN/100ml)	2700	2600	3300	2700	2700	3300	2700	3300	2600	2700	2700	2700		
9	Fecal Coliform(MPN/100ml)	2200	2200	2600	2200	2200	2100	2200	2700	2200	2200	2200	2200	100 or less MPN/100 ml	
10	Fecal Streptococci (MPN/100ml)	281	241	541	220	240	230	230	490	490	790	940.0	700.0		
11	Turbidity(NTU)	6.81	69.0	21.8	9.95	5.15	4.67	11.56	12.80	29.90	3.77	3.88	2.79	30 NTU	
12	Phenolphthalein Alkalinity(mg/l)	6.0	BDL	2.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	4.0		
13	Total Alkalinity(mg/l)	92	16.0	74.0	14.0	40.0	20.0	66.0	66.0	72.0	86.0	80.0	120.0		
14	Chlorides(mg/l)	4158	379.9	17995.0	41.9	45.1	97.84	92.9	599.0	3824.0	978.4	1712.2	99.8		
15	COD(mg/l)	-	10.0	-	4.0	6.0	6.0	6.0	4.0	-	8.0	14.0	4.0		
16	Total Kjeldahl Nitrogen(mg/l)	BDL	0.6	2.8	1.7	3.36	3.9	1.68	2.8	2.8	1.12	2.2	0.6		
17	Ammonia (mg/l)	BDL	0.15	0.24	BDL	0.04	0.06	BDL	0.10	0.20	BDL	BDL	BDL		
18	Total Hardness(mg/l)	560.0	236.0	6400.0	44.0	68.0	168.0	68.0	246.0	100.0	680.0	800.0	500.0		
19	Calcium(mg/l)	40.9	45.7	264.53	8.0	30.0	92.0	18.4	56.1	22.44	64.13	160.3	40.1		
20	Magnesium(mg/l)	111.3	29.6	139.5	5.8	9.23	18.47	5.4	25.8	10.7	126.4	97.2	97.2		
21	Sulphate(mg/l)	339.7	192.9	1887.5	17.2	13.42	22.75	18.5	8.64	11.4	69.3	90.56	12.12		
22	Sodium(mg/l)	-	-	-	-	-	40.6	136.5	452.5	222.7	289.9	548.0	128.2		
23	Total Dissolved Solids(mg/l)	7235.0	1091.0	27980.0	121.0	150.0	175.0	150.0	1285.0	644.0	1421.0	1680.0	546.0		
24	Total Fixed Solids(mg/l)	4245.0	641.0	26578.0	95.0	79.0	86.0	110.0	885.0	623.0	902.0	1010.0	436.0		
25	Total Suspended Solids(mg/l)	18.0	68.0	47.0	16.0	25.0	12.0	36.0	16.0	22.0	26.0	18.0	4.0		
26	Phosphate(mg/l)	0.18	BDL	0.02	0.07	0.06	BDL	0.19	0.06	0.30	0.06	0.062	0.14		
27	Boron(mg/l)	0.66	BDL	4.95	BDL	0.77	BDL	BDL	0.28	BDL	0.3	0.39	BDL		
28	Potassium(mg/l)	-	-	-	-	-	9.2	22.3	38.2	137.9	34.9	43.9	13.1		
29	Fluoride(mg/l)	0.4	BDL	BDL	BDL	0.40	0.39	0.20	BDL	BDL	3.5	0.23	0.21		
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
31	Cadmium(mg/l)	0.019	-	-	-	-	-	BDL	-	-	-	-	-		
32	Copper(mg/l)	BDL	-	-	-	-	-	0.090	-	-	-	-	-		
33	Lead(mg/l)	BDL	-	-	-	-	-	0.068	-	-	-	-	-		
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.043	-	-	-	-	-		
35	Nickel(mg/l)	0.075	-	-	-	-	-	0.092	-	-	-	-	-		
36	Zinc(mg/l)	0.027	-	-	-	-	-	0.034	-	-	-	-	-		
37	Iron Total(mg/l)	0.238	-	-	-	-	-	0.098	-	-	-	-	-		
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-		
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
44	Ambiofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
50	DDT (o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-		
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-		

COLVA CREEK DOWNSTREAM														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for SW II river as per CPCB classification based on designated best use of rivers
1	Temperature°C	32	29	29	27	29	29	30	29	29	29	28	29	4 mg/l or more 6.5 - 8.5
2	Dissolved Oxygen(mg/l)	6.5	3.0	6.7	4.8	6.5	5.5	5.2	6.5	4.3	5.0	4.0	4.3	
3	pH	7.74	7.18	7.3	6.97	7.42	7.0	6.98	7.18	6.78	7.33	6.85	6.78	
4	Conductivity(µs/cm)	11430.0	2541.0	46630.0	346.3	140.3	231.9	286.8	2297.0	1054.0	2230.0	2790.0	886.0	3 mg/l or less
5	BOD(mg/l)	BDL	2.1	3.4	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	0.28	0.57	BDL	0.496	BDL	0.1	0.57	0.14	0.1	0.11	BDL	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.005	0.01	0.026	0.006	0.028	BDL	0.005	0.468	0.009	0.05	0.01	BDL	100 or less MPN/100 ml
8	Total Coliform(MPN/100ml)	3300	3200	3400	3300	3300	4300	4900	4900	3300	4900	3300	3300	
9	Fecal Coliform(MPN/100ml)	2300	2100	2700	2600	2300	2300	3300	3300	2300	3300	2300	2300	
10	Fecal Streptococci (MPN/100ml)	141	171	131	280	350	390	330	630	1100	790	700	700	30 NTU
11	Turbidity(NTU)	7.9	73.6	21.8	7.97	5.0	5.89	12.78	8.31	18.57	3.46	4.89	4.13	
12	Phenolphthalein Alkalinity(mg/l)	4.0	BDL	10.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	4.0	
13	Total Alkalinity(mg/l)	92	18.0	70.0	18.0	32.0	28.0	70.0	66.0	74.0	84.0	80.0	118.0	99.8
14	Chlorides(mg/l)	3547	509.8	16755	34.9	30.33	97.84	185.8	748.7	1125	880.6	1712.2	99.8	
15	COD(mg/l)	-	12.0	-	4.0	6.0	6.0	6.0	4.0	20.0	6.0	16.0	4.0	
16	Total Kjeldahl Nitrogen(mg/l)	BDL	1.1	2.24	1.1	3.36	3.36	1.12	2.8	2.2	1.68	2.8	0.6	BDL
17	Ammonia (mg/l)	BDL	0.17	BDL	BDL	0.07	0.05	BDL	0.10	0.16	BDL	0.07	BDL	
18	Total Hardness(mg/l)	400.0	322.0	5600.0	50.0	66.0	82.0	78.0	244.0	128.0	440.0	800.0	300.0	
19	Calcium(mg/l)	36.9	50.5	1122	9.6	34.0	36.0	21.6	54.5	23.25	48.1	240.5	40.1	48.6
20	Magnesium(mg/l)	74.84	47.6	680	6.3	7.78	11.18	5.8	26.2	17.0	77.8	48.6	48.6	
21	Sulphate(mg/l)	317	272.4	3289	17.4	12.6	22.6	16	2.88	42	69.6	99.02	9.09	
22	Sodium(mg/l)	-	-	-	-	-	32.9	341.4	511.8	320.6	267.9	469.7	124.2	522.0
23	Total Dissolved Solids(mg/l)	7171.0	1559.0	32631.0	208.0	58.0	145.0	200.0	1335.0	620.0	1335.0	1700.0	522.0	
24	Total Fixed Solids(mg/l)	4541.0	972.0	19579.0	185.0	32.0	70.0	140.0	880.0	611.0	935.0	1003.0	390.0	
25	Total Suspended Solids(mg/l)	20.0	70.0	54.0	13.0	21.0	15.0	41.0	10.0	18.0	28.0	23.0	6.0	0.073
26	Phosphate(mg/l)	0.18	BDL	0.10	0.06	0.071	BDL	0.2	0.14	0.25	0.09	0.073	0.09	
27	Boron(mg/l)	1.25	BDL	0.75	BDL	0.79	BDL	BDL	0.20	BDL	0.3	0.33	BDL	
28	Potassium(mg/l)	-	-	-	-	-	10.3	34.4	43.7	12.6	32.1	40.1	12.4	BDL
29	Flouride(mg/l)	0.9	BDL	1.15	BDL	0.30	BDL	BDL	BDL	BDL	3.1	0.25	BDL	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.046	-	-	-	-	-	0.012	-	-	-	-	-	BDL
32	Copper(mg/l)	BDL	-	-	-	-	-	0.026	-	-	-	-	-	
33	Lead(mg/l)	0.071	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.017	-	-	-	-	-	BDL
35	Nickel(mg/l)	0.187	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	0.043	-	-	-	-	-	
37	Iron Total(mg/l)	0.261	-	-	-	-	-	0.079	-	-	-	-	-	BDL
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	BDL
41	DDT-p,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	BDL
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	BDL
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	BDL
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	BDL
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

ST.INEZ CREEK UPSTREAM														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for Class B river as per CPCB classification based on designated best use of rivers
1	Temperature°C	28	29	29	27	29	28	28	28	28	28	28	29	
2	Dissolved Oxygen(mg/l)	BDL	1.0	1.2	4.4	5.0	5.5	2.0	1.5	4.5	3.0	1.9	3.0	≥5.0
3	pH	7.18	6.70	7.30	6.58	7.44	7.64	6.81	7.10	7.18	7.35	7.63	7.46	6.5-8.5
4	Conductivity(µs/cm)	3900.0	644.0	926.33	188.1	488.9	426.6	410.1	328.2	315.3	3830.0	1491.0	14900	
5	BOD(mg/l)	4.8	4.3	4.8	BDL	BDL	BDL	BDL	12.0	BDL	BDL	4.0	2.8	≤3.0
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.58	0.37	1.03	0.40	BDL	0.2	0.35	0.54	0.10	0.716	2.6	0.169	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.005	0.31	BDL	0.031	BDL	0.030	0.03	0.85	0.01	0.243	0.26	0.026	
8	Total Coliform(MPN/100ml)	4600	3300	3400	2700	3300	2700	2300	3300	3200	3300	2300	2200	
9	Fecal Coliform(MPN/100ml)	3300	2300	2200	2200	2600	2200	1300	2200	1300	2300	1300	1700	
10	Fecal Streptococci (MPN/100ml)	431	921	1601	210	350	320	270	340	840	790	700	700	
11	Turbidity(NTU)	1.57	1.52	14.83	11.55	9.3	10.06	8.53	13.2	12.41	12.84	18.15	48.7	
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	2.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	20.0	
13	Total Alkalinity(mg/l)	88.0	78.0	102.0	30.0	44.0	44.0	112.0	124.0	70.0	140.0	118.0	176.0	
14	Chlorides(mg/l)	704.8	214.9	99.8	40.5	64.58	47.45	46.9	607.0	587.05	1076.26	538.0	7582.76	
15	COD(mg/l)	15	24.0	12.0	18.0	8.0	6.0	12.0	30.0	6.0	8.0	18.0	-	
16	Total Kjeldahl Nitrogen(mg/l)	BDL	1.7	2.2	6.2	3.3	2.8	1.12	2.8	7.8	7.8	0.56	6.16	
17	Ammonia (mg/l)	BDL	0.08	BDL	0.25	0.59	0.08	0.54	BDL	BDL	BDL	BDL	0.19	
18	Total Hardness(mg/l)	420.0	222.0	170.0	86.0	128.0	118.0	122.0	220.0	700.0	438.0	800.0	5000.0	
19	Calcium(mg/l)	561.1	52.9	32.9	29.66	64.0	62.0	32.1	64.0	120.2	103.4	44.1	1122.2	
20	Magnesium(mg/l)	68.04	21.9	21.4	2.9	15.55	13.61	10.2	15.0	97.2	43.74	167.7	534.60	
21	Sulphate(mg/l)	253.7	71.9	51.34	30.83	8.89	23.78	13.2	57.0	272.05	1021.58	56.8	1183.35	
22	Sodium(mg/l)	-	-	-	-	-	48.1	43.2	122.0	29.4	180.3	245.1	2003.0	
23	Total Dissolved Solids(mg/l)	2390.0	388.0	602.0	111.0	287.0	260.0	242.0	224.0	188.0	2283.0	888.0	8876.0	
24	Total Fixed Solids(mg/l)	1503.0	212.0	458.0	84.0	111.0	118.0	141.0	130.0	52.0	749.0	586.0	1566.0	
25	Total Suspended Solids(mg/l)	45.0	9.0	19.0	10.0	11.0	14.0	19.0	82.0	26.0	29.0	47.0	53.0	
26	Phosphate(mg/l)	1.16	1.38	0.76	0.32	0.346	0.075	0.16	0.18	0.066	BDL	0.84	2.867	
27	Boron(mg/l)	0.95	BDL	BDL	0.51	0.47	BDL	0.55	0.43	BDL	0.20	BDL	BDL	
28	Potassium(mg/l)	-	-	-	-	-	4.30	19.3	42.0	10.1	69.5	35.0	174.7	
29	Flouride(mg/l)	0.28	BDL	1.13	0.10	0.17	BDL	BDL	1.63	BDL	BDL	0.3	3.53	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.044	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.025	-	-	-	-	-	
33	Lead(mg/l)	0.071	-	-	-	-	-	0.081	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
37	Iron Total(mg/l)	0.258	-	-	-	-	-	0.106	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

Sr. No	Parameters	ST.INEZ CREEK DOWNSTREAM											Limit for Class B river as per CPCB classification based on designated best use of rivers
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
1	Temperature°C		29	29	27	28	28	29	30	28	28	28	29
2	Dissolved Oxygen(mg/l)		BDL	BDL	3.4	5.0	5.9	BDL	BDL	4.0	3.5	1.4	2.5
3	pH		7.06	7.19	6.16	6.75	7.2	6.33	7.02	7.1	6.88	7.07	8.05
4	Conductivity(µs/cm)		490.0	411.03	89.0	202.8	212.2	193.9	169.7	180.2	269.4	270.5	414.8
5	BOD(mg/l)		5.3	5.6	BDL	BDL	BDL	3.8	9.0	BDL	BDL	3.6	4.2
6	Nitrate Nitrogen as NO ₃ -N(mg/l)		0.50	0.88	0.75	BDL	BDL	0.29	0.21	0.137	1.07	0.11	0.11
7	Nitrite Nitrogen as NO ₂ -N mg/l		0.16	BDL	0.066	BDL	BDL	BDL	0.005	0.012	0.114	0.04	0.011
8	Total Coliform(MPN/100ml)		4600	3900	3300	4600	3300	3400	4600	3300	4600	3300	2700
9	Fecal Coliform(MPN/100ml)		3300	2700	2600	2300	2300	2300	2300	1700	3300	2300	2200
10	Fecal Streptococci (MPN/100ml)		541	431	350	540	580	470	790	940	1400	790	940
11	Turbidity(NTU)		3.36	26.1	8.26	13.93	9.11	6.04	15.17	15.06	10.48	10.0	78.6
12	Phenolphthalein Alkalinity(mg/l)		BDL	2.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
13	Total Alkalinity(mg/l)		74.0	102.0	20.0	42.0	30.0	64.0	102.0	100.0	70.0	90.0	190.0
14	Chlorides(mg/l)		84.9	49.9	16.0	97.8	20.55	17.90	364.00	195.68	57.24	146.8	190.0
15	COD(mg/l)		24.0	14.0	10.0	6.0	10.0	10.0	24.0	4.0	6.0	14.0	98.82
16	Total Kjeldahl Nitrogen(mg/l)		2.2	2.8	3.4	2.8	2.24	1.12	2.24	8.4	2.8	1.12	2.24
17	Ammonia (mg/l)		0.17	BDL	0.27	0.14	0.07	0.23	0.08	BDL	BDL	BDL	BDL
18	Total Hardness(mg/l)		204.0	110.0	36.0	68.0	62.0	64.0	80.0	400.0	68.0	800.0	138.0
19	Calcium(mg/l)		52.9	18.4	12.02	36.0	30.0	18.4	13.0	80.2	13.6	22.4	30.5
20	Magnesium(mg/l)		17.5	15.6	BDL	7.78	7.78	4.4	12.0	48.6	8.26	180.8	15.07
21	Sulphate(mg/l)		82.1	12.08	14.89	9.39	12.52	4.5	4.45	81.52	13.19	8.8	16.35
22	Sodium(mg/l)		-	-	-	-	28.7	25.6	44.0	109.8	156.8	37.4	48.4
23	Total Dissolved Solids(mg/l)		265.0	263.0	54.0	107.0	130.0	115.0	110.0	104.7	160.0	165.0	248.0
24	Total Fixed Solids(mg/l)		171.0	157.0	43.0	44.0	54.0	69.0	65.0	26.8	33.0	127.0	96.0
25	Total Suspended Solids(mg/l)		22.0	35.0	5.0	21.0	40.0	27.0	57.0	28.0	24.0	22.0	62.0
26	Phosphate(mg/l)		1.89	3.82	0.17	0.122	0.070	0.22	0.28	0.17	BDL	0.32	0.216
27	Boron(mg/l)		BDL	BDL	0.51	0.53	BDL	0.49	0.35	BDL	BDL	BDL	BDL
28	Potassium(mg/l)		-	-	-	-	7.70	17.4	16.0	17.1	31.3	10.1	10.0
29	Flouride(mg/l)		BDL	1.1	0.09	0.20	0.44	0.27	1.47	BDL	BDL	BDL	1.79
30	Arsenic(mg/l)		-	-	-	-	-	BDL	-	-	-	-	-
31	Cadmium(mg/l)		-	-	-	-	-	BDL	-	-	-	-	-
32	Copper(mg/l)		-	-	-	-	-	0.020	-	-	-	-	-
33	Lead(mg/l)		-	-	-	-	-	0.064	-	-	-	-	-
34	Chromium(mg/l)		-	-	-	-	-	BDL	-	-	-	-	-
35	Nickel(mg/l)		-	-	-	-	-	BDL	-	-	-	-	-
36	Zinc(mg/l)		-	-	-	-	-	0.090	-	-	-	-	-
37	Iron Total(mg/l)		-	-	-	-	-	0.218	-	-	-	-	-
38	Mercury (mg/l)		-	-	-	-	-	BDL	-	-	-	-	-
39	Carbaryl (mg/L)		-	-	-	-	-	-	-	-	-	-	-
40	DDT-o,p' (mg/L)		-	-	-	-	-	-	-	-	-	-	-
41	DDT-p,p' (mg/L)		-	-	-	-	-	-	-	-	-	-	-
42	alpha Endosulfant(mg/L)		-	-	-	-	-	-	-	-	-	-	-
43	beta Endosulfant(mg/L)		-	-	-	-	-	-	-	-	-	-	-
44	Anilofos (mg/L)		-	-	-	-	-	-	-	-	-	-	-
45	2,4-Dichlorophenoxyacetic acid(mg/L)		-	-	-	-	-	-	-	-	-	-	-
46	Aldrin/Dieldrin (mg/L)		-	-	-	-	-	-	-	-	-	-	-
47	Alpha HCH (mg/L)		-	-	-	-	-	-	-	-	-	-	-
48	Beta HCH (mg/L)		-	-	-	-	-	-	-	-	-	-	-
49	Chlorpyrifos (mg/L)		-	-	-	-	-	-	-	-	-	-	-
50	DDT(o,p & isomers of DDT, DDE & DDD)		-	-	-	-	-	-	-	-	-	-	-
51	Gamma-HCH (Lindane) (mg/L)		-	-	-	-	-	-	-	-	-	-	-
52	Malathion (mg/L)		-	-	-	-	-	-	-	-	-	-	-
53	Methyl parathion(mg/L)		-	-	-	-	-	-	-	-	-	-	-

DRY

UPSTREAM OF BETHORA NALLAH														Limit for Class B river as per CPCB classification based on designated best use of rivers
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	
1	Temperature°C	29		28	28	29	28	29		28	30			≥5.0
2	Dissolved Oxygen(mg/l)	3.4		6.8	6.2	4.8	4.7	5.7		4.0	6.5			6.5-8.5
3	pH	6.98		5.10	6.61	6.2	5.8	8.7		6.20	6.08			
4	Conductivity(µs/cm)	1322.0		1390.0	720.0	278.0	208.3	2638.0		586.4	292.1			
5	BOD(mg/l)	2.2		2.4	BDL	BDL	BDL	BDL		BDL	2.5			≤3.0
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.36		0.32	0.39	0.079	0.70	BDL		0.18	BDL			
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.24		BDL	0.023	0.005	BDL	0.005		0.011	BDL			
8	Total Coliform(MPN/100ml)	4900		3300	2300	3300	2300	2700		3300	3300			
9	Fecal Coliform(MPN/100ml)	3300		2300	1300	2300	1300	2200		2600	2300			
10	Fecal Streptococci (MPN/100ml)	221		-	240	170	210	260		330	790			
11	Turbidity(NTU)	11.85		38	7.94	2.94	1.94	42.7		2.13	2.86			
12	Phenolphthalein Alkalinity(mg/l)	BDL		BDL	BDL	BDL	BDL	BDL		BDL	BDL			
13	Total Alkalinity(mg/l)	40.0		10.0	30.0	10.0	10.0	24.0		40.0	22.0			
14	Chlorides(mg/l)	748.7		429.87	350.0	62.13	44.0	70.0		342.5	65.6			
15	COD(mg/l)	20.0		6.0	16.0	4.0	6.0	6.0		4.0	6.0			
16	Total Kjeldahl Nitrogen(mg/l)	25.8		3.4	3.9	3.3	1.12	1.1		5.6	7.30			
17	Ammonia (mg/l)	0.06		BDL	0.24	0.05	BDL	0.07		BDL	BDL			
18	Total Hardness(mg/l)	600.0		260	398.0	128.0	46.0	76.0		108.0	70.0			
19	Calcium(mg/l)	160.3		11.22	151.50	72.00	11.0	21.64		35.3	23.2			
20	Magnesium(mg/l)	48.6		56.4	4.9	13.61	4.0	5.3		4.86	2.9			
21	Sulphate(mg/l)	9.24		59.54	63.38	15.18	13.0	15.38		87.5	5.05			
22	Sodium(mg/l)	-		-	-	-	28.7	35.3		47.7	321.5			
23	Total Dissolved Solids(mg/l)	793.0		828.0	426.0	146.0	141.0	1580.0		325.0	182.0			
24	Total Fixed Solids(mg/l)	622.0		818.0	337.0	58.0	80.0	1450.0		156.0	78.0			
25	Total Suspended Solids(mg/l)	30.0		12.0	58.0	5.0	7.0	4.0		12.0	35.0			
26	Phosphate(mg/l)	0.06		0.117	0.15	0.038	0.03	BDL		0.06	0.02			
27	Boron(mg/l)	1.01		BDL	0.49	0.59	BDL	BDL		BDL	BDL		Dry	
28	Potassium(mg/l)	-		BDL	-	-	13.1	6.5		10.1	198.5			
29	Flouride(mg/l)	0.24		BDL	0.11	0.28	BDL	BDL		BDL	BDL			
30	Arsenic(mg/l)	BDL		-	-	-	-	BDL		-	-			
31	Cadmium(mg/l)	0.032		-	-	-	-	0.022		-	-			
32	Copper(mg/l)	0.019		-	-	-	-	BDL		-	-			
33	Lead(mg/l)	BDL		-	-	-	-	0.094		-	-			
34	Chromium(mg/l)	0.028		-	-	-	-	BDL		-	-			
35	Nickel(mg/l)	BDL		-	-	-	-	BDL		-	-			
36	Zinc(mg/l)	0.027		-	-	-	-	0.086		-	-			
37	Iron Total(mg/l)	0.209		-	-	-	-	0.082		-	-			
38	Mercury (mg/l)	BDL		-	-	-	-	0.079		-	-			
39	Carbaryl (mg/L)	BDL		-	-	-	-	BDL		-	-			
40	DDT-o,p' (mg/L)	BDL		-	-	-	-	-		-	-			
41	DDT-p,p' (mg/L)	BDL		-	-	-	-	-		-	-			
42	alpha Endosulfan(mg/L)	BDL		-	-	-	-	-		-	-			
43	beta Endosulfan(mg/L)	BDL		-	-	-	-	-		-	-			
44	Anilofos (mg/L)	BDL		-	-	-	-	-		-	-			
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL		-	-	-	-	-		-	-			
46	Aldrin/Dieldrin (mg/L)	BDL		-	-	-	-	-		-	-			
47	Alpha HCH (mg/L)	BDL		-	-	-	-	-		-	-			
48	Beta HCH (mg/L)	BDL		-	-	-	-	-		-	-			
49	Chlorpyrifos (mg/L)	BDL		-	-	-	-	-		-	-			
50	DDT(o,p & isomers of DDT, DDE & DDD)	BDL		-	-	-	-	-		-	-			
51	Gamma-HCH (Lindane) (mg/L)	BDL		-	-	-	-	-		-	-			
52	Malathion (mg/L)	BDL		-	-	-	-	-		-	-			
53	Methyl parathion(mg/L)	BDL		-	-	-	-	-		-	-			

BOREWELL/TUBE WELL/OPEN WELL AT SANCOALE INDUSTRIAL ESTATE														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for class A as per CPCB classification based on designated best use
1	Temperature°C	29	-	-	-	-	-	30	-	-	-	-	-	
2	Dissolved Oxygen(mg/l)	7.8	-	-	-	-	-	4.0	-	-	-	-	-	6 mg/l or more
3	pH	7.12	-	-	-	-	-	6.73	-	-	-	-	-	6.5-8.5
4	Conductivity (µs/cm)	258.48	-	-	-	-	-	238.40	-	-	-	-	-	
5	BOD(mg/l)(mg/l)	2.0	-	-	-	-	-	BDL	-	-	-	-	-	2 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
8	Total Coliform(MPN/100ml)	<1.8	-	-	-	-	-	33	-	-	-	-	-	50 or less MPN/100ml
9	Fecal Coliform(MPN/100ml)	NIL	-	-	-	-	-	13	-	-	-	-	-	
10	Fecal Streptococci MPN/100ml	59	-	-	-	-	-	4.5	-	-	-	-	-	
11	Turbidity(NTU)	0.66	-	-	-	-	-	3.18	-	-	-	-	-	
12	Phenolphthalein Alkalinity(mg/l)	6.0	-	-	-	-	-	4.0	-	-	-	-	-	
13	Total Alkalinity(mg/l)	68.0	-	-	-	-	-	58.0	-	-	-	-	-	
14	Chlorides(mg/l)	20.99	-	-	-	-	-	8.80	-	-	-	-	-	
15	COD(mg/l)	18.0	-	-	-	-	-	4.0	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	1.12	-	-	-	-	-	0.6	-	-	-	-	-	
17	Ammonia (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
18	Total Hardness(mg/l)	90.0	-	-	-	-	-	104.0	-	-	-	-	-	
19	Calcium(mg/l)	20.8	-	-	-	-	-	21.60	-	-	-	-	-	
20	Magnesium(mg/l)	9.23	-	-	-	-	-	12.2	-	-	-	-	-	
21	Sulphate(mg/l)	11.40	-	-	-	-	-	4.90	-	-	-	-	-	
22	Sodium(mg/l)	-	-	-	-	-	-	174.8	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	144.0	-	-	-	-	-	161.0	-	-	-	-	-	
24	Total Fixed Solids(mg/l)	85.0	-	-	-	-	-	96.0	-	-	-	-	-	
25	Total Suspended Solids(mg/l)	14.0	-	-	-	-	-	13.0	-	-	-	-	-	
26	Phosphate(mg/l)	0.08	-	-	-	-	-	0.08	-	-	-	-	-	
27	Boron(mg/l)	1.24	-	-	-	-	-	BDL	-	-	-	-	-	
28	Potassium(mg/l)	-	-	-	-	-	-	24.9	-	-	-	-	-	
29	Flouride(mg/l)	0.4	-	-	-	-	-	BDL	-	-	-	-	-	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.051	-	-	-	-	-	0.011	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.021	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.057	-	-	-	-	-	
35	Nickel(mg/l)	0.093	-	-	-	-	-	0.089	-	-	-	-	-	
36	Zinc(mg/l)	0.021	-	-	-	-	-	0.045	-	-	-	-	-	
37	Iron Total(mg/l)	0.205	-	-	-	-	-	0.118	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

BOREWELL/TUBE WELL/ OPEN WELL AT VERNA INDUSTRIAL ESTATE														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for class A as per CPCB classification based on designated best use
1	Temperature °C	30	-	-	-	-	-	31	-	-	-	-	-	-
2	Dissolved Oxygen(mg/l)	7.1	-	-	-	-	-	7.4	-	-	-	-	-	6 mg/l or more
3	pH	6.34	-	-	-	-	-	6.40	-	-	-	-	-	6.5-8.5
4	Conductivity(µs/cm)	378.97	-	-	-	-	-	298.0	-	-	-	-	-	-
5	BOD(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	2 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	2.55	-	-	-	-	-	4.64	-	-	-	-	-	-
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	-	-	-	-	-	BDL	-	-	-	-	-	-
8	Total Coliform(MPN/100ml)	<1.8	-	-	-	-	-	<1.8	-	-	-	-	-	50 or less MPN/100ml
9	Fecal Coliform(MPN/100ml)	NIL	-	-	-	-	-	NIL	-	-	-	-	-	-
10	Fecal Streptococci MPN/100ml	10.1	-	-	-	-	-	<1.8	-	-	-	-	-	-
11	Turbidity(NTU)	0.21	-	-	-	-	-	2.76	-	-	-	-	-	-
12	Phenolphthalein Alkalinity(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	-
13	Total Alkalinity(mg/l)	28.0	-	-	-	-	-	36.0	-	-	-	-	-	-
14	Chlorides(mg/l)	44.17	-	-	-	-	-	36.99	-	-	-	-	-	-
15	COD(mg/l)	12.0	-	-	-	-	-	6.0	-	-	-	-	-	-
16	Total Kjeldahl Nitrogen(mg/l)	19.6	-	-	-	-	-	1.12	-	-	-	-	-	-
17	Ammonia (mg/l)	BDL	-	-	-	-	-	0.18	-	-	-	-	-	-
18	Total Hardness(mg/l)	82.0	-	-	-	-	-	78.0	-	-	-	-	-	-
19	Calcium(mg/l)	16.0	-	-	-	-	-	20.80	-	-	-	-	-	-
20	Magnesium(mg/l)	10.2	-	-	-	-	-	6.3	-	-	-	-	-	-
21	Sulphate(mg/l)	18.66	-	-	-	-	-	20.77	-	-	-	-	-	-
22	Sodium(mg/l)	-	-	-	-	-	-	33.2	-	-	-	-	-	-
23	Total Dissolved Solids(mg/l)	234.0	-	-	-	-	-	162.0	-	-	-	-	-	-
24	Total Fixed Solids(mg/l)	182.0	-	-	-	-	-	97.0	-	-	-	-	-	-
25	Total Suspended Solids(mg/l)	12.0	-	-	-	-	-	12.0	-	-	-	-	-	-
26	Phosphate(mg/l)	0.02	-	-	-	-	-	BDL	-	-	-	-	-	-
27	Boron(mg/l)	0.68	-	-	-	-	-	0.66	-	-	-	-	-	-
28	Potassium(mg/l)	-	-	-	-	-	-	16.8	-	-	-	-	-	-
29	Flouride(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	-
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	-
31	Cadmium(mg/l)	0.016	-	-	-	-	-	BDL	-	-	-	-	-	-
32	Copper(mg/l)	BDL	-	-	-	-	-	0.022	-	-	-	-	-	-
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	-
34	Chromium(mg/l)	0.031	-	-	-	-	-	BDL	-	-	-	-	-	-
35	Nickel(mg/l)	0.042	-	-	-	-	-	BDL	-	-	-	-	-	-
36	Zinc(mg/l)	0.031	-	-	-	-	-	0.015	-	-	-	-	-	-
37	Iron Total(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	-
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	-
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
40	DDT-o,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
41	DDT-p,p (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
50	DDT(o,p & Isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-

BOREWELL/TUBE WELL/ OPEN WELL/ KUNDAIM INDUSTRIAL ESTATE														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for class A as per CPCB classification based on designated best use
1	Temperature°C	28	-	-	-	-	-	26	-	-	-	-	-	
2	Dissolved Oxygen(mg/l)	2.5	-	-	-	-	-	10.5	-	-	-	-	-	6 mg/l or more
3	pH	5.6	-	-	-	-	-	6.87	-	-	-	-	-	6.5-8.5
4	Conductivity(µs/cm)	122.33	-	-	-	-	-	59.30	-	-	-	-	-	
5	BOD(mg/l)	4.2	-	-	-	-	-	BDL	-	-	-	-	-	2 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.1	-	-	-	-	-	BDL	-	-	-	-	-	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
8	Total Coliform(MPN/100ml)	<1.8	-	-	-	-	-	<1.8	-	-	-	-	-	50 or less MPN/100ml
9	Fecal Coliform(MPN/100ml)	NIL	-	-	-	-	-	NIL	-	-	-	-	-	
10	Fecal Streptococci MPN/100ml	26	-	-	-	-	-	<1.8	-	-	-	-	-	
11	Turbidity(NTU)	1.65	-	-	-	-	-	4.14	-	-	-	-	-	
12	Phenolphthalein Alkalinity(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
13	Total Alkalinity(mg/l)	20.0	-	-	-	-	-	20.0	-	-	-	-	-	
14	Chlorides(mg/l)	18.36	-	-	-	-	-	6.85	-	-	-	-	-	
15	COD(mg/l)	14.0	-	-	-	-	-	4.0	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	BDL	-	-	-	-	-	1.1	-	-	-	-	-	
17	Ammonia (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
18	Total Hardness(mg/l)	24.0	-	-	-	-	-	28.0	-	-	-	-	-	
19	Calcium(mg/l)	4.0	-	-	-	-	-	20.00	-	-	-	-	-	
20	Magnesium(mg/l)	3.4	-	-	-	-	-	2.0	-	-	-	-	-	
21	Sulphate(mg/l)	4.20	-	-	-	-	-	BDL	-	-	-	-	-	
22	Sodium(mg/l)	-	-	-	-	-	-	2.9	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	77.0	-	-	-	-	-	36.0	-	-	-	-	-	
24	Total Fixed Solids(mg/l)	41.0	-	-	-	-	-	13.0	-	-	-	-	-	
25	Total Suspended Solids(mg/l)	16.0	-	-	-	-	-	10.0	-	-	-	-	-	
26	Phosphate(mg/l)	0.03	-	-	-	-	-	0.020	-	-	-	-	-	
27	Boron(mg/l)	0.86	-	-	-	-	-	BDL	-	-	-	-	-	
28	Potassium(mg/l)	-	-	-	-	-	-	0.9	-	-	-	-	-	
29	Flouride(mg/l)	BDL	-	-	-	-	-	0.35	-	-	-	-	-	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.016	-	-	-	-	-	0.019	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
33	Lead(mg/l)	0.094	-	-	-	-	-	0.047	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.044	-	-	-	-	-	
35	Nickel(mg/l)	0.145	-	-	-	-	-	BDL	-	-	-	-	-	
36	Zinc(mg/l)	0.015	-	-	-	-	-	0.086	-	-	-	-	-	
37	Iron Total(mg/l)	0.144	-	-	-	-	-	0.111	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfant(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfant(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

BORE WELL / TUBE WELL / OPENWELL IN CORLIM INDUSTRIAL ESTATE														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for class A as per CPCB classification based on designated best use
1	Temperature°C	29	-	-	-	-	-	28	-	-	-	-	-	-
2	Dissolved Oxygen(mg/l)	6.2	-	-	-	-	-	8.5	-	-	-	-	-	6 mg/l or more
3	pH	5.04	-	-	-	-	-	4.93	-	-	-	-	-	6.5-8.5
4	Conductivity(µs/cm)	91.91	-	-	-	-	-	62.48	-	-	-	-	-	-
5	BOD(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	2 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.21	-	-	-	-	-	BDL	-	-	-	-	-	-
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.017	-	-	-	-	-	BDL	-	-	-	-	-	-
8	Total Coliform(MPN/100ml)	<1.8	-	-	-	-	-	11	-	-	-	-	-	50 or less MPN/100ml
9	Fecal Coliform(MPN/100ml)	NIL	-	-	-	-	-	7.8	-	-	-	-	-	-
10	Fecal Streptococci MPN/100ml	85	-	-	-	-	-	4.5	-	-	-	-	-	-
11	Turbidity(NTU)	BDL	-	-	-	-	-	1.03	-	-	-	-	-	-
12	Phenolphthalein Alkalinity(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	-
13	Total Alkalinity(mg/l)	10.0	-	-	-	-	-	20.0	-	-	-	-	-	-
14	Chlorides(mg/l)	13.9	-	-	-	-	-	8.32	-	-	-	-	-	-
15	COD(mg/l)	10.0	-	-	-	-	-	4.0	-	-	-	-	-	-
16	Total Kjeldahl Nitrogen(mg/l)	BDL	-	-	-	-	-	1.1	-	-	-	-	-	-
17	Ammonia (mg/l)	0.38	-	-	-	-	-	BDL	-	-	-	-	-	-
18	Total Hardness(mg/l)	16.0	-	-	-	-	-	18.0	-	-	-	-	-	-
19	Calcium(mg/l)	BDL	-	-	-	-	-	14.0	-	-	-	-	-	-
20	Magnesium(mg/l)	2.9	-	-	-	-	-	BDL	-	-	-	-	-	-
21	Sulphate(mg/l)	2.69	-	-	-	-	-	BDL	-	-	-	-	-	-
22	Sodium(mg/l)	-	-	-	-	-	-	7.5	-	-	-	-	-	-
23	Total Dissolved Solids(mg/l)	54.0	-	-	-	-	-	37.0	-	-	-	-	-	-
24	Total Fixed Solids(mg/l)	29.0	-	-	-	-	-	14.0	-	-	-	-	-	-
25	Total Suspended Solids(mg/l)	20.0	-	-	-	-	-	8.0	-	-	-	-	-	-
26	Phosphate(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	-
27	Boron(mg/l)	1.38	-	-	-	-	-	BDL	-	-	-	-	-	-
28	Potassium(mg/l)	-	-	-	-	-	-	1.3	-	-	-	-	-	-
29	Flouride(mg/l)	BDL	-	-	-	-	-	0.30	-	-	-	-	-	-
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	-
31	Cadmium(mg/l)	0.022	-	-	-	-	-	BDL	-	-	-	-	-	-
32	Copper(mg/l)	BDL	-	-	-	-	-	0.025	-	-	-	-	-	-
33	Lead(mg/l)	BDL	-	-	-	-	-	0.073	-	-	-	-	-	-
34	Chromium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	-
35	Nickel(mg/l)	0.115	-	-	-	-	-	BDL	-	-	-	-	-	-
36	Zinc(mg/l)	0.034	-	-	-	-	-	0.061	-	-	-	-	-	-
37	Iron Total(mg/l)	0.206	-	-	-	-	-	0.157	-	-	-	-	-	-
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	-
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
50	DDT(o,p & isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	-

BOREWELL/TUBE WELL/OPEN WELL IN PILERNE INDUSTRIAL ESTATE														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for class A as per CPCB classification based on designated best use
1	Temperature°C	28	-	-	-	-	-	25	-	-	-	-	-	
2	Dissolved Oxygen(mg/l)	7.0	-	-	-	-	-	7.5	-	-	-	-	-	6 mg/l or more
3	pH	6.85	-	-	-	-	-	6.8	-	-	-	-	-	6.5-8.5
4	Conductivity(µs/cm)	314.85	-	-	-	-	-	107.90	-	-	-	-	-	
5	BOD(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	2 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.14	-	-	-	-	-	0.84	-	-	-	-	-	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
8	Total Coliform(MPN/100ml)	4.5	-	-	-	-	-	<1.8	-	-	-	-	-	50 or less MPN/100ml
9	Fecal Coliform(MPN/100ml)	NIL	-	-	-	-	-	NIL	-	-	-	-	-	
10	Fecal Streptococci(MPN/100ml)	16	-	-	-	-	-	<1.8	-	-	-	-	-	
11	Turbidity(NTU)	3.28	-	-	-	-	-	2.82	-	-	-	-	-	
12	Phenolphthalen Alkalinity(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
13	Total Alkalinity(mg/l)	76.0	-	-	-	-	-	26.0	-	-	-	-	-	
14	Chlorides(mg/l)	11.5	-	-	-	-	-	24.99	-	-	-	-	-	
15	COD(mg/l)	16.0	-	-	-	-	-	12.0	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	1.12	-	-	-	-	-	1.1	-	-	-	-	-	
17	Ammonia (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
18	Total Hardness(mg/l)	88.0	-	-	-	-	-	28.0	-	-	-	-	-	
19	Calcium(mg/l)	23.2	-	-	-	-	-	6.40	-	-	-	-	-	
20	Magnesium(mg/l)	7.3	-	-	-	-	-	2.9	-	-	-	-	-	
21	Sulphate(mg/l)	10.2	-	-	-	-	-	3.63	-	-	-	-	-	
22	Sodium(mg/l)	-	-	-	-	-	-	176.7	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	163.0	-	-	-	-	-	66.0	-	-	-	-	-	
24	Total Fixed Solids(mg/l)	98.0	-	-	-	-	-	35.0	-	-	-	-	-	
25	Total Suspended Solids(mg/l)	7.0	-	-	-	-	-	10.0	-	-	-	-	-	
26	Phosphate(mg/l)	0.04	-	-	-	-	-	BDL	-	-	-	-	-	
27	Boron(mg/l)	0.72	-	-	-	-	-	BDL	-	-	-	-	-	
28	Potassium(mg/l)	-	-	-	-	-	-	23.7	-	-	-	-	-	
29	Flouride(mg/l)	0.43	-	-	-	-	-	BDL	-	-	-	-	-	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	0.024	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.069	-	-	-	-	-	0.083	-	-	-	-	-	
36	Zinc(mg/l)	0.038	-	-	-	-	-	0.080	-	-	-	-	-	
37	Iron Total(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfant(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfant(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/ Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

Sr. No	Parameters	BORE WELL/TUBE WELL/ OPEN WELL IN CUNCOLIM INDUSTRIAL ESTATE												Limit for class A as per CPCB classification based on designated best use
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	
1	Temperature°C		-	-	-	-	-	30	-	-	-	-	-	
2	Dissolved Oxygen(mg/l)		-	-	-	-	-	4.2	-	-	-	-	-	6 mg/l or more
3	pH		-	-	-	-	-	6.82	-	-	-	-	-	6.5-8.5
4	Conductivity(µs/cm)		-	-	-	-	-	392.00	-	-	-	-	-	
5	BOD(mg/l)		-	-	-	-	-	BDL	-	-	-	-	-	2 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)		-	-	-	-	-	0.1	-	-	-	-	-	
7	Nitrite Nitrogen as NO ₂ -N mg/l		-	-	-	-	-	BDL	-	-	-	-	-	
8	Total Coliform(MPN/100ml)		-	-	-	-	-	49	-	-	-	-	-	50 or less MPN/100ml
9	Fecal Coliform(MPN/100ml)		-	-	-	-	-	23	-	-	-	-	-	
10	Fecal Streptococci(MPN/100ml)		-	-	-	-	-	<1.8	-	-	-	-	-	
11	Turbidity(NTU)		-	-	-	-	-	8.01	-	-	-	-	-	
12	Phenolphthalein Alkalinity(mg/l)		-	-	-	-	-	14.0	-	-	-	-	-	
13	Total Alkalinity(mg/l)		-	-	-	-	-	82.0	-	-	-	-	-	
14	Chlorides(mg/l)		-	-	-	-	-	24.60	-	-	-	-	-	
15	COD(mg/l)		-	-	-	-	-	8.0	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)		-	-	-	-	-	1.1	-	-	-	-	-	
17	Ammonia (mg/l)		-	-	-	-	-	BDL	-	-	-	-	-	
18	Total Hardness(mg/l)		-	-	-	-	-	182.0	-	-	-	-	-	
19	Calcium(mg/l)		-	-	-	-	-	41.70	-	-	-	-	-	
20	Magnesium(mg/l)		-	-	-	-	-	19.0	-	-	-	-	-	
21	Sulphate(mg/l)		-	-	-	-	-	44.0	-	-	-	-	-	
22	Sodium(mg/l)		-	-	-	-	-	26.9	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)		-	-	-	-	-	230.0	-	-	-	-	-	
24	Total Fixed Solids(mg/l)		-	-	-	-	-	148.0	-	-	-	-	-	
25	Total Suspended Solids(mg/l)		-	-	-	-	-	12.0	-	-	-	-	-	
26	Phosphate(mg/l)		-	-	-	-	-	0.05	-	-	-	-	-	
27	Boron(mg/l)		-	-	-	-	-	0.6	-	-	-	-	-	
28	Potassium(mg/l)		-	-	-	-	-	16.7	-	-	-	-	-	
29	Flouride(mg/l)		-	-	-	-	-	0.30	-	-	-	-	-	
30	Arsenic(mg/l)		-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)		-	-	-	-	-	BDL	-	-	-	-	-	
32	Copper(mg/l)		-	-	-	-	-	0.026	-	-	-	-	-	
33	Lead(mg/l)		-	-	-	-	-	0.054	-	-	-	-	-	
34	Chromium(mg/l)		-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)		-	-	-	-	-	0.081	-	-	-	-	-	
36	Zinc(mg/l)		-	-	-	-	-	0.048	-	-	-	-	-	
37	Iron Total(mg/l)		-	-	-	-	-	0.101	-	-	-	-	-	
38	Mercury (mg/l)		-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)		-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)		-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)		-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)		-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)		-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)		-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)		-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)		-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)		-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)		-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)		-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & isomers of DDT, DDE & DDD)		-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)		-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)		-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)		-	-	-	-	-	-	-	-	-	-	-	

BOREWELL WAS DRY

BOREWELL/TUBE WELL/OPEN WELL IN BETHORA INDUSTRIAL ESTATE														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for class A as per CPCB classification based on designated best use
1	Temperature °C	29	-	-	-	-	-	30	-	-	-	-	-	
2	Dissolved Oxygen(mg/l)	6.6	-	-	-	-	-	5.0	-	-	-	-	-	6 mg/l or more
3	pH	7.12	-	-	-	-	-	7.5	-	-	-	-	-	6.5-8.5
4	Conductivity(µs/cm)	118.26	-	-	-	-	-	106.20	-	-	-	-	-	
5	BOD(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	2 mg/l or less
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.59	-	-	-	-	-	2.15	-	-	-	-	-	
7	Nitrite Nitrogen as NO ₂ -N mg/l	0.005	-	-	-	-	-	BDL	-	-	-	-	-	
8	Total Coliform(MPN/100ml)	<1.8	-	-	-	-	-	7.8	-	-	-	-	-	50 or less MPN/100ml
9	Fecal Coliform(MPN/100ml)	NIL	-	-	-	-	-	NIL	-	-	-	-	-	
10	Fecal Streptococci(MPN/100ml)	121	-	-	-	-	-	<1.8	-	-	-	-	-	
11	Turbidity(NTU)	BDL	-	-	-	-	-	1.91	-	-	-	-	-	
12	Phenolphthalein Alkalinity(mg/l)	12	-	-	-	-	-	BDL	-	-	-	-	-	
13	Total Alkalinity(mg/l)	22.0	-	-	-	-	-	18.0	-	-	-	-	-	
14	Chlorides(mg/l)	13.0	-	-	-	-	-	15.0	-	-	-	-	-	
15	COD(mg/l)	6.0	-	-	-	-	-	BDL	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	12.6	-	-	-	-	-	0.6	-	-	-	-	-	
17	Ammonia (mg/l)	0.06	-	-	-	-	-	0.19	-	-	-	-	-	
18	Total Hardness(mg/l)	34.0	-	-	-	-	-	4.0	-	-	-	-	-	
19	Calcium(mg/l)	5.6	-	-	-	-	-	0.8	-	-	-	-	-	
20	Magnesium(mg/l)	4.9	-	-	-	-	-	0.5	-	-	-	-	-	
21	Sulphate(mg/l)	10.33	-	-	-	-	-	BDL	-	-	-	-	-	
22	Sodium(mg/l)	-	-	-	-	-	-	13.9	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	77.0	-	-	-	-	-	60.0	-	-	-	-	-	
24	Total Fixed Solids(mg/l)	59.0	-	-	-	-	-	43.0	-	-	-	-	-	
25	Total Suspended Solids(mg/l)	5.0	-	-	-	-	-	2.0	-	-	-	-	-	
26	Phosphate(mg/l)	0.14	-	-	-	-	-	0.03	-	-	-	-	-	
27	Boron(mg/l)	0.67	-	-	-	-	-	BDL	-	-	-	-	-	
28	Potassium(mg/l)	-	-	-	-	-	-	2.5	-	-	-	-	-	
29	Flouride(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.032	-	-	-	-	-	0.015	-	-	-	-	-	
32	Copper(mg/l)	0.06	-	-	-	-	-	0.039	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.085	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
35	Nickel(mg/l)	0.611	-	-	-	-	-	0.094	-	-	-	-	-	
36	Zinc(mg/l)	0.027	-	-	-	-	-	0.091	-	-	-	-	-	
37	Iron Total(mg/l)	0.255	-	-	-	-	-	0.062	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfant(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfant(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(o,p & isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

BOREWELL/TUBEWELL/OPENWELL IN MADKAI INDUSTRIAL ESTATE														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit for class A as per CPCB classification based on designated best use
1	Temperature°C	28	-	-	-	-	-	30	-	-	-	-	-	6 mg/l or more 6.5-8.5
2	Dissolved Oxygen(mg/l)	6.7	-	-	-	-	-	7.5	-	-	-	-	-	
3	pH	7.89	-	-	-	-	-	8.38	-	-	-	-	-	
4	Conductivity(µs/cm)	101.51	-	-	-	-	-	74.63	-	-	-	-	-	2 mg/l or less
5	BOD(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.57	-	-	-	-	-	1.22	-	-	-	-	-	
7	Nitrite Nitrogen as NO ₂ -N mg/l	BDL	-	-	-	-	-	BDL	-	-	-	-	-	50 or less MPN/100ml
8	Total Coliform(MPN/100ml)	2	-	-	-	-	-	23	-	-	-	-	-	
9	Fecal Coliform(MPN/100ml)	NIL	-	-	-	-	-	4.5	-	-	-	-	-	
10	Fecal Streptococci(MPN/100ml)	39	-	-	-	-	-	<1.8	-	-	-	-	-	
11	Turbidity(NTU)	BDL	-	-	-	-	-	1.98	-	-	-	-	-	
12	Phenolphthalein Alkalinity(mg/l)	2.0	-	-	-	-	-	BDL	-	-	-	-	-	
13	Total Alkalinity(mg/l)	18.0	-	-	-	-	-	16.0	-	-	-	-	-	
14	Chlorides(mg/l)	35.9	-	-	-	-	-	13.0	-	-	-	-	-	
15	COD(mg/l)	4.0	-	-	-	-	-	BDL	-	-	-	-	-	
16	Total Kjeldahl Nitrogen(mg/l)	14.6	-	-	-	-	-	0.6	-	-	-	-	-	
17	Ammonia (mg/l)	BDL	-	-	-	-	-	0.20	-	-	-	-	-	
18	Total Hardness(mg/l)	26.0	-	-	-	-	-	4.0	-	-	-	-	-	
19	Calcium(mg/l)	4.0	-	-	-	-	-	0.8	-	-	-	-	-	
20	Magnesium(mg/l)	3.9	-	-	-	-	-	0.5	-	-	-	-	-	
21	Sulphate(mg/l)	8.67	-	-	-	-	-	BDL	-	-	-	-	-	
22	Sodium(mg/l)	-	-	-	-	-	-	165.0	-	-	-	-	-	
23	Total Dissolved Solids(mg/l)	64.0	-	-	-	-	-	45.0	-	-	-	-	-	
24	Total Fixed Solids(mg/l)	42.0	-	-	-	-	-	27.0	-	-	-	-	-	
25	Total Suspended Solids(mg/l)	4.0	-	-	-	-	-	3.0	-	-	-	-	-	
26	Phosphate(mg/l)	0.13	-	-	-	-	-	BDL	-	-	-	-	-	
27	Boron(mg/l)	0.56	-	-	-	-	-	BDL	-	-	-	-	-	
28	Potassium(mg/l)	-	-	-	-	-	-	16	-	-	-	-	-	
29	Flouride(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
31	Cadmium(mg/l)	0.019	-	-	-	-	-	0.013	-	-	-	-	-	
32	Copper(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
33	Lead(mg/l)	BDL	-	-	-	-	-	0.058	-	-	-	-	-	
34	Chromium(mg/l)	BDL	-	-	-	-	-	0.081	-	-	-	-	-	
35	Nickel(mg/l)	0.129	-	-	-	-	-	0.077	-	-	-	-	-	
36	Zinc(mg/l)	0.037	-	-	-	-	-	0.072	-	-	-	-	-	
37	Iron Total(mg/l)	0.253	-	-	-	-	-	0.068	-	-	-	-	-	
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
46	Aldrin Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
50	DDT(to,p & isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-	
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	
53	Methyl parathion(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-	

Sr. No	Parameters	SALMONA SPRING											Permissible Limits
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
1	Temperature°C	28	30	29	28	28	29	29	28	26	27	27	26
2	Dissolved Oxygen(mg/l)	7.3	7.4	6.9	7.3	7.1	7.7	7.3	7.5	7.8	7.0	6.7	7.0
3	pH	6.36	6.93	6.45	5.8	6.05	6.6	5.65	6.54	6.03	6.34	5.91	7.41
4	Conductivity(µs/cm)	124.17	72.32	110.03	99.27	88.82	156.30	106.80	87.27	95.71	81.48	71.69	67.50
5	BOD(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
6	Nitrate Nitrogen as NO ₃ -N(mg/l)	0.26	BDL	1.193	3.4	3.03	0.4	3.39	BDL	0.61	2.1	0.13	BDL
7	Nitrite Nitrogen as NO ₂ -N(mg/l)	BDL	BDL	0.006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
8	Total Coliform(MPN/100ml)	220	920	540	270	790	790	350	540	350	540	46	140
9	Fecal Coliform(MPN/100ml)	130	280	220	170	490	490	280	240	240	350	33	94
10	Fecal Streptococci (MPN/100ml)	171	1601	921	210	230	270	170	220	170	110	23	63
11	Turbidity(NTU)	1.59	1.17	3.88	BDL	2.28	3.17	1.10	2.68	2.08	2.29	0.63	3.25
12	Phenolphthalein Alkalinity(mg/l)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
13	Total Alkalinity(mg/l)	20.0	12.0	14.0	10.0	14.0	6.0	20.0	12.0	20.0	16.00	18.0	16.0
14	Chlorides(mg/l)	23.90	12.20	18.49	19.1	15.9	25.9	18.49	18.0	6.99	18.5	14.5	15.65
15	COD(mg/l)	10.0	BDL	10.0	6.0	4.0	8.0	6.0	BDL	4.0	BDL	BDL	4.0
16	Total Kjeldahl Nitrogen(mg/l)	0.56	1.68	2.8	0.56	1.68	1.12	0.56	BDL	0.56	1.68	0.56	0.6
17	Ammonia (mg/l)	BDL	BDL	BDL	BDL	BDL	0.07	0.06	BDL	BDL	BDL	BDL	BDL
18	Total Hardness(mg/l)	16.0	18.0	18.0	10.0	12.0	22.0	18.0	8.0	16.0	18.0	18.0	14.0
19	Calcium(mg/l)	4.0	1.60	3.21	2.40	3.2	2.4	3.2	3.0	4.8	4.0	3.2	3.2
20	Magnesium(mg/l)	BDL	3.4	2.4	BDL	BDL	3.89	BDL	BDL	BDL	BDL	2.4	BDL
21	Sulphate(mg/l)	3.1	BDL	3.82	2.1	BDL	1.9	BDL	2.0	BDL	3.1	2.5	2.17
22	Sodium(mg/l)	-	-	-	-	-	31.2	108.9	33.5	30.5	10.1	43.3	49.8
23	Total Dissolved Solids(mg/l)	78.0	41.0	65.0	59.0	56.0	92.0	66.0	55.0	61.0	50.0	45.0	40.0
24	Total Fixed Solids(mg/l)	59.0	25.0	60.0	39.0	33.0	52.0	39.0	22.0	37.0	31.0	27.0	24.0
25	Total Suspended Solids(mg/l)	8.0	14.0	5.0	28.0	9.0	37.0	5.0	47.0	24.0	19.0	27.0	7.0
26	Phosphate(mg/l)	0.02	BDL	0.042	BDL	0.03	BDL	BDL	BDL	BDL	BDL	0.08	BDL
27	Boron(mg/l)	0.38	1.7	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
28	Potassium(mg/l)	-	-	-	-	-	13.3	20.3	2.6	5.6	BDL	9.7	3.4
29	Flouride(mg/l)	0.22	0.49	BDL	1.1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
30	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
31	Cadmium(mg/l)	0.013	-	-	-	-	-	BDL	-	-	-	-	-
32	Copper(mg/l)	BDL	-	-	-	-	-	0.016	-	-	-	-	-
33	Lead(mg/l)	0.098	-	-	-	-	-	BDL	-	-	-	-	-
34	Chromium(mg/l)	-	-	-	-	-	-	BDL	-	-	-	-	-
35	Nickel(mg/l)	0.110	-	-	-	-	-	BDL	-	-	-	-	-
36	Zinc(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
37	Iron Total(mg/l)	0.021	-	-	-	-	-	BDL	-	-	-	-	-
38	Mercury (mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-
39	Carbaryl (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
40	DDT-o,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
41	DDT-p,p' (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
42	alpha Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
43	beta Endosulfan(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
44	Anilofos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
45	2,4-Dichlorophenoxyacetic acid(mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
46	Aldrin/Dieldrin (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
47	Alpha HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
48	Beta HCH (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
49	Chlorpyrifos (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
50	DDT(o,p & isomers of DDT, DDE & DDD)	BDL	-	-	-	-	-	-	-	-	-	-	-
51	Gamma-HCH (Lindane) (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
52	Malathion (mg/L)	BDL	-	-	-	-	-	-	-	-	-	-	-
53	Methvl parathion(mg/l.)	BDL	-	-	-	-	-	-	-	-	-	-	-

INLET STP TONCA-PANAJI														
Sr.No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit
1	Temp (°C)	28	29	30	28	29	28	30	28	28	-	-	-	-
2	pH	6.46	7.14	6.6	6.75	5.19	5.1	5.98	6.69	6.60	6.99	6.23	6.52	-
3	BOD(mg/l)	328.95	360.5	50.3	167.8	265	312.5	428.5	267	333.6	315	500.0	424.24	-
4	Total Coliform(MPN/100ml)	9200000	5400000	9200000	3500000	2800000	2800000	2800000	2400000	2800000	5400000	9200000	5400000	-
5	Fecal Coliform(MPN/100ml)	3500000	2200000	5400000	2800000	1700000	2200000	2200000	1300000	2200000	3500000	5400000	3500000	-
6	Fecal Streptococci(MPN/100ml)	>1601	1601	>1601	-	9200000	540000	240000	240000	350000	920000	920000	350000	-
7	COD(mg/l)	660	580.0	120	350.0	600.0	650.0	750.0	660.0	750.0	1050.0	1260.0	750.0	-
8	Ammonia (mg/l)	10.66	4.68	0.29	32.89	89.18	14.82	64.87	13.06	10.53	54.94	2.13	7.35	-
9	Total Suspended Solids(mg/l)	217.0	371.4	55	165.0	191.0	123.0	219.0	515.0	208.0	280.0	534.0	230.0	-
10	Phosphate(mg/l)	8.93	2.21	79.4	4.28	78.37	24.14	5.936	5.31	13.11	0.748	12.32	11.17	-
11	Oil & Grease (mg/l)	3.4	-	-	-	-	-	-	-	-	-	-	-	-
12	MLSS (mg/l)	217	371.4	55	168.0	191	123.0	219.0	515.0	208.0	280.0	610.0	230.0	-
13	Residual Chlorine (mg/l)	0.35	0.53	-	-	-	-	-	-	-	-	-	-	-
14	Boron (mg/l)	0.52	-	-	-	-	-	-	-	-	-	-	-	-
15	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	-
16	Cadmium(mg/l)	0.018	-	-	-	-	-	BDL	-	-	-	-	-	-
17	Copper(mg/l)	0.029	-	-	-	-	-	0.034	-	-	-	-	-	-
18	Lead(mg/l)	0.058	-	-	-	-	-	0.099	-	-	-	-	-	-
19	Chromium(mg/l)	BDL	-	-	-	-	-	0.053	-	-	-	-	-	-
20	Nickel(mg/l)	0.093	-	-	-	-	-	0.098	-	-	-	-	-	-
21	Zinc(mg/l)	0.026	-	-	-	-	-	0.059	-	-	-	-	-	-
22	Iron Total(mg/l)	0.222	-	-	-	-	-	0.152	-	-	-	-	-	-
23	Manganese (mg/l)	0.134	-	-	-	-	-	BDL	-	-	-	-	-	-

OUTLET STP TONCA - PANAJI														
Sr. No	Parameters	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Limit
1	Temp (°C)	28	29	29	28	29	28	29	28	28	28	28	-	
2	pH	6.24	6.0	7.10	6.15	6.69	6.67	6.19	6.95	6.90	6.95	6.50	6.42	5.5-9.0
3	BOD(mg/l)	12.57	4.4	8	8.0	8.4	8.8	8.9	3.8	7.2	16.0	8.0	13.3	10.0
4	Total Coliform(MPN/100ml)	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	
5	Fecal Coliform(MPN/100ml)	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	
6	Fecal Streptococci(MPN/100ml)	15	64	50	-	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	
7	COD(mg/l)	30	20.0	20	20.0	20.0	20.0	30.0	10.0	20.0	50.0	20.0	40.0	50.0
8	Ammonia (mg/l)	3.84	BDL	BDL	0.049	0.25	0.09	0.35	BDL	0.079	BDL	BDL	0.06	5.0
9	Total Suspended Solids(mg/l)	13.0	6.0	10.0	BDL	3.0	2.0	6.0	5.0	3.0	7.0	4.0	5.0	20.0
10	Phosphate(mg/l)	4.97	2.78	0.64	0.525	0.56	0.661	0.078	0.09	0.65	BDL	0.27	0.319	
11	Oil & Grease (mg/l)	BDL	BDL	<10	<10.0	<10.0	<10.0	<10	<10.0	<10.0	<10	<10.0	<10.0	10.0
12	MLSS (mg/l)	13	-	-	-	-	-	-	-	-	-	-	-	
13	Residual Chlorine (mg/l)	BDL	BDL	BDL	37.22	2.65	3.01	1.4	BDL	1.77	1.59	100.8	3.54	1.0
14	Boron (mg/l)	0.95	-	-	-	-	-	-	-	-	-	-	-	
15	Arsenic(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
16	Cadmium(mg/l)	0.034	-	-	-	-	-	BDL	-	-	-	-	-	
17	Copper(mg/l)	BDL	-	-	-	-	-	0.044	-	-	-	-	-	
18	Lead(mg/l)	BDL	-	-	-	-	-	BDL	-	-	-	-	-	
19	Chromium(mg/l)	0.055	-	-	-	-	-	BDL	-	-	-	-	-	
20	Nickel(mg/l)	0.102	-	-	-	-	-	0.082	-	-	-	-	-	
21	Zinc(mg/l)	0.021	-	-	-	-	-	0.078	-	-	-	-	-	
22	Iron Total(mg/l)	0.196	-	-	-	-	-	0.114	-	-	-	-	-	
23	Manganese (mg/l)	0.057	-	-	-	-	-	BDL	-	-	-	-	-	

ANNEXURE VIII

AMBIENT AIR QUALITY MONITORING DATA OF TRANSPORTATION ROUTES (IRON ORE) DURING THE PERIOD FROM 2021-22

MINING TRANSPORTATION (IRON ORE)										
Station:-At Open Space in front of Govt. Primary School Fanaswadi Naveli										City:-Naveli
		Time Weighted Average (TWA)							AQI	AIR QLTY
		24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
Sr. No	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
MARCH										
1	25.03.2022	53.85	14.47	9.30	15.60	0.83	12.88	0.09	54	Satisfactory
2	29.03.2022	53.03	13.22	6.90	14.60	0.67	11.2	0.07	53	Satisfactory

Station: On the Open terrace of residential House of Mr. Sagun Gawas									City: Sanvordem	
		Time Weighted Average (TWA)							AQI	AIR QLTY
		24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
Sr. No	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
FEBRUARY										
1	15.02.2022	71	20	7	17	0.83	5	0.03	71	Satisfactory
2	18.02.2022	69	19	8	17	0.67	8	0.08	69	Satisfactory
3	22.02.2022	73	18	7	15	0.83	6	0.05	73	Satisfactory
4	25.02.2022	77	17	10	18	0.67	8	0.04	77	Satisfactory
MARCH										
5	01.03.2022	54.09	10.27	7.10	14.50	0.5	6.58	0.05	54	Satisfactory
6	04.03.2022	61.68	11.31	5.90	19.10	0.75	8.23	0.03	62	Satisfactory
7	08.03.2022	54.11	11.19	11.30	17.60	0.58	6.58	0.06	54	Satisfactory
8	11.03.2022	49.05	9.02	7.10	15.30	0.5	8.78	0.07	49	Good
9	15.03.2022	53.24	11.68	10.90	12.10	0.67	10.64	0.02	53	Satisfactory
10	18.03.2022	54.24	10.23	9.30	14.50	0.58	12.32	0.06	54	Satisfactory

11	22.03.2022	54.63	12.52	5.70	9.90	0.67	10.64	0.03	55	Satisfactory
12	25.03.2022	59.07	10.81	6.70	11.30	1	11.76	0.02	59	Satisfactory
13	29.03.2022	54.65	9.65	9.60	14.90	0.83	12.88	0.06	55	Satisfactory

Station: On the Open terrace of Shri Ramnath Setu Naik, Bodyamal, Uguem									City: Sanguem	
		Time Weighted Average (TWA)							AQI	AIR QLTY
		24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
Sr. No	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
DECEMBER										
1	15.12.2021	43	9	7	13	0.67	14	0.05	43	Good
2	17.12.2021	40	10	8	19	0.58	13	0.05	40	Good
3	21.12.2021	49	11	10	14	0.50	12	0.04	49	Good
4	23.12.2021	48	11	7	16	0.67	10	0.02	48	Good
5	28.12.2021	39	9	10	20	0.75	9	0.06	39	Good
6	30.12.2021	48	11	6	16	0.58	9	0.04	48	Good
JANUARY										
7	04.01.2022	43	13	9	15	0.75	7	0.06	43	Good
8	07.01.2022	39	11	10	13	0.67	8	0.04	39	Good
9	11.01.2022	48	13	11	15	0.58	7	0.06	48	Good
10	14.01.2022	47	11	6	11	0.50	5	0.03	47	Good
11	18.01.2022	47	12	10	14	0.83	8	0.08	47	Good
12	21.01.2022	41	13	9	13	0.58	7	0.06	41	Good
13	25.01.2022	47	13	6	14	0.75	8	0.03	47	Good
14	28.01.2022	49	11	10	13	0.83	7	0.06	49	Good
FEBRUARY										
15	01.02.2022	57	9	8	16	0.75	9	0.07	57	Satisfactory
16	04.02.2022	59	14	6	17	0.58	5	0.04	59	Satisfactory
17	08.02.2022	66	13	8	16	1.00	8	0.05	66	Satisfactory
18	11.02.2022	61	12	10	16	0.83	9	0.09	61	Satisfactory
19	15.02.2022	68	14	7	14	1.08	8	0.08	68	Satisfactory
20	18.02.2022	66	15	10	16	0.92	9	0.07	66	Satisfactory

21	22.02.2022	49	9	6	12	0.75	8	0.06	49	Good
22	25.02.2022	65	14	8	15	0.83	9	0.08	65	Satisfactory
MARCH										
23	01.03.2022	56.00	11.73	5.90	12.50	0.67	6.03	0.03	56	Satisfactory
24	04.03.2022	52.95	9.9	10.00	20.00	0.58	8.78	0.06	53	Satisfactory
25	08.03.2022	50.28	10.27	7.10	13.60	0.67	9.8	0.07	50	Satisfactory
26	11.03.2022	46.42	8.52	11.30	15.80	0.58	10.97	0.04	46	Good
27	15.03.2022	40.36	10.27	8.40	11.40	0.67	12.32	0.08	40	Good
28	18.03.2022	51.76	11.31	5.65	11.00	0.5	11.2	0.07	52	Satisfactory
29	22.03.2022	50.40	10.35	10.90	15.80	0.75	12.32	0.09	50	Satisfactory
30	25.03.2022	53.69	10.94	8.00	12.90	0.67	11.2	0.09	54	Satisfactory
31	29.03.2022	52.57	8.32	5.70	9.80	0.5	10.08	0.05	53	Satisfactory

Station: On the Open terrace of residential house of Mr. Anil alias shaba Faldessai City: Cavrem										
		Time Weighted Average (TWA)							AQI	AIR QLTY
		24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
Sr. No	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
OCTOBER										
1	26-10-2021	25	5	10	18	0.75	7	0.04	38	Good
2	29-10-2021	27	4	6	13	0.83	10	0.02	42	Good
NOVEMBER										
3	02-11-2021	25	9	10	17	0.75	11	0.03	38	Good
4	05-11-2021	34	10	6	13	0.58	9	0.06	34	Good
5	09-11-2021	36	9	10	16	0.83	11	0.04	42	Good
6	12-11-2021	39	8	6	15	0.75	10	0.03	39	Good
7	16-11-2021	33	7	4	13	0.58	9	0.07	33	Good
8	18-11-2021	32	9	7	17	0.75	11	0.05	38	Good
9	23-11-2021	27	8	4	10	0.50	9	0	27	Good
10	25-11-2021	29	7	8	18	0.75	11	0	38	Good
11	30-11-2021	24	7	9	21	0.83	12	0	42	Good

Station: On the open terrace of office building of village panchayat of Kaley City:Sanguem										
		Time Weighted Average (TWA)							AQI	AIR QLTy
		24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
Sr. No	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
AUGUST										
1	09.08.2021	31	6	5	13	0.83	6	0.04	42	Good
2	11.08.2021	32	6	8	20	1.00	7	0.04	50	Good
3	16.08.2021	29	6	5	16	0.83	6	0.02	42	Good
4	18.08.2021	32	5	6	12	0.75	5	0.05	38	Good
5	23.08.2021	32	16	9	19	1.00	10	0.05	50	Good

Station: Within the premises of M/s. Timblo Enterprises, Maulinguem, Kaley Village City:Sanguem										
		Time Weighted Average (TWA)							AQI	AIR QLTY
		24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
Sr. No	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
AUGUST										
1	09.08.2021	35	15	6	14	0.75	5	0.03	38	Good
2	11.08.2021	42	5	5	16	0.92	7	0.04	46	Good
3	16.08.2021	29	7	8	15	0.75	7	0.02	38	Good
4	18.08.2021	36	5	5	14	0.67	6	0.03	36	Good
5	23.08.2021	32	14	8	16	0.83	8	0.08	42	Good

Station:-Within Premise of Shree Sateri Temple, Bag Xelvona									City:-Quepem	
		Time Weighted Average (TWA)							AQI	AIR QLTY
		24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
Sr. No	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
MARCH										
1	25.03.2022	47.88	13.18	6.90	14.10	0.67	11.2	0.03	48	Good
2	29.03.2022	49.02	11.31	5.70	9.90	0.5	10.08	0.05	49	Good

Station: On the open Terrace of Residential House of Mr. Selwyn D’costa									City: Quepem	
		Time Weighted Average (TWA)							AQI	AIR QLTY
		24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
Sr. No	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
MAY										
1	04.05.2021	75	14	8	14	0.92	9	0.05	75	Satisfactory
2	06.05.2021	74	17	6	13	0.83	8	0.04	74	Satisfactory
3	11.05.2021	71	12	5	12	0.83	7	0.04	71	Satisfactory
4	13.05.2021	63	11	10	16	1.17	5	0.02	63	Satisfactory
5	18.05.2021	59	11	5	13	1.00	5	0.01	59	Satisfactory
6	20.05.2021	58	8	3	12	0.75	7	0.05	58	Satisfactory
7	25.05.2021	57	10	8	16	1.00	9	0.03	57	Satisfactory
8	27.05.2021	63	11	5	11	0.67	6	0.04	63	Satisfactory
9	31.05.2021	58	10	8	16	0.83	7	0.04	58	Satisfactory

Station: On the open Terrance of M/s. Mallikarjun Store near Village Panchayat									City: Sanvordem	
		Time Weighted Average (TWA)							AQI	AIR QLTY
		24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
Sr. No	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
MAY										
1	04.05.2021	71	15	5	12	0.83	10	0.05	71	Satisfactory
2	06.05.2021	71	14	10	16	1.17	11	0.03	71	Satisfactory
3	11.05.2021	65	13	8	16	1.08	11	0.03	65	Satisfactory
4	13.05.2021	63	12	5	11	0.92	7	0.02	63	Satisfactory
5	18.05.2021	61	9	6	13	1.00	7	0.05	61	Satisfactory
6	20.05.2021	55	10	5	16	0.83	8	0.05	55	Satisfactory
7	25.05.2021	59	11	8	16	0.67	6	0.05	59	Satisfactory
8	27.05.2021	57	14	10	17	1.00	8	0.05	57	Satisfactory

9	31.05.2021	60	11	6	13	1.17	9	0.05	60	Satisfactory
OCTOBER										
10	26-10-2021	32	10	7	18	0.67	11	0.02	34	Good
11	29-10-2021	59	16	6	10	0.58	9	0.03	59	Satisfactory
NOVEMBER										
12	02-11-2021	57	16	7	14	0.75	11	0.03	57	Satisfactory
13	05-11-2021	62	16	6	13	0.67	10	0.03	62	Satisfactory
14	09-11-2021	56	12	8	16	0.75	11	0.04	56	Satisfactory
15	12-11-2021	54	13	7	15	0.67	11	0.03	54	Satisfactory
16	16-11-2021	49	11	8	18	0.83	10	0.03	49	Good
17	18-11-2021	50	15	6	12	0.58	11	0.11	50	Satisfactory
18	23-11-2021	46	13	8	18	0.83	10	0.01	46	Good
19	25-11-2021	42	13	11	20	0.58	12	0.17	42	Good
20	30-11-2021	39	11	7	18	0.42	10	0.03	39	Good
DECEMBER										
21	15.12.2021	62	16	10	22	0.50	11	0.04	62	Satisfactory
22	17.12.2021	62	14	13	25	0.67	12	0.02	62	Satisfactory
23	21.12.2021	63	16	8	17	0.50	12	0.02	63	Satisfactory
24	23.12.2021	66	16	11	17	0.83	10	0.04	66	Satisfactory
25	28.12.2021	65	13	10	13	0.58	10	0.01	65	Satisfactory
26	30.12.2021	65	14	11	17	0.75	10	0.07	65	Satisfactory
JANUARY										
27	04.01.2022	77	20	10	17	0.67	8	0	77	Satisfactory
28	07.01.2022	77	20	7	13	0.50	6	0	77	Satisfactory
29	11.01.2022	71	20	11	17	0.67	8	0	71	Satisfactory
30	14.01.2022	69	21	11	18	0.58	7	0	69	Satisfactory
31	18.01.2022	72	20	11	22	1.00	9	0	72	Satisfactory
32	21.01.2022	92	27	8	19	0.83	8	0	92	Satisfactory
33	25.01.2022	91	29	10	16	0.75	7	0	91	Satisfactory
34	28.01.2022	92	28	13	17	1.08	6	0	92	Satisfactory

FEBRUARY										
35	01.02.2022	92	30	11	18	0.92	8	0	92	Satisfactory
36	04.02.2022	94	27	11	19	0.83	9	0	94	Satisfactory
37	08.02.2022	92	24	13	17	1.25	7	0	92	Satisfactory
38	11.02.2022	91	26	10	17	1.00	8	0	91	Satisfactory
39	15.02.2022	93	24	11	18	1.25	9	0	93	Satisfactory
40	18.02.2022	88	24	10	19	0.83	9	0	88	Satisfactory
41	22.02.2022	87	25	11	18	0.58	8	0	87	Satisfactory
42	25.02.2022	88	25	8	18	0.92	9	0	88	Satisfactory
MARCH										
43	01.03.2022	84.77	19.5	5.90	10.10	0.75	7.68	0.07	85	Satisfactory
44	04.03.2022	91.39	23.25	7.10	18.80	0.58	6.03	0.04	91	Satisfactory
45	08.03.2022	84.55	19.88	9.70	20.40	0.5	8.78	0.03	85	Satisfactory
46	11.03.2022	86.62	20.58	8.40	14.00	0.67	10.42	0.04	87	Satisfactory
47	15.03.2022	84.05	21.08	8.00	14.95	0.5	11.76	0.03	84	Satisfactory
48	18.03.2022	80.19	20.92	5.70	12.30	0.67	10.64	0.04	80	Satisfactory
49	22.03.2022	77.28	17.38	8.00	16.90	0.83	12.32	0.06	77	Satisfactory
50	25.03.2022	79.19	16.18	5.70	14.50	0.92	10.64	0.03	79	Satisfactory
51	29.03.2022	81.51	19.46	10.90	16.30	0.75	11.76	0.08	82	Satisfactory

Station: On the open Terrance of Residential House of Mr. Dilip Raikar									City: Sanguem	
		Time Weighted Average (TWA)							AQI	AIR QLTY
		24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
Sr. No	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
DECEMBER										
1	15.12.2021	55	11	8	15	0.75	12	0.03	55	Satisfactory
2	17.12.2021	54	11	11	22	0.83	10	0.03	54	Satisfactory
3	21.12.2021	54	12	7	13	0.58	9	0.01	54	Satisfactory
4	23.12.2021	52	15	6	19	0.75	11	0.03	52	Satisfactory
5	28.12.2021	52	10	8	19	0.92	12	0.04	52	Satisfactory
6	30.12.2021	52	13	7	14	0.83	8	0.06	52	Satisfactory

JANUARY										
7	04.01.2022	55	13	7	11	0.50	6	0.08	55	Satisfactory
8	07.01.2022	54	11	7	15	0.83	8	0.02	54	Satisfactory
9	11.01.2022	53	12	9	15	0.75	10	0.08	53	Satisfactory
10	14.01.2022	57	11	10	15	0.83	10	0.04	57	Satisfactory
11	18.01.2022	54	11	10	15	0.50	5	0.05	54	Satisfactory
12	21.01.2022	79	17	12	17	0.67	7	0.08	79	Satisfactory
13	25.01.2022	77	17	11	19	0.50	6	0.07	77	Satisfactory
14	28.01.2022	78	15	13	17	0.67	9	0.04	78	Satisfactory
FEBRUARY										
15	01.02.2022	80	19	11	18	0.58	5	0.08	80	Satisfactory
16	04.02.2022	85	18	10	16	0.75	8	0.08	85	Satisfactory
17	08.02.2022	73	17	10	17	1.08	6	0.06	73	Satisfactory
18	11.02.2022	79	15	9	16	0.83	5	0.03	79	Satisfactory
19	15.02.2022	85	21	7	17	1.17	7	0.03	85	Satisfactory
20	18.02.2022	85	21	8	18	1.08	7	0.06	85	Satisfactory
21	22.02.2022	88	22	11	17	0.83	8	0.08	88	Satisfactory
22	25.02.2022	90	22	8	17	0.67	7	0.06	90	Satisfactory
MARCH										
23	01.03.2022	71.04	17.55	11.30	17.50	0.5	8.78	0.09	71	Satisfactory
24	04.03.2022	77.96	16.13	8.40	22.10	0.83	9.88	0.05	78	Satisfactory
25	08.03.2022	71.28	16.55	5.90	12.00	0.58	8.23	0.04	71	Satisfactory
26	11.03.2022	73.52	15.18	8.40	15.90	0.5	9.33	0.05	74	Satisfactory
27	15.03.2022	64.55	13.49	6.90	12.80	0.75	11.2	0.06	65	Satisfactory
28	18.03.2022	76.49	17.67	9.30	16.30	0.83	12.32	0.05	76	Satisfactory
29	22.03.2022	71.28	14.14	6.90	10.10	0.58	10.08	0.07	71	Satisfactory
30	25.03.2022	71.64	15.72	10.90	14.90	0.83	12.32	0.05	72	Satisfactory
31	29.03.2022	79.15	17.09	8.00	12.90	0.67	11.2	0.02	79	Satisfactory

Station: Ambaulim Quepem (House of Ramnath B. Naik)									City: Quepem	
		Time Weighted Average (TWA)							AQI	AIR QLTY
		24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour	24 - Hour		
	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)								
Sr. No	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O ₃	Pb		
OCTOBER										
1	26-10-2021	42	12	8	23	0.83	10	0.03	42	Good
2	29-10-2021	26	8	7	15	0.67	11	0.03	34	Good
NOVEMBER										
3	02-11-2021	34	11	8	16	0.58	10	0.03	34	Good
4	05-11-2021	55	15	10	15	0.83	12	0.03	55	Satisfactory
5	09-11-2021	49	12	7	13	0.58	10	0.03	49	Good
6	12-11-2021	42	12	8	16	0.83	11	0.07	42	Good
7	16-11-2021	45	12	6	16	0.75	11	0.08	45	Good
8	18-11-2021	41	11	9	19	0.67	9	0.06	41	Good
9	23-11-2021	34	11	7	13	0.75	11	0	38	Good
10	25-11-2021	35	10	9	21	0.67	11	0	35	Good
11	30-11-2021	35	9	6	13	0.50	9	0	35	Good

ANNEXURE IX **Ambient Air Quality monitoring data during Deepawali Festival 2021 (pre, during & post Deepawali)**

Name of the Location: Patto, Panaji-Goa										
Date	Regulatory parameters						New parameters			
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	Metals in PM ₁₀		Metals/Elements in PM _{2.5}			
					Pb (µg/m ³)	Ni (ng/m ³)	As (ng/m ³)	Al (µg/m ³)	Ba (µg/m ³)	Fe (µg/m ³)
28-10-2021	BDL	12	46	25	0.10	69.80	<0.4	<0.01	0.70	39.27
29-10-2021	BDL	13	127	57	0.12	81.08	<0.4	<0.01	10.29	112.56
30-10-2021	BDL	12	52	47	0.03	98.54	<0.4	<0.01	1.26	15.77
31-10-2021	BDL	12	77	10	0.06	60.69	<0.4	<0.01	0.24	12.76
01-11-2021	BDL	BDL	37	26	0.24	357.78	<0.4	<0.01	2.34	4.57
02-11-2021	BDL	BDL	24	25	0.13	381.62	<0.4	<0.01	1.12	7.26
03-11-2021	*	*	*	*	*	*	*	*	*	*
04-11-2021	BDL	BDL	36	17	0.15	346.24	<0.4	<0.01	8.66	4.87
05-11-2021	BDL	BDL	25	23	0.16	456.54	<0.4	<0.01	4.97	8.19
06-11-2021	BDL	12	22	14	0.23	396.57	<0.4	<0.01	5.46	0.23
07-11-2021	BDL	12	30	14	0.14	351.37	<0.4	<0.01	9.67	4.53
08-11-2021	BDL	10	68	34	0.20	213.97	<0.4	<0.01	1.90	3.94
09-11-2021	BDL	11	93	76	0.05	48.90	<0.4	<0.01	0.95	1.78
10-11-2021	BDL	10	109	59	0.02	28.05	<0.4	<0.01	6.89	2.87
11-11-2021	BDL	10	142	61	0.07	23.97	<0.4	<0.01	2.56	23.03
NAAQS(24 hrly Standard in µg/m ³)	80	80	100	60	1.0	Annual Stan- dard (20 ng/ m ³)	Annual Standard (6 ng/m ³)	NA	NA	NA

Note- *No monitoring

Interpretation of Ambient Air Quality Data/Result:
 PM10 exceeding for 3 days 29-11-2021, 10-11-2021 & 11-11-2021 & PM2.5 exceeding for 2 days 09-11-2021 & 11-11-2021 during 14 monitoring days
 Field Observations reported during exceedence days: Low to high density Light Motor Vehicular movement & Heavy Motor Vehicular movement, sweeping activity and windy conditions observed during Monitoring.
 No exceedence observed with respect to any of the parameters monitored on 04-11-2021 (Diwali Day)

ANNEXURE X

AMBIENT AIR QUALITY MONITORING DATA AT M/s. GOA CARBON LIMITED							
Station : Behind weigh bridge within the premises of M/s Goa Carbon Ltd City: St. Jose De Areal							
Sr. No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hr	24-Hr	24-Hr	24-Hr		
		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
May-21							
1	11-05-2021	79	12	8	23	79	Satisfactory
2	13-05-2021	70	10	6	21	70	Satisfactory
Station : Near FO Tank of M/s Goa Glass Ltd. City: St. Jose De Areal							
May-21							
3	11-05-2021	69	10	8	15	69	Satisfactory
4	13-05-2021	71	12	10	18	71	Satisfactory
Station : Near Raw pet coke handling shed of M/s Goa Carbon Ltd. City: St. Jose De Areal							
May-21							
5	11-05-2021	75	14	11	24	75	Satisfactory
6	13-05-2021	72	13	13	22	72	Satisfactory
Station : Near FO Tank of M/s Goa Carbon Ltd., North-East side City: St. Jose De Areal							
Dec-21							
7	08.12.2021	35	10	7	13	35	Good
8	10.12.2021	30	9	7	12	30	Good
9	14.12.2021	40	10	7	14	40	Good
10	16.12.2021	29	9	9	13	29	Good
Station : Near Raw Material Storage yard of M/s Goa Carbon Ltd., West side Areal City: St. Jose De Areal							
Dec-21							
11	08.12.2021	65	11	8	11	65	Satisfactory
12	10.12.2021	77	18	9	13	77	Satisfactory
13	14.12.2021	63	18	10	14	63	Satisfactory
14	16.12.2021	60	15	10	11	60	Satisfactory

Station : Open terrace residential of Mr. Felix Pereira, East side							City: St. Jose De Areal
Dec-21							
15	08.12.2021	53	14	11	20	53	Satisfactory
16	10.12.2021	61	16	13	28	61	Satisfactory
17	14.12.2021	53	15	10	21	53	Satisfactory
18	16.12.2021	50	14	11	23	50	Satisfactory
Station : Near Village Panchayat							City: St. Jose De Areal
Dec-21							
19	08.12.2021	75	25	15	21	75	Satisfactory
20	10.12.2021	65	21	10	22	65	Satisfactory
21	14.12.2021	60	13	11	20	60	Satisfactory
22	16.12.2021	58	14	11	19	58	Satisfactory
Station : Location-5, Near Entry Gate, Souh Side, Goa Carbon Ltd.							City: St. Jose De Areal
Dec-21							
23	08.12.2021	72	27	22	22	72	Satisfactory
24	10.12.2021	75	37	12	28	75	Satisfactory
25	14.12.2021	68	45	12	27	75	Satisfactory
26	16.12.2021	101	74	13	26	147	Moderate

ANNEXURE XI

AMBIENT AIR QUALITY MONITORING DATA AROUND DUDHSAGAR							
Station : Near Dudhsagar Entry Gate				City: Mollem			
Sr.No		Time Weighted Average (TWA)				AQI	AIR QLTY
	Parameters	24-Hr	24-Hr	24-Hr	24-Hr		
		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)					
	Date	PM ₁₀	PM _{2.5}	SO ₂	NO ₂		
Dec-21							
1	08-12-2021	119	32	2	11	113	Moderate
Station : Near Dudhsagar temple				City: Mollem			
Dec-21							
2	08-12-2021	215	25	2	11	177	Moderate
3	10-12-2021	95	22	2	9	95	Satisfactory

ANNEXURE XII

AMBIENT AIR QUALITY MONITORING DATA AT MARGAO GARBAGE DUMP (SONSODO)										
Station :-Near Express Carwash									City:-Margao	
Sr. No		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)							AQI	AIR QLTY
	Parameters	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	*CO	O3	Pb		
	Date	24-hr avg	24-hr avg	24-hr avg	24-hr avg	1-hr avg	1-hr avg	24-hr avg		
Mar-22										
1	04.03.2022	105	22	6	8	1.42	11	0.18	103	Moderate
2	05.03.2022	105	21	7	17	1.17	10	0.11	104	Moderate
3	06.03.2022	110	18	9	14	0.75	11	0.06	107	Moderate
Station :- Open space of residence of Mr. Malik Amin Nanda, Near Vet Hospital, St. Xavier Road										
City:-Margao										
Mar-22										
4	04.03.2022	96	18	7	20	1.17	12	0.11	96	Satisfactory
5	05.03.2022	88	15	5	13	0.83	10	0.05	88	Satisfactory
6	06.03.2022	87	11	6	14	0.58	9	0.05	87	Satisfactory
Station :- Mr. Jojo Sequeira Residence, H. NO. 1011 Raia									City:-Margao	
Mar-22										
7	04.03.2022	81	14	6	15	0.92	7	0.07	81	Satisfactory
8	05.03.2022	60	11	7	13	0.75	5	0.03	60	Satisfactory
9	06.03.2022	88	14	5	15	0.83	8	0.08	88	Satisfactory

ANNEXURE XIII

AAQM DATA AT MUNICIPAL SOLID WASTE SITES FOR THE YEAR 2021-2022

Station:- On the Open Terrace of Security Cabin, Cuncolim Municipal Council															City:- Cuncolim			
Sr. No	Date	Time Weighted Average (TWA)												AQI		AIR QLTY		
		24-Hr	24-Hr	24-Hr	8-Hr	8-Hr	24-Hr	24-Hr	24-Hr	8-Hr	24-Hr	24-Hr	24-Hr					
		Pollutants concentration in µg/m3 (except for CO which is in mg/m3 and BaP/As/Ni in ng/m3)																
		PM ₁₀	PM _{2.5}	SO ₂	NO ₂	CO	O ₃	NH ₃	Pb	C ₆ H ₆	BaP	Ni	As					
May-21																		
1	03.05.2021	77	11	5	11	0.66	7	33	0.03	BDL	BDL	10.20	BDL	77	Satisfactory			
2	05.05.2021	69	15	8	19	0.93	11	29	0.05	BDL	BDL	13.31	BDL	69	Satisfactory			
3	11.05.2021	64	10	6	11	0.61	6	26	0.01	BDL	BDL	12.07	BDL	64	Satisfactory			
4	14.05.2021	58	10	5	16	0.68	8	34	0.05	BDL	BDL	7.87	BDL	58	Satisfactory			
Station:- Near Bailing Station, Cuncolim Municipal Council															City:- Cuncolim			
May-21																		
5	03.05.2021	69	13	8	18	0.95	9	30	0.04	BDL	BDL	11	BDL	69	Satisfactory			
6	05.05.2021	64	12	5	14	0.95	11	32	0.07	BDL	BDL	14	BDL	64	Satisfactory			
7	11.05.2021	63	11	5	11	0.86	6	33	0.01	BDL	BDL	4	BDL	63	Satisfactory			
8	14.05.2021	55	10	6	15	0.77	9	29	0.02	BDL	BDL	12	BDL	55	Satisfactory			

Station:- Near the Solid Waste Dump ,Cuncolim Municipal Council															City:- Cuncolim	
May-21																
9	03.05.2021	62	12	6	15	0.88	8	33	0.04	BDL	BDL	8.14	BDL	62	Satisfactory	
10	05.05.2021	80	14	10	14	0.93	12	34	0.07	BDL	BDL	15.55	BDL	80	Satisfactory	
11	11.05.2021	56	9	8	15	0.61	5	34	0.02	BDL	BDL	14.66	BDL	56	Satisfactory	
12	14.05.2021	51	10	5	14	0.77	7	29	0.04	BDL	BDL	9.38	BDL	51	Satisfactory	

Station:- On the Open Terrace of Security Cabin, Canacona Municipal Council															City:- Canacona	
Sr. No	Date	Time Weighted Average (TWA)											AQI		AIR QLTY	
		Pollutants concentration in µg/m3 (except for CO which is in mg/m3 and BaP/As/Ni in ng/m3)														
		PM ₁₀	PM _{2.5}	SO ₂	NO ₂	CO	O ₃	NH ₃	Pb	C ₆ H ₆	BaP	Ni	As			
13	03.05.2021	67	9	5	14	0.72	12	34	0.05	BDL	BDL	14.28	BDL	67	Satisfactory	
14	05.05.2021	64	11	5	14	0.97	11	28	0.06	BDL	BDL	14.08	BDL	64	Satisfactory	
15	11.05.2021	61	10	8	14	0.57	7	30	0.06	BDL	BDL	12.06	BDL	61	Satisfactory	
16	14.05.2021	58	9	6	12	0.77	10	32	0.04	BDL	BDL	12.58	BDL	58	Satisfactory	

Station:- Near Bailing Stationn, Canacona Municipal Council															City:- Canacona	
May-21																
17	03.05.2021	70	10	6	13	0.88	10	29	0.09	BDL	BDL	14.03	BDL	70	Satisfactory	
18	05.05.2021	68	15	10	18	0.95	10	30	0.02	BDL	BDL	9.04	BDL	68	Satisfactory	
19	11.05.2021	66	14	5	10	0.54	6	31	0.05	BDL	BDL	9.09	BDL	66	Satisfactory	
20	14.05.2021	60	11	6	13	0.64	10	30	0.04	BDL	BDL	4.85	BDL	60	Satisfactory	

Station:- On the Top of the Security Cabin Near Entrance Gate, Quepem Municipal Council														City:- Quepem	
Sr. No	Date	Time Weighted Average (TWA)										AQI		AIR QLTY	
		24-Hr	24-Hr	24-Hr	24-Hr	8-Hr	24-Hr	24-Hr	8-Hr	24-Hr	24-Hr				
		Pollutants concentration in µg/m3 (except for CO which is in mg/m3 and BaP/As/Ni in ng/m3)										Ni	As		
		PM ₁₀	PM _{2.5}	SO ₂	NO ₂	CO	O ₃	NH ₃	Pb	C ₆ H ₆	BaP				
May-21															
21	04.05.2021	75	9	5	10	0.81	6	30	0.09	BDL	BDL	11.97	BDL	75	Satisfactory
22	07.05.2021	70	12	6	15	0.78	11	34	0.04	BDL	BDL	15.96	BDL	70	Satisfactory
23	10.05.2021	69	13	6	13	0.89	7	28	0.04	BDL	BDL	12.92	BDL	69	Satisfactory
24	13.05.2021	61	10	5	11	0.79	9	34	0.01	BDL	BDL	3.23	BDL	61	Satisfactory
Station:- Near the Landfill Site, Quepem Municipal Council															
City:- Quepem															
May-21															
25	04.05.2021	66	11	6	14	0.95	5	28	0.07	BDL	BDL	11.26	BDL	66	Satisfactory
26	07.05.2021	81	16	10	18	0.89	9	30	0.05	BDL	BDL	7.96	BDL	81	Satisfactory
27	10.05.2021	71	7	8	17	0.81	6	32	0.07	BDL	BDL	11.96	BDL	71	Satisfactory
28	13.05.2021	61	7	6	15	0.66	9	27	0.05	BDL	BDL	10.61	BDL	61	Satisfactory

Station:- Near Entrance Gate MSW Treatment Site, Cuchorem Municipal Council															City:- Cuchorem		
Sr. No	Date	Time Weighted Average (TWA)												AQI		AIR QLTY	
		24-Hr	24-Hr	24-Hr	24-Hr	8-Hr	8-Hr	24-Hr	24-Hr	8-Hr	24-Hr	24-Hr	24-Hr				
		Pollutants concentration in µg/m3 (except for CO which is in mg/m3 and BaP/As/Ni in ng/m3)															
		PM ₁₀	PM _{2.5}	SO ₂	NO ₂	CO	O ₃	NH ₃	Pb	C ₆ H ₆	BaP	Ni	As				
May-21																	
29	05.05.2021	69	14	8	16	0.68	8	31	0.03	BDL	BDL	10.21	BDL	69	Satisfactory		
30	08.05.2021	70	14	8	18	0.96	12	33	0.05	BDL	BDL	9.84	BDL	70	Satisfactory		
31	11.05.2021	67	15	8	15	0.66	8	34	0.02	BDL	BDL	9.81	BDL	67	Satisfactory		
32	14.05.2021	58	11	5	13	0.72	6	29	0.03	BDL	BDL	5.73	BDL	58	Satisfactory		
Station:- Near the Mix Solid Waste Dumps, Cuchorem Municipal Council																	
City:- Cuchorem																	
May 2021																	
33	05.05.2021	77	15	10	20	0.95	10	34	0.06	BDL	BDL	14.69	BDL	77	Satisfactory		
34	08.05.2021	73	12	6	16	0.97	11	31	0.07	BDL	BDL	12.33	BDL	73	Satisfactory		
35	11.05.2021	70	12	5	13	0.84	6	35	0.03	BDL	BDL	11.71	BDL	70	Satisfactory		
36	14.05.2021	60	10	6	14	0.78	10	29	0.02	BDL	BDL	9.33	BDL	60	Satisfactory		

Station:- At Entrance Near Security Cabin,Margao Municipal Council														City:- Margao												
Sr. No	Date	Time Weighted Average (TWA)												AQI			AIR QLTY									
		Pollutants concentration in µg/m3 (except for CO which is in mg/m3 and BaP/As/Ni in ng/m3)																								
		24-Hr	24-Hr	24-Hr	24-Hr	8-Hr	8-Hr	24-Hr	24-Hr	8-Hr	24-Hr	24-Hr	24-Hr	PM ₁₀	PM _{2.5}	SO ₂		NO ₂	CO	O ₃	NH ₃	Pb	C ₆ H ₆	BaP	Ni	As
		May-21																								
37	18.05.2021	59	8	5	13	0.57	7	31	0.03	BDL	BDL	BDL	10.93	BDL	59	BDL	Satisfactory									
38	21.05.2021	56	10	6	12	0.53	8	29	0.05	BDL	BDL	BDL	13.95	BDL	56	BDL	Satisfactory									
39	25.05.2021	58	11	8	18	0.77	9	31	0.06	BDL	BDL	BDL	13.57	BDL	58	BDL	Satisfactory									
40	28.05.2021	55	8	5	14	0.68	8	28	0.07	BDL	BDL	BDL	12.24	BDL	55	BDL	Satisfactory									
Station:- Near Administrative Building, Margao Municipal Council																			City:- Margao							
May-21																										
41	18.05.2021	55	8	6	12	0.53	6	31	0.05	BDL	BDL	BDL	11.76	BDL	55	BDL	Satisfactory									
42	21.05.2021	54	14	5	13	0.49	6	30	0.03	BDL	BDL	BDL	8.05	BDL	54	BDL	Satisfactory									
43	25.05.2021	58	11	6	15	0.86	10	30	0.05	BDL	BDL	BDL	9.16	BDL	58	BDL	Satisfactory									
44	28.05.2021	51	10	8	14	0.61	6	32	0.05	BDL	BDL	BDL	4.23	BDL	51	BDL	Satisfactory									
Station:- Near Old Waste Dump (Legacy Waste) Margao Municipal Council																			City:- Margao							
May-21																										
45	18.05.2021	57	11	5	13	0.65	7	28	0.02	BDL	BDL	BDL	10.74	BDL	57	BDL	Satisfactory									
46	21.05.2021	61	10	8	14	0.68	9	31	0.05	BDL	BDL	BDL	11.72	BDL	61	BDL	Satisfactory									
47	25.05.2021	61	11	8	17	0.89	9	28	0.03	BDL	BDL	BDL	12.18	BDL	61	BDL	Satisfactory									
48	28.05.2021	55	11	6	14	0.74	5	28	0.05	BDL	BDL	BDL	7.71	BDL	55	BDL	Satisfactory									

Station:- Near Entrance Gate of Proposed MRF Shed, Marmugoa Municipal Council														City:- Marmugoa			
Sr. No	Date	Time Weighted Average (TWA)												AQI		AIR QLTY	
		Pollutants concentration in µg/m3 (except for CO which is in mg/m3 and BaP/As/Ni in ng/m3)															
		PM ₁₀	PM _{2.5}	SO ₂	NO ₂	CO	O ₃	NH ₃	Pb	C ₆ H ₆	BaP	Ni	As				
		24-Hr	24-Hr	24-Hr	24-Hr	8-Hr	8-Hr	24-Hr	24-Hr	8-Hr	24-Hr	24-Hr	24-Hr				
		May-21															
49	22.05.2021	59	11	8	13	0.66	6	30	0.03	BDL	BDL	13.20	BDL	59	Satisfactory		
50	25.05.2021	61	13	10	16	0.72	11	33	0.02	BDL	BDL	13.63	BDL	61	Satisfactory		
51	28.05.2021	60	10	6	15	0.81	7	29	0.03	BDL	BDL	12.16	BDL	60	Satisfactory		
52	31.05.2021	59	10	5	12	0.56	5	30	0.08	BDL	BDL	12.65	BDL	59	Satisfactory		
Station:- Near Biogas Plant, Marmugoa Municipal Council																	
City:- Marmugoa																	
May-21																	
53	22.05.2021	56	10	10	15	0.78	9	32	0.03	BDL	BDL	5.22	BDL	56	Satisfactory		
54	25.05.2021	58	10	6	14	0.64	7	31	0.04	BDL	BDL	14.01	BDL	58	Satisfactory		
55	28.05.2021	59	12	8	17	0.88	6	29	0.02	BDL	BDL	9.32	BDL	59	Satisfactory		
56	31.05.2021	56	9	10	17	0.77	9	32	0.05	BDL	BDL	8.91	BDL	56	Satisfactory		
Station:- Opposite to Present Bailing Station, Marmugoa Municipal Council																	
City:- Marmugoa																	
May-21																	
57	22.05.2021	58	11	6	16	0.93	7	32	0.03	BDL	BDL	9.33	BDL	58	Satisfactory		
58	25.05.2021	57	9	5	13	0.77	9	27	0.07	BDL	BDL	10.23	BDL	57	Satisfactory		
59	28.05.2021	57	8	8	17	0.93	10	34	0.04	BDL	BDL	12.08	BDL	57	Satisfactory		
60	31.05.2021	57	10	5	18	0.72	8	29	0.04	BDL	BDL	9.82	BDL	57	Satisfactory		

STATION:- Near main gate of plant										CITY:-Valpoi Municipal					
Sr. No		Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)											AQI		AIR QLTY
	Param-eters	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	Ben-zopy-rene	Nickel (Ni)	Arse-nic (As)	Benzene	Ammo-nia	*CO	O3	Pb		
	Date	24-hr avg	24-hr avg	24-hr avg	24-hr avg						1-hr avg	1-hr avg	24-hr avg		
Apr-21															
1	21-04-21	64.30	12.89	4.80	11.10	BDL	9.84	BDL	BDL	33.6	0.68	9.15	0.03	64	Satisfactory
2	24-04-21	58.71	11.23	3.20	11.10	BDL	11.71	BDL	BDL	28.5	0.7	6.86	0.04	59	Satisfactory
3	27-04-21	47.97	9.98	4.80	10.80	BDL	15.92	BDL	BDL	29.7	0.8	5.72	0.02	48	Good
4	29-04-21	56.71	11.64	8.00	15.40	BDL	8.66	BDL	BDL	29.0	0.9	8	0.03	57	Satisfactory
STATION:- Behind plant (within premises)															
CITY:-Valpoi Municipal															
Apr-21															
1	21-04-21	84.26	14.97	6.40	14.10	BDL	10.71	BDL	BDL	31.7	0.81	12.58	0.02	84	Satisfactory
2	24-04-21	91.80	17.05	9.62	15.10	BDL	12.58	BDL	BDL	23.3	0.69	10.86	0.04	92	Satisfactory
3	27-04-21	75.12	14.97	6.40	14.00	BDL	11.39	BDL	BDL	38.3	0.93	8.58	0.02	75	Satisfactory
4	29-04-21	62.62	19.54	4.80	18.00	BDL	9.50	BDL	BDL	58.3	0.84	10.86	0.01	63	Satisfactory
STATION:- Near solid waste dump															
CITY:-Valpoi Municipal															
Apr-21															
1	21-04-21	92.50	16.63	9.62	18.30	BDL	8.83	BDL	BDL	23.3	0.82	10.86	0.01	93	Satisfactory
2	24-04-21	84.39	14.97	6.40	15.50	BDL	12.95	BDL	BDL	31.7	0.56	9.15	0.03	84	Satisfactory
3	27-04-21	74.29	11.64	8.00	13.50	BDL	12.29	BDL	BDL	23.3	0.72	8	0.03	74	Satisfactory
4	29-04-21	77.53	14.97	4.80	15.40	BDL	14.69	BDL	BDL	31.7	0.78	5.72	0.02	78	Satisfactory

STATION:- Near Office block of the plant												CITY:-Pernem Municipal											
Sr. No	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)												AQI			AIR QLTY						
		PM ₁₀	PM _{2.5}	SO ₂	NO ₂	Benzo- pyrene	Nickel (Ni)	Arsenic (As)	Ben- zene	Am- monia	*CO	O3	Pb										
		24-hr avg	24-hr avg	24-hr avg	24-hr avg						1-hr avg	1-hr avg	24- hr avg										
Apr-21																							
1	21-04-21	53.93	9.56	3.20	11.70	BDL	10.83	BDL	BDL	58.3	0.71	6.86	0.04	54	Satisfactory								
2	24-04-21	49.76	10.81	4.80	10.20	BDL	6.85	BDL	BDL	46.7	0.75	5.72	0.03	50	Good								
3	27-04-21	47.26	9.56	6.40	12.30	BDL	9.92	BDL	BDL	38.3	0.93	8	0.03	47	Good								
4	29-04-21	57.92	11.23	8.00	14.70	BDL	12.01	BDL	BDL	46.7	0.58	5.72	0.02	58	Satisfactory								
STATION:- Back side of plant (within Premises)												CITY:-Pernem Municipal											
Apr-21																							
1	21-04-21	53.96	10.4	4.80	9.10	BDL	8.84	BDL	BDL	30.00	0.56	5.72	0.04	54	Satisfactory								
2	24-04-21	44.14	9.56	6.40	11.80	BDL	9.34	BDL	BDL	28.26	0.55	5.15	0.03	44	Good								
3	27-04-21	55.28	9.98	4.80	14.20	BDL	8.89	BDL	BDL	28.26	0.6	6.29	0.02	55	Satisfactory								
4	29-04-21	59.19	10.40	6.40	14.40	BDL	11.26	BDL	BDL	28.33	0.64	5.15	0.01	59	Satisfactory								

STATION:- Near weigh bridge												CITY:- Bicholim Municipal													
Sr. No	Param-eters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)												AQI		AIR QLTY									
		PM ₁₀	PM _{2.5}	SO ₂	NO ₂	Benzo-pyrene	Nickel (Ni)	Arsenic (As)	Benzene	Am-monias	*CO	O3	Pb												
		24-hr avg	24-hr avg	24-hr avg	24-hr avg						1-hr avg	1-hr avg	24-hr avg												
Apr-21														CITY:- Bicholim Municipal											
1	21-04-21	88.81	14.6	6.40	10.90	BDL	12.08	BDL	BDL	33.9	0.67	6.29	0.02	89	Satisfactory										
2	24-04-21	82.34	15.39	9.62	15.40	BDL	7.96	BDL	BDL	34.0	0.85	8	0.04	82	Satisfactory										
3	27-04-21	85.61	19.96	11.02	16.40	BDL	10.33	BDL	BDL	30.7	0.54	9.72	0.01	86	Satisfactory										
4	29-04-21	76.97	20.79	6.40	15.40	BDL	15.49	BDL	BDL	30.6	0.85	10.86	0.03	77	Satisfactory										
STATION:- Near Solid waste dump														CITY:- Bicholim Municipal											
Apr-21														CITY:- Bicholim Municipal											
1	21-04-21	63.49	18.3	4.80	10.40	BDL	10.70	BDL	BDL	32.1	0.74	7.43	0.02	63	Satisfactory										
2	24-04-21	67.79	20.38	8.00	14.10	BDL	13.42	BDL	BDL	31.9	0.92	9.15	0.04	68	Satisfactory										
3	27-04-21	72.61	22.04	6.40	14.00	BDL	10.15	BDL	BDL	31.9	0.95	8	0.03	73	Satisfactory										
4	29-04-21	78.41	19.54	11.20	16.50	BDL	14.82	BDL	BDL	30.0	0.82	11.43	0.01	78	Satisfactory										
STATION:- Near Ground slab												CITY:- Bicholim Municipal													
Apr-21														CITY:- Bicholim Municipal											
1	21-04-21	82.94	17.47	8.00	13.60	BDL	11.56	BDL	BDL	31.9	0.61	10.86	0.03	83	Satisfactory										
2	24-04-21	77.27	18.71	4.80	13.80	BDL	15.08	BDL	BDL	27.9	0.6	9.72	0.02	77	Satisfactory										
3	27-04-21	81.14	16.63	9.62	16.50	BDL	12.42	BDL	BDL	29.7	0.89	10.86	0.02	81	Satisfactory										
4	29-04-21	87.99	18.3	4.80	13.10	BDL	11.89	BDL	BDL	27.8	0.81	9.15	0.01	88	Satisfactory										

STATION:- Near leachet tank														CITY:- Sankhali Municipal				
Sr. No	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)										AQI		AIR QLTY				
		PM ₁₀	PM _{2.5}	SO ₂	NO ₂	Ben-zopyrene	Nickel (Ni)	Arsenic (As)	Ben-zene	Ammo-nia	*CO	O3	Pb					
		24-hr avg	24-hr avg	24-hr avg	24-hr avg						1-hr avg	1-hr avg	24-hr avg					
Apr-21																		
1	21-04-21	54.68	9.15	3.20	9.40	BDL	9.47	BDL	BDL	31.7	0.81	5.72	0.81	55	Satisfactory			
2	24-04-21	62.82	10.4	6.40	13.50	BDL	5.72	BDL	BDL	29.9	0.84	6.86	0.84	63	Satisfactory			
3	27-04-21	57.74	9.15	4.80	10.20	BDL	11.34	BDL	BDL	32.2	0.9	5.72	0.90	58	Satisfactory			
4	29-04-21	68.55	12.06	9.62	13.70	BDL	10.73	BDL	BDL	29.7	0.93	8.58	0.93	69	Satisfactory			
STATION:- Near Compound wall																		
CITY:- Sankhali Municipal																		
Apr-21																		
1	21-04-21	75.38	13.72	8.00	15.20	BDL	5.48	BDL	BDL	33.8	0.85	8.58	0.03	75	Satisfactory			
2	24-04-21	69.26	15.39	4.80	14.90	BDL	8.31	BDL	BDL	27.3	0.66	5.72	0.03	69	Satisfactory			
3	27-04-21	63.14	12.06	8.00	15.60	BDL	8.57	BDL	BDL	30.8	0.79	7.43	0.02	63	Satisfactory			
4	29-04-21	73.80	13.72	4.80	12.30	BDL	9.34	BDL	BDL	30.2	0.71	9.15	0.01	74	Satisfactory			
STATION:- Near Security gate																		
CITY:- Sankhali Municipal																		
Apr-21																		
1	21-04-21	68.19	10.81	4.80	11.90	BDL	5.97	BDL	BDL	29.0	0.88	7.43	0.02	68	Satisfactory			
2	24-04-21	72.22	12.48	3.20	14.40	BDL	8.56	BDL	BDL	28.8	0.93	6.29	0.03	72	Satisfactory			
3	27-04-21	64.40	9.56	6.40	16.90	BDL	9.22	BDL	BDL	31.7	1	9.15	0.02	64	Satisfactory			
4	29-04-21	59.87	8.32	8.00	14.60	BDL	8.03	BDL	BDL	35.7	1	6.29	0.02	60	Satisfactory			

STATION:- Near solid waste dump (Right side of bailing machine)										CITY:- Ponda Municipal					
Sr. No	Parameters	Pollutants concentration in µg/m3 (except for *CO which is in mg/m3)										AQI		AIR QLTY	
		PM ₁₀	PM _{2.5}	SO ₂	NO ₂	Benzo-pyrene	Nickel (Ni)	Arsenic (As)	Ben-zene	Am-monia	*CO				O3
		24-hr avg	24-hr avg	24-hr avg	24-hr avg						1-hr avg	1-hr avg	24-hr avg		
May-21															
1	19-05-21	59.41	10.81	8.00	13.70	BDL	11.77	BDL	BDL	31.46	0.66	8.58	0.07	59	Satisfactory
2	22-05-21	59.73	8.73	9.62	13.00	BDL	8.60	BDL	BDL	30.63	0.72	7.43	0.09	60	Satisfactory
3	25-05-21	57.08	12.06	9.62	19.40	BDL	14.04	BDL	BDL	32.71	0.71	8.00	0.02	57	Satisfactory
4	28-05-21	58.05	10.81	6.40	16.10	BDL	2.24	BDL	BDL	32.64	0.84	8.58	0.03	58	Satisfactory
STATION:- Near main gate of plant															
CITY:- Ponda Municipal															
May-21															
1	19-05-21	60.29	9.98	4.80	14.60	BDL	12.46	BDL	BDL	31.32	0.72	6.29	0.05	60	Satisfactory
2	22-05-21	53.92	12.06	8.00	15.40	BDL	8.94	BDL	BDL	32.78	0.81	5.15	0.06	54	Satisfactory
3	25-05-21	59.53	9.98	8.00	17.70	BDL	11.81	BDL	BDL	31.18	0.79	9.72	0.02	60	Satisfactory
4	28-05-21	56.00	10.4	6.40	16.60	BDL	9.03	BDL	BDL	27.64	0.65	6.86	0.05	56	Satisfactory
STATION:- Front side Near bailing machine															
CITY:- Ponda Municipal															
May-21															
1	19-05-21	61.63	12.06	6.40	13.30	BDL	13.77	BDL	BDL	28.89	0.61	8.00	0.06	62	Satisfactory
2	22-05-21	56.68	9.15	4.80	12.20	BDL	7.97	BDL	BDL	28.19	0.66	5.72	0.06	57	Satisfactory
3	25-05-21	58.04	11.64	4.80	15.80	BDL	8.57	BDL	BDL	32.22	0.66	10.29	0.04	58	Satisfactory
4	28-05-21	56.92	11.23	8.00	15.60	BDL	2.22	BDL	BDL	32.71	0.84	7.43	0.05	57	Satisfactory

ANNEXURE XIV**GANESH VISARJAN DATA OF 2021****River Mandovi at Ferry Point 2021**

Sr. No	Parameters	Before Ganesh Visarjan	After Ganesh Visarjan	After 15 day of Ganesh visarjan	Permissible Limits
1	Date & Time	31-08-2021 & 12:45 pm	17-09-2021 & 01:00 pm	27-09-2021 & 12:45 pm	-
2	Weather	Raining	Raining	Clear	-
3	Colour	Colourfree	Colourfree	Colourfree	-
4	Odour	Odourfree	Odourfree	Odourfree	-
5	Human Activity	None	None	None	-
6	pH	7.15	7.16	7.32	6.5-8.5
7	Temperature °C	28	29	29	-
8	Cond µS/cm	13420.0	12710.0	29800.0	-
9	Turb NTU	4.99	9.32	5.58	30
10	DO mg/l	7.3	7.1	6.3	≥4.0
11	BOD mg/l	BDL	BDL	BDL	≤3.0
12	Chemical Oxygen Demand	-	8.0	-	-
13	Total Dissolved Solids mg/l	7157.0	7751.0	19370.0	-
14	Total Solids mg/l	7515.0	10383.0	24998.0	-
15	Chromium mg/l	0.038	0.036	0.034	-
16	Lead mg/l	BDL	0.074	0.056	-
17	Zinc mg/l	0.013	0.042	0.325	-
18	Copper mg/l	0.022	0.010	BDL	-

River Mapusa at Taricode- Mapusa 2021

Sr. No	Parameters	Before Ganesh Visarjan	After Ganesh Visarjan	After 15 day of Ganesh Visarjan	Permissible Limits
1	Date & Time	31-08-2021 & 11:30 am	17-09-2021 & 12:15 pm	27-09-2021 & 11:30 am	-
2	Weather	Clear	Clear	Clear	-
3	Colour	L.Turbid	Colourfree	L.Turbid	-
4	Odour	Odourfree	Odourfree	Odourfree	-
5	Human Activity	None	None	None	-
6	pH	6.45	6.82	6.13	6.5-8.5

7	Temperature °C	28	29	29	-
8	Cond µs/cm	297.5	350.0	264.90	-
9	Turb NTU	7.26	4.11	7.92	30
10	DO mg/l	2.7	3.8	1.8	≥4.0
11	BOD mg/l	4.4	3.6	5.2	≤3.0
12	COD mg/l	14.0	10.0	20.0	-
13	Total Dissolved Solids mg/l	206.0	211.0	159.0	-
14	Total Solids mg/l	419.0	251.0	174.0	-
15	Chromium mg/l	0.052	BDL	0.036	-
16	Lead mg/l	BDL	0.062	0.069	-
17	Zinc mg/l	0.020	0.016	0.309	-
18	Copper mg/l	0.031	BDL	0.029	-

Carambolim Lake at Carambolim 2021

Sr. No	Parameters	Before Ganesh Visarjan	After Ganesh Visarjan	After 15 day of Ganesh visarjan	Permissible Limits
1	Date & Time	31-08-2021 & 01:45 pm	20-09-2021 & 11:30 am	28-09-2021 & 11:15 am	-
2	Weather	Clear	Raining	Clear	-
3	Colour	Colourfree	Colourfree	Colourfree	-
4	Odour	Odourfree	Odourfree	Odourfree	-
5	Human Activity	None	None	None	-
6	pH	6.7	6.43	6.75	6.0-9.0
7	Temperature °C	28	28	28	-
8	Cond µs/cm	66.28	84.2	229.2	-
9	Turb NTU	3.0	2.21	5.36	-
10	DO mg/l	6.8	3.5	7.2	≥4.0
11	BOD mg/l	2.1	BDL	BDL	≤3.0
12	COD mg/l	16.0	6.0	10.0	-
13	Total Dissolved Solids mg/l	63.0	51.0	124.0	-
14	Total Solids mg/l	164.0	58.0	156.0	-
15	Chromium mg/l	0.079	0.040	0.014	-
16	Lead mg/l	0.04	0.094	BDL	-
17	Zinc mg/l	BDL	0.033	0.287	-
18	Copper mg/l	BDL	0.058	0.086	-

Carkhamba (Mansher) Panaji – St. Cruz road 2021

Sr. No	Parameters	Before Ganesh Visarjan	After Ganesh Visarjan	After 15 day of Ganesh visarjan	Permissible Limits
1	Date & Time	31-08-2021 & 12:15 pm	17-09-2021 & 12:45 pm	27-09-2021 & 12:30 pm	-
2	Weather	Raining	Raining	Clear	-
3	Colour	Colourfree	Colourfree	Colourfree	-
4	Odour	Odourfree	Odourfree	Odourfree	-
5	Human Activity	None	None	None	-
6	pH	7.05	7.15	7.04	6.5-8.5
7	Temperature °C	28	29	29	-
8	Cond µS/cm	15790.0	2338.0	13710.0	-
9	Turb NTU	3.49	4.10	3.92	30
10	DO mg/l	6.2	6.5	6.5	≥4.0
11	BOD mg/l	BDL	2.2	BDL	≤3.0
12	COD mg/l	-	8.0	-	-
13	Total Dissolved Solids mg/l	10187.0	1448.0	8550.0	-
14	Total Solids mg/l	11173.0	1657.0	12566.0	-
15	Chromium mg/l	0.048	BDL	BDL	-
16	Lead mg/l	0.078	0.072	BDL	-
17	Zinc mg/l	0.038	0.017	0.278	-
18	Copper mg/l	0.016	0.085	BDL	-

Near the bridge , Chereaband , Dandora, Cuncolim 2021

Sr. No	Parameters	Before Ganesh Visarjan	After Ganesh Visarjan	After 15 day of Ganesh Visarjan	Permissible Limits
1	Date & Time	31-08-2021 & 09:40 am	20-09-2021 & 09:45 am	28-09-2021 & 09:30 am	-
2	Weather	Cloudy	Clear	Cloudy	-
3	Colour	Colourfree	Colourfree	Greyish	-
4	Odour	Odourfree	Odourfree	Odourfree	-
5	Human Activity	None	None	None	-
6	pH	6.7	6.02	7.5	6.0-9.0
7	Temperature °C	27	27	27	-
8	Cond µs/cm	84.06	76.25	268.2	-
9	Turb NTU	9.1	4.31	7.71	-
10	DO mg/l	5.5	7	6.4	≥4.0
11	BOD mg/l	BDL	BDL	BDL	≤3.0
12	COD mg/l	4.0	14.0	BDL	-

13	Total Dissolved Solids mg/l	57.0	47.0	180.0	-
14	Total Solids mg/l	201.0	59.0	120.0	-
15	Chromium mg/l	0.033	0.017	0.058	-
16	Lead mg/l	0.099	0.067	0.057	-
17	Zinc mg/l	0.070	0.028	0.280	-
18	Copper mg/l	0.010	0.052	0.054	-

Near Railway bridge, Khandiwada , Curchorem 2021

Sr. No	Parameters	Before Ganesh Visarjan	After Ganesh Visarjan	After 15 day of Ganesh visarjan	Permissible Limits
1	Date & Time	30-08-2021 & 09:50 am	17-09-2021 & 09:45 am	27-09-2021 & 10:15 am	-
2	Weather	Cloudy	Clear	Clear	-
3	Colour	Colourfree	Colourfree	Colorfree	-
4	Odour	Odourfree	Odourfree	Odourfree	-
5	Human Activity	None	None	None	-
6	pH	6.72	6.83	6.58	6.0-9.0
7	Temperature °C	28	27	28	-
8	Cond µs/cm	86.8	79.82	53.7	-
9	Turb NTU	4.11	2.44	2.71	-
10	DO mg/l	8.4	6.9	7.8	≥4.0
11	BOD mg/l	BDL	BDL	BDL	≤3.0
12	COD mg/l	4.0	4.0	8.0	-
13	Total Dissolved Solids mg/l	58.0	51.0	32.0	-
14	Total Solids mg/l	151.0	65.0	55.0	-
15	Chromium mg/l	0.032	0.035	0.020	-
16	Lead mg/l	0.037	0.075	0.047	-
17	Zinc mg/l	BDL	0.014	0.341	-
18	Copper mg/l	BDL	0.041	BDL	-

Paraste, Harmalkar wada, Pernem 2021

Sr. No	Parameters	Before Ganesh Visarjan	After Ganesh Visarjan	After 15 day of Ganesh visarjan	Permissible Limits
1	Date & Time	31-08-2021 & 11:00 am	17-09-2021 & 11:10 am	27-09-2021 & 11:00 am	-
2	Weather	Clear	Raining	Clear	-
3	Colour	L.Turbid	Colourfree	Colorfree	-
4	Odour	Odourfree	Odourfree	Odourfree	-
5	Human Activity	None	None	None	-
6	pH	6.63	7.06	6.62	6.0-9.0

7	Temperature °C	28	28	29	-
8	Cond µs/cm	121.4	104.4	174.7	-
9	Turb NTU	18.24	3.86	5.65	-
10	DO mg/l	8.1	7.5	7.5	≥4.0
11	BOD mg/l	BDL	BDL	BDL	≤3.0
12	COD mg/l	8.0	6.0	10.0	-
13	Total Dissolved Solids mg/l	66.0	65.0	96.0	-
14	Total Solids mg/l	82.0	86.0	110.0	-
15	Chromium mg/l	0.041	BDL	BDL	-
16	Lead mg/l	0.043	BDL	BDL	-
17	Zinc mg/l	0.016	0.019	0.291	-
18	Copper mg/l	0.027	0.011	BDL	-

Daudkiwada River, Daudkiwada-velus, ward no. 1, Valpoi 2021

Sr. No	Parameters	Before Ganesh Visarjan	After Ganesh Visarjan	After 15 day of Ganesh visarjan	Permissible Limits
1	Date & Time	31-08-2021 & 12:15 pm	20-09-2021 & 12:30 pm	28-09-2021 & 12:30 pm	-
2	Weather	Clear	Raining	Clear	-
3	Colour	Colourfree	Colourfree	Colourfree	-
4	Odour	Odourfree	Odourfree	Odourfree	-
5	Human Activity	None	None	None	-
6	pH	6.8	6.69	6.71	6.0-9.0
7	Temperature °C	28	28	28	-
8	Cond µs/cm	138.2	51.4	77.22	-
9	Turb NTU	8.2	1.97	3.19	-
10	DO mg/l	7.6	8.0	9.0	≥4.0
11	BOD mg/l	BDL	2.0	BDL	≤3.0
12	COD mg/l	BDL	6.0	6.0	-
13	Total Dissolved Solids mg/l	93.0	33.0	43.0	-
14	Total Solids mg/l	355.0	40.0	75.0	-
15	Chromium mg/l	0.037	0.046	0.014	-
16	Lead mg/l	0.037	BDL	0.055	-
17	Zinc mg/l	BDL	0.015	0.282	-
18	Copper mg/l	BDL	0.057	0.103	-

Near bridge, Orcotto, ward no. 4, Sanguem 2021

Sr. No	Parameters	Before Ganesh Visarjan	After Ganesh Visarjan	After 15 day of Ganesh visarjan	Permissible Limits
1	Date & Time	30-08-2021 & 10:15 am	17-09-2021 & 10:20 am	27-09-2021 & 10:40 am	-
2	Weather	Cloudy	Clear	Clear	-
3	Colour	Colourfree	Colourfree	Colorfree	-
4	Odour	Odourfree	Odourfree	Odourfree	-
5	Human Activity	None	None	None	-
6	pH	6.94	7.07	6.62	6.0-9.0
7	Temperature °C	27	28	28	-
8	Cond µs/cm	66.86	61.21	69.61	-
9	Turb NTU	13.78	4.42	7.62	-
10	DO mg/l	7.0	6.7	7.3	≥4.0
11	BOD mg/l	BDL	BDL	BDL	≤3.0
12	COD mg/l	8.0	6.0	6.0	-
13	Total Dissolved Solids mg/l	44.0	35.0	41.0	-
14	Total Solids mg/l	245.0	44.0	84.0	-
15	Chromium mg/l	0.039	0.047	0.024	-
16	Lead mg/l	0.062	0.084	0.096	-
17	Zinc mg/l	0.060	BDL	0.293	-
18	Copper mg/l	0.011	BDL	0.038	-

Pimpolcotto, ward no. 2, Sanguem 2021

Sr. No	Parameters	Before Ganesh Visarjan	After Ganesh Visarjan	After 15 day of Ganesh visarjan	Permissible Limits
1	Date & Time	30-08-2021 & 10:40 am	17-09-2021 & 11:00 am	27-09-2021 & 11:15 am	-
2	Weather	Cloudy	Clear	Clear	-
3	Colour	Colourfree	Colourfree	Colorfree	-
4	Odour	Odourfree	Odourfree	Odourfree	-
5	Human Activity	None	None	None	-
6	pH	6.87	6.89	6.87	6.0-9.0
7	Temperature °C	27	28	28	-
8	Cond µs/cm	54.12	61.69	53.63	-
9	Turb NTU	3.41	3.31	3.43	-
10	DO mg/l	8.2	6.8	7.9	≥4.0
11	BOD mg/l	BDL	BDL	BDL	≤3.0
12	COD mg/l	8.0	8.0	8.0	-

13	Total Dissolved Solids mg/l	34.0	38.0	33.0	-
14	Total Solids mg/l	543.0	47.0	52.0	-
15	Chromium mg/l	0.044	0.018	BDL	-
16	Lead mg/l	0.075	0.088	0.080	-
17	Zinc mg/l	0.016	0.031	0.226	-
18	Copper mg/l	BDL	BDL	BDL	-

Panefond River, Kindlebag, ward no. 5, Canacona 2021

Sr. No	Parameters	Before Ganesh Visarjan	After Ganesh Visarjan	After 15 day of Ganesh visarjan	Permissible Limits
1	Date & Time	31-08-2021 & 10:45 am	20-09-2021 & 10:40 am	28-09-2021 & 10:50 am	-
2	Weather	Cloudy	Clear	Drizzling	-
3	Colour	Colourfree	Colourfree	Colorfree	-
4	Odour	Odourfree	Odourfree	Odourfree	-
5	Human Activity	None	None	None	-
6	pH	6.5	7.41	7.14	6.0-9.0
7	Temperature °C	27.5	27.5	27	-
8	Cond µs/cm	1452.0	5630.0	5138.0	-
9	Turb NTU	5.89	2.75	4.29	-
10	DO mg/l	8.4	7.8	7.2	≥4.0
11	BOD mg/l	BDL	BDL	BDL	≤3.0
12	COD mg/l	6.00	12.0	-	-
13	Total Dissolved Solids mg/l	987.0	11.0	3545.0	-
14	Total Solids mg/l	1012.0	17.0	4137.0	-
15	Chromium mg/l	0.040	0.024	0.023	-
16	Lead mg/l	0.081	0.080	0.043	-
17	Zinc mg/l	BDL	0.018	0.323	-
18	Copper mg/l	BDL	0.033	0.089	-

Baina Beach, Vasco 2021

Sr. No	Parameters	Before Ganesh Visarjan	After Ganesh Visarjan	After 15 day of Ganesh visarjan	Permissible Limits
1	Date & Time	31-08-2021 & 12:30 pm	20-09-2021 & 12:45 pm	28-09-2021 & 01:00 pm	-
2	Weather	Clear	Clear	Cloudy	-
3	Colour	Colourfree	Colourfree	Colorfree	-
4	Odour	Odourfree	Odourfree	Odourfree	-
5	Human Activity	None	None	None	-
6	pH	7.09	6.78	7.4	6.5-8.5

7	Temperature °C	28	28	28	-
8	Cond µs/cm	47110.0	42960.0	50860.0	-
9	Turb NTU	21.3	6.32	13.48	30
10	DO mg/l	6.9	7.0	6.8	≥4.0
11	BOD mg/l	BDL	BDL	BDL	≤3.0
13	Total Dissolved Solids mg/l	32035.0	25642.0	35601.0	-
14	Total Solids mg/l	37579.0	26398.0	78132.0	-
15	Chromium mg/l	0.065	0.088	0.018	-
16	Lead mg/l	0.097	0.074	0.083	-
17	Zinc mg/l	0.079	0.100	0.282	-
18	Copper mg/l	0.037	0.048	0.091	-

ANNEXURE XV

GOA STATE POLLUTION CONTROL BOARD गोंय राज्य प्रदूषण नियंत्रण मंडळ

(An ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2007 Certified Board)

Phone Nos. : 0832-2407700
2407701, 2407702
2407703

Tel/Fax No. : 0832-2407700



Email Ids:
Chairman, GSPCB: chairman-gspcb.goa@nic.in
Member Secretary GSPCB: ms-gspcb.goa@nic.in
Environment Engineer, GSPCB: ee-gspcb.goa@nic.in
Scientist, GSPCB: scientist-gspcb.goa@nic.in
Office: goapcb@gspcb.in

No. 10/1/21-PCB/Tech/ 7952

Dated: 30.07.2021

To,

Y. P Yadav,
Additional Director and Head,
Waste Management –I Division
Central Pollution Control Board
Parivesh Bhavan, East Arjun Nagar, Delhi -110032

Sub: Annual Report information on Biomedical Waste Management for the year 2020

Ref: CPCB letter no. B-31011/BMW (2.25)/2021/WMD-I/2452 dated 21/06/2021

Sir,

With regards to the above mentioned subject matter, please find attached herewith the Annual Report for the Biomedical Waste Management for the year 2020 for the State of Goa.

Yours faithfully,

Dr. Shamila Monteiro
Member Secretary

Encl: As above

Copy to:

1. Office file
2. Guard File

“Form IVA”
[See rule 13(2)]

Calendar Year: 2020

Part-1 (Summary of Information)

(1) Name of the Organization: GOA STATE POLLUTION CONTROL BOARD

(2) Name of the Nodal Officer with contact telephone number and e-mail:

Dr. Shamila Monteiro (Member Secretary, GSPCB) Contact no. 08322407700 email: ms-gspcb.goa@nic.in

(3) Total no. of Health Care Facilities / Occupiers:

i. Bedded Hospitals and Nursing Homes (bedded): **148 nos**

ii. Clinics, dispensaries: **462 nos**

iii. Veterinary institutions: **43 nos**

iv. Animal houses: **NIL**

v. Pathological laboratories: **101 nos**

vi. Blood banks: **1 (in Goa Medical College and Hospital)**

vii. Clinical establishment: **NIL**

viii. Research Institutions: **9 nos**

ix. AYUSH: **15 nos**

(4) Total no. of beds: 5051

- (5) Status of authorisation
- (i) Total number of Occupiers applied for authorisation: **401 nos**
 - (ii) Total number of Occupiers granted authorisation: **139 nos**
 - (iii) Total number of application under consideration: **177 nos (pending for fees payment, incomplete applications, clarification / compliance sought)**
 - (iv) Total number of applications rejected: **85**
 - (v) Total number of Occupiers in operation without applying for authorisation: **For the year 2020, the Board had identified and issued showcause notices to 419 health care facilities. The GSPCB is in process of identifying additional HCFs operating without authorisation under the BMW Rules.**
- (6) Quantity of Bio-medical Waste Generation (in kg/day):
- (Please enclose District Wise Bio-medical Waste Generation as per Part-2)
- (i) Bio-medical waste generation by bedded hospitals (in kg/day): **1141.746 kg/day**
 - (ii) Bio-medical waste generation by non-bedded hospitals (in kg/day): **130.93 Kg/day**
 - (iii) Any other: **NIL**
- (7) Bio-medical waste treatment and disposal
- (a) By Captive bio-medical waste treatment and disposal by Health Care Facilities (please enclose details as per Part-3)
 - (i) Number of Health Care Facilities having captive treatment and Disposal facilities: **165 nos**
 - (ii) Total bio-medical waste treated and disposed by captive treatment facilities in kg/day: **1272.68 Kg/day**
 - (b) Bio-medical waste treatment and disposal by Common Bio Medical Waste Treatment Facilities (please enclose details as per Part 4):

- (i) Number of Common Bio Medical Waste Treatment Facilities in Operation:
State of Goa presently doesn't have CBMWTF. The setting up of a CBMWTF is in the final stages of completion and expected operation from August 2021. As a temporary measure till the CBMWTF is made operational, the incinerator facility (capacity: 100 kgs/hr) installed at the M/s Goa Medical College and Hospital, Bambolim is utilised for the disposal of yellow category (incinerable waste) generated in the State. Also the autoclave facility at M/s Manipal Hospital, Donapaula is utilised for the pre-treatment of the applicable biomedical waste categories before the waste is sent for disposal/recycling.
 - (ii) Number of Common Bio Medical Waste Treatment Facilities under construction:
The Goa Waste Management Corporation (GWMC) has been granted Environmental Clearance for the setting up of the CBMWTF at Kundaim Industrial Estate. M/s Biotic Waste Solutions Pvt Ltd. has been selected for "Design Built Operate and Transfer a CBMWTF for a period of 20 years. The setting up of a CBMWTF is in the final stages of completion and expected operation from August 2021. The said facility has obtained consent to operate from the GSPCB under the Air Act and the Water Act and also obtained authorisation under the Biomedical waste Management Rules.
 - (iii) Total bio-medical waste treated in kg/day: State of Goa doesn't presently have CBMWTF.
 - (iii) Total treated bio-medical waste disposed through authorised recyclers (in Kg/day): State of Goa doesn't have CBMWTF
- (8) Total no. of violation by:
- (i) Health Care Facilities (bedded and non-bedded):
 - a) Show cause notice were issued by Board to 419 HCFs for operating without valid authorization of the board under BMW rules in 2020 based on the BMW details collected by the GSPCB from local bodies.
 - b) Goa state Pollution Control Board has proposed to issue showcause notice to HCFs for not submitting annual reports within the stipulated time frame in the rules.
 - (ii) Common Bio Medical Waste Treatment Facilities: NIL
 - (iii) Others (please specify): NIL
- (9) Show cause notices/directions issued to defaulters:

- a) Show cause notice were issued by Board to approx 419 nos HCFs for operating without valid authorization of the board under BMW rules in 2020 based on the information submitted by the various local bodies in the state.
- b) Goa state Pollution Control Board has proposed to issue showcause notice to HCFs for not submitting annual reports within the stipulated time frame in the rules.

(ii) Common Bio Medical Waste Treatment Facilities: NIL

(iii) Others: NIL

(10) Any other relevant information:

(i) Number of workshops / trainings conducted during the year: The state of Goa has organised training programs for major hospitals in the state through the upcoming operator of the CBMWTF (Biotic Solutions)

(ii) Number of occupiers installed liquid waste treatment facility: 16nos

(iii) Number of captive incinerators complying to the norms: Goa Medical College and Hospital(GMCH) has upgraded the existing Incinerator and the same is as per the norms of the Biomedical Waste Management Rules.

(iv) Number of occupiers organised trainings: 766 nos

(v) Number of occupiers constituted Bio-medical Waste Management Committees: 97 nos

(vi) Number of occupiers submitted Annual Report for the previous calendar year: 386 nos

(vii) Number of occupiers practising pre-treatment of lab microbiology and Bio-technology waste: 16 nos

(viii) Number of Common Bio Medical Waste Treatment Facilities that have installed Continuous Online Emission Monitoring Systems: 1 no.
(Captive incinerator installed at the Goa Medical College and Hospital, Bambolim has installed continuous online emission monitoring system.)

PART 2: District wise biomedical waste generation for the calendar year 2020

S. No	Name of the State / Union Territory	Name of the District	Bio-medical Waste Generation (in Kg/day)	Existing Total bio-medical waste treatment capacity (both captive and CBMWTF) in kg/day					
				Equipment					
				Incinerator:	Autoclave:	Deep Burial:	Microwave:	Shredder:	Needle Destroyer:
1	GOA	NORTH	1027.172	1000	1130	275	0	0	425
		SOUTH	235.666	0	480	187	0	0	255
		TOTAL	1262.838	1000	1610	462	0	0	680

Sl No	Name and address of the Health Care Facility	District	Remarks- Bedded/non-bedded	Quantity of Bio-medical Waste Generation (in kg/day)				Total Installed Treatment Capacity in kg/day						Total biomedical waste treated and disposed by Health Care Facilities in kg/day					BMW committed for consolidated treatment	ETP treated
				Yellow	Red	Blue	White	Total biomedical waste generated (in kg/day)	Incinerator	Autoclave (15-40lit) * (1.5*1.5)	Deep Burial (1.5*1.5)	encapsulated (1.2x1.2x1.5)	Any other	Incinerator	Autoclave	Deep Burial	Any Other			
1	Dr Ashok Varmu Vaze Clinic, 188/77, Near Govt primary school, near Ponda, Ponda, North Goa	North Goa	Non bedded	0.007	0.000	0.000	0.033		0.039	0	0	0	0	0.000	0.007		Yes	4	Yes	
2	Healthway Hospitals Pvt Ltd, Plot No 132/1, Els village, Kadamba Phasur, Goa	North Goa	Bedded	8.101	5.847	2.322	0.052	16.322	0.007	0	1	1	0	8.169	8.101					
3	DR. KUDALGUR'S DENTAL CLINIC, 10/1, KUDALGUR, KUDALGUR, PERNEM - GOA	North Goa	Non bedded	0.003	0.003	0.000	0.001	0.007		0	1	1	0	0.003	0.003		No	1	No	
4	Nagaraj's Clinic Hospital, Margao-Goa, 10/1, FRANCIS DE SOUZA EYE CLINIC, B-5/9, CAMPAL TRADE CENTRE, BEHIND MILITARY HOSPITAL, CAMPAL , PANAJI- GOA.	South Goa	Bedded	1.945	1.093	0.678	0.082	3.798	0.001	0	1	0	0	0.001	0.001		Yes	0	No	
5	Vasaveja Hospital, 2nd floor, Leela Plaza, near Bank of Baroda, Swatantra Path, Vasco Da Gama, Goa	North Goa	Non bedded	0.001	0.001	0.000	0.000	0.001		0	1	0	0	0.189	1.421	GHMS	No	4	No	
6	Goa Glass Fibre Ltd, Colvale, Bardez-Goa	South Goa	Bedded	1.421	0.128	0.060	0.008	1.617		0	0	0	0	0.008	0.006	GHMS	Yes	1	No	
7	Dr Baveji's Family Welfare Centre, Near Church, Railway Station, Church, North Goa	North Goa	Non bedded	0.006	0.007	0.001	0.000	0.013		0	0	0	0	0.492	0.984		No	1	No	
8	Dr. Jankar Dr. Sousa Clinic, B-5/9, CAMPAL TRADE CENTRE, BEHIND MILITARY HOSPITAL, CAMPAL, PANAJI-Goa	South Goa	Bedded	0.984	0.295	0.197	0.020	1.495		0	0	0	0	0.000	0.000		No	0	No	
9	M/S CG Power & Industrial Solutions Limited Thivim IDC	North Goa	Non bedded	0.000	0.000	0.000	0.000	0.001		0	0	0	0	0.000	0.000		No	3	No	
10	M/S CG Power & Industrial Solutions Limited Thivim IDC	North Goa	Non bedded	0.000	0.000	0.000	0.000	0.000		0	0	0	0	0.000	0.000		No	2	Yes	
11	M/S CG Power & Industrial Solutions Limited S14,15 Colvale IDC	North Goa	Non bedded	0.000	0.000	0.000	0.000	0.000		0	2	0	0	0.042	7.541		No	3	No	
12	Waste India LTD, Usgao Goa, Plot No 394-297, Usgao Industrial Estate, Ponda -Goa	North Goa	Non bedded	7.541	0.042	0.000	0.017	7.600		0	1	1	0	0.000	0.010		No			
13	Dr. Jankar Dr. Sousa Clinic, B-5/9, CAMPAL TRADE CENTRE, BEHIND MILITARY HOSPITAL, CAMPAL, PANAJI-Goa	North Goa	Non bedded	0.010	0.050	0.010	0.020	0.090		0	0	0	0	0.005	0.000		Yes	1	No	
14	Veterinary Dispensary Navelim Sakere -Goa	South Goa	Non bedded	0.000	0.000	0.005	0.003	0.008		0	0	0	0	0.000	0.000		No	0	No	
15	Dr. Prokar Ponda	North Goa	Non bedded	0.000	0.000	0.000	0.000	0.000		0	0	0	0	0.002	0.000		No	1	No	
16	DR. RAMESH BORKAR MEMORIAL BORKAR POLYCLINIC, NEAR PRINCE KATTA, GANDHIMARKET RD, MARGAO -GOA	South Goa	Non bedded	0.000	0.001	0.001	0.001	0.003								No				

17	Central Diagnostic Centre Mapusa	North Goa	Non bedded	0	0.004	0.008	0.000	0.000	0.001	0.014	0	1	0	0	0	0	0.008	0.004	1	No
18	Sanoji Synthelabo (India) Pvt. Ltd. Plot L-121, Phase III, Verna Industrial Estate, Verna	South Goa	Non bedded	0	1.568	0.000	0.000	0.000	0.000	1.568	0	1	0	0	0	0	0.000	1.568	0	No
19	St. Anthony's Hospital and Research Centre, Anjuna	North Goa	Bedded	25	0.328	0.101	0.040	0.020	0.000	0.489	0	1	1	1	0	0	0.052	0.025	1	No
20	CAEIRO BICPOLIN POLYCLINIC HOSPITAL	North Goa	Bedded	17	0.025	0.027	0.023	0.004	0.001	0.081	0	0	0	0	0	0	0.027	0.003	0	No
21	Veterinary Dispensary Vilpali	North Goa	Non bedded	0	0.003	0.000	0.027	0.005	0.000	0.036	0	0	0	0	0	0	0.000	0.000	0	No
22	One Clinic Mapolda	South Goa	Non bedded	0	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0	0	0	0	4.028	4.236	4	No
23	Silgoonkar Medical Research Centre, Vasco	South Goa	Bedded	86	4.336	2.801	1.238	0.071	0.000	8.445	0	1	0	0	0	0	0.000	0.000	0	No
24	One Clinic Colva	South Goa	Non bedded	0	0.000	0.000	0.000	0.000	0.000	0.000	0	1	1	1	0	0	0.096	0.115	5	No
25	Aster Hospital Emvaka Limited, Monte III, Near Holy Spirit, Margao - Goa	South Goa	Bedded	35	0.115	0.055	0.041	0.016	0.000	0.227	0	0	0	0	0	0	17.039	34.464	20	No
26	ESI Hospara Margao	South Goa	Bedded	210	34.464	13.217	3.822	0.985	0.000	52.468	0	1	0	0	0	0	0.628	0.273	2	No
27	Pat Hospital Vasco	South Goa	Bedded	20	0.273	0.492	0.137	0.137	0.137	1.038	0	1	0	0	0	0	0.212	0.511	4	No
28	DR. MOPKANE ANKUR NURSING HOME, ST. Xavier College, Mapusa - Goa	North Goa	Bedded	9	0.511	0.202	0.010	0.011	0.000	0.734	0	0	0	0	0	0	0.096	0.191	1	No
29	Adarsh Family Hospital Salma Valley, Zalgaon, Margao, Goa.	South Goa	Bedded	8	0.191	0.096	0.000	0.082	0.000	0.369	0	0	0	0	0	0	0.022	0.027	1	No
30	Kulkarni Eye Clinic and Hospital, Margao Goa.	South Goa	Bedded	6	0.027	0.022	0.000	0.003	0.000	0.052	0	1	0	0	0	0	0.001	0.000	23	No
31	Toungtam India Private Limited Plot A-1, Phase I A Verna Industrial Estate Salcete-Goa	South Goa	Non bedded	0	0.000	0.001	0.000	0.000	0.000	0.001	0	1	1	0	0	0	0.007	4.753	1	Yes
32	Sanoji India Ltd.GIICC. PLOT NO. L-121, PHASE III, VERNA IND. ESTATE, VERNA-GOA.	South Goa	Non bedded	0	4.753	0.003	0.003	0.000	0.000	4.760	0	1	1	1	0	0	0.000	0.318	1	Yes
33	Piper Limited PLOT NO.L137, PHASE II'-A, VERNA INDUSTRIAL ESTATE, VERNA GOA - 403722	South Goa	Non bedded	0	0.318	0.000	0.000	0.000	0.000	0.318	0	0	0	0	0	0	0.087	0.688	0	No
34	Veterinary Dispensary Mandrem Limited Plot NO. A3 TO A/6, PHASE I - A, VERNA IND. ESTATE, VERNA, SALCETE - GOA.	North Goa	Non bedded	0	0.068	0.033	0.055	0.011	0.000	0.167	0	0	0	0	0	0	0.009	0.602	50	No
35	Siemens Ltd EA PLOT NO.L6, VERNA INDUSTRIAL ESTATE, VERNA, SALCETE - GOA	South Goa	Non bedded	0	0.002	0.009	0.000	0.000	0.000	0.011	0	1	1	0	0	0	0.006	0.017	2	No
36	Siemens Ltd EA PLOT NO.L6, VERNA INDUSTRIAL ESTATE, VERNA, SALCETE - GOA	South Goa	Non bedded	0	0.007	0.006	0.000	0.000	0.000	0.013	0	1	1	0	0	0	0.000	0.017	1	No

Sr	Name of the Institution	Address	State	Bedded	No. of beds	Year started	Year closed	Year opened	Year closed	Year opened	Year closed	Year opened	Year closed
37	Abbott India Ltd., L/18/19 Verna Goa Verna Salcette-603722	South Goa	Non bedded	0	1,997	0,000	0,000	1,997	0	0	0	1,997	0
38	M/S Priekar Surgical, Maternity & Child Care Hospital, Mangeshi Ponda	North Goa	Bedded	9	0,410	0,068	0,011	0,571	0	0	0	0,410	0
39	Dr. Lawendes Hospital & Medical Research Center Aquem Margao Goa	South Goa	Bedded	25	0,765	0,295	0,199	1,363	0	1	0	0,008	0
40	Zulu Agro Chemicals Limited Kisan Bhavan, Zuariagar, Goa	South Goa	Non bedded	0	0,014	0,006	0,001	0,022	0	1	0	0,014	0
41	Diseases Investigation Unit, Dept. of Animal Husbandry & Veterinary Services, Tonca Caranzalem -Goa	North Goa	Non bedded	0	0,014	0,055	0,005	0,075	0	1	0	0,464	0
42	Government Veterinary Hospital Tonca	North Goa	Non bedded	0	0,082	0,137	0,328	0,615	0	3	1	0,104	0
43	Royal Hospital,Auem Margao - Goa	South Goa	Bedded	48	0,087	0,077	0,027	0,219	0	0	0	0,005	0
44	Dr. Anula Ugabolkar (Dental Clinic),located at 013A/014A, Garden Centre, Mausau, Bardez - Goa	North Goa	Non bedded	0	0,003	0,003	0,001	0,010	0	1	0	0,046	0
45	INFANT JESUS NURSING HOME,located at Agalli Gopoli, Margao - Goa	South Goa	Bedded	10	0,533	0,046	0,000	0,382	0	0	0	0,000	0
46	M/S United Spirits Ltd.,Ponda Goa	North Goa	Non bedded	0	0,042	0,000	0,000	0,042	0	1	1	2,231	0
47	DR A C BORKAR MEMORIAL BORKAR ROAD HONEL, Margao - Goa	South Goa	Bedded	23	2,251	1,216	0,486	3,999	0	1	1	0,031	0
48	CORSELA AFONSO HOSPITAL,Breaulim Salcote,-Goa	South Goa	Bedded	10	0,026	0,030	0,001	0,060	0	0	0	0,002	0
49	Oscar Fine Chemicals (India) Private Limited, Crim., Tiwadi	North Goa	Non bedded	0	0,002	0,0030	0,000	0,006	0	0	0	0,273	0
50	ADHAR HOSPITAL,located at C/o, Rameshwar Prabhakar Patelkar, Parvati Nagar, Kulan Sanjay, Bicholim, Goa	North Goa	Bedded	10	0,273	0,137	0,137	0,574	0	0	0	1,308	0
51	SHEDEKAR NURSING HOME-VV, Railway Station Curchorem, Goa.	South Goa	Bedded	12	0,590	0,984	0,525	2,590	0	1	0	0,189	0
52	Pimpri Pharmacy located at Central Police Post floor, La Campala Colony, Near Magon's Supercentre, Miramar, Panaji, Goa	North Goa	Non bedded	0	0,396	0,169	0,019	0,590	0	1	1	0,014	0
53	DEVAKI,Opp. Valpoi Bus stand, Valpoi, Sattari - Goa	North Goa	Non bedded	0	0,014	0,011	0,003	0,030	0	0	0	0,396	0
54	PLATICARE HOSPITAL,Tisk, Ponda - Goa	North Goa	Bedded	16	6,831	0,431	0,205	7,237	0	0	0	0,006	0
55	Medical Clinic, Lotus Apartment, Shree Z. F. & Gomes road Indra Thakur	South Goa	Non bedded	0	0,004	0,004	0,002	0,010	0	0	0	0,000	0

56	A V DA COSTA MEMORIAL CLINIC	South Goa	Bedded	10	0.497	0.049	0.022	0.009	0.577		0	1	1	1	0	0.071	0.497		encap-2.5	No	3	No
57	Chaitany Hospital at H No 20/1113, Vaant Nagar, Phase II, Maraklem, Sanikelli-Goa	North Goa	Bedded	10	0.984	0.109	0.090	0.033	1.126		0	2	1	1	0	0.109	0.984			Yes	1	No
58	KANAT NURSING HOME, Wadkudem Upper Bazarar, Ponda -Goa	North Goa	Bedded	25	0.656	0.642	0.158	0.066	1.522		0	1	0	0	0	0.801	0.656			No	1	No
59	DR. DUKLES HOSPITAL & RESEARCH CENTRE Ximre Candolim Bardez-Goa.	North Goa	Bedded	18	0.328	0.295	0.036	0.033	0.691		0	0	0	0	0	0.331	0.328			No	2	No
60	SAVAKAR HOSPITAL & DIAGNOSTIC CENTRE, Ponda, Goa - 403401	North Goa	Bedded	41	0.301	0.656	1.175	0.137	2.268		0	0	0	0	0	1.831	0.301			No	1	No
61	Shri Demodar Nursing Home, Goa - Paroda, P.O. Paroda Quesm Goa. 403705	South Goa	bedded	12	0.284	0.044	0.000	0.011	0.339		0	1	0	0	1	0.044	0.284			No	2	No
62	URBAN HEALTH CENTRE MARGAO,Saleor Goa	South Goa	Non bedded	0	0.008	0.857	0.431	0.011	1.309		0	1	1	1	0	0.581	0.378			No	1	No
63	MAMATHE NURSING HOME,Sankab Garden, SH-1, Vashi Bicollim - Goa,	North Goa	Bedded	10	0.378	0.428	0.153	0.049	1.007		0	1	1	0	0	0.025	0.027			Yes	1	No
64	NOBLE HOSPITAL,Near St. Joseph Chapel, Borda, Margao - Goa	South Goa	Bedded	16	0.027	0.016	0.008	0.007	0.059		0	1	1	0	0	0.094	0.009			No	4	No
65	Usganekar Children Hospital and Clinic,Mr. Gine Alpha, Ponda Goa	North Goa	Bedded	19	0.009	0.062	0.032	0.005	0.108		0	0	0	0	0	0.029	0.065			No	1	No
66	Naytavan Nursing Home,Home located Opposite Electricity Department Harvel, Curo, Ponda - Goa	North Goa	Bedded	10	0.065	0.016	0.013	0.002	0.097		0	1	1	1	0	0.020	0.027			No	0	No
67	LIFE CARE PATHO LABH, no. 805/A, Koiwara, Opp. Agricocho Wine Stores, Agasalim, Itasir, Goa	North Goa	Non bedded	0	0.027	0.090	0.000	0.025	0.082		0	1	0	0	0	5.948	4.781			No	4	Yes
68	Goa Dental College & hospital, Bambolim, Goa	North Goa	Non bedded	0	4.781	3.352	2.596	0.066	10.795		0	1	1	0	0	0.019	0.027			Yes	1	No
69	Dr. Ghanshyam V. Marcelkar, Marcol, Ponda	North Goa	Non bedded	0	0.027	0.019	0.000	0.001	0.048		0	1	1	1	0	0.016	1.770			No	2	No
70	M/S Radiance Diagnostics Manasa,located at E- Bodhan, Shop no- EG1 , Ground Floor, Opposite Badgethwar Temple, Mapusa, Goa .	North Goa	Non bedded	0	1.770	0.016	0.000	0.005	1.792		0	1	1	1	0	0.016	2.026			No	3	No
71	RADIANCE DIAGNOSTICS Donaulpaia	North Goa	Non bedded	0	2.036	0.016	0.000	0.005	2.057		0	1	0	0	0	0.150	0.100			No	1	No
72	DR WALVES DIAGNOSTIC CENTRE & POLYCLINIC 1st floor Trunk Apartments Markets Bechlim -Goa.	North Goa	Non bedded	0	0.100	0.15	0.000	0.010	0.260		0	0	0	0	0	0.025	0.030			No	1	No
73	DR. TATVE'S CLINIC,located at Lifer-11C, Near Bank of Maharashtra, Journalist Colony, And Soli Service, Alto Porvorim-Salvora Goa	North Goa	Non bedded	0	0.030	0.019	0.005	0.011	0.066									JMD Hospital	No			

74	M/s. Cipla Biotech Private Limited, Verna Industrial Estate	South Goa	Non bedded	0	1.711	0.000	0.000	0.000	0.000	0	0	0	0	0	0	0	0.000	1.711		No	2	No
75	M/s. Cipla Limited, Plot No 139-L-146, Verna Industrial Estate, Salcete - Goa	South Goa	Non bedded	0	4.798	0.000	0.000	0.000	0.000	0	0	0	0	0	0	0	0.000	4.798		No	4	No
76	M/s. Cipla Limited, Verna IE, Plot S 102-105	South Goa	Non bedded	0	4.798	0.000	0.000	0.000	0.000	0	1	0	0	0	0	0	0.000	2.529		No	7	Yes
77	Cipla Limited, Verna IE, M01-63	South Goa	Non bedded	0	1.616	0.000	0.000	0.000	0.000	0	0	0	0	0	0	0	0.000	1.616		No	4	No
78	Dr. A. Menezes Nursing Home, Margao, Salcete	South Goa	Bedded	20	0.287	0.888	0.342	0.060	1.577	0	0	0	0	0	0	0	1.220	0.287		No	5	No
79	REKAR HOSPITAL AND RESEARCH CENTRE, Goa National Highway Orelha & Hargal Perim - Goa	North Goa	Bedded	16	0.197	0.721	0.492	0.459	1.869	0	1	1	1	0	0	0	1.215	0.197		No	1	No
80	Employees' State Insurance esplanade, Vasco	South Goa	Non bedded	0	0.033	0.019	0.014	0.005	0.071	0	0	0	0	0	0	0	0.033	0.033		No	1	No
81	Dr. Ganesh Memorial Clinic located at Near Joao Fernandes Pharmacy, Mapusa - Goa	North Goa	Non bedded	0	0.019	0.011	0.000	0.003	0.033	0	1	1	1	0	0	0	0.011	0.019		Yes	3	No
82	SIEMENS LTD. M2, Plot No L-6, Verna Industrial Estate, Verna Salcete, Goa...	South Goa	Non bedded	0	0.002	0.0014	0.000	0.000	0.004	0	1	0	0	0	0	0	0.002	0.002		No	1	No
83	PHC Mayem, Bicholim - Goa	North Goa	Non bedded	0	0.645	0.432	0.105	0.010	1.192	0	1	1	1	0	0	0	0.337	0.645		No	4	No
84	Dr. Gonsalves Prabhu's Clinic, located at Near J. S. Fernandes Colony, Porvorim - Goa	North Goa	Non bedded	0	0.017	0.013	0.001	0.004	0.034	0	0	0	0	0	0	0	0.013	0.017		Yes	0	No
85	PHC Baski, Ponda Goa	North Goa	Bedded	12	1.146	0.686	0.129	0.051	2.021	0	1	1	1	0	0	0	0.824	1.146		Yes	2	No
86	LHC Mapusa - Goa	North Goa	Non bedded	0	0.051	0.032	0.024	0.004	0.110	0	0	0	0	0	0	0	0.055	0.051		No	1	No
87	Dr. Prabhu Nursing Home, located at Near J. S. Fernandes Colony, Ch. Daman de Goa, Porvorim, Bardez, Goa	North Goa	Bedded	4	0.021	0.019	0.003	0.012	0.055	0	0	0	0	0	0	0	0.022	0.021		No	1	No
88	Dr. Gonsalves Dental Clinic - G9, Bushan Homes, Opp. Shree Boddishwar Temple, Mapusa Go	North Goa	Non bedded	0	0.109	0.137	0.410	0.109	0.765	0	0	0	0	0	0	0	0.246	0.109		No	0	No
89	Rupa's Allergy, Chest & General Clinician Vithoba Temple, Upper Bazar, Ponda Goa	North Goa	Non bedded	0	0.008	0.008	0.008	0.008	0.033	0	1	1	0	0	0	0	0.016	0.008		No	1	No
90	DR. A P PRABHUKAR CLINIC BUILDMORE BUSINESS PARK, MAPUSA, Bardez	North Goa	Non bedded	0	0.027	0.008	0.000	0.004	0.040	0	1	1	0	0	0	0	0.008	0.027		No	3	No
91	M/s National Laboratory, C-6, Kossamba Bldg, Sweetana Path, Vasco da Gama	South Goa	Non bedded	0	1.421	0.000	0.492	0.056	2.003	0	0	0	0	0	0	0	0.492	1.421		Yes	1	No

[illegible]

109	M/s. Mandori Clinic, Parvorum, Bardez	North Goa	Bedded	10	0.265	0.169	0.027	0.005	0.467	0	1	0	0	0	0	0.197	0.265	BWW Infection control committee	Yes	2	No
110	Dume's Clinical Laboratory Panaji	North Goa	Non bedded	0	0.287	0.077	0.019	0.014	0.396	0	0	0	0	0	0	0.096	0.287	Infection control committee	Yes	2	No
111	Minerals Polyclinic Cosme Nates Pereira Memorial Trust, Panaji	North Goa	Bedded	27	5.120	1.014	0.033	0.019	6.186	0	0	0	0	0	0	1.046	5.120	Infection control Committee	Yes	3	No
112	GOA DIAGNOSTIC LABORATORY, Ponda	North Goa	Non bedded	0	0.026	0.033	0.000	0.004	0.063	0	0	1	0	0	0	0.033	0.026	Infection control Committee	Yes	2	No
113	Asio District Hospital Mapusa, Bardez, Goa	North Goa	Bedded	240	35.686	15.992	7.317	2.131	61.126	0	1	0	0	0	0	23.309	35.686		No	3	No
114	Dr nagarsplains dental clinic Vasco	North Goa	Non bedded	0	0.205	0.301	0.032	0.032	0.669	0	0	0	0	0	0	0.383	0.205	GHMS	Yes	1	No
115	Urban Health Centre Panaji	North Goa	Non bedded	0	0.437	0.358	0.038	0.000	0.893	0	0	0	0	0	0	0.396	0.497	GHMS Infection control Committee	No	1	No
116	Dr-Subodh Maternity Home, Bldom	South Goa	Bedded	12	15.000	22.172	7.555	13.811	58.538	0	1	0	0	0	0	29.727	15.000		Yes	3	No
117	Dr. Jaishree Rajeev's Pathology Laboratory Reliance Trade Center Shop A-203, 204 & 205 Above Sony Exclusive Showroom Varde Valaulkar Road	South Goa	Non bedded	0	0.314	0.317	0.287	0.306	1.224	0	1	2	1	0	0	0.287	0.117		No	2	No
118	Primary Health Centre Balli	South Goa	Bedded	24	0.117	0.178	0.109	0.011	0.415	0	0	0	0	0	0	1.995	1.164		Yes	1	No
119	CHC Curchorem	South Goa	Bedded	30	1.164	0.495	1.500	0.973	4.082	0	0	0	0	0	0	0.973	0.344		Yes	13	No
120	PHC Quepem	South Goa	Bedded	24	0.544	0.910	0.063	0.036	1.552	0	1	1	1	0	0	2.066	3.208		Yes	4	No
121	PRIMARY HEALTH CENTRE ALDONA	North Goa	Bedded	12	3.208	1.645	0.421	0.770	6.044	0	1	0	0	0	0	0.719	0.346		No	2	No
122	Primary Health Centre Chimbai, OE-3/OB6 BSNL Quarters Bambolim Goa	South Goa	Non bedded	0	0.546	0.294	0.426	0.114	1.370	0	1	1	1	0	0	0.006	0.008		No	2	No
123	Orthopaedic Hospital for Surgery Rosadi Enclave, Near District Court, Old Panaji	South Goa	Bedded	10	0.008	0.003	0.002	0.003	0.017	0	1	0	0	0	0	0.005	0.002		No	1	No
124	Procter & Gamble Hygiene and Health Care Limited Plot No. 172, 314, 315, GDDDC, Kundaim, Ponda, Goa 403115	North Goa	Non bedded	0	0.002	0.003	0.002	0.001	0.007	0	25	0	1	0	0	1.852	4.022		Yes	4	No
125	Dr. Kulkarni's Galaxy Hospital Mapusa	North Goa	Bedded	44	4.022	1.530	0.322	0.044	5.918										Yes		

126	Yashodhan Hospital Aquem Margao Goa	South Goa	Bedded	26	0.574	0.492	0.027	0.260	1.352	0	1	1	1	0	0.519	0.574		No	2	No
127	Goa Medical College & Hospital	North Goa	Bedded	1300	265.000	152.000	17.000	0.350	434.350	1	0	0	1	Hydroclave-180kgs/day	169.000	265.000	Hydroclave- 180 kgs/day	No	6	No
128	SRL LIMITED GOA MG Road, Panaji	North Goa	Non bedded	0	0.026	0.821	0.028	0.016	0.891	0	1	0	0	0	0.848	0.026		No	3	No
129	GLENMARK PHARMACEUTICALS LIMITED(S-7), Plot no.57,57A & 58,covalde industrial estate, Bandrapada	North Goa	Non bedded	0	0.007	0.037	0.001	0.000	0.045	0	2	0	0	0	2.489	1.898	GHMS	Yes	2	No
130	PRIMARY HEALTH CENTRE CONCOLIM Vaddi, Cantolim Berdez Goa	North Goa	Bedded	10	1.898	1.687	0.802	0.707	5.093	0	0	1	0	0	0.010	0.010		Yes	3	No
131	Dr Prithviji Vethasa Jethava, Scholar Sadan Goulnwadi, Sakinaka Goa	North Goa	Non bedded	0	0.010	0.008	0.002	0.004	0.024	0	2	1	1	0	0.002	0.082		Yes		
132	CHIKITSA MOTHERCARE HOSPITAL, Near St. Paulim Road, Sorda, Margao	South Goa	Bedded	30	0.082	0.001	0.000	0.001	0.084	0	1	0	0	0	0.027	0.027	encep-4	No	12	No
133	Coccare Childrens Hospital, Opp Zorade grounds, Campai, Panaji, Goa	North Goa	Non bedded	0	0.027	0.023	0.003	0.004	0.055	0	1	0	0	0	0.00	10.000	VISION HOSPITAL, Mapusa	Yes	4	No
134	Mr. sath eye clinic, UG10 Gomes crato complex Near one alankar mapusa Goa	North Goa	Non bedded	0	10.000	5.000	0.000	1.100	16.100	0	1	0	0	0	0.00	0.078		No	2	No
135	MPT HOSPITAL HEADLAND SADA, MORMUGAO GOA - 403804	South Goa	Bedded	60	0.078	0.112	0.042	0.002	0.234	0	1	1	1	0	0.00	0.020		Yes	4	No
136	Nagarjuna Hospital & Clinic 1st phillum opp St mary high school, Chinchim, Salcete Goa	South Goa	Bedded	12	0.030	0.005	0.000	0.001	0.037	0	0	0	0	0	0.142	0.022		No	5	No
137	Assistant Director, Veterinary Hospital, Hongo	North Goa	Non bedded	0	0.022	0.060	0.082	0.041	0.205	0	2	2	1	0	0.00	1.432		No	0	No
138	PMC Canservarmen	North Goa	Bedded	12	1.208	0.790	0.642	0.355	2.995	0	1	0	0	0	0.00	0.000		Yes	1	No
139	M/s. Cadila Healthcare Limited PLOT NO. 203 - 213, KUNDARN INDUSTRIAL ESTATE, KUNDARN	North Goa	Non bedded	0	0.000	0.000	0.000	0.000	0.000	0					0.00	0.027		No	8	No
140	Milagres A Fernandes 11, Leolima Building, Nr. Bank of India, Cusmane, Quepem Goa	South Goa	Non bedded	0	0.027	0.055	0.008	0.003	0.093	0	1	1	1	0	0.00	0.109		No	1	No
141	Veterinary Dispensary Vasco	South Goa	Non bedded	0	0.027	0.068	0.041	0.033	0.169	0	1	0	0	0	0.00	0.000		No	0	No
142	MESLIA RUIZADO TELES ABADIE FARIA ROAD	North Goa	Non bedded	0	0.000	0.000	0.000	0.000	0.000	0	1	0	0	0	0.00	0.000		No	0	No
143	RICARDO LIGIA TELES ABADIE FARIA ROAD	North Goa	Non bedded	0	0.000	0.000	0.000	0.000	0.000	0	1	0	0	0	0.00	0.000		No		

144	Veterinary Hospital Sonoda, Department of Animal Husbandry and Veterinary Services	South Goa	Non bedded	0	1.011	1.503	0.041	0.033	2.587	0	0	0	0	0	0	0	1.544	1.011	No	0	No
145	Healthline Laboratory	South Goa	Non bedded	0	0.020	0.010	0.020	0.015	0.065	0	0	0	0	0	0	0	0.020	0.020	No	2	No
146	Veterinary Hospital, Mapusa	North Goa	Non bedded	0	0.224	0.322	0.464	0.038	1.049	0	1	0	0	0	0	0	0.010	0.005	No	0	No
147	M/s. Goa Health Care(Clinic) Verna Industrial Estate, Verna, Goa.	South Goa	Non bedded	0	0.005	0.010	0.000	0.005	0.020	0	1	0	0	0	0	0	0.022	0.041	0	1	No
148	SHUSHRUSHALAYA DIAGNOSTIC CENTER	South Goa	Non bedded	0	0.041	0.022	0.000	0.041	0.104	0	1	1	1	0	0	0	0.016	0.027	No	5	No
149	Barkhe Hospital & Veterinary Clinic, Chudasheri, Concan, Goa	South Goa	Bedded	10	0.027	0.011	0.005	0.005	0.049	0	0	0	0	0	0	0	0.000	0.002	No	1	No
150	Vedanta Ltd. Godil Kiripal, Dhaabardora - Goa	South Goa	Non bedded	0	0.002	0	0	0	0.002	0	1	0	0	0	0	0	0.000	0.002	Yes	2	No
151	SHUSHRUSHALAYA HOSPITAL NR MARUTIGAD, BEHIND RAVINDRABHAVAN CURCHOREM GOA.	South Goa	Bedded	14	0.273	0.109	0.117	0.096	0.596	0	1	0	0	0	0	0	0.044	0.055	No	5	No
152	Dr. Pined's Dental Clinic Panaji	North Goa	Non bedded	0	0.055	0.041	0.003	0.001	0.100	0	1	0	0	0	0	0	0.049	0.060	Yes	1	Yes
153	Dr. Piroda Prebhusdasi Dental Clinic Panaji	North Goa	Non bedded	0	0.060	0.046	0.002	0.001	0.110	0	1	0	0	0	0	0	0.014	0.004	Yes	2	Yes
154	Goa Scan Centre Pervorum	North Goa	Non bedded	0	0.004	0.008	0.005	0.001	0.019	0	1	2	1	0	0	0	0.019	0.082	No	3	No
155	Chodankar Nursing Home Pervorum	North Goa	bedded	24	0.082	0.008	0.011	0.014	0.115	0	1	1	0	0	0	0	0.000	0.051	NO	4	No
156	MRP Unit -1 Ugaon	North Goa	Non bedded	0	0.031	0.000	0.000	0.000	0.031	0	0	0	0	0	0	0	0.000	0.000	No	1	No
157	SESA RESOURCE LIMITED Suria- South Zon Oza Mine	North Goa	Non bedded	0	0.000	0.000	0.000	0.000	0.000	0	0	0	0	0	0	0	0.008	0.004	No	0	No
158	MAHALAXMI PATHOLOGY LABORATORY Babelim	North Goa	Non bedded	0	0.004	0.000	0.008	0.031	0.043	0	1	1	1	0	0	0	0.112	0.178	No	0	No
159	Gaur's Chidare Hospital Mapusa	North Goa	Bedded	16	0.178	0.087	0.025	0.011	0.301	0	0	0	0	0	0	0	0.000	0.000	Yes	4	No

Part 4: Information on Common Biomedical Waste Treatment and Disposal Facilities (For the previous calendar year 2020)										
Sr. No.	Name and Address of CBMWTSDF with contact person name and Telephone no.	GPS Coordinates	Coverage area in Kms	Name of the cities covered by CBMWTSDF	Total no. of HCFs being covered	Total no. of beds covered	Total quantity of biomedical waste collected from member HCFs	Capacity of the treatment equipment installed by CBMWTSDF	Total Biomedical waste treated in kgs/day	Method of disposal of treated waste (incineration on ash/sharps/plastics)
1	CBMWTSDF is yet to be made operational in the state of Goa	NA	NA	NA	NA	NA	NA	NA	NA	NA

ANNEXURE XVI

GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदूषण नियंत्रण मंडळ

(An ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2007 Certified Board)

Phone Nos. : 0832-2407700
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PART A

No. 9/1/21-PCB/Vol. XXIX/Tech/7956

30/07/2021

To,
The Chairman,
Central Pollution Control Board,
Parivesh Bhawan, East Arjun Nagar,
DELHI- 110 0032.

ANNUAL REPORT ON SOLID WASTE MANAGEMENT RULES 2016 FOR THE YEAR 2020-2021

1. Name of the State/Union territory	: GOA
2. Name & address of the State Pollution Control	: GOA STATE POLLUTION CONTROL BOARD
3. Number of local bodies responsible for management of solid wastes in the State/Union territory under these rules	: 205 NOS.
4. No. of authorisation application received	: Nil
5. A Summary Statement on progress made by local body in respect of solid waste management.	: Attached as Annexure-I
6. A Summary Statement on progress made by local bodies in respect of waste collection, segregation, transportation and disposal.	: Attached as Annexure-II
7. A Summary Statement on progress made by local bodies in respect of Schedule II.	: Attached as Annexure-III

Date: 29/7/2021

Place : SALIGAO- GOA

MEMBER SECRETARY
GOA STATE POLLUTION CONTROL BOARD

PART B

Sr. No.	Description	Nos.
1.	Towns/cities	
	(i) Total Number of towns/cities	14
	(ii) Total number of ULBs	14
	(iii) Number of Class I & class II cities/towns	
	(a) Nos. of Towns Class-I (more than 1,00,000 Population)	1
	(b) Nos. of Class-II Towns (50,000-99,000 Population)	0
2	Authorisation status (names/number)	
	(i) Number of Application received	0
	(ii) Number of Authorization granted	0
	(iii) Authorizations under scrutiny	0
3	SOLID WASTE Generation status	
	(i) Solid waste generation in the state (TPD)	226.87
	(ii) collected	218.87
	(iii) treated	197.47
	(iv) Landfilled/Dumpsite	22.05
4	Compliance to Schedule I of SW Rules (Number/names of towns/capacity)	
	(i) Good practices in cities/towns (Panaji, Pernem, Ponda, Bicholim, Sankhali, Quepem, Cuncolim, Sanguem & Valpoi)	09
	(ii) House to house collection (Panaji, Pernem, Ponda, Bicholim, Sankhali, Quepem, Canacona, Cuncolim, Curchorim-Cacora, Sanguem, Mapusa, Margao, Mormugao & Valpoi, Sanguem)	14
	(iii) Segregation (Panaji, Pernem, Ponda, Bicholim, Sankhali, Quepem, Canacona, Cuncolim, Curchorim-Cacora, Sanguem, Mapusa, Mormugao & Valpoi)	13
	(iv) Storage (Panaji, Pernem, Ponda, Bicholim, Sankhali, Quepem, Canacona, Cuncolim, Curchorim-Cacora, Sanguem, Mapusa, Margao, Mormugao & Valpoi)	14
	(v) Covered transportation (Panaji, Pernem, Ponda, Bicholim, Sankhali, Quepem, Canacona, Cuncolim, Curchorim-Cacora, Sanguem, Mapusa, Margao, Mormugao & Valpoi)	14

5. (i) Processing of SW (Number /names of towns/capacity)

(i) Solid waste processing facilities setup:

Sl. No.	Composting	Vermi-composting	Biogas	RDF/Pelletization
01	Pernem	NA	NA	NA
02	Bicholim	NA	NA	NA
03	Sankhali	NA	NA	NA
04	Mapusa	NA	NA	NA
05	CCP Panaji	NA	12TPD	NA
06	Valpoi	NA	NA	NA
07	Ponda	NA	NA	NA
08	Mormugao	NA	10 TPD	NA
09	Margao	NA	NA	NA
10	Curchorem - Cacora	NA	NA	NA
11	Sanguem	NA	NA	NA
12	Cuncolim	NA	NA	NA
13	Quepem	NA	NA	NA
14	Canacona	NA	NA	NA

(ii) Processing facility operational:

Sl. No.	Composting	Vermi-composting	Biogas	RDF/Pellitization
01	Bicholim	NA	NA	NA
02	Sankhali	NA	NA	NA
03	Mapusa	NA	NA	NA
04	Panaji	NA	YES	NA
05	Valpoi	NA	NA	NA
06	Ponda	NA	NA	NA
07	Mormugao	NA	YES	NA
08	Quepem	NA	NA	NA
09	Cuncolim	NA	NA	NA
10	Sanguem	NA	NA	NA
11	Margao	NA	NA	NA

12	Pernem	NA	NA	NA
13	Curchorem – Cacora	NA	NA	NA
14	Canacona	NA	NA	NA

(iii) Processing facility under installation/planned:

Sl. No.	Composting	Vermi-composting	Biogas	RDF/Pelittization
i)	NIL	NIL	01(Margao)	NIL

(iv) Waste-to-Energy Plants: (Number/names of towns/capacity) -----01

Sl. No.	Plant Location	Status of operation	Power generation (MW)	Remarks
i)	Hindustan Waste Treatment Plant Pvt. Ltd. at Saligao, Bardez Goa	In Operation	0.6	The area comes under Panchayat jurisdiction.

6	Disposal of solid waste (number/names of towns/capacity):			
	(i) Landfill sites identified (Panaji, Ponda)			02
	(ii) Landfill constructed (Pernem, Bicholim, Sankhali, Quepem, Cuncolim, Canacona, Valpoi, Margao)			08
	(iii) Landfill under construction:			NIL
	(iv) Landfill in operation: (Pernem, Bicholim, Quepem, Cuncolim,)			04
	(v) Landfill exhausted (Canacona)			01
	(vi) Landfill capped			NIL
7	Solid Waste Dumpsites (number/names of towns/capacity):			
	(i) Total number of existing dumpsites (Mapusa, Curchorem-Cacora, Margao, Mormugao)			04
	(ii) Old dump (Bicholim, Pernem, Canacona & Cuncolim)			04
	(ii) Dumpsites reclaimed/capped			01
	(iii) Dumpsites converted to sanitary landfill			NIL

8 Monitoring at waste processing/Landfill sites:

Sl. No.	Name of facilities	Ambient Air	Ground water	Leachate Quality	Compost Quality	VOCs
i)	Pernem Municipal Council	-	✓	-	-	-
ii)	Bicholim Municipal Council	✓	-	-	-	-

iii)	Sankhali Municipal Council	✓	✓	-	-	-
iv)	Quepem Municipal Council	✓	✓	-	-	-
v)	Cuncolim Municipal Council	✓	✓	-	-	-
vi)	Canacona Municipal Council	-	✓	-	-	-
vii)	Corporation of the City of Panaji	-	-	✓	-	-
viii)	Valpoi Municipal Council	✓	-	-	-	-
ix)	Ponda Municipal Council	-	-	-	-	-
x)	Sanguem Municipal Council	-	-	-	-	-
xi)	Margao Municipal Council	-	-	✓	-	-
xii)	Curchorem- Cacora Municipal Council	-	-	-	-	-
xiii)	Mapusa Municipal Council	-	-	-	-	-
xiv)	Mormugao Municipal Council	✓	-	✓	-	-

9 Status of Action Plan prepared by Municipalities.

(i) Total No. Of Municipalities-----14

(iii) Number of Action Plan Submitted-----14

ANNEXURE I

IMPLEMENTATION SCHEDULE

Sr. No.	Name of Corporation/ Municipal Council/ Village Panchayat's	Setting up of waste processing, disposal facilities and material recovery facilities.	Monitoring the performance of waste processing and disposal facilities	Identification of landfill sites for future use and making site(s) ready for operation
1	Corporation of the City (CCP) of Panaji, Panaji - Goa.	The Goa State Pollution Control Board has granted authorization to the CCP for material recovery facility & composting station at P.T. sheet no. 56 chalta no. 6 and for setting up & Operation of waste processing facility at the following locations: (i) Behind SBI building at Patto Plaza. (ii) Near LIC Build. Adjacent to STP of PWD. (iii) Panaji Municipal Market. CCP has set up decentralized composting units in Housing Societies as well as in Municipal market area and public gardens to treat the bio degradable waste.	✓	Does not have Landfill site.
2	Pernem Municipal Council, Pernem - Goa.	The Council has set up decentralized composting units for treatment of bio degradable waste and the construction of the landfill site is completed.	✓	Construction of Landfill site is completed.
3	Bicholim Municipal Council, Bicholim - Goa.	The Council has set up facility for treatment of bio-degradable waste and has completed construction of landfill site		Landfill is not in use.
5	Valpoi Municipal Council, Valpoi - Goa.	The Council has set up facility for treatment of bio-degradable waste.	✓	Landfill site constructed.

6	Ponda Municipal Council, Ponda – Goa.	The Council has set up decentralized composting units within the city		Not yet set up.
7	Mapusa Municipal Council	The Council has set up decentralized composting units within the city and a centralized unit at Assagao Plateau.		Not yet set up.
8	Mormugao Municipal Council, Mormugao – Goa.	The Council has installed 10 ton capacity bio-gas plant for treatment of bio degradable waste	✓	Not yet set up.
9	Margao Municipal Council, Margao – Goa.	The garbage management plant is in operation	✓	Landfill is not in use.
10	Quepem Municipal Council, Quepem – Goa.	The Construction work of setting up treatment facility for bio-degradable waste and landfill site is completed	✓	Construction of Landfill site is completed. Site not used.
11	Curchorem-Cacora Municipal Council, Curchorem – Goa.	The Council has constructed decentralized composting units for treating of bio degradable waste but are not properly functional		Not yet set up.
12	Cuncolim Municipal Council, Cuncolim – Goa.	The Council has set up facility for treatment of bio-degradable waste and has completed construction of landfill site	✓	Construction of Landfill site is completed. Site not used.
13	Sanguem Municipal Council, Sanguem – Goa.	The Council has set up decentralized composting units for treatment of bio degradable waste.		Site identified and land acquisition in process.
14	Canacona Municipal Council	Plant and machinery gutted due to fire.	✓	Landfill site is full and covered with mud.
15	Village Panchayat's	The state has 191 village panchayat's out of which 182 nos. of village panchayat has been granted approval by Board for setting up material recovery facility (MRF)		Not Applicable.

ANNEXURE-II

MANAGEMENT OF SOLID WASTES

Sr.No	Name of Municipal Council/Corporation	Collection of Solid waste	Segregation of Solid Wastes	Transportation of Solid wastes	Disposal of Solid wastes
1	Corporation of City of Panaji	Complied	Complied	Complied	Partly Complied
2	Pernem Municipal Council	Complied	Complied	Complied	Partly Complied
3	Bicholim Municipal Council	Complied	Complied	Complied	Partly Complied
4	Sanquelim Municipal Council	Complied	Complied	Complied	Partly Complied
5	Valpoi Municipal Council	Complied	Complied	Complied	Partly complied
6	Ponda Municipal Council	Complied	Complied	Complied	Partly Complied
7	Mapusa Municipal Council	Complied	Partly complied	Complied	Partly complied
8	Mormugao Municipal Council	Complied	Partly Complied	Complied	Partly Complied
9	Margao Municipal Council	Complied	Partly Complied	Complied	Partly Complied
10	Quepem Municipal Council	Complied	Complied	Complied	Partly Complied
11	Curchorem-Cacora Municipal Council	Complied	Partly Complied	Complied	Partly Complied
12	Cuncolim Municipal Council	Complied	Partly Complied	Complied	Partly Complied
13	Sanguem Municipal Council	Complied	Complied	Complied	Partly complied
14	Canacona Municipal Council	Complied	Partly Complied	Complied	Partly Complied
15	All Village Panchayat's *				

*Only dry waste collected by 191 Village Panchayat's is sent to baling stations established by Goa Waste Management Corporation (GWMC) wherein it is baled and sent for co-incineration in cement kilns. Also 4 village panchayat's has set up baling facility.

ANNEXURE III

STANDARDS FOR COMPOSTING, TREATED LEACHATES AND INCINERATION

Sr. No.	Name of Municipal Council/Corporation	Establishment of Composting Plant
1	Corporation of City of Panaji	Has established decentralized composting stations
2	Pernem Municipal Council	Has established composting stations
3	Bicholim Municipal Council	Has established mechanized composting plant
4	Sanquelim Municipal Council	Has established mechanized composting plant
5	Valpoi Municipal Council	Has established a composting plant
6	Ponda Municipal Council	Has established composting stations
7	Mapusa Municipal Council	Has established composting stations
8	Mormugao Municipal Council	Has established a composting plant /Biogas plant
9	Margao Municipal Council	Has established integrated plant.
10	Quepem Municipal Council	Has established composting units
11	Curchorem-Cacora Municipal Council	Has established decentralized composting units
12	Cuncolim Municipal Council	Composting is carried out using windrows method
13	Sanguem Municipal Council	Has established composting stations
14	Canacona Municipal Council	Has established composting stations

ANNEXURE XVII

GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदूषण नियंत्रण मंडळ

(An ISO 9001:2015, ISO 14001:2015. OHSAS 18001:2007 Certified Board)

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Environment Engineer, GSPCB: ee-gspcb.goa@nic.in
Scientist, GSPCB: scientist-gspcb.goa@nic.in
Office: goapcb@gspcb.in

Dated: 30/07/2021

No. 9/1/19/PCB/Tech/7953

To,
The Member Secretary,
Central Pollution Control Board,
"Parivesh Bhavan",
CBD cum Office Complex,
East Arjun Nagar, Shahdara Delhi- 110032

Sub: - Submission of Annual Report for FY 2020-2021 on
implementation of Plastic Waste (Management and Handling) Rules, 2016,
as amended 2018.

Sir/Madam,

With reference to the above mention subject, please find enclose herewith
the annual compliance status report of Plastic waste generation for the year
2020-21 on the implementation of Plastic Waste (Management and Handling)
Rules, 2016, as amended 2018.

Yours faithfully


Dr. Shamila Monteiro
(Member Secretary)

Goa State Pollution Control Board

Encl: As above

Copy to:

1. Office Copy
2. Guard File.

STATE-WISE STATUS OF IMPLEMENTATION OF PLASTIC WASTE MANAGEMENT RULES, 2016 AS AMENDED 2018, FOR THE 2020-2021

Name of SPCB/CPB	Estimate of Plastic Waste generated on Tons Per Annum (TPA)	Implementation of thickness of less than 50 microns carry bags (virgin/recycled). (Rule 4c)	Detailed of Plastic Waste Management (PWM) e.g. Collection, Segregation, Disposal (Co-Processing, Road construction etc) Rules (5 & 6) (Attach Action Plan)	Partial/complete ban on usages of Plastic Bags (through executive order) Attach copy of notification or Executive Order	No. Of registered Plastic Manufacturing/Recycling units (Rule 13)			No. Of unregistered Plastic Manufacturing or recycling units (in residential or unapproved areas) (Rule 13)	Status of Marketing, Labelling on carry bags (Rule 11) Specify No. of units not complied	No. Of violation and action taken on non compliance of PWM Rules, 2016, as amended 2018 (Rule 12)	Explicitly pricing of carry bags from producers, brand owners and importers (Rule 15)	Status of submission of Annual Report by ULBs to SPCB/PCCs (Rule 16)	Submission of Annual Report to CPCB (Rule 17)
					Plastic Units	Compostable Plastic Units	Multilayer Plastic Units						
(1)	(2)	(3)	(4)	(5)	(6)			(7)	(8)	(9)	(10)	(11)	(12)
Goa State Pollution Control Board	29440.9 TPA	Implemented	The non bio-degradable waste collected by the local bodies/ULBs is sent for co-incineration in cement plants through Goa Waste Management Corporation (GWMC). The GWMC has set up three bailing stations i.e. Bicholim, Verna, Cacora. In additions to above bailing stations 11 ULB's and 4 Village Panchayat's has bailing facility and 1 solid waste management facility at Salgao.	Amendment in the Goa Non-Biodegradable Garbage Control Act banned single use plastic (Notification enclosed)	64	1	0	Nil	Nil	As per the data submitted by local bodies, 631 cases have been booked and an amount of Rs. 4,40,200/- has been collected.	-	completed	Yes

ANNEXURE XVIII

GOA STATE POLLUTION CONTROL BOARD गोंय राज्य प्रदूषण नियंत्रण मंडळ

(An ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2007 Certified Board)

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Environment Engineer, GSPCB: ee-gspcb.goa@nic.in
Scientist, GSPCB: scientist-gspcb.goa@nic.in
Office: goapcb@gspcb.in

No.9/1/19-PCB/Tech/7559 /9255

Dated 20/08/2021
20/8/2021

To,
Member Secretary,
Central Pollution Control Board,
"Parivesh Bhavan",
CBD Cum Office Complex,
East Arjun Nagar, Shahdara Delhi- 110032

Sub: - Submission of Annual Report for the year 2020-2021 on implementation Of Batteries (Management and Handling) Rules, 2001 as amended in 2010.

Sir,

With reference to the above mention subject, please find enclose herewith the annual compliance status report for the year 2020-2021 on the implementation of Batteries (Management and Handling) Rules, 2001 as amended in 2010 in the state of Goa.

Yours faithfully


Member Secretary
Goa State Pollution Control Board

Encl: As above

Copy to:

1. Office Copy
2. Guard File.

GOA STATE POLLUTION CONTROL BOARD

Status of Lead Acid Battery (APRIL 2020-MARCH 2021)

Sr. No	Type of Category	Total No	Total no. Production/ Imported/Consumption/ of LAB/(Nos)	Sale of Lead Acid Batteries in Nos	Total collection of Lead Acid Batteries in Nos	Annual Returns submitted	Action taken	Remarks
1	Manufacturer/ Reconditioner	1	22816	NA	0	Yes	Units & Dealers which have	Scrap Batteries sent to 1. M/s. Sterling Lead Pvt. Ltd. Plot No. A210, Five Star MIDC Kagal, Tal- Karveer, Dist.
2	Assembler	1	0	NA	NA	NA	not submitted	2.
3	Collection Centre	1	Nil	NA	5089	NA	returns have been	M/s. Associated Pigments Limited. 3. M/s. Cholired Metals Ltd. (Pune).
4	Dealer	53	NA	46814	3640	Yes	directed to do so.	
5	Importer	0	0	NA	NA	NA		
6	Blk. Consumer	50	688*	NA	700**	Yes		
7	Auctioneer	Nil	NA	NA	NA	NA		
8	Recycler	Nil	NA	NA	NA	NA		

* Batteries Purchased by the bulk consumers.

** Batteries handed over to dealers, manufacturers & registered recyclers by the Consumers & Bulk consumers.

1 Details of action initiated/taken against illegal/unauthorised recycler and smelter of used lead acid batteries:

No case of such illegality has been reported/observed by the Board

2 Percentage of compliance achieved in the state for the collection of used batteries as per schedule I of the rules : 20.14%

ANNEXURE XIX



GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदूषण नियंत्रण मंडळ

(An ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 Certified Board)

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Office: mail.gspcb@gov.in

Tel/Fax No. : 0832-2407700

No.2022/GSPCB/Other/9895/Tech/11277

Date: 24/09/2021

To,
The Chairman,
Central Pollution Control Board,
(Ministry of Environment and Forests)
Government of India, 'Parivesh Bhawan',
East Arjun Nagar, Delhi- 110 0032.

Sub: Annual Report under E-waste Management Rule 2016 for the Period
April 2020 to March 2021.

Sir,

1	Number of authorised manufacturer, refurbishers, collection centre, dismantler and recycler for management of e-waste in the State or Union territory under these rules	: Bulk Consumer- 108 Nos Authorised Manufacturer- 04 Authorised Refurbisher- NIL Authorised Collection Centre- NIL Authorised Dismantler- 02 No Producers- 03 No Authorised Recycler- NIL
2	Categories of waste collected along with their quantities on a monthly average basis:	: Attached in Annexure I
3	A Summary Statement code-wise of e-waste collected	: Attached in Annexure II
4	Details of material recovered from recycling of e-waste	: Not Applicable
5	Quantity of CFL received at Treatment, Storage and Disposal Facility	: Not Applicable
6	The above report is for the period from April 2020 to March 2021.	

Place: Saligao, Bardez, Goa.

Date: 24/09/2021

Member Secretary
Goa State Pollution Control Board

ANNEXURE I

Sr. No.	Categories of electrical and electronic equipment	Collected Waste Quantities on Monthly Average Basis in MT
i.	Information technology and telecommunication equipment (ITEW) :	1.356
ii	Consumer electrical and electronics (CEEW) :	11.373

ANNEXURE II

Sr. No.	Categories of electrical and electronic equipment	Electrical and electronic equipment code	Collected Waste Quantities on Monthly Average Basis in MT
i.	Information technology and telecommunication equipment:		
	Centralised data processing: Mainframes, Minicomputers	ITEW1	0.1516
	Personal Computing: Personal Computers (Central Processing Unit with input and output devices)	ITEW2	0.7388
	Personal Computing: Laptop Computers (Central Processing Unit with input and output devices)	ITEW3	0.06633
	Personal Computing: Notebook Computers	ITEW4	0.0099
	Personal Computing: Notepad Computers	ITEW5	0.00067
	Printers including cartridges	ITEW6	0.1249
	Copying equipment	ITEW7	0.1855
	Electrical and electronic typewriters	ITEW8	0.0128
	User terminals and systems	ITEW9	0.0187
	Facsimile	ITEW10	0.0131
	Telex	ITEW11	0.000
	Telephones	ITEW12	0.0207
	Pay telephones	ITEW13	0.0002
	Cordless telephones	ITEW14	0.00048
	Cellular telephones	ITEW15	0.0026
	Answering systems	ITEW16	0.01
ii	Consumer electrical and electronics:		
	Television sets (including sets based on (Liquid Crystal Display and Light Emitting Diode technology)	CEEW1	0.109
	Refrigerator	CEEW2	0.0931
	Washing Machine	CEEW3	8.749
	Air-conditioners excluding centralised air conditioning plants	CEEW4	0.718
	Fluorescent and other Mercury containing lamps	CEEW5	0.802
	Others	PCBA, Wires, PCB	0.901

ANNEXURE XX

GOA STATE POLLUTION CONTROL BOARD

गोंय राज्य प्रदूषण नियंत्रण मंडळ

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Scientist, GSPCB: scientist-gspcb.goa@nic.in
Office: goapcb@gspcb.in
Dated: 30/07/2021

No. 2022/GSPCB/Letter/3159/Tech/ 7950

To,
The Chairman,
Central Pollution Control Board,
Parivesh Bhawan, East Arjun Nagar, Delhi 110032

ANNUAL REPORT ON CONSTRUCTION & DEMOLITION WASTE MANAGEMENT RULES 2016 FOR 2020-2021

1.	Name of the State/Union territory	GOA
2.	Name & address of the State Pollution Control	GOA STATE POLLUTION CONTROL BOARD Near Pilerne Industrial Estate, Opp. Saligao Seminary, Saligao, Bardez, Goa – 403511.
3.	Number of municipal authorities responsible for management of municipal solid wastes in the State/Union territory under these rules	14
4.	A Summary Statement on progress made by municipal authorities in respect of implementation of Schedule III	Annexure-I
5.	A Summary Statement on progress made by municipal authorities in respect of implementation of Schedule IV	Not available in the said Rules.

Place: Saligao-Goa.

(Dr. Shamila Monteiro)
Member Secretary
Goa State Pollution Control Board

Annexure I

Timeframe for Planning and Implementation

Sl. No.	Compliance Criteria	Cities with population of 01 million and above	Cities with population of 0.5-01 million	Cities with population of less than 0.5 million
1	Formulation of policy by State Government	NIL		
2	Identification of sites for collection and processing facility	Government has handed over land to Goa Waste Management Corporation (GWMC) in survey no. 146/2, 146/3, 146/4, 146/6, 148/2, 148/6 & 148/7 of Village Curchirem of Bicholim Taluka, for setting up C&D Waste Management Facility of 500 TPD capacity. Board has granted authorization to GWMC for temporary storage of C & D waste at the said site. Final draft copy of Detail Project Report (DPR) has been submitted on 04.02.2021 to GWMC by SINTEF (a research organization from Norway having MOU with CPWD under the Ministry of Urban Development Govt of India). GWMC shall float tender for setting up C & D Waste Management Facility by December-2021 after getting the land without any encumbrances.		
3	Commissioning and implementation of the facility			
4	Monitoring by SPCBs	Not yet started as the facility is yet to be established.		

ANNEXURE XXI

LIST OF APPLICATIONS FOR CONSENTS TO OPERATE (CCA) AND CONSENT TO ESTABLISH (CTO) UNDER WATER (PREVENTION & CONTROL OF POLLUTION) ACT, 1974 AND AIR (PREVENTION & CONTROL OF POLLUTION) ACT, 1981 BIO-MEDICAL WASTE (MANAGEMENT & HANDLING) RULES, 2016 AND HAZARDOUS WASTE (MANAGEMENT & HANDLING) (AMENDMENT) RULES, 2018 PROCESSED AND APPROVED BY THE BOARD DURING THE YEAR 2021-2022.

Consent To Operate/Establish granted for the period 01/04/2021 to 31/03/2022				
Sr. No.	Name of the Industry	Taluka	Category	Date of Issue
1	HOTEL VIVANTA GOA MIRAMAR UNIT OF DRK VENTURES LLP	TISWADI	ORANGE	25-08-2021
2	7 Apple Hotels Private Limited	PERNEM	ORANGE	15-02-2022
3	Porvorim Regency	BARDEZ	GREEN	20-08-2021
4	M/s Sharif & Sons	PONDA	ORANGE	07-01-2022
5	REGENCY	BARDEZ	ORANGE	20-06-2021
6	ANDALUZIA VILLA	BARDEZ	GREEN	11-08-2021
7	Shreenaath Prestressed Pvt. Ltd.	BARDEZ	GREEN	22-10-2021
8	The Rosewood	PERNEM	GREEN	21-10-2021
9	Goa Bagayatdar Sahakari Kharedi Saunsta Maryadit	SATARI	ORANGE	26-10-2021
10	PLANET GOA SHACK	BARDEZ	GREEN	12-11-2021
11	Synaptic Integrated Telecommunication Service Pvt	SATARI	GREEN	24-03-2022
12	Cafe Aniket	BARDEZ	GREEN	02-07-2021
13	My Nest	BARDEZ	GREEN	09-12-2021
14	Aditya Builders	BARDEZ	GREEN	01-03-2022
15	Mermaids Guest House (Agnes Fernendes)	BARDEZ	GREEN	20-04-2021
16	M/s. CASA DE GOA BOUTIQUE RESORTS	BARDEZ	ORANGE	04-08-2021
17	MANDOVI CASTING PRIVATE LIMITED	PONDA	RED	01-02-2022
18	WEST COAST INDUSTRY	PONDA	GREEN	21-03-2022
19	M/S MANDREM GARDEN	BARDEZ	GREEN	28-10-2021
20	M/S TIPPING POINT HOSPITALITY PVT. LTD.	BARDEZ	ORANGE	22-07-2021
21	EVA'S ARK GUEST HOUSE	BARDEZ	GREEN	06-10-2021
22	PEACE VILLA SIRIDAO BEACH	TISWADI	GREEN	08-10-2021
23	M/S MANDOVI DISTILLERIES AND BREWERIES PVT. LTD	PONDA	ORANGE	12-07-2021

24	Lodge Janki Shankar	BARDEZ	ORANGE	22-07-2021
25	SERENITY SPACES	BARDEZ	ORANGE	23-08-2021
26	SAVITRI WORKSHOP	BICHOLIM	WHITE	28-10-2021
27	P K ENTERPRISES	PONDA	ORANGE	08-08-2021
28	La Ceres Caffè	BARDEZ	GREEN	23-11-2021
29	HILLARIO'S GUEST HOUSE	BARDEZ	GREEN	26-10-2021
30	M/S TIPPING POINT HOSPITALITY PVT. LTD.	BARDEZ	ORANGE	27-07-2021
31	LARIO'S BEACH SHACK	BARDEZ	GREEN	06-01-2022
32	SEA LA VIE GUEST HOUSE	BARDEZ	GREEN	27-10-2021
33	Hindustan Waste Treatment Pvt. Ltd	BARDEZ	RED	17-12-2021
34	Polynova Industries Ltd	PONDA	GREEN	22-10-2021
35	K K GUEST HOUSE	BARDEZ	GREEN	30-04-2021
36	AVNG Goan Holidays (V4)	BARDEZ	GREEN	20-08-2021
37	Aavaas Elite (F3)	BARDEZ	GREEN	07-09-2021
38	MIRANDA BEACH RESORT	BARDEZ	GREEN	15-10-2021
39	D L Natekar and Sons	BARDEZ	ORANGE	30-12-2021
40	Berger Paints India Limited, Plot.316-317, Kundaim Industrial Estate, Kundaim, Goa	PONDA	ORANGE	15-04-2021
41	Hotel Embassy	TISWADI	GREEN	07-03-2022
42	Bhagwant Korgaonkar	TISWADI	WHITE	12-05-2021
43	VIVA ANJUNA	BARDEZ	ORANGE	31-10-2021
44	AEROCOACH	PONDA	RED	09-02-2022
45	Ana c Dsouza	BARDEZ	ORANGE	11-05-2021
46	Polynova Industries Ltd	PONDA	GREEN	30-07-2021
47	O pierre guest house	TISWADI	GREEN	30-12-2021
48	Mslings	TISWADI	WHITE	09-02-2022
49	RAJ FOOD INDUSTRY	PONDA	GREEN	23-02-2022
50	Aquamarine Holidays Goa (SF-D2)	BARDEZ	GREEN	08-09-2021
51	HOTEL GUIMAKA (LODGING ONLY)	TISWADI	GREEN	20-10-2021
52	Megawide Construction DMCC (Temporary Plants for Construction of Mopa Airport)	PERNEM	ORANGE	20-04-2021
53	Colonia Santa Maria Hotels Pvt Ltd.	BARDEZ	ORANGE	11-06-2021

54	M/s. THE HORIZON	BARDEZ	ORANGE	22-07-2021
55	SPLASH SPA	BARDEZ	WHITE	01-02-2022
56	M/s Moksha Hotels Pvt. Ltd.	BARDEZ	ORANGE	04-08-2021
57	Nestle India Ltd	PONDA	RED	15-02-2022
58	EMMANUEL GUEST HOUSE	BARDEZ	GREEN	05-01-2022
59	Casa Hemila	BARDEZ	GREEN	20-08-2021
60	VIRGIN KITCHEN	TISWADI	GREEN	22-04-2021
61	MARTINI	BARDEZ	GREEN	24-11-2021
62	DELTA CORP LIMITED (M.V HORSESHOE CASINO)	TISWADI	ORANGE	09-02-2022
63	Sai Guest House	PERNEM	GREEN	06-09-2021
64	ELSEWHERE H No 206/1	PERNEM	GREEN	02-12-2021
65	ELSEWHERE (House No 226)	PERNEM	GREEN	02-12-2021
66	VMSALGAOCAR CORPORATION PVT LTD	TISWADI	GREEN	09-02-2022
67	Stonewood (Mayfair Resorts India Ltd)	BARDEZ	GREEN	23-09-2021
68	La Riviere	PERNEM	GREEN	28-02-2022
69	Highland Distilleries	SATARI	ORANGE	18-08-2021
70	REDKAR HOSPITAL AND RESEARCH CENTER PVT LTD	BARDEZ	ORANGE	23-08-2021
71	Mira Cafe Guest House	BARDEZ	GREEN	08-09-2021
72	HOTEL VIVANTA GOA MIRAMAR UNIT OF DRK VENTURES LLP	TISWADI	ORANGE	19-01-2022
73	VILLA ALEX MARIE GUEST HOUSE	BARDEZ	GREEN	11-08-2021
74	Gera Developments Pvt Ltd & Gera Realty Estates	TISWADI	RED	03-01-2022
75	ANTHONY FERNANDES GUEST HOUSE	BARDEZ	GREEN	09-07-2021
76	DROGEN PHARMA PVT LTD	PONDA	ORANGE	27-05-2021
77	MARQUIS BEACH RESORT (MARQUIS HOTELS LIMITED)	BARDEZ	ORANGE	26-10-2021
78	Wellness Centre - Family Spa	BARDEZ	GREEN	08-11-2021
79	JOAQUIM'S GUEST HOUSE	BARDEZ	GREEN	15-12-2021
80	SUPER SPECIALITY BLOCK AT GMCH	TISWADI	RED	17-02-2022
81	Himgiri Casting Pvt. Ltd. (Himcast)	PONDA	ORANGE	15-03-2022
82	Bakers Bhatti	BARDEZ	GREEN	20-07-2021

83	Zac Beach Resort	BARDEZ	ORANGE	11-12-2019
84	BALAJI INN	BARDEZ	GREEN	15-12-2021
85	GAURAV TRIPATHI AND KAMINI SINGH	BARDEZ	GREEN	22-11-2021
86	Sunrise Cashew Industry	SATARI	ORANGE	04-08-2021
87	REAL BOTTLING FACTORY PVT LTD	TISWADI	ORANGE	04-08-2021
88	SAHAKARI PETROLEUM PUC CENTRE	PONDA	GREEN	08-09-2021
89	204 TUDOR GUEST HOUSE	BARDEZ	GREEN	24-03-2022
90	Sukraft Recycling Pvt. Ltd.	SATARI	RED	11-06-2021
91	VILLA CALANGUTE PHASE 1 & 2	BARDEZ	GREEN	25-06-2021
92	HANG OUT BEACH SHACK	BARDEZ	GREEN	17-02-2020
93	FAGUN CARDOZO GUEST HOUSE	BARDEZ	GREEN	07-01-2022
94	Nosso Vagator Hotel & Resort Pvt. Ltd.	BARDEZ	ORANGE	31-10-2021
95	SAI GUEST HOUSE (HOUSE NO 7/182-B)	BARDEZ	GREEN	23-04-2021
96	Brinda Malhotra	BARDEZ	GREEN	28-07-2021
97	M/s. Goa Institute of Management	SATARI	RED	14-12-2021
98	CENTAUR PHARMACEUTICALS PVT.LTD	BARDEZ	ORANGE	09-02-2022
99	Aroma Beauty Salon	TISWADI	GREEN	22-04-2021
100	DELTIN SUITES(CASTLE ROYAL)	BARDEZ	ORANGE	01-11-2021
101	THE SEA HORSE RESORT (Unit of Varnik Resorts pvt.ltd.)	BARDEZ	ORANGE	22-02-2022
102	RODRIGUES AUTO SPA	TISWADI	ORANGE	27-05-2021
103	LA CABANA BEACH & SPA	PERNEM	ORANGE	12-06-2021
104	Vasu Guest House	PERNEM	GREEN	01-07-2021
105	Chodankar Hallmarking & Refinery	BARDEZ	ORANGE	29-07-2021
106	MAGNUM RESORTS	BARDEZ	ORANGE	04-08-2021
107	Polynova Industries Ltd	PONDA	GREEN	22-10-2021
108	ATUL PUNJ GUEST HOUSE	BARDEZ	GREEN	17-02-2022
109	Krishna Villa	BARDEZ	GREEN	27-05-2021
110	SONATAPES PRIVATE LIMITED UNIT-2	TISWADI	GREEN	09-07-2021
111	Bicholim Municipal Council	BICHOLIM	ORANGE	11-11-2021

112	THE ANCHORAGE	BARDEZ	GREEN	24-06-2021
113	MOHIT STEEL INDUSTRIES PRIVATE LIMITED	PONDA	ORANGE	26-10-2021
114	UBON SALON AND WELLNESS	BARDEZ	GREEN	27-07-2021
115	Abhishek Agarwal Guest House	BARDEZ	GREEN	06-10-2021
116	SNS HOLIDAY VILLA	BARDEZ	GREEN	15-12-2021
117	UNICORN REAL ESTATE (UNIT: TURTLE BEACH RESORT)	PERNEM	ORANGE	01-06-2021
118	MORESHWAR TRADING Company PVT. LTD.(Sharayu autom)	BARDEZ	ORANGE	06-04-2021
119	DROGEN PHARMA PVT LTD	PONDA	ORANGE	03-02-2022
120	Aavaas Elite	BARDEZ	GREEN	08-09-2021
121	ANANT NIWAS GUEST HOUSE	BARDEZ	GREEN	05-01-2022
122	The Pink Spa & Wellness	TISWADI	WHITE	23-03-2022
123	YUAM COSMETICS I PVT LTD	TISWADI	ORANGE	26-10-2021
124	A.J.F VILLA	PERNEM	GREEN	13-08-2021
125	Vilanova	BARDEZ	GREEN	22-07-2021
126	Madeira Mansion	BARDEZ	GREEN	04-01-2022
127	KALANGUTKAR NURSING HOME	BARDEZ	ORANGE	29-11-2021
128	Compact Cement Products	BARDEZ	GREEN	23-12-2021
129	GAUTAM AUTO	PONDA	GREEN	02-08-2021
130	JONSHA GUEST HOUSE	BARDEZ	GREEN	11-05-2021
131	M/s Arul Linu Grabs Pvt Ltd	BICHOLIM	RED	06-05-2021
132	AVNG Goan Holidays	BARDEZ	GREEN	18-08-2021
133	SHARVANI PLASTIC INDUSTRY	PERNEM	GREEN	14-06-2021
134	AVNG Goan Holidays	BARDEZ	GREEN	20-08-2021
135	Gajanan Ice Works	PONDA	GREEN	08-12-2021
136	Happy Panda Hostel (Trouvaille Hospitality Pvt Ltd	PERNEM	GREEN	24-11-2021
137	21 CENTURY POLYMERS	TISWADI	ORANGE	23-08-2021
138	M/S. SALDANHA DEVELOPERS PVT. LTD	BARDEZ	ORANGE	19-11-2021
139	MATA RUKMINI FLOOR MILL	PONDA	GREEN	02-07-2021
140	RIVERSIDE	BARDEZ	GREEN	10-01-2022
141	Patit Banerjee & Sandhya Banerjee	BARDEZ	GREEN	30-09-2021

142	MARIA	BARDEZ	GREEN	24-11-2021
143	M/s. Gift of Nature Ayur Villa	BARDEZ	WHITE	03-03-2022
144	VILLA ROSA	PERNEM	GREEN	16-08-2021
145	M/s ANAND & ANAND ASSOCIATES (UNIT: ORABELLA VILLAS & SUITES)	BARDEZ	GREEN	27-10-2021
146	GURU GUEST HOUSE AND BAR & RESTAURANT	BARDEZ	GREEN	27-07-2021
147	M/s GOLDENDUNES INFRATECH PVT LTD	BARDEZ	GREEN	12-05-2021
148	FIESTA BAR & RESTAURANT	BARDEZ	GREEN	28-05-2021
149	De Alcazar	BARDEZ	ORANGE	24-06-2021
150	M/s. ECAP GREENTECH PVT. LTD.	PONDA	ORANGE	31-05-2021
151	Altrude By The Sea	BARDEZ	GREEN	15-12-2021
152	M/s. Golden Cashew Products	PONDA	ORANGE	12-06-2021
153	Megawide Construction DMCC - RMC Batching Plant	PERNEM	GREEN	09-04-2021
154	M/s. RAMAN RESORT	BARDEZ	GREEN	20-07-2021
155	KAPDI FABRICATORS	BICHOLIM	RED	14-12-2021
156	Shakti Polymetals Manufacturing Pvt Ltd	PONDA	RED	07-04-2021
157	SMILEY HOSPITALITY & ALLIED SERVICES	BARDEZ	ORANGE	14-07-2021
158	Aquamarine Holidays Goa (FF-C2)	BARDEZ	GREEN	08-09-2021
159	BEAUTY PARLOUR AND FAMILY SPA	BARDEZ	GREEN	20-10-2021
160	M/S.MAULI METAL INDUSTRIES	PONDA	WHITE	25-10-2021
161	Avita's Guest house	PERNEM	GREEN	06-12-2021
162	GOLDEN HERITAGE PVT LTD	BARDEZ	GREEN	15-02-2022
163	Superindia (FRP) Private Limited	PONDA	GREEN	10-01-2022
164	RACHEADO	BARDEZ	GREEN	08-03-2022
165	PEREIRA BAR AND RESTAURANT	BARDEZ	GREEN	17-07-2021
166	The Kumbh	BARDEZ	GREEN	26-10-2021
167	The Floral High	BARDEZ	GREEN	13-12-2021
168	ASSIS STAYS	BARDEZ	GREEN	27-04-2021
169	COCO GARDEN	BARDEZ	GREEN	20-08-2021
170	S&A(Suvina & Antonio's Guest House)	BARDEZ	GREEN	20-07-2021

171	COUNTO MICROFINE PRODUCTS PVT. LTD	SATARI	ORANGE	04-08-2021
172	Tribe Anjuna	BARDEZ	GREEN	30-04-2021
173	Goa Medical College & Hospital	TISWADI	RED	28-06-2021
174	Jungle House	BARDEZ	GREEN	13-12-2021
175	Aavaas Elite (UGF-F2)	BARDEZ	GREEN	08-09-2021
176	HOTEL HIDDEN PARADISE	PERNEM	ORANGE	31-10-2021
177	R.K.V TWO SISTER BEACH CAFE	BARDEZ	GREEN	04-01-2022
178	sabsol qualitech industries llp	PONDA	GREEN	18-10-2021
179	Agrawal Renewable Energy Pvt Ltd	PONDA	WHITE	28-10-2021
180	DIRECTORATE OF FISHERIES	BARDEZ	ORANGE	05-04-2021
181	Peace Land Guest House	BARDEZ	GREEN	20-08-2021
182	QUAINT COZY APARTMENT (SANTANA DCOSTA)	BARDEZ	GREEN	07-03-2022
183	Prince Santosh Holiday Homes	BARDEZ	GREEN	04-08-2021
184	HIGHSTREET CRUISES AND ENTERTAINMENT PVT. LTD (M.V ROYALE FLOTEL)	TISWADI	ORANGE	17-02-2022
185	Ariston Guest House	PERNEM	GREEN	16-07-2021
186	M/s LE GRAND ENGINEERING PVT LTD	BARDEZ	ORANGE	07-01-2022
187	PLAZ INN CANDOLIM	BARDEZ	ORANGE	03-07-2021
188	Ankita Bar & Restaurant	PERNEM	GREEN	23-07-2021
189	M/s SHRIYASH CEMENT ARTS	SATARI	GREEN	20-09-2021
190	Vision India Infraestate Pvt Ltd	BARDEZ	GREEN	06-01-2022
191	M/s. A. W. Faber Castell (India) Pvt. Ltd.	TISWADI	ORANGE	02-09-2021
192	LA BLANCA RESORT	PERNEM	GREEN	11-01-2022
193	La Quinta	BARDEZ	GREEN	09-07-2021
194	PRIMO BOM TERA VERDE	BARDEZ	ORANGE	26-10-2021
195	M/s GOLDFINCH RESORTS PVT LTD	TISWADI	RED	24-03-2022
196	Rafik Chowhan/Hindustan En Harmonie Guesthouse	BARDEZ	GREEN	28-07-2021
197	Lax Washing Center	PERNEM	ORANGE	02-09-2021
198	Sri Ganesh Fuels (BPCL)	PONDA	WHITE	19-01-2022
199	Celsos Home stay	TISWADI	GREEN	05-01-2022

200	Campal Clinic Hospital	TISWADI	ORANGE	20-10-2021
201	M. V. RIPPLES	TISWADI	ORANGE	27-12-2021
202	M/s SHER - E- PUNJAB HOTELS PVT LTD	TISWADI	GREEN	15-10-2021
203	SHREEYA CORRUGATING INDUSTRIES	PONDA	GREEN	22-02-2022
204	M/s A. V. Associates	BARDEZ	GREEN	10-08-2021
205	Heera Recreation and Entertainment	PERNEM	GREEN	24-11-2021
206	TOMLIB GARDENS	PERNEM	GREEN	21-04-2021
207	VAILANKANNI GUEST HOUSE	PERNEM	GREEN	10-01-2022
208	Frangipani - II	BARDEZ	GREEN	28-07-2021
209	DHANULAXMI CASHEWNUTS	BICHOLIM	ORANGE	27-05-2021
210	Lucky Star Beach Shack	BARDEZ	GREEN	31-12-2021
211	Mystical Rose Luxury Holiday homes	BARDEZ	GREEN	11-08-2021
212	Elsewhere (House No 442)	PERNEM	GREEN	02-12-2021
213	CHAMUNDA RIVER PARK	PONDA	ORANGE	26-10-2021
214	Twentyone Properties Private Limited	BARDEZ	GREEN	16-11-2021
215	Five Star Granites	PERNEM	ORANGE	15-11-2021
216	Mangesh Industries	BARDEZ	WHITE	15-07-2021
217	MV Arushi PNJ 803	BARDEZ	ORANGE	31-10-2021
218	SAFIRA RIVER FRONT RESORT	BARDEZ	GREEN	15-04-2021
219	ABAB AUTO INDUSTRIES	SATARI	WHITE	12-05-2021
220	Paradise Ventures -Paradise PNJ263	TISWADI	ORANGE	09-12-2021
221	RED FROG	BARDEZ	GREEN	05-08-2021
222	AGGIS SHACK	BARDEZ	GREEN	08-11-2021
223	URBAN HARVEST	BARDEZ	GREEN	20-04-2021
224	Flying Maya Guest House Pvt. Ltd.	BARDEZ	GREEN	06-04-2021
225	AYM Yoga Resort	PERNEM	GREEN	23-09-2021
226	DWAR ECO DESIGN(MAE TERRA)	TISWADI	GREEN	22-07-2021
227	SUMMERVILLE BEACH RESORT	BARDEZ	ORANGE	22-07-2021
228	M/s LAXMI AGRO INDUSTRIES	PONDA	ORANGE	09-02-2022
229	Automobile Corporation of Goa Ltd. (Plant-II) Bus Body Division	SATARI	ORANGE	05-06-2021
230	COASTAL SUNVIEW HOTEL PVT LTD	BARDEZ	ORANGE	09-02-2022

231	Anand Sagar Restaurant	BARDEZ	GREEN	04-08-2021
232	Angels Holiday Resort	BARDEZ	ORANGE	01-11-2021
233	REYBIER ALCO BEV PRIVATE LIMITED	BICHOLIM	ORANGE	07-01-2022
234	F106 ADHIRAJ OCEAN VISTA	BARDEZ	GREEN	18-11-2021
235	SEAHAWK SUITES	BARDEZ	GREEN	27-01-2022
236	Sean & Victoria Fernandes	BARDEZ	GREEN	15-10-2021
237	PUTZMEISTER INDIA PVT LTD	PONDA	ORANGE	11-11-2021
238	C K INDUSTRY	PONDA	RED	22-12-2021
239	Devashri Garden Cooperative Housing Society Ltd.	BARDEZ	RED	11-06-2021
240	Hotel Gautam	BARDEZ	ORANGE	04-08-2021
241	Casa Pinto Do Rosario Village Retreat and Homestay	BARDEZ	GREEN	16-07-2021
242	GBC PACKAGING	PONDA	GREEN	24-03-2022
243	M/s. SUNSET BAR AND RESTAURANT	BARDEZ	GREEN	09-07-2021
244	Siridao Beach Resorts Pvt. Ltd.	TISWADI	ORANGE	11-08-2021
245	LA SEA VUE	BARDEZ	GREEN	29-09-2021
246	Henmil	BARDEZ	GREEN	02-07-2021
247	GOA CONTAINERS PVT LTD	PONDA	ORANGE	11-11-2021
248	MILROC COLINA	TISWADI	RED	10-12-2021
249	Devashri Nirman L.L.P	TISWADI	GREEN	09-02-2022
250	HOLY TRINITY GUEST HOUSE	BARDEZ	GREEN	06-08-2021
251	M/S. PAPAS RESTAURANT AND JUICE BAR	BARDEZ	GREEN	11-06-2021
252	Nathurmal Eco Minerals Private Limited	BICHOLIM	ORANGE	07-01-2022
253	Medispray Laboratories Pvt.Ltd	PONDA	ORANGE	11-08-2021
254	SHREE KRUPA PLASTICS	PONDA	GREEN	05-08-2021
255	DAMIAN VINCENT CRASTO	TISWADI	WHITE	26-08-2021
256	M/S HAPPY LAUNDRY	PONDA	ORANGE	23-04-2021
257	VICTORIA VILLA	BARDEZ	GREEN	08-09-2021
258	GODS GIFT GUEST HOUSE	BARDEZ	GREEN	05-01-2022
259	Marshall's Guest House	PERNEM	GREEN	14-10-2021
260	Alcon Cement Company Pvt. Ltd.	BICHOLIM	ORANGE	03-08-2021

261	ANJUNA DREAMS	BARDEZ	GREEN	16-02-2022
262	SHUBHANKAR HERITAGE	TISWADI	ORANGE	01-11-2021
263	Esmeralda Barreto	BARDEZ	WHITE	24-02-2022
264	Sigma Laboratories Private Limited	BARDEZ	ORANGE	15-02-2022
265	AQUARIUS AIRA SUITES	BARDEZ	GREEN	15-07-2021
266	AMONCAR CLASSIC CATERING SERVICES PVT. LTD.	BICHOLIM	GREEN	03-06-2021
267	MRF LTD UNIT -II	PONDA	RED	16-11-2021
268	Ivon Holiday Calm	PERNEM	GREEN	20-08-2021
269	ROCK FOREST	BARDEZ	GREEN	04-08-2021
270	Mystical Rose Luxury Holiday Homes	BARDEZ	GREEN	22-11-2021
271	Shree Gananath Industries	PONDA	RED	12-05-2021
272	Gautam Vir & Payal Vir	BARDEZ	GREEN	30-12-2021
273	GOAN CHOICE HOTEL RESTAURANT	BARDEZ	GREEN	26-01-2022
274	RESORT RITCHITA	BARDEZ	GREEN	09-07-2021
275	MAPUSA MUNICIPAL COUNCIL	BARDEZ	GREEN	02-08-2021
276	Cafe Ritz Bar & Restaurant	TISWADI	GREEN	22-07-2021
277	Mrs Leela K Ellis	BARDEZ	GREEN	20-04-2021
278	Aldeia Miraflor	BARDEZ	GREEN	27-07-2021
279	M/s ELEGANT OFFSET PRINTERS PVT. LTD.	BARDEZ	ORANGE	03-08-2021
280	Aquamarine Holidays Goa	BARDEZ	GREEN	08-09-2021
281	LA VEGA RESORTS	PERNEM	GREEN	17-04-2021
282	TROPICAL WAVE HOSTEL	BARDEZ	GREEN	22-11-2021
283	7 SEA'S SPA	BARDEZ	WHITE	19-01-2022
284	M/S SAILOR'S INN	BARDEZ	GREEN	16-07-2021
285	SHEILAJA V.TAMBA	TISWADI	ORANGE	08-08-2021
286	ALBANO'S BEACH SHACK	BARDEZ	GREEN	22-10-2021
287	Jai Gopal Sachdeva	BARDEZ	ORANGE	06-09-2021
288	Tea stall	BARDEZ	WHITE	13-07-2021
289	M/s Jay Kay Plastic	BARDEZ	ORANGE	11-07-2021
290	Estela Marine Services	TISWADI	ORANGE	02-09-2021
291	TAVORA VEGTURES(NAV TARA)	BARDEZ	GREEN	16-09-2021

292	Kingstork Beach Resort	BARDEZ	GREEN	11-05-2021
293	M/s HOTEL SUJAY	PONDA	GREEN	23-06-2021
294	M/s ARBOR BREWING COMPANY (INDIA) PVT LTD	PERNEM	ORANGE	15-03-2022
295	Ponda Envocare Limited	SATARI	RED	01-11-2021
296	The Vagatorian	BARDEZ	GREEN	08-11-2021
297	JOLVERA GUEST HOUSE	BARDEZ	GREEN	26-11-2021
298	SUREFLO TECHCON PRIVATE LIMITED - UNIT II	PONDA	ORANGE	02-07-2021
299	M/s. GKB HI-TECH LENSES Pvt. Ltd.	BARDEZ	GREEN	03-09-2021
300	MICRO INTERCONNEXION PVT LTD	TISWADI	ORANGE	16-02-2022
301	DB Electricals Private Limited - Unit III	PERNEM	WHITE	12-07-2021
302	CHAMPAVATI GUEST HOUSE	BARDEZ	GREEN	23-03-2022
303	M/S. HERAMB INDUSTRIES	BARDEZ	GREEN	05-05-2021
304	Nitin Developers Pvt.Ltd.(Corlim Grand)	TISWADI	ORANGE	09-02-2022
305	CHACHA'S GUEST HOUSE	BARDEZ	GREEN	07-03-2022
306	STAR ALLIANCE RESORTS LLP	BARDEZ	ORANGE	03-08-2021
307	M/s. ALOR GRANDE HOLIDAY RESORTS	BARDEZ	ORANGE	06-12-2021
308	M/S. Meal Makers (Rich Goan Spice)	BARDEZ	ORANGE	20-10-2021
309	ANDREW'S BEACH SHACK	BARDEZ	GREEN	12-11-2021
310	Canrey Nest Bar & Restaurant	PERNEM	GREEN	30-04-2021
311	M/s. RANDEN ENGINEERING PVT. LTD.	PONDA	ORANGE	20-04-2021
312	BOULANGER	BARDEZ	GREEN	23-04-2021
313	M/S Ursula Happy Home	PERNEM	GREEN	06-01-2022
314	OMKAR GUEST HOUSE	PERNEM	GREEN	07-09-2021
315	RIA HOSPITALITY PVT LTD.	BARDEZ	ORANGE	02-09-2021
316	VITORINO PALACE	PERNEM	GREEN	08-09-2021
317	Lurdes Guest House	BARDEZ	GREEN	07-09-2021
318	Aavaas Apartments (FF3)	BARDEZ	GREEN	31-12-2021
319	EMMANUEL'S GUEST HOUSE	BARDEZ	GREEN	28-07-2021
320	Tajasvi Estate Pvt Ltd	BARDEZ	ORANGE	22-07-2021
321	K & P INDUSTRIES	PONDA	WHITE	16-07-2021

322	Deccan Fine Chemicals (India) Private Limited	TISWADI	RED	19-11-2021
323	BAY 15(Unit of M/s. Aqua resorts & Spa vt.ltd.	TISWADI	ORANGE	01-03-2022
324	SABA SCRAP TRADER	PONDA	ORANGE	01-07-2021
325	Aavaas Elite (UGF-F5)	BARDEZ	GREEN	08-09-2021
326	M/s. AJAY CASHEW OIL & ALLIED PRODUCTS	PONDA	ORANGE	09-03-2022
327	Global Spirits And Foods	BARDEZ	ORANGE	31-10-2021
328	Devyani FoodIndustries Limited	PONDA	RED	31-01-2022
329	TIGER SHEET METAL WORKS UNIT-I	TISWADI	ORANGE	21-07-2021
330	SOLEIL GUEST HOUSE	PERNEM	GREEN	10-11-2021
331	Hotel Celestial (Cygnett)	BARDEZ	GREEN	28-10-2021
332	RICHLOOKS INFRASTRUCTURE PVT LTD	BARDEZ	ORANGE	04-08-2021
333	UNITED LEADOXIDE PRODUCTS PVT LTD	PONDA	RED	23-07-2021
334	Meditab Specialities Limited	PONDA	ORANGE	21-07-2021
335	Vassudeva Citadel BLOCK B	BICHOLIM	GREEN	02-12-2021
336	HOTEL PARK PLAZA	TISWADI	ORANGE	04-03-2022
337	Ivon's Holiday Calm	PERNEM	GREEN	20-08-2021
338	Anandi Niwas	PERNEM	GREEN	01-07-2021
339	Mofet	TISWADI	ORANGE	15-02-2022
340	SHIVSHANKAR MAYEKAR (RESIDENTIAL & COMMERCIAL COMPLEX)	BARDEZ	GREEN	19-10-2021
341	Chetan Malhotra	BARDEZ	GREEN	30-12-2021
342	BacTreat Environmental Solutions LLP	BICHOLIM	ORANGE	09-02-2022
343	Maitrey cold storage	TISWADI	GREEN	11-11-2021
344	HABLOT MANUFACTURING CONSTRUCTION CO	PONDA	GREEN	02-08-2021
345	HOTEL HOLIDAY HOME	TISWADI	GREEN	24-09-2021
346	THE ATTIC GUEST HOUSE	BARDEZ	GREEN	20-08-2021
347	MRF LTD UNIT -II	PONDA	RED	22-03-2022
348	XAVIERS BEACH CAFE	BARDEZ	GREEN	22-02-2022
349	HNL INSTRUMENTS AND CONTROLS PVT LTD	BICHOLIM	ORANGE	17-01-2022

350	FRIENDS CORNER (BEACH SHACK)	BARDEZ	GREEN	07-02-2020
351	Arpora Tales	BARDEZ	GREEN	14-12-2021
352	VIJAY GUEST HOUSE	BARDEZ	GREEN	10-01-2022
353	HOTEL AMAR	TISWADI	GREEN	04-01-2022
354	M/S OM GANESH NAIK GUEST HOUSE	PERNEM	GREEN	22-07-2021
355	Awesome salon & spa	BARDEZ	WHITE	19-01-2022
356	WHISPERING PALMS BEACH RESORT	BARDEZ	ORANGE	06-12-2021
357	PEC VENTURES PVT LTD	BARDEZ	ORANGE	09-11-2021
358	Sachin Katake	BARDEZ	GREEN	30-09-2021
359	D. AUTO DETAILER	BARDEZ	ORANGE	02-09-2021
360	CASA DE SOUZA	BARDEZ	GREEN	24-11-2021
361	Gaonkar Chemicals	TISWADI	ORANGE	13-01-2022
362	Karthik Inductions Ltd	PONDA	ORANGE	01-11-2021
363	BLUE COCONUT BEACH SHACK	BARDEZ	GREEN	12-11-2021
364	Sequoia Residency	BARDEZ	GREEN	30-04-2021
365	ZELOSENA GUEST HOUSE	BARDEZ	GREEN	24-11-2021
366	Krish Holiday Inn	BARDEZ	ORANGE	22-07-2021
367	NIZMAR RESORT	BARDEZ	ORANGE	04-08-2021
368	BRITTOS BAR & RESTAURANT	BARDEZ	GREEN	15-04-2021
369	Expanse Asoka Vann	BARDEZ	GREEN	09-02-2022
370	Travellers and Alex	BARDEZ	GREEN	26-01-2022
371	H Key Hospitality	BARDEZ	ORANGE	27-09-2021
372	RAJESHREE GUEST HOUSE	PERNEM	GREEN	02-07-2021
373	M/s Mahindra Holidays & Resorts India Limited	BARDEZ	RED	06-08-2021
374	M/s. "4D's Coast Resort"	BARDEZ	GREEN	25-01-2022
375	Berger Paints India Limited, Plot.316-317, Kundaim Industrial Estate, Kundaim, Goa	PONDA	ORANGE	15-04-2021
376	SUPER SPECIALITY BLOCK AT GMCH	TISWADI	RED	17-06-2021
377	ST JOSEPH TYRE SERVICE SHOP	BARDEZ	GREEN	28-10-2021
378	The Abode Goa	TISWADI	GREEN	22-09-2021

379	NAMO NAMAH RESORT	PERNEM	GREEN	09-02-2022
380	CHOWGULE INDUSTRIES PRIVATE LIMITED	PONDA	ORANGE	15-11-2021
381	CAFE HORIZON BEACH SHACK	BARDEZ	GREEN	06-01-2022
382	Prabhu vihar	BARDEZ	GREEN	08-09-2021
383	Ashoka Buildcon Limited	PERNEM	GREEN	28-02-2022
384	M/s Golden Plastocrafts	BICHOLIM	ORANGE	07-01-2022
385	ALIDIA BEACH COTTAGES	BARDEZ	ORANGE	14-01-2022
386	Automobile Corporation of Goa Ltd. (Plant-II) Bus Body Division	SATARI	ORANGE	20-06-2021
387	Aminha Casa	BARDEZ	GREEN	11-08-2021
388	VALENTINES RETREAT	BARDEZ	ORANGE	22-07-2021
389	Tejas Nataraj	BARDEZ	GREEN	27-09-2021
390	R.R. INDUSTRIES	PONDA	WHITE	16-07-2021
391	RAIYANI STEELS	PONDA	GREEN	11-02-2022
392	CAVALA, THE SEASIDE RESORT	BARDEZ	ORANGE	26-10-2021
393	M/S Supreme Industries	BARDEZ	RED	03-01-2022
394	M/s Falcon Retreat Pvt. Ltd	BARDEZ	GREEN	20-04-2021
395	M/S FIESTA HOSPITALITY SERVICES PVT LTD	BARDEZ	GREEN	23-09-2021
396	FERNANDES GUEST HOUSE	BARDEZ	GREEN	11-02-2022
397	BANIL CASTING PRIVATE LIMITED	PONDA	ORANGE	07-01-2022
398	Sky Gate Hospitality Private Limited (Biryani By Kilo)	TISWADI	GREEN	21-06-2021
399	Goa Medical College & Hospital	TISWADI	RED	16-07-2021
400	Megawide Construction DMCC (Temporary Plants for Construction of Mopa Airport)	PERNEM	ORANGE	18-10-2021
401	Shaiv Distilleries Pvt.Ltd.	BICHOLIM	ORANGE	20-10-2021
402	BAGA RETREAT	BARDEZ	ORANGE	21-07-2021
403	LUCIANA'S GUEST HOUSE	BARDEZ	GREEN	31-12-2021
404	Cafe Bytes n Bites	BARDEZ	GREEN	27-10-2021
405	ROFINO'S COTTAGES	BARDEZ	GREEN	23-12-2021
406	TENDULKAR FLOUR	PONDA	GREEN	10-11-2021
407	Chetan Kashyap (Guest House)	BARDEZ	GREEN	21-04-2021
408	HOTEL LINDA GOA	BARDEZ	ORANGE	22-07-2021

409	EMPERORS BOULEWARD	TISWADI	ORANGE	18-10-2021
410	Avinash Guest House	PERNEM	GREEN	22-11-2021
411	CALYSTA HOTEL AND RESORTS LLP	BARDEZ	ORANGE	01-07-2021
412	Chawla Restaurant & Fast Food	BARDEZ	GREEN	07-04-2021
413	Saishiv Boards And Tops Pvt Ltd	BARDEZ	GREEN	24-09-2021
414	M/s. Prakash Parodkar Basalt Quarry	BICHOLIM	ORANGE	16-11-2021
415	Mama Moo Cheese Pvt Ltd	SATARI	ORANGE	30-12-2021
416	SHARANAM HOTELS & RESORTS PVT LTD	BARDEZ	ORANGE	17-01-2022
417	SAM SHACK	BARDEZ	GREEN	22-10-2021
418	MORESHWAR TRADING Company PVT. LTD.(Sharayu autom)	BARDEZ	ORANGE	14-07-2021
419	M/s. Bharat Plastic	TISWADI	ORANGE	12-06-2021
420	Nutan Gupta	BARDEZ	GREEN	31-05-2021
421	7Sea's salon n Spa	BARDEZ	GREEN	20-08-2021
422	West Valley Guest House	BARDEZ	GREEN	13-12-2021
423	Hotel Marva (Carvalho Real Estate))	BARDEZ	ORANGE	11-05-2021
424	The River Palace	BARDEZ	GREEN	07-09-2021
425	MANGALMURTI ART SOLUTION	BICHOLIM	ORANGE	05-05-2021
426	Desai Cement Company Private Limited	BICHOLIM	ORANGE	16-12-2021
427	MR. SANJAY DHALL	BARDEZ	GREEN	23-04-2021
428	SAI TECH	PONDA	WHITE	27-07-2021
429	SRK'S Baga Along Resort & Spice Farm	PONDA	GREEN	22-07-2021
430	Frangipani - I	BARDEZ	GREEN	28-07-2021
431	M/s. CG Power and Industrial Solutions Ltd. (Formerly Crompton Greaves Ltd.),	PONDA	ORANGE	11-11-2021
432	BEACH FRONT RESORT	BARDEZ	ORANGE	11-08-2021
433	M/s. C G Power and Industrial Solutions Limited	BARDEZ	ORANGE	10-12-2021
434	TRINITY BEVERAGES	TISWADI	ORANGE	18-08-2021
435	Nestle India Ltd	PONDA	RED	04-01-2022
436	MONIKA GUEST HOUSE	BARDEZ	GREEN	30-12-2021
437	DATTAPRASAD ENTERPRISES	BICHOLIM	ORANGE	22-07-2021

438	MULTIPROCESSING UNIT AT PALE KOTHAMBI UNDER PROJECT GOVAN BY GSBB	BICHOLIM	ORANGE	20-04-2021
439	M/s Goa Antibiotic and Pharmaceuticals Ltd.	PERNEM	ORANGE	09-11-2021
440	Hindustan Multitech	BARDEZ	ORANGE	18-08-2021
441	Fatima Guest House	BARDEZ	GREEN	30-04-2021
442	Quinta Serena	BARDEZ	GREEN	30-04-2021
443	M/s Precitech Components	SATARI	WHITE	26-11-2021
444	Shalini Metals	PERNEM	ORANGE	11-08-2021
445	GEMINI MOTORS	BARDEZ	ORANGE	21-07-2021
446	NATRAJ BAR & RESTAURANT	BARDEZ	GREEN	23-07-2021
447	AA.RA Hotels Pvt. Ltd	BARDEZ	ORANGE	10-12-2021
448	DAMUS BAKERY	BARDEZ	GREEN	20-04-2021
449	Goan Hotels & Realty Pvt Ltd Unit Grand Hyatt Goa	BARDEZ	RED	30-07-2021
450	Om Sai Guest House	TISWADI	GREEN	09-08-2021
451	M/s. JUST PERFECT RESORTS GOA PVT. LTD.	BARDEZ	ORANGE	11-06-2021
452	Dcruz Apartments	BARDEZ	GREEN	08-03-2022
453	KRUPA POLYMERS (INDIA) PRIVATE LIMITED	PONDA	GREEN	24-03-2022
454	SUNSET GUEST HOUSE	PERNEM	GREEN	10-12-2021
455	FARMAGUDI RESIDENCY	PONDA	ORANGE	03-09-2021
456	THE MOMS HOME	BARDEZ	GREEN	06-04-2021
457	CRUISE VESSEL, M.V. St.Joseph, Queen Paulo Travels	TISWADI	ORANGE	20-10-2021
458	HOTEL AMBER ROOMS	BARDEZ	ORANGE	07-01-2022
459	Allan Pereira (Guest House)	BARDEZ	GREEN	07-09-2021
460	Koteshwar Residency	BICHOLIM	GREEN	04-06-2021
461	Saira Car Servicing Washing centre	SATARI	ORANGE	21-07-2021
462	PLATICARE HOSPITAL	PONDA	ORANGE	02-09-2021
463	MVR Seaview Homes Pvt. Ltd.	BARDEZ	GREEN	27-07-2021
464	Smart PET LLP	PONDA	GREEN	03-06-2021
465	ANZINY GUEST HOUSE II	BARDEZ	GREEN	11-01-2022
466	Mahananda Restaurant	PONDA	GREEN	28-06-2021

467	VRINDAVAN ENTERPRISES	BICHOLIM	ORANGE	01-11-2021
468	Manthan Beach Resort	PERNEM	GREEN	09-07-2021
469	ECOTECH PROJECTS PVT LTD.	BARDEZ	ORANGE	01-03-2022
470	Montego Bay	PERNEM	ORANGE	19-11-2021
471	BOUGAINVILLEA GUEST HOUSE	BARDEZ	GREEN	14-06-2021
472	Vishwamukta Pvt Ltd Unit: Copperleaf Restaurant	TISWADI	ORANGE	27-09-2021
473	OCEANIC 22 RESTAURANT	BARDEZ	GREEN	16-09-2021
474	Espynick Guest House	TISWADI	GREEN	22-02-2022
475	GL CLASSIC	BARDEZ	GREEN	16-08-2021
476	NIKS & DEEPS	BARDEZ	GREEN	09-02-2022
477	Somani hospitality	TISWADI	GREEN	16-08-2021
478	S. N. Villa	BARDEZ	GREEN	06-09-2021
479	ValAnthines	BARDEZ	GREEN	08-03-2022
480	Ocean Palms Goa	BARDEZ	ORANGE	01-11-2021
481	CROMPTON GREAVES CONSUMER ELECTRICAL LTD.	PONDA	GREEN	30-03-2022
482	Kineco Exel Composites Private Limited	BARDEZ	ORANGE	28-03-2022
483	M/s Calm Realty and Hospitality LLP	BARDEZ	ORANGE	06-09-2021
484	M/s Sun Village Resort Pvt Ltd	BARDEZ	ORANGE	04-08-2021
485	ULKA SEAFOODS PRIVATE LIMITED	PONDA	ORANGE	26-10-2021
486	M/s. FRESENIUS KABI INDIA PRIVATE LIMITED	SATARI	RED	13-09-2021
487	HOTEL ASHOK PLAZA	TISWADI	ORANGE	07-01-2022
488	Joshua's Guest House	PERNEM	GREEN	14-10-2021
489	HOTEL LA CAPITOL	TISWADI	GREEN	23-03-2022
490	The Regalia Resort	PERNEM	ORANGE	05-04-2021
491	Hotel Ambrosia Guest House Villa AVR GOA PROMOTERS	BARDEZ	GREEN	24-09-2021
492	TCPL Packaging Ltd.	PONDA	GREEN	30-11-2021
493	Glenmark Pharmaceuticals Ltd. Plot No S-7, Colvale Industrial Estate, Colvale, Goa	BARDEZ	ORANGE	06-12-2021
494	Himalaya Yoga Valley	PERNEM	GREEN	30-12-2021
495	M/s. SIRSAT LODGE	BARDEZ	ORANGE	26-10-2021

496	Creative Manufacturing Solutions (India) Pvt. Ltd.	BARDEZ	RED	09-02-2022
497	PRABHU ENTERPRISES	PONDA	GREEN	04-05-2021
498	SUSHEELA PALACE	PONDA	GREEN	30-03-2022
499	GK AUTOTECH	PONDA	GREEN	23-07-2021
500	MEHA CHEMICALS	PONDA	RED	01-06-2021
501	Pompa's Poffertjes	BARDEZ	GREEN	20-04-2021
502	M/s. ALOFT CALANGUTE GOA (Le Meridian)	BARDEZ	ORANGE	24-06-2021
503	SUNSTAR HOMES	BARDEZ	GREEN	29-04-2021
504	Construction of New Market Complex at Porvorim Goa	BARDEZ	GREEN	13-08-2021
505	M/S.ISPRAVA HOSPITALITY PVT LTD	BARDEZ	GREEN	28-07-2021
506	GOA VILLA 6	BARDEZ	GREEN	02-12-2021
507	GARDEN OF MEALS	PERNEM	GREEN	16-08-2021
508	saligao farm cottages	BARDEZ	GREEN	22-11-2021
509	CANDOLIM VILLA VEREDIANA	BARDEZ	GREEN	08-09-2021
510	TAVORA VEGTURES	TISWADI	GREEN	27-04-2021
511	Riva Resort and Spa	PERNEM	ORANGE	22-07-2021
512	RAJ RYLE RESIDENCY	BARDEZ	RED	10-12-2021
513	Serendip	PONDA	GREEN	20-10-2021
514	Hotel Srikamal Park	BICHOLIM	GREEN	14-07-2021
515	CAFE SANDBAR BEACH SHACK	BARDEZ	GREEN	12-11-2021
516	Sastech Associates(M.V Tango-16)	TISWADI	ORANGE	07-01-2022
517	Palacio Baga	BARDEZ	GREEN	30-07-2021
518	M/s. MILAGRO INFRASTRUCTURE PRIVATE LIMITED	BARDEZ	ORANGE	23-03-2022
519	ROZBAL INDUSTRIES	PONDA	RED	04-01-2022
520	NELMAR NEST GUEST HOUSE	BARDEZ	GREEN	05-01-2022
521	M/S. SUNSHINE APARTMENT	BARDEZ	GREEN	11-08-2021
522	OCEANIC SHACK	BARDEZ	GREEN	04-01-2022
523	LE MARIN BEACH SHACK	BARDEZ	GREEN	14-12-2021
524	Leena guest house	PERNEM	GREEN	25-01-2022
525	Vision Dempo Hospitality And Estates Pvt Ltd (VISION GALLERIA - RESIDENTIAL PROJECT)	BARDEZ	GREEN	05-10-2021

526	ANIL GARAGE	BARDEZ	ORANGE	21-07-2021
527	Baga Venture (Ziva Thai	BARDEZ	GREEN	27-09-2021
528	Rukmini Pack Print Pvt Ltd	BARDEZ	ORANGE	14-07-2021
529	M/s CORLIM MEADOWS	TISWADI	GREEN	20-10-2021
530	Metpro Industries	BARDEZ	RED	28-06-2021
531	Polynova Industries Ltd	PONDA	GREEN	11-03-2022
532	LANDESEND MORJIM Guest House	PERNEM	GREEN	20-07-2021
533	VAILANKANNI GUEST HOUSE	PERNEM	GREEN	14-12-2021
534	VIVAJAY BRUSHES (GOA)	BARDEZ	ORANGE	07-01-2022
535	Villa 59	BARDEZ	GREEN	13-12-2021
536	Bicholim Municipal Council	BICHOLIM	ORANGE	28-07-2021
537	Goana Foods	TISWADI	ORANGE	11-11-2021
538	Cassa - e - Divan	BARDEZ	ORANGE	05-04-2021
539	SKY KING	PERNEM	GREEN	24-09-2021
540	PYRAMID BEACH SHACK	BARDEZ	GREEN	20-04-2021
541	MORESHWAR TRADING Company PVT. LTD.(Sharayu autom)	BARDEZ	ORANGE	21-07-2021
542	JONATHAN GUEST HOUSE	BARDEZ	GREEN	16-09-2021
543	AA.RA Hotels Pvt. Ltd	BARDEZ	ORANGE	27-05-2021
544	M/s. ROBERTET INDIA PRIVATE LIMITED	BARDEZ	ORANGE	22-07-2021
545	AZUL BARCO CRUISES	TISWADI	ORANGE	27-12-2021
546	Mandrem Beach Resort	PERNEM	ORANGE	17-01-2022
547	BOBBYS SHACK.COM	BARDEZ	GREEN	26-01-2022
548	RAJ INDUSTRIES	BARDEZ	ORANGE	23-08-2021
549	M.A.R.S Beach Cottages	BARDEZ	GREEN	28-10-2021
550	NUPUR HOME STAY	BARDEZ	GREEN	12-11-2021
551	RAJESHREE GREEN HOUSE	PERNEM	GREEN	02-07-2021
552	Mermaids Guest House (Agnes Fernendes)	BARDEZ	GREEN	25-01-2022
553	CROMPTON GREAVES CONSUMER ELECTRICAL LTD.	PONDA	GREEN	12-08-2021
554	ONDAS DO MAR RESORT	BARDEZ	ORANGE	11-11-2021
555	Versatile Landbase Pvt Ltd	TISWADI	RED	12-05-2021
556	The LUX unit of Aditya Residential Complex	PONDA	GREEN	18-11-2021

557	Concio Bar & Restaurant	BARDEZ	GREEN	28-05-2021
558	AAKAASH MANUFACTURING COMPANY PRIVATE LIMITED	PERNEM	GREEN	20-07-2021
559	M/S OM GANESH NAIK GUEST HOUSE	PERNEM	GREEN	13-01-2022
560	PUTZMEISTER INDIA PVT LTD	PONDA	ORANGE	08-03-2022
561	SULEMAN WEDING AND FABRICATION WORK	SATARI	WHITE	06-05-2021
562	Sanjeevan Swami (Guest House)	BARDEZ	GREEN	23-04-2021
563	M/s M V NOAHS ARK (Unit of M/s N to N Solutions)	TISWADI	ORANGE	16-11-2021
564	M/s. CG Power and Industrial Solutions Ltd. (Formerly Crompton Greaves Ltd.),	PONDA	ORANGE	23-07-2021
565	PK and D Guest House	BARDEZ	GREEN	15-10-2021
566	COLGATE PALMOLIVE (INDIA) LIMITED	PONDA	ORANGE	06-05-2021
567	Goa Medical College & Hospital	TISWADI	RED	26-11-2021
568	NADAF AND SONS	PONDA	ORANGE	26-10-2021
569	Miracle Foods	BARDEZ	WHITE	06-05-2021
570	COUTINHO'S NEST	BARDEZ	GREEN	07-01-2022
571	BEACH WAY HOME STAY	BARDEZ	GREEN	08-09-2021
572	Mayflower Enclave Coop Housing Maintenance Society	TISWADI	GREEN	09-02-2022
573	Franria Villa Guest House	BARDEZ	GREEN	01-07-2021
574	Hotel Mira	BARDEZ	ORANGE	05-06-2021
575	Ana Maria Guest House	BARDEZ	GREEN	15-04-2021
576	MANUEL VILLA	PERNEM	GREEN	10-08-2021
577	Olegario Nazareth Agri Holdings	BICHOLIM	GREEN	11-11-2021
578	RADHARAM CASHEW PRODUCTS	SATARI	ORANGE	11-11-2021
579	SKY VILLA	BARDEZ	GREEN	01-07-2021
580	Bicholim Municipal Council	BICHOLIM	ORANGE	16-11-2021
581	Joaquim Luis Fernandes	BARDEZ	GREEN	29-04-2021
582	ARYA CASHEW PRODUCTS PVT LTD	PONDA	ORANGE	01-11-2021
583	SONU INDUSTRIES	PONDA	ORANGE	15-02-2022
584	HEALTHWAY HOSPITALS PVT.LTD.	TISWADI	ORANGE	11-07-2021
585	CASA AHNNA	BARDEZ	ORANGE	11-08-2021

586	Jalaram Furniture Industries	PONDA	GREEN	18-11-2021
587	M/s. Superb Goan Reality LLP	BARDEZ	ORANGE	06-12-2021
588	ESHA ENTERPRISES	PONDA	WHITE	21-01-2022
589	SAIRAJ GUEST HOUSE	BARDEZ	GREEN	26-01-2022
590	Porvorim Regency	BARDEZ	GREEN	08-09-2021
591	SUN GUEST HOUSE	BARDEZ	GREEN	27-10-2021
592	HOTEL SHANTI SOLITAIRE	BARDEZ	ORANGE	28-11-2021
593	Dmellos Sea View Home	BARDEZ	ORANGE	22-07-2021
594	Arsh's Nest	BARDEZ	GREEN	22-02-2022
595	SHAH'S HOLIDAY HOME	BARDEZ	GREEN	14-10-2021
596	Aavaas Apartments (FF2)	BARDEZ	GREEN	31-12-2021
597	EPL LIMITED	PONDA	ORANGE	16-02-2022
598	PARAB ENGINEERING INDUSTRIES	PONDA	RED	01-10-2021
599	Raj industries	TISWADI	WHITE	13-09-2021
600	PROPOSED HOTEL BY IKVAL S. SAGGU	PERNEM	ORANGE	04-08-2021
601	RESORTE MARINHA DOURADA	BARDEZ	ORANGE	26-10-2021
602	AUTO REPAIR WORKSHOP	BARDEZ	ORANGE	03-08-2021
603	CRYSTAL VILLAGE	BARDEZ	GREEN	20-10-2021
604	Star Agro Products	PONDA	ORANGE	09-04-2021
605	BIG BREAD FAMILY BAKERY	BARDEZ	GREEN	04-08-2021
606	M/S. PRESA DI GOA	BARDEZ	GREEN	29-12-2021
607	INCREDIBLE FOOD AND BEVERAGES	PONDA	GREEN	28-05-2021
608	MULTIPROCESSING UNIT AT PALE KOTHAMBI UNDER PROJECT GOVAN BY GSBB	BICHOLIM	ORANGE	19-11-2021
609	Vini Keni Ventures	TISWADI	GREEN	17-09-2021
610	HOTEL ORION	BARDEZ	ORANGE	01-11-2021
611	SHREE RAM ENTERPRISES	BICHOLIM	GREEN	09-02-2022
612	Sesa Resource Limited, Barge Loading Jetty at Surla	BICHOLIM	RED	19-07-2021
613	CALVIN PROPERTIES	TISWADI	GREEN	20-10-2021
614	M/s Riverside Regency Resort	BARDEZ	ORANGE	23-02-2022

615	M/s. SURFACE COATING INDUSTRIES	PONDA	GREEN	03-06-2021
616	Villa Beleza Infinita	BARDEZ	GREEN	28-12-2021
617	MEHA CHEMICALS	PONDA	RED	23-03-2022
618	Kartik Inn	PERNEM	GREEN	28-09-2021
619	COREL PAINTS	PONDA	ORANGE	01-11-2021
620	Britonna Yatch Station (Stephania Frois)	BARDEZ	GREEN	29-06-2021
621	La Quinta	BARDEZ	GREEN	11-05-2021
622	KEVIN HENRY MASCARENHAS	BARDEZ	GREEN	16-07-2021
623	M/s. GOLDY FINEPACKS PVT. LTD.	PONDA	ORANGE	27-05-2021
624	CREAMCHOC ICE CREAMS PVT LTD	BARDEZ	ORANGE	28-02-2022
625	ELSEWHERE (H No 298)	PERNEM	GREEN	02-12-2021
626	pebbles guest house	BARDEZ	GREEN	08-09-2021
627	GOA VILLA 14	BARDEZ	GREEN	02-12-2021
628	M/S ST. MICHAEL SERVICE STATION	BARDEZ	ORANGE	11-02-2022
629	GOA COLD STORAGE PVT. LTD	PERNEM	ORANGE	15-04-2021
630	HERITAGE EXOTICA	BARDEZ	GREEN	30-09-2021
631	1.00 MLD Sewage Treatment Plant Durbhat	PONDA	RED	25-10-2021
632	Meditab Specialities Limited	PONDA	ORANGE	04-08-2021
633	Jaglux Hospitality LLP	BARDEZ	GREEN	21-04-2021
634	CASA FREDNA guest house	BARDEZ	GREEN	26-10-2021
635	PAPAYA RESTAURANT	BARDEZ	GREEN	11-05-2021
636	JAMES SOUZA GUEST HOUSE	BARDEZ	GREEN	22-08-2019
637	LA BAMBA GUEST HOUSE	BARDEZ	GREEN	24-11-2021
638	HIGHSTREET CRUISES & ENT. PVT. LTD. (M.V CASINO R	TISWADI	ORANGE	01-11-2021
639	ROYAL COURTYARD	TISWADI	GREEN	30-09-2021
640	DR KEDARS MATERNITY INFERTILITY AND SURGICAL HOSPITAL	TISWADI	ORANGE	31-05-2021
641	M/s. THE GRAND LEONEY RESORT	BARDEZ	ORANGE	31-05-2021
642	LE GRAND ENGINEERING PVT LTD	BARDEZ	ORANGE	07-03-2022
643	LAXMI AUTO GARAGE	BARDEZ	ORANGE	04-08-2021

644	SAO LOURENCO	TISWADI	GREEN	23-09-2021
645	Roots Corporation Ltd (Ginger Hotel)	TISWADI	ORANGE	06-12-2021
646	Satpurush Metal Industries	PERNEM	ORANGE	17-09-2021
647	EN VOGUE HAIR AND BEAUTY SALON	BARDEZ	GREEN	27-10-2021
648	Consistent Engineers	BARDEZ	WHITE	15-02-2022
649	CASA RAYANN GUEST HOUSE	BARDEZ	GREEN	30-07-2021
650	DHAVAL GUEST HOUSE	TISWADI	ORANGE	05-04-2021
651	SIMCHEM PRIVATE LIMITED	PERNEM	ORANGE	26-10-2021
652	M/s. Nitin Developers Pvt. Ltd.	BARDEZ	GREEN	06-01-2022
653	Desai Cement Company Private Limited	BICHOLIM	ORANGE	27-05-2021
654	M/s. EL DOURADO HOILIDAY HOMES	BARDEZ	GREEN	01-03-2022
655	M/s De Souza Leisures Pvt Ltd (Aldeia Santa Rita)	BARDEZ	ORANGE	20-10-2021
656	LADISLAU FERNANDES FABRICATION OF GRILLS	BARDEZ	WHITE	11-02-2022
657	CASA GOANA HOLIDAY INN	BARDEZ	ORANGE	07-01-2022
658	M/s. DE LAGOM COMFORTS	BARDEZ	ORANGE	15-06-2021
659	ANJALI SEN	BARDEZ	GREEN	28-07-2021
660	M/s Club Cubana	BARDEZ	GREEN	26-01-2022
661	AVNG Goan Holidays (B-A/SF-A2)	BARDEZ	GREEN	20-08-2021
662	CORRAL HOSPITALITY PVT. LTD	PERNEM	ORANGE	15-02-2022
663	Martha&Meurin's Stays	BARDEZ	GREEN	04-06-2021
664	M/s. LYNN WASH CARE	TISWADI	ORANGE	03-08-2021
665	Maxcil Guest House	TISWADI	GREEN	07-09-2021
666	Chelsea Inn Residency	BARDEZ	GREEN	20-08-2021
667	Hindustan Waste Treatment Pvt. Ltd	BARDEZ	RED	02-11-2021
668	MARINA RESORTS PVT LTD (PARADISE VILLAGE BEACH RESORT)	BARDEZ	ORANGE	13-01-2022
669	CAFE GOA BEACH SHACK	BARDEZ	GREEN	12-11-2021
670	Omni Impex Pvt. Ltd.	SATARI	RED	12-05-2021
671	WILSHA BAR RESTAURANT AND LODGING	TISWADI	GREEN	08-09-2021
672	SHANKAR HOTEL	PERNEM	ORANGE	31-10-2021

673	GRANMON PRIVATE LIMITED	TISWADI	RED	07-09-2021
674	Pramila prabhakar morajkar (movable cart)	BARDEZ	WHITE	16-08-2021
675	COCOA MOGA BAKE HOUSE GOA	BARDEZ	GREEN	23-11-2021
676	HINDUSTAN PETROLEUM CORPORATION LIMITED	BARDEZ	WHITE	12-07-2021
677	The River Palace	BARDEZ	GREEN	11-10-2021
678	M/S SHREE DURGAPARAMESHWARI HOTELS PVT LTD	TISWADI	GREEN	24-09-2021
679	M/S MANDОВI DISTILLERIES AND BREWERIES PVT. LTD	PONDA	ORANGE	24-01-2022
680	Aastha EscapesGoa(Dsouza Faria Hospitality Pvt Ltd	BARDEZ	GREEN	15-04-2021
681	Sangeet Pepsi	PONDA	ORANGE	05-06-2021
682	Mayfair Hotel	TISWADI	ORANGE	18-10-2021
683	AML AUTO CARE	PONDA	ORANGE	27-05-2021
684	DUNES RERSTAURANT	PERNEM	GREEN	22-11-2021
685	SUREFLO TECHCON PRIVATE LIMITED - UNIT II	PONDA	ORANGE	28-11-2021
686	BARRETO SERVICE CENTER	SATARI	ORANGE	21-07-2021
687	Cinnamon Apartments (Jyoti Vadgama)	BARDEZ	GREEN	30-12-2021
688	RUDRA HOMES	BARDEZ	GREEN	30-07-2021
689	Casa Joseph	BARDEZ	GREEN	26-10-2021
690	M/s. AHAAN RESORT PVT. LTD.	BARDEZ	ORANGE	22-07-2021
691	SHREE SAWANT CAFE	BARDEZ	GREEN	28-05-2021
692	India	TISWADI	ORANGE	18-08-2021
693	M/s.Baba Hotels Pvt.Ltd.(Calangute Grande)	BARDEZ	ORANGE	21-03-2022
694	The Arowana Goa	BARDEZ	GREEN	20-07-2021
695	Sai Laundry	BARDEZ	ORANGE	01-06-2021
696	Biotic Waste Solutions Pvt Ltd	PONDA	RED	18-05-2021
697	Vedanta Ltd, Pig Iron Plant and Sinter Plant	BICHOLIM	RED	14-09-2021
698	M/s D'Souza Villa	BARDEZ	GREEN	20-04-2021
699	M/S VILLA RODRIGUES	PERNEM	GREEN	20-08-2021
700	Jacks Resort	BARDEZ	GREEN	15-10-2021

701	M/s Esteem Industries	BICHOLIM	ORANGE	06-04-2021
702	Hotel Arcadia	TISWADI	GREEN	20-07-2021
703	MARIO'S GUEST HOUSE	BARDEZ	GREEN	15-12-2021
704	M/s. The International Centre Goa	TISWADI	ORANGE	28-11-2021
705	ANTONATTA GUEST HOUSE	BARDEZ	GREEN	16-07-2021
706	Rukmini Hall	PONDA	GREEN	12-10-2021
707	Paulo Cho Vado	BARDEZ	GREEN	29-12-2021
708	H2O1 BEACH SHACK	BARDEZ	GREEN	26-01-2022
709	M/s Shaikh Polymers	PONDA	ORANGE	11-07-2021
710	THE MILROC KADAMBA COOP. HOUSING SOCIETY LTD.	TISWADI	RED	14-12-2021
711	Sunrise Restaurant	BARDEZ	GREEN	20-08-2021
712	CLEWALT ENGINEERING PRIVATE LIMITED	PONDA	ORANGE	05-04-2021
713	PARVATKAR INDUSTRIES	PONDA	GREEN	22-03-2022
714	BALAJI GUEST HOUSE	BARDEZ	GREEN	26-01-2022
715	PARTH PRACHET INDUSTRIES	PONDA	GREEN	20-10-2021
716	MARQUITOS GUEST HOUSE	TISWADI	GREEN	04-01-2022
717	RIVERSIDE RESORTS & HOLIDAY HOMES PVT LTD UNIT RIO ROYALE	BARDEZ	ORANGE	22-03-2022
718	LEMONMINT TOURS PVT LTD	BARDEZ	ORANGE	31-10-2021
719	Sequoia Residency	BARDEZ	GREEN	30-04-2021
720	H2O SHACK	BARDEZ	GREEN	29-12-2021
721	Sukho Thai	BARDEZ	GREEN	08-09-2021
722	Sunil Gupta Guest House	BARDEZ	GREEN	22-07-2021
723	Sigma Laboratories Private Limited	BARDEZ	ORANGE	22-07-2021
724	M/s. DR KOLWALKARS GALAXY HOSPITAL	BARDEZ	ORANGE	04-08-2021
725	EVERGREEN SKIN SALON & WELLNESS	BARDEZ	GREEN	25-10-2021
726	THE GOA STAY	BARDEZ	GREEN	01-07-2021
727	KAMAT ADVENTURE CRUISES	TISWADI	ORANGE	03-08-2021
728	Milestone Resorts	TISWADI	GREEN	14-01-2022
729	White Lotus Cafe	TISWADI	GREEN	09-03-2022
730	PRINCES DONA GUEST HOUSE	BARDEZ	GREEN	08-09-2021

731	River Isle Guest House & Restaurant	TISWADI	GREEN	08-09-2021
732	PARADKAR FURNITURE	PONDA	ORANGE	22-07-2021
733	M/s. Simeshwar Garage	BARDEZ	ORANGE	01-03-2022
734	M/s ELEGANT OFFSET PRINTERS PVT. LTD.	BARDEZ	ORANGE	19-11-2021
735	Primary Health Center Betki	PONDA	ORANGE	11-11-2021
736	Mother Nature by Spring Field	PERNEM	GREEN	23-07-2021
737	Pragati Furniture Arts	TISWADI	GREEN	09-11-2021
738	Andria Coelho	BARDEZ	GREEN	04-06-2021
739	SAVO & LUCY	BARDEZ	GREEN	23-07-2021
740	14Pods	PERNEM	GREEN	17-12-2021
741	ELSEWHERE (House No 447)	PERNEM	GREEN	30-11-2021
742	RESORT DE BALNEAIRE	BARDEZ	ORANGE	17-01-2022
743	Guest House/ Homestay, Heritage Exotica	BARDEZ	GREEN	10-01-2022
744	VICCO LABORATORIES	TISWADI	ORANGE	01-03-2022
745	sabsol qualitech industries llp	PONDA	GREEN	16-08-2021
746	M/s. ALPANA ENTERPRISES	BARDEZ	GREEN	20-10-2021
747	Om Sai Engineering Works	PONDA	WHITE	25-10-2021
748	SUPERKING DISTILLERY	BARDEZ	ORANGE	21-07-2021
749	Zinhos Beach Resort	BARDEZ	GREEN	07-09-2021
750	M/s RAKSHA INDUSTRIES	PONDA	ORANGE	17-09-2021
751	ASG Hospital Pvt Ltd	TISWADI	ORANGE	02-09-2021
752	M/s. Unichem Laboratories Limited	BARDEZ	ORANGE	18-08-2021
753	AVNG Goan Holidays (B-A/UGF-A1)	BARDEZ	GREEN	19-08-2021
754	J B GRACIAS SALON AND SPA	TISWADI	GREEN	20-10-2021
755	AARAV GUEST HOUSE	BARDEZ	GREEN	08-09-2021
756	CAFE SANDBAR BEACH SHACK	BARDEZ	GREEN	11-03-2022
757	SKYE VILLA MR ANIL CHOPRA & MRS SABINA CHOPRA GUEST HOUSE	BARDEZ	GREEN	06-05-2021
758	Dr. Amit S. Kalangutkar and Dr. (Mrs.) Preetam A. Kalangutkar	BARDEZ	ORANGE	24-03-2022
759	CORRAL HOSPITALITY PVT. LTD	PERNEM	ORANGE	10-08-2021
760	Aquamarine Holidays Goa (FF-B1)	BARDEZ	GREEN	08-09-2021

761	Casa Elvino	BARDEZ	GREEN	14-10-2021
762	KINECO LTD UNIT 3	BARDEZ	ORANGE	11-06-2021
763	ELSEWHERE (House No 297)	PERNEM	GREEN	02-12-2021
764	Gomantak Cruise Liner Pvt Ltd (H.B Barco De Festa)	TISWADI	ORANGE	06-01-2022
765	RAJ INDUSTRIES	BARDEZ	ORANGE	18-08-2021
766	Krish Retreat	BARDEZ	ORANGE	01-03-2022
767	OM GANESH	PERNEM	GREEN	24-11-2021
768	CHRISTALINA GUEST HOUSE	BARDEZ	GREEN	26-01-2022
769	BATE PAPO	BARDEZ	GREEN	20-07-2021
770	Riverside Resorts & Holiday Homes Pvt Ltd (Unit: Resort Rio)	BARDEZ	ORANGE	06-12-2021
771	3102 BCE	BARDEZ	ORANGE	24-06-2021
772	Bar Boss	BARDEZ	ORANGE	03-07-2021
773	VASSUDEVA TAMBA METAL QUARRY(CRUSHING UNIT)	TISWADI	ORANGE	23-07-2021
774	Rakesh Srichand Bhavnani	BARDEZ	GREEN	26-01-2022
775	Elite Convergence Developers (Areia De Goa))	BARDEZ	ORANGE	09-03-2022
776	Avinash Guest House	PERNEM	GREEN	25-08-2021
777	SN VENTURES	PONDA	ORANGE	05-05-2021
778	The Out House	BARDEZ	GREEN	21-06-2021
779	Goa Cricket Association	PERNEM	RED	16-07-2021
780	Goa Villa Margarida	BARDEZ	GREEN	16-09-2021
781	ZANZIBAR	BARDEZ	GREEN	07-02-2020
782	Lazy Holidays	BARDEZ	GREEN	05-08-2021
783	FERNANDES GUEST HOUSE	BARDEZ	GREEN	05-01-2022
784	M/s. R&H Spaces Pvt. Ltd.	BARDEZ	ORANGE	06-01-2022
785	Village Inn	TISWADI	GREEN	24-09-2021
786	Aurita Paiva	BARDEZ	GREEN	27-07-2021
787	DEVACHEM DENNEM	PERNEM	GREEN	23-09-2021
788	Wonder Restaurant	BARDEZ	GREEN	06-04-2021
789	Ayurma	BARDEZ	WHITE	03-02-2022
790	Samarth Enclave	TISWADI	GREEN	29-04-2021
791	Shree Gajanan saw mill	PONDA	GREEN	20-09-2021

792	Hotel Solmar	TISWADI	ORANGE	24-01-2022
793	GOA ISPAT PRIVATE LIMITED	PONDA	ORANGE	26-10-2021
794	M/S KISMET HOTEL UNIT OF M/S KAMRUDIN VELJEE & SONS	TISWADI	GREEN	16-08-2021
795	M/S ALOR HOLIDAY RESORT	BARDEZ	ORANGE	11-06-2021
796	Sunshine Restaurant	BARDEZ	GREEN	21-04-2021
797	M/s KAMAT METAL INDUSTRIES (QUARRY)	BICHOLIM	ORANGE	01-11-2021
798	GOA VILLA 31	BARDEZ	GREEN	22-10-2021
799	Venkat Muppana (Residential Villas)	BARDEZ	GREEN	10-01-2022
800	Golden Globe Hotels Private Limited	TISWADI	GREEN	02-07-2021
801	M/s. Bauginim Guest House	TISWADI	GREEN	01-09-2021
802	M/S QUINTESSENCE FRAGRANCES PVT LTD	BARDEZ	GREEN	20-08-2021
803	FLAVI'S GUEST HOUSE	BARDEZ	GREEN	09-11-2021
804	M/s. SAI SERVICE PRIVATE LIMITED	PONDA	ORANGE	26-10-2021
805	Ashville Homes (M/s Ashville Hospitality Pvt.Ltd)	BARDEZ	GREEN	29-12-2021
806	INRABO HOSPITALITIES PVT LTD	BARDEZ	GREEN	22-07-2021
807	M/s. MAHAL PLASTICS AND FIBRES PVT. LTD	PONDA	GREEN	16-07-2021
808	Om Siddheshwar Bar & Restaurant	PERNEM	GREEN	25-08-2021
809	Lobo's Guest House	BARDEZ	GREEN	17-09-2021
810	MAHALASA SERVICE CENTRE	TISWADI	ORANGE	20-10-2021
811	DILIP BUILDCON LIMITED	TISWADI	GREEN	04-03-2022
812	St. Augustine Guest House	PERNEM	GREEN	13-08-2021
813	Sindola Inn	BARDEZ	ORANGE	26-10-2021
814	Poonam Guest House	BARDEZ	ORANGE	11-06-2021
815	Avinash Guest House	PERNEM	GREEN	25-08-2021
816	Take A Treat	BARDEZ	WHITE	06-05-2021
817	ADITYA AGROFOOD PRODUCTS LIMITED	PONDA	GREEN	18-11-2021
818	CALANGUTE BEACH RESORT	BARDEZ	GREEN	26-01-2022
819	SWAMI SAMARTH P.U. CENTRE	BICHOLIM	GREEN	09-12-2021
820	M/s E.O. THOMAS & C A AHMED ASSOCIATES	PERNEM	ORANGE	01-03-2022

821	Grandpa's Inn	BARDEZ	ORANGE	26-10-2021
822	AMTHANE INDUSTRIES	BICHOLIM	GREEN	02-08-2021
823	M/s. SIOLIM HOTELS PVT. LTD	BARDEZ	GREEN	31-12-2021
824	HINDUSTAN PETROLEUM CORPORATION LIMITED	PERNEM	WHITE	01-06-2021
825	TANISH GUEST HOUSE	PERNEM	GREEN	20-08-2021
826	SWADISTH ENTERPRISES	PONDA	ORANGE	28-11-2021
827	Hotel Riverside	BARDEZ	ORANGE	23-02-2022
828	JKC Universal Solutions LLP	TISWADI	RED	13-10-2021
829	SHREE POLYMER PRODUCTS	PONDA	GREEN	13-12-2021
830	Grandeur De Sanchi	BARDEZ	ORANGE	04-08-2021
831	Carol In Beach Resort Pvt Ltd	BARDEZ	ORANGE	06-12-2021
832	SUPERPACKS BUSINESS SOLUTIONS LLP	PONDA	GREEN	28-10-2021
833	7 Apple Hotels Private Limited	PERNEM	ORANGE	12-07-2021
834	SERENE WATERS HOMESTAY	TISWADI	GREEN	28-05-2021
835	COUTINHO'S NEST	BARDEZ	GREEN	08-02-2022
836	CROMPTON GREAVES CONSUMER ELECTRICAL LTD.	PONDA	GREEN	06-01-2022
837	M/s. THE PORTO by De Lagom	BARDEZ	ORANGE	26-10-2021
838	La Conceicao	PERNEM	ORANGE	21-07-2021
839	Chandra Cleaners	BARDEZ	ORANGE	23-04-2021
840	Preksha Guest House	PERNEM	GREEN	28-06-2021
841	ADVANCED COMPOSITES PVT LTD	BICHOLIM	ORANGE	08-08-2021
842	BHAGAWATI GALVANIZING INDUSTRIES	PONDA	WHITE	25-02-2022
843	Medispray Labarotary Pvt Ltd.	PONDA	ORANGE	01-11-2021
844	M/s The Old Mango Tree Bar and Resturant	BARDEZ	GREEN	02-06-2021
845	O pierre guest house	TISWADI	GREEN	08-02-2022
846	HOTEL BOM SUCESSO	BARDEZ	GREEN	22-07-2021
847	Cinnamon Apartments (Arvind Chawla	BARDEZ	GREEN	30-12-2021
848	NV BEACH RESORT	BARDEZ	GREEN	27-05-2021
849	Dias Washing centre	TISWADI	ORANGE	26-10-2021
850	BRITTOS GUEST HOUSE	PERNEM	GREEN	11-11-2021

851	M/S SMT HIRABAI M PARSEKAR MEMORIAL HOSPITAL	PERNEM	ORANGE	16-02-2022
852	Megawide Construction - STP for Labour Colony	PERNEM	ORANGE	22-04-2021
853	Fortune Belaza	BARDEZ	ORANGE	27-05-2021
854	Modern Polypack Industries	PONDA	GREEN	13-07-2021
855	M/s Superb Goan Reality LLP	BARDEZ	ORANGE	10-01-2022
856	Sou Parvati Food Products	BICHOLIM	ORANGE	18-10-2021
857	Rukmini Polymers	BARDEZ	GREEN	05-11-2021
858	M/s PRISM JOHNSON LIMITED	BARDEZ	GREEN	22-07-2021
859	M/s. VIC Industries	SATARI	RED	15-02-2022
860	M/s. MINCO (INDIA) FLOW ELEMENTS PVT. LTD.	BARDEZ	GREEN	13-08-2021
861	CALANGUTE CASTLE HOTEL (A UNIT OF M/s B.S.ENTERPRISES)	BARDEZ	GREEN	22-09-2021
862	GEOTECH ENGINEERS	PERNEM	ORANGE	15-04-2021
863	AVNG Goan Holidays (RV2)	BARDEZ	GREEN	18-08-2021
864	PIRATES CABIN	BARDEZ	GREEN	13-08-2021
865	Madeiras Home	BARDEZ	GREEN	17-07-2021
866	Namaste Jungle	BARDEZ	GREEN	28-06-2021
867	CASA SUMANJO	BARDEZ	GREEN	14-10-2021
868	Vedashrika Tiles	BICHOLIM	GREEN	12-05-2021
869	SANCHITA STEELS	PONDA	ORANGE	12-07-2021
870	LINEAGE SPACE	BARDEZ	GREEN	28-07-2021
871	Marosa Beach House	TISWADI	GREEN	09-08-2021
872	DURGA MOTORS	BARDEZ	ORANGE	04-08-2021
873	National Industrial Corporation Ltd	BARDEZ	ORANGE	19-11-2021
874	CHILLIS GUEST HOUSE	PERNEM	GREEN	13-08-2021
875	La Ceres Caffé	BARDEZ	GREEN	14-12-2021
876	Aaqura laboratories	PONDA	ORANGE	26-10-2021
877	HOLIDAY APARTMENT	BARDEZ	GREEN	10-01-2022
878	NOLAN GUEST HOUSE	BARDEZ	GREEN	06-10-2021
879	Venture Metel	PERNEM	ORANGE	18-10-2021
880	M/S RAJ EXOTICA HOLIDAY HOMES	BARDEZ	GREEN	23-07-2021

881	ADHIRAJ OCEAN VISTA	BARDEZ	GREEN	25-06-2021
882	Jaglux Realty Pvt Ltd	BARDEZ	GREEN	21-04-2021
883	PLATICARE HOSPITAL	PONDA	ORANGE	20-10-2021
884	Glow Paints Pvt Ltd	PONDA	ORANGE	11-06-2021
885	SAI GURU CAFE AND MORE	BARDEZ	GREEN	15-12-2021
886	M/S. M. V. VIHAAN	TISWADI	ORANGE	11-05-2021
887	RANE INDUSTRIES	PONDA	ORANGE	26-10-2021
888	SAFIL'S BEACH SHACK	BARDEZ	GREEN	12-11-2021
889	ZANZIBAR	BARDEZ	GREEN	24-11-2021
890	Pretty Petals Guesthouse	BARDEZ	GREEN	07-09-2021
891	COLGATE PALMOLIVE (INDIA) LIMITED	PONDA	ORANGE	03-02-2022
892	Amey Dhan	PERNEM	GREEN	22-11-2021
893	Deccan Fine Chemicals (India) Private Limited	TISWADI	RED	23-03-2022
894	Coast cafe	BARDEZ	GREEN	29-12-2021
895	Construction of Office Complex at Porvorim	BARDEZ	GREEN	31-01-2022
896	Akanksha Naik & Atul Ramakant Naik	BARDEZ	GREEN	23-02-2022
897	Aquamarine Holidays Goa (SF-B2)	BARDEZ	GREEN	08-09-2021
898	Rud Inn	BARDEZ	GREEN	03-11-2021
899	Nathurmal Eco Minerals Private Limited	BARDEZ	RED	22-11-2021
900	TIA	BARDEZ	GREEN	24-11-2021
901	SENTIR DE CASA	TISWADI	GREEN	07-07-2021
902	Palms Guest house	BARDEZ	GREEN	15-10-2021
903	CAFE BAGA BEACH SHACK	BARDEZ	GREEN	29-12-2021
904	M.A.R.S Villa	BARDEZ	GREEN	23-09-2021
905	HOTEL NEPTUNE	TISWADI	ORANGE	08-08-2021
906	DR KEDARS MATERNITY, INFERTILITY AND SURGICAL HOSPITAL	TISWADI	ORANGE	03-08-2021
907	Mystical Roses Resorts Pvt. Ltd	BARDEZ	ORANGE	17-09-2021
908	Pruthvi Villa	BARDEZ	GREEN	24-11-2021
909	SILVER WOOD	BARDEZ	GREEN	15-07-2021

910	C. D. C. CAR SPA , WASHING & SERVICING	TISWADI	ORANGE	14-07-2021
911	ABALONE RESORTS PVT LTD	BARDEZ	ORANGE	04-08-2021
912	Pacifica Hotels (Ahmedabad Project) Pvt. Ltd.	BARDEZ	RED	17-06-2021
913	ALEKHYA SUITES BY M/s SUNHOUSE RESORTS PRIVATE LIMITED	TISWADI	GREEN	30-03-2022
914	SWISS HAPPY COW CHEESE PVT LTD	BARDEZ	ORANGE	04-08-2021
915	M. V. RIPPLES	TISWADI	ORANGE	11-05-2021
916	RAJIV V KORGAONKAR	BARDEZ	GREEN	01-07-2021
917	Nestle India Ltd	PONDA	RED	06-12-2021
918	Gera Developments Pvt Ltd & Gera Realty Estates	TISWADI	RED	06-12-2021
919	M/s Chamundi Udyog	PONDA	ORANGE	07-01-2022
920	EN DIOR SALON AND SPA	BARDEZ	GREEN	03-09-2021
921	Relax Foot and Fish Therapy	BARDEZ	WHITE	19-01-2022
922	Hotel Kismat Mahal	BARDEZ	GREEN	09-07-2021
923	Kavalekar Caterers	BARDEZ	GREEN	25-02-2022
924	SRL ENTERPRISES	TISWADI	GREEN	22-12-2021
925	KALOSHI GRANITES	SATARI	ORANGE	09-11-2021
926	Spring Field Apartment	PERNEM	GREEN	30-07-2021
927	M/s. SAI SERVICE PRIVATE LIMITED	TISWADI	ORANGE	18-08-2021
928	The X & Z Residency	BARDEZ	GREEN	23-07-2021
929	TONYS KITCHEN	BARDEZ	GREEN	05-04-2021
930	PRANAV BAJAJ GUEST HOUSE	BARDEZ	GREEN	08-09-2021
931	WEATHER SPOON CAFE	BARDEZ	GREEN	29-12-2021
932	JAWS GUEST HOUSE	BARDEZ	GREEN	21-03-2022
933	M/S SHAFEEN FABRICATION WORKS	BICHOLIM	WHITE	28-07-2021
934	GKB VISION PRIVATE LIMITED	BARDEZ	GREEN	13-08-2021
935	AA WALKER ESTATES PRIVATE LIMITED	BARDEZ	GREEN	02-06-2021
936	Anaye Entertainment	BARDEZ	GREEN	25-03-2022
937	Roshan Industries Private Limited	BARDEZ	WHITE	04-01-2022
938	PRIMA GUEST HOUSE	PERNEM	GREEN	08-09-2021

939	AVNG Goan Holidays (RV3)	BARDEZ	GREEN	20-08-2021
940	RED MONKEYS HOSTEL	PERNEM	GREEN	30-09-2021
941	M/S STONEX	BICHOLIM	ORANGE	11-03-2022
942	Jose Ivo Romao Reginaldo Das Dores Lopes	BARDEZ	GREEN	16-09-2021
943	Gera's Premio by Gera Developments Pvt Ltd & Gera Realty Estates	TISWADI	RED	09-02-2022
944	Sukraft Recycling Pvt. Ltd.	SATARI	RED	04-01-2022
945	VILLA CALANGUTE RESORT	BARDEZ	GREEN	05-08-2021
946	PRES Oorja Private Limited	BARDEZ	GREEN	21-10-2021
947	Adventurist Spirits Distillery Private Limited	BARDEZ	ORANGE	04-08-2021
948	Atul Udyog Unit II	BARDEZ	GREEN	27-07-2021
949	COSME COSTA HOSPITALITY PVT. LTD.	TISWADI	ORANGE	11-11-2021
950	ASSENCAO FERNANDES	BARDEZ	GREEN	04-08-2021
951	M/s. South India Cashew Corporation	PONDA	ORANGE	22-07-2021
952	FAM SALON & SPA	BARDEZ	WHITE	03-01-2022
953	Jagwant Gill	BARDEZ	GREEN	17-09-2021
954	Laxmi Empire	BARDEZ	GREEN	10-01-2022
955	GRANDE AVE MARIA RESORT	BARDEZ	ORANGE	14-01-2022
956	RODRIGUES RESTAURANT	BARDEZ	GREEN	24-03-2022
957	Prescon Homes Pvt Ltd	TISWADI	RED	24-03-2022
958	Devang Guest House	BARDEZ	GREEN	09-03-2022
959	CALYSTA HOTEL AND RESORTS LLP	BARDEZ	ORANGE	07-03-2022
960	SUNIL BAR & RESTAURANT	BARDEZ	GREEN	05-08-2021
961	SAIRAJ BEACH RESORT LLP	BARDEZ	ORANGE	12-06-2021
962	CROMPTON GREAVES CONSUMER ELECTRICALS LTD	PONDA	RED	04-02-2022
963	Wet waste and Sanitary Incinerator Mini Plant (1.5 TPD Compost Plant)	PONDA	ORANGE	24-06-2021
964	M/s. Navelkar Landmarks(Unit:Girasol Beach Resort)	BARDEZ	ORANGE	30-09-2021
965	ANJALI J MODY TRUST	BARDEZ	ORANGE	26-10-2021
966	MERRY MILK FOODS	PONDA	ORANGE	11-11-2021
967	Sastech Associates(M.V Tango-16)	TISWADI	ORANGE	01-06-2021

968	White Castles Villa A	BARDEZ	GREEN	09-07-2021
969	TILLOMINA	BARDEZ	GREEN	31-12-2021
970	M/S.SAVIOLA'S GUEST HOUSE	TISWADI	GREEN	24-09-2021
971	LAWANDE HOLIDAY HOMES	TISWADI	GREEN	20-07-2021
972	Berger Paints India Limited, Plot.316-317, Kundaim Industrial Estate, Kundaim, Goa	PONDA	ORANGE	09-03-2022
973	ACEROCK DEVELOPERS PVT. LTD.(THE BAGA MARINA BEACH RESORT)	BARDEZ	ORANGE	18-10-2021
974	CINNAMON LOFTS	BARDEZ	ORANGE	11-06-2021
975	SEA PEARL GUEST HOUSE	BARDEZ	GREEN	08-09-2021
976	M/s. CG Power and Industrial Solutions Ltd. (Formerly Crompton Greaves Ltd.),	PONDA	ORANGE	28-11-2021
977	Azzure Sea Hospitality Pvt Ltd	BARDEZ	GREEN	22-11-2021
978	CALANGUTE PRISTINE	BARDEZ	GREEN	05-01-2022
979	WHITE CLOUD A UNIT OF LOTUS INDUSTRIES	TISWADI	ORANGE	21-07-2021
980	M/s Mahindra Holidays & Resorts India Limited	BARDEZ	RED	13-09-2021
981	AVNG Goan Holidays (D1)	BARDEZ	GREEN	20-08-2021
982	The Kumbh	BARDEZ	GREEN	13-08-2021
983	VAHAN PUC	PONDA	GREEN	24-11-2021
984	JAYRAJ CASHEW INDUSTRIES	BARDEZ	ORANGE	23-04-2021
985	GLENMARK PHARMACEUTICALS LTD(S-9)	BARDEZ	ORANGE	16-02-2022
986	Viola Trading Co.	PONDA	GREEN	09-02-2022
987	M/s. Jolene's Nook	BARDEZ	GREEN	14-10-2021
988	M/s. SAI METALS	PERNEM	ORANGE	07-01-2022
989	TESSO WATER FRONT	BARDEZ	GREEN	07-02-2019
990	HideOut Guest House	BARDEZ	GREEN	01-07-2021
991	kiara bnb home	BARDEZ	GREEN	29-12-2021
992	SEAHAWK SUITES	BARDEZ	GREEN	27-01-2022
993	GOLDEN CHAKKI ATTA	PERNEM	GREEN	21-10-2021
994	M/S. RAMESH HOTELS & RESORTS PVT. LTD.	SALCETE	ORANGE	08-04-2021
995	M/s SUPER SHA AERATED WATERS	SALCETE	ORANGE	27-12-2021

996	M/S JORGES HOLIDAY HOMES	SALCETE	GREEN	16-11-2021
997	MAJESTIC ECO COMFORT	SALCETE	ORANGE	07-03-2022
998	M/s UNITED MARINE PRODUCTS	SALCETE	ORANGE	23-04-2021
999	M/s VILLA MARTHA	SALCETE	GREEN	22-09-2021
1000	M/S HOLY FAMILY AGENCY	SALCETE	WHITE	20-09-2021
1001	M/S COASTAL INFRA	SALCETE	ORANGE	22-04-2021
1002	Oshin Holiday Care Cottages	SALCETE	ORANGE	12-07-2021
1003	M/S VISHWA SARASWATI SOCIETY(HOTEL MANAGEMENT INS.	SALCETE	ORANGE	20-06-2021
1004	CASA DE-CAJI-M-COTTAGES	SALCETE	GREEN	28-07-2021
1005	M/s CASA GOES GUEST HOUSE	SALCETE	GREEN	23-09-2021
1006	FLOUR MILL	SALCETE	GREEN	02-08-2021
1007	M/s TULIP DIAGNOSTIC (P) LTD --PLOT NO. L-73	SALCETE	ORANGE	09-02-2022
1008	ZUMBRAI BEACH SHACK	SALCETE	GREEN	11-03-2022
1009	M/S BLUE LAGOON RESORT	CANACONA	GREEN	13-07-2021
1010	Daniel Engineering Works & Ship Repairs	MORMUGAO	ORANGE	17-02-2022
1011	M/s UNITED MARINE PRODUCTS	SALCETE	ORANGE	14-06-2021
1012	BAKER CORNER	DHARBANDORA	GREEN	21-06-2021
1013	SIL-SEL	SALCETE	GREEN	04-02-2022
1014	A's Holiday Guest House	SALCETE	GREEN	31-05-2021
1015	GRADIENT CHEMICALS CO PVT LTD	SALCETE	RED	06-12-2021
1016	Beleza By The Beach(Best Location Properties Pvt	SALCETE	ORANGE	07-09-2021
1017	Akar Suburbia	SALCETE	GREEN	08-04-2021
1018	M/s. Sincro Hotels	SALCETE	ORANGE	27-09-2021
1019	M/s SHREE PRINT AND PACK	SALCETE	GREEN	28-12-2021
1020	GOA SHIPYARD LIMITED	MORMUGAO	RED	16-11-2021
1021	M/S MAHALAXMI WORKS	CANACONA	WHITE	30-07-2021
1022	M/s NATURES HARMONY	CANACONA	GREEN	22-11-2021
1023	M/S SEA QUEEN BEACH RESORT PVT LTD	SALCETE	ORANGE	09-12-2021
1024	M/S SMRC'S V M SALGAOCAR HOSPITAL	MORMUGAO	ORANGE	04-02-2022

1025	Tivan (TIVAN FRAGRANCES)	SALCETE	GREEN	25-02-2022
1026	M/s MAX COTTAGES	SALCETE	GREEN	08-10-2021
1027	STEVE P -AIR SOLUTIONS	SALCETE	ORANGE	09-06-2021
1028	M/S Jolly Metals	SALCETE	ORANGE	03-08-2021
1029	Shipyard Sadan (Goa Shipyard)	MORMUGAO	ORANGE	15-03-2022
1030	M/s OCUZINERO RESTAURANT & BAR	SALCETE	GREEN	10-12-2021
1031	WHEEL POINT	QUEPEM	ORANGE	25-02-2022
1032	Lupin Limited	SALCETE	ORANGE	09-02-2022
1033	M/s ARYAVAAN PHARMACEUTICALS PVT LTD	SALCETE	ORANGE	02-09-2021
1034	GREG ENGINEERING INDUSTRIES	SALCETE	WHITE	01-10-2021
1035	RAFAEL'S BAR & RESTAURANT	SALCETE	GREEN	08-09-2021
1036	PRIMARY HEALTH CENTER (PHC) CANSULIM	MORMUGAO	ORANGE	08-08-2021
1037	SIVOM INOTEC PRIVATE LIMITED	SALCETE	GREEN	03-02-2022
1038	SAMEER ENTERPRISES	MORMUGAO	ORANGE	01-03-2022
1039	Sanofi India Ltd	SALCETE	ORANGE	28-11-2021
1040	BIRLA FURUKAWA FIBRE OPTICS PRIVATE LIMITED	SALCETE	ORANGE	22-07-2021
1041	M/S TEREZA CRUSHING ENTERPRISES	SALCETE	ORANGE	21-07-2021
1042	Cocomar Resorts Pvt.Ltd. (Longuinhas Beach Resort)	SALCETE	ORANGE	25-02-2022
1043	SHRI SUDIN N. VERENKAR	QUEPEM	ORANGE	12-05-2021
1044	Model Infra Corporation Pvt Ltd	SALCETE	ORANGE	31-10-2021
1045	M/s Indoco Remedies Ltd (Plant-I)	SALCETE	ORANGE	09-02-2022
1046	ZEEBOP RESTAURANT	SALCETE	GREEN	01-03-2022
1047	BRENDON'S COLONY	CANACONA	GREEN	30-03-2022
1048	M/s LOTUS NATURE CURE	SALCETE	ORANGE	07-09-2021
1049	J J HOLIDAY HOMES	CANACONA	GREEN	14-07-2021
1050	BOGPREE FAMILY INN	SALCETE	GREEN	25-02-2022
1051	WILLIAMS BEACH RETREAT PVT LTD	SALCETE	ORANGE	25-01-2022
1052	LIVOM PHARMA	SALCETE	ORANGE	08-04-2021
1053	BAPTISTA GUEST HOUSE	SALCETE	GREEN	02-09-2021
1054	CACULO CARS PVT. LTD.	SALCETE	ORANGE	15-04-2021

1055	Grace Nursing Home	SALCETE	ORANGE	23-04-2021
1056	Sai Service Pvt. Ltd.	MORMUGAO	ORANGE	21-07-2021
1057	VASCO RESIDENCY	MORMUGAO	ORANGE	22-07-2021
1058	parekh recycling	SALCETE	ORANGE	12-07-2021
1059	M/S CAMRON RESTAURANT & BAR	SALCETE	GREEN	16-11-2021
1060	Advani Hotels & Resorts (India) Ltd	SALCETE	RED	11-06-2021
1061	Hotel City Comfort	SALCETE	GREEN	10-12-2021
1062	M/s Sea View Resorts	MORMUGAO	ORANGE	02-07-2021
1063	M/s Valankini Workshop	SALCETE	WHITE	12-07-2021
1064	The Cape Goa 2	CANACONA	GREEN	02-09-2021
1065	CHOWGULE & CO. PVT. LTD.	MORMUGAO	RED	10-12-2021
1066	M/S KHAVIN AFONSO GUEST HOUSE	CANACONA	GREEN	14-07-2021
1067	GANESH BENZOPLAST LIMITED	MORMUGAO	RED	02-08-2021
1068	Cuncolim Municipal council(Incinerator Facility)	SALCETE	GREEN	25-08-2021
1069	M/s. Ultratech Cement Ltd. (Unit Ultratech Concrete)	MORMUGAO	GREEN	30-03-2022
1070	Melissa Complex by Melissa Developers	MORMUGAO	GREEN	16-11-2021
1071	LOK-BETA PHARMACEUTICALS (INDIA) PRIVATE LIMITED	SALCETE	ORANGE	18-10-2021
1072	M/s Cipla Limited	SALCETE	ORANGE	12-05-2021
1073	EMM ESS AIRCON PRIVATE LIMITED	SALCETE	GREEN	21-06-2021
1074	Rafael Guest House	SALCETE	GREEN	03-03-2022
1075	M/S EMMANUEL GUEST HOUSE	SALCETE	GREEN	22-09-2021
1076	M/s. SAI SERVICE PRIVATE LIMITED	SALCETE	ORANGE	15-04-2021
1077	Menas Guest House	SALCETE	GREEN	11-01-2022
1078	CHOWGULE AND CO. PVT. LTD. SBD	SALCETE	RED	17-02-2022
1079	FDC LTD (UNIT I & II)	SALCETE	ORANGE	05-05-2021
1080	Keegan Guest House	SALCETE	GREEN	03-09-2021
1081	Camron Guest House	SALCETE	GREEN	28-07-2021
1082	M/s Cipla Limited	SALCETE	ORANGE	01-07-2021
1083	MIKES OASIS BEACH SHACK	SALCETE	GREEN	08-04-2021

1084	KNEAD BREAD	MORMUGAO	GREEN	08-09-2021
1085	M/S FERDIES METAL INDUSTRIES	SALCETE	ORANGE	12-07-2021
1086	TEMBEICHEM DONGOR IRON & MANGANESE ORE MINE	QUEPEM	RED	13-07-2021
1087	Third Eye Distillery Holdings Pvt Ltd	MORMUGAO	ORANGE	08-03-2022
1088	ACE HOTELS & RESORTS PRIVATE LIMITED	SALCETE	ORANGE	18-10-2021
1089	Srithik Ispat Pvt Ltd	SANGUEM	RED	16-11-2021
1090	GOURI ENTERPRISES	SALCETE	ORANGE	01-07-2021
1091	M/S JOSE FRANCISCO DOS SANTOS	SALCETE	WHITE	02-11-2021
1092	PEREIRA'S SWEET HUT	SALCETE	GREEN	08-03-2022
1093	M/s HIGH HILL ROCKS	SALCETE	ORANGE	15-03-2022
1094	Sociedade De Formento Industrial Private Limited -SN 100/2-B	SALCETE	GREEN	13-12-2021
1095	M/s CLAREM GUEST HOUSE (FLAT NO 201 SECTOR II)	SALCETE	GREEN	23-11-2021
1096	THE BLOOMS	MORMUGAO	GREEN	26-01-2022
1097	Inharmony Multipurpose Hall	QUEPEM	GREEN	12-08-2021
1098	TAPRATH IMEX	QUEPEM	ORANGE	03-08-2021
1099	VEDANTA	SALCETE	GREEN	15-06-2021
1100	MARPOL PVT LTD (UNIT I)	QUEPEM	ORANGE	09-02-2022
1101	SOHAIL STEEL FURNITURES	MORMUGAO	WHITE	01-03-2022
1102	JOHN DOUGLAS COUTINHO	CANACONA	GREEN	05-05-2021
1103	DCI Pharmaceutical Pvt. Ltd.	SALCETE	ORANGE	06-05-2021
1104	FINE ABRASIVE PRODUCTS	SALCETE	GREEN	11-06-2021
1105	M/s JERRY ENTERPRISES	SALCETE	ORANGE	12-07-2021
1106	San Joao Holiday Homes	SALCETE	GREEN	10-12-2021
1107	MORMUGAO PORT TRUST BERTH NO.10,11 & GENERAL	MORMUGAO	RED	01-03-2022
1108	Praya Beach Resort(M/s Hermitage Builders Pvt Ltd)	SALCETE	GREEN	07-06-2021
1109	SWETA D NAIK (MAA KALIKADEVI PETROL PUMP)	QUEPEM	WHITE	26-08-2021
1110	Trio Chem Sucrotech Engineering and Projects Pvt Ltd	SALCETE	ORANGE	03-07-2021
1111	CHIKITSA HOSPITAL	SALCETE	ORANGE	09-04-2021
1112	M/S MICHAEL GUEST HOUSE	SALCETE	GREEN	19-11-2021

1113	The White House (Guest House)	CANACONA	GREEN	28-12-2021
1114	M/S NIRVANA HILL GUEST HOUSE	SALCETE	GREEN	18-10-2021
1115	BABITA TYRES	SALCETE	ORANGE	11-08-2021
1116	LUISA BY THE SEA	SALCETE	GREEN	09-04-2021
1117	HOTEL RICONE	MORMUGAO	GREEN	30-09-2021
1118	GOA HOUSING BOARD	MORMUGAO	GREEN	08-09-2021
1119	BASE WORKSHOP (GOA)	MORMUGAO	ORANGE	23-07-2021
1120	Ion Exchange India Ltd	SALCETE	GREEN	27-10-2021
1121	Ganesh cafe	SALCETE	GREEN	21-06-2021
1122	MARTINS CREST	CANACONA	ORANGE	04-08-2021
1123	MORMUGAO PORT TRUST-CRUISE TERMINAL STP	MORMUGAO	RED	26-08-2021
1124	SICGIL INDUSTRIAL GASES LTD	MORMUGAO	ORANGE	25-01-2022
1125	THE GOD'S GARDEN	SALCETE	GREEN	05-05-2021
1126	GRACIAS MATERNITY HOSPITAL	SALCETE	ORANGE	26-10-2021
1127	M/s.Sea Bird Resorts Pvt.Ltd.(Unit- Alila Diwa Goa)	SALCETE	RED	28-05-2021
1128	VOCATUS BEVERAGES PRIVATE LIMITED	MORMUGAO	ORANGE	02-09-2021
1129	M/S MARIA PAULO GUEST HOUSE	CANACONA	GREEN	24-03-2022
1130	GENERAL WORKSHOP (AUTOMECHANICAL)	SANGUEM	ORANGE	24-03-2022
1131	M/s GOAN LIQUOR PRODUCTS PVT LTD	CANACONA	ORANGE	13-01-2022
1132	M/S Sanman Hotels	MORMUGAO	GREEN	02-07-2021
1133	Vedanga Infratech	SALCETE	WHITE	01-10-2021
1134	M/s. FIGOS HOLIDAY HOMES	SALCETE	GREEN	28-04-2021
1135	Libra Cottages	SALCETE	GREEN	11-01-2022
1136	M/s JAISWAL TRADERS	SALCETE	ORANGE	22-07-2021
1137	BAJA MOTOR WORKS	CANACONA	ORANGE	16-11-2021
1138	MEDSTAR HEALTHCARE	SALCETE	ORANGE	19-11-2021
1139	Quepem Municipal Council	QUEPEM	ORANGE	27-12-2021
1140	Affairz (Dwarka Eco Beach Resort)	CANACONA	GREEN	01-10-2021
1141	VILLA SEANCY	SALCETE	GREEN	05-08-2021
1142	GAURAV FURNITURE	QUEPEM	ORANGE	01-06-2021

1143	MARPOL PVT LTD (UNIT I)	QUEPEM	ORANGE	15-02-2022
1144	Finolux Cables Limited	SALCETE	ORANGE	10-01-2022
1145	M/S MVR SEA VIEWS HOMES PVT LTD	MORMUGAO	RED	24-03-2022
1146	M/S PURSHOTTAM V.S. KUNKOLIENKAR	QUEPEM	GREEN	23-09-2021
1147	SGDH	SALCETE	RED	06-05-2021
1148	M/S GOAN CHEF FAMILY RESTUARANT	SALCETE	GREEN	01-10-2021
1149	M/S JOES RIVER COVE	SALCETE	GREEN	09-02-2022
1150	Reliable Automotive Pvt Ltd	SALCETE	ORANGE	17-01-2022
1151	M/s JOSE HOLIDAY HOMES	SALCETE	GREEN	11-01-2022
1152	NARVEKAR FLOUR MILL	MORMUGAO	GREEN	24-02-2022
1153	M/S RONS GUEST HOUSE	SALCETE	GREEN	18-11-2021
1154	M/S TWO GLEN COTTAGES	SALCETE	GREEN	16-11-2021
1155	M/S YSD ABODE	SALCETE	GREEN	10-12-2021
1156	MARIO P. MASCARENHAS	SANGUEM	ORANGE	08-08-2021
1157	M/s AMIGOS RESTAURANT	QUEPEM	GREEN	22-11-2021
1158	SEA CUISINE BAR AND RESTAURANT	MORMUGAO	GREEN	07-05-2021
1159	M/S JOMA METAL INDUSTRIES(UNIT II)	SALCETE	ORANGE	01-07-2021
1160	M/s VISAO VERDE	SALCETE	GREEN	10-12-2021
1161	MICRO LABS LIMITED	SALCETE	ORANGE	15-07-2021
1162	Anastisia Voegler, Goa Cottages	CANACONA	GREEN	11-06-2021
1163	O Mangueiro	SALCETE	GREEN	25-02-2022
1164	Commscope India Pvt Ltd	SALCETE	ORANGE	14-07-2021
1165	Suvinas DIVINE ANGELS HOSPITAL	SALCETE	ORANGE	25-02-2022
1166	M/s. MIKES PLACE	SALCETE	GREEN	31-05-2021
1167	M/s MONAK PACKAGING	SALCETE	ORANGE	31-05-2021
1168	LUISA BY THE SEA	SALCETE	GREEN	09-04-2021
1169	DESAI CONCRETE CASTINGS	SANGUEM	GREEN	07-09-2021
1170	M/s PAVOA ESTATE	SALCETE	GREEN	26-11-2021
1171	M/S MA SUMITRA CRUSHERS	SANGUEM	ORANGE	12-07-2021
1172	COSMOS PREMISES PVT LTD	SALCETE	ORANGE	27-05-2021

1173	WILD BERRY RESORT	CANACONA	GREEN	09-06-2021
1174	GECKO DORADO-unitof Bright Turquoise Light Pvt Ltd	SALCETE	GREEN	11-01-2022
1175	SRI MURUGAN FAMILY RESTAURANT	MORMUGAO	GREEN	28-06-2021
1176	M/s SERENITY BY THE SEA	SALCETE	GREEN	08-09-2021
1177	TULIP DIAGNOSTICS PVT LTD (WAREHOUSE)	SALCETE	ORANGE	12-07-2021
1178	Agneshkia Apartment	SALCETE	GREEN	08-07-2021
1179	M/s WHITE CLOUD	SALCETE	GREEN	08-03-2022
1180	Hindustan Petroleum Corporation Ltd.	MORMUGAO	ORANGE	03-08-2021
1181	VASCO REPAIRERS	MORMUGAO	ORANGE	16-11-2021
1182	Reliable Automotive Pvt Ltd	SALCETE	ORANGE	07-01-2022
1183	Palolem Beach Resort	CANACONA	ORANGE	14-07-2021
1184	GOA ROLLER FLOUR MILLS PVT LTD	MORMUGAO	GREEN	02-09-2021
1185	super marble and granites	MORMUGAO	GREEN	23-11-2021
1186	M/s MUKTAR MINERALS PVT LTD	SALCETE	ORANGE	12-05-2021
1187	M/S SHAUN HOLDINGS PVT LTD	MORMUGAO	ORANGE	02-09-2021
1188	Jean and Nadia Hotels & Resorts Pvt. Ltd.	SALCETE	GREEN	11-03-2022
1189	IFB INDUSTRIES LIMITED	SALCETE	GREEN	08-04-2021
1190	KAKODE TRADING LIMITED LIABILITY PARTNERSHIP	SALCETE	WHITE	09-02-2022
1191	Ultratech Automotive Pvt Ltd	SALCETE	WHITE	01-02-2022
1192	CARDOSO HOLIDAY HOMES	SALCETE	GREEN	28-06-2021
1193	REMS CORNER	CANACONA	GREEN	22-11-2021
1194	VAILANKANNI GUEST HOUSE	SALCETE	GREEN	05-08-2021
1195	Heritage Village Club (A Unit of Select Holiday Resorts Pvt. Ltd.)	SALCETE	ORANGE	26-10-2021
1196	LOTUS SUITES	SALCETE	ORANGE	24-03-2022
1197	M/s. MARKSANS PHARMA LIMITED	SALCETE	ORANGE	07-05-2021
1198	MORMUGAO PORT TRUST	MORMUGAO	ORANGE	23-04-2021
1199	ABHIJITA & SANKET ENTERPRISES	SALCETE	GREEN	23-09-2021
1200	SHATIXA DAIRY FARM	SANGUEM	ORANGE	22-07-2021
1201	M/S DAD'S YARD	MORMUGAO	GREEN	31-12-2021
1202	MARPOL PVT LTD (UNIT II)	QUEPEM	ORANGE	28-11-2021

1203	M/S TRIUMPH REALTY PVT LTD(Azaya Beach Resort)	SALCETE	ORANGE	16-11-2021
1204	Shiva Goa Palace Pvt. Ltd.	SALCETE	ORANGE	15-04-2021
1205	M/s MAHALSA ENTERPRISES	SALCETE	GREEN	16-11-2021
1206	M/S TRINITAS REALTORS INDIA LLP	MORMUGAO	RED	28-10-2021
1207	M/s. MARKSANS PHARMA LIMITED	SALCETE	ORANGE	31-05-2021
1208	M/s ROCK IT CAFE ROOMS	CANACONA	GREEN	10-12-2021
1209	Park Sintech Company Pvt. Ltd.	SALCETE	ORANGE	14-07-2021
1210	M/S. PATXA GUEST HOUSE	SALCETE	GREEN	23-09-2021
1211	CHOWGULE INDUSTRIES PRIVATE LIMITED (EICHER DIVN)	SALCETE	ORANGE	03-08-2021
1212	Eco Prime Car Care	SALCETE	ORANGE	07-05-2021
1213	DOMITRA RESTAURANT	SALCETE	GREEN	26-10-2021
1214	German Fabricators	SALCETE	WHITE	13-07-2021
1215	BLUE OCEAN BEVERAGES PRIVATE LIMITED	SALCETE	ORANGE	11-07-2021
1216	Tevapharm India Pvt Ltd	SALCETE	ORANGE	15-04-2021
1217	SIMRAN GUEST HOUSE	SALCETE	GREEN	26-07-2021
1218	PEE GEE ASSOCIATES	SALCETE	ORANGE	09-02-2022
1219	M/s CLAREM GUEST HOUSE (FLAT NO 201 SECTOR III)	SALCETE	GREEN	23-11-2021
1220	M/S CASA LOUIS (SHOBITA LOUIS)	SALCETE	GREEN	28-12-2021
1221	CARINA BEACH RESORT	SALCETE	ORANGE	08-08-2021
1222	GOA SINTERED PRODUCTS PVT. LTD.	SALCETE	ORANGE	11-07-2021
1223	M/s ERALEX DREAMS	SALCETE	GREEN	01-03-2022
1224	The Indian Hotels Co. Ltd. Unit Taj Exotica Resort & Spa Goa	SALCETE	RED	16-11-2021
1225	SIL-SEL	SALCETE	GREEN	19-10-2021
1226	THE GOAN HOUSE SISHORE	SALCETE	GREEN	21-04-2021
1227	M/s Tourist Nest	SALCETE	GREEN	07-06-2021
1228	Sanofi India Ltd	SALCETE	ORANGE	11-03-2022
1229	KINGSLEY BAR AND RESTAURANT	QUEPEM	GREEN	08-04-2021
1230	COLACO CAFE	MORMUGAO	WHITE	28-06-2021
1231	ROOP TEKNO POLYMERS PVT LTD	SALCETE	GREEN	17-08-2021

1232	FERNS BROTHERS FABRICATION WORK	SALCETE	WHITE	16-11-2021
1233	CASTLE HOUSE RESORT	CANACONA	ORANGE	02-09-2021
1234	GANESH BENZOPLAST LIMITED	MORMUGAO	RED	26-11-2021
1235	M/S NIRAAMAYA PRIVATE RESIDENCES GOA	SALCETE	GREEN	22-11-2021
1236	M/s. Rio De Goa (Tata Housing project)	MORMUGAO	RED	22-12-2021
1237	DANLAW ELECTRONICS ASSEMBLY LTD.	SALCETE	GREEN	22-09-2021
1238	M/s LLOYDS TOURIST ROOMS	SALCETE	GREEN	10-12-2021
1239	100+25% Solid Waste Management Facility at Cacora	QUEPEM	RED	19-01-2022
1240	My Hotel	SALCETE	GREEN	28-12-2021
1241	M/S SILVA ENGINEERS	SALCETE	ORANGE	22-07-2021
1242	Fine-O-Plast	MORMUGAO	GREEN	28-04-2021
1243	CRAVIUM GOURMET PRIVATE LIMITED	SALCETE	ORANGE	24-02-2022
1244	IFB INDUSTRIES LIMITED	SALCETE	GREEN	23-06-2021
1245	Bermuda Triangle	SALCETE	GREEN	26-01-2022
1246	Shubham Ice Cream	SALCETE	ORANGE	03-01-2022
1247	PLASTIC EXPORT ZUNDERT (I) PVT LTD	SALCETE	ORANGE	02-08-2021
1248	UPA AUTO SERVICE	SALCETE	ORANGE	12-06-2021
1249	ADDITYA FOOD COURT (Unit of Unnati Hospitality)	SALCETE	ORANGE	12-07-2021
1250	M/s DONA CLARA BAR & RESTAURANT	SALCETE	GREEN	10-12-2021
1251	M/S CALVIN'S RETREAT	SALCETE	GREEN	28-06-2021
1252	MV SPOTLIGHT	SALCETE	ORANGE	31-10-2021
1253	Cool planet	SALCETE	WHITE	12-07-2021
1254	M/s J L Baptista	SALCETE	ORANGE	18-08-2021
1255	Siddharth Construction	MORMUGAO	GREEN	03-11-2021
1256	Leda Balcao	SALCETE	GREEN	28-01-2022
1257	Launderaids	SALCETE	ORANGE	23-04-2021
1258	The Cape Goa	CANACONA	GREEN	03-09-2021
1259	JOECONS MARINE EXPORTS PVT LTD	SALCETE	ORANGE	24-06-2021
1260	NAVDURGA RESTAURANT	SALCETE	GREEN	14-07-2021

1261	DAILY RENTAL(AIR B&B)	SALCETE	GREEN	09-11-2021
1262	Sai Service Private Ltd	SALCETE	ORANGE	26-10-2021
1263	M/S MVR SEA VIEW HOMES PVT LTD	MORMUGAO	RED	22-07-2021
1264	M/S BLUE PLANET	CANACONA	GREEN	19-10-2021
1265	Spectra Pavers Pvt Ltd	SALCETE	GREEN	11-02-2022
1266	M/s PALMIRA GUEST HOUSE	SALCETE	GREEN	08-09-2021
1267	IMPERIAL PLUS HOSPITAL LLP	SALCETE	ORANGE	12-05-2021
1268	LUISA BY THE SEA	SALCETE	GREEN	31-05-2021
1269	TELESMART SCS LIMITED	SALCETE	GREEN	15-06-2021
1270	ADWALPALKAR CONSTRUCTIONS & RESORTS PVT LTD	SALCETE	GREEN	24-01-2022
1271	AIR ENGINEERING WORKSHOP	MORMUGAO	GREEN	26-01-2022
1272	M/S. CAM INDUSTRIAL SERVICES	QUEPEM	ORANGE	22-04-2021
1273	CHOWGULE INDUSTRIES PRIVATE LIMITED	CANACONA	ORANGE	31-10-2021
1274	M/S SPARKLE SERVICE STATION	MORMUGAO	ORANGE	03-08-2021
1275	MAJESTIC ECO COMFORT	SALCETE	ORANGE	20-06-2021
1276	Shraddha ispat (Melting Division) Pvt. Ltd.	SALCETE	ORANGE	12-07-2021
1277	Soceidade Zarapkar & Parkar Ltda. (Mobile Screening Plant) Santona	DHARBANDORA	RED	07-09-2021
1278	Voyoge Celebre	CANACONA	GREEN	26-10-2021
1279	Perfect Laundry & Dry Cleaners	SALCETE	ORANGE	15-07-2021
1280	M/s Adarsh Lodge	MORMUGAO	GREEN	08-09-2021
1281	Sea Breeze	SALCETE	GREEN	11-11-2021
1282	CABE SPRINGS AND FASTENERS INDIA PVT LTD	SALCETE	WHITE	05-10-2021
1283	ASIAN FOOD INDUSTRIES	SALCETE	ORANGE	09-02-2022
1284	M/s Royal Goan Beach Resorts LLP. (Royal Palms)	SALCETE	ORANGE	20-06-2021
1285	M/S YASHODHAN HOSPITAL	SALCETE	ORANGE	16-11-2021
1286	M/s. INDOCO REMEDIES LTD (Plant II) (Unit 2 & 3)	SALCETE	ORANGE	12-07-2021
1287	Mr. Cesar Luis Cabral & Others	MORMUGAO	GREEN	11-01-2022
1288	Cipla Limited	SALCETE	ORANGE	05-05-2021
1289	M/S THE WEEKEND	SALCETE	GREEN	03-09-2021

1290	FERRAO BAKERY	SALCETE	GREEN	13-07-2021
1291	N.C. Villa	SALCETE	GREEN	30-12-2021
1292	BEST GRANDS MINERALS PVT LTD	SANGUEM	RED	16-11-2021
1293	YUNCA MACHINERY MANUFACTURING PVT LTD	SALCETE	ORANGE	24-06-2021
1294	CHOWGULE INDUSTRIES PRIVATE LIMITED (MSIL DIVN)	SALCETE	ORANGE	03-08-2021
1295	ESMERALDA METALS	DHARBANDORA	RED	06-01-2022
1296	HOT CHIPS	SALCETE	GREEN	15-06-2021
1297	Aakaash Manufacturing Company Private Limited	MORMUGAO	GREEN	01-10-2021
1298	M/s PRETTY HOMES BUILDERS & DEVELOPERS	SALCETE	ORANGE	02-09-2021
1299	MANGALA FOOD PRODUCTS	SALCETE	ORANGE	10-05-2021
1300	ASTRA METAL SYSTEMS LIMITED	SALCETE	RED	14-01-2022
1301	M/S PAULRINA TOURIST HOME	SALCETE	GREEN	26-07-2021
1302	Adinco Distilleries	QUEPEM	ORANGE	17-01-2022
1303	MARTINS COMFORT	SALCETE	GREEN	21-06-2021
1304	JRE TANK TERMINALS PVT LTD	MORMUGAO	RED	26-08-2021
1305	SHREE LAXMINARAYAN HALLMARKING CENTRE	SALCETE	ORANGE	23-04-2021
1306	M/s COCONUT PALMS	SALCETE	GREEN	26-01-2022
1307	M/s Suni Cottages	SALCETE	GREEN	14-01-2022
1308	COLVA HOLIDAY HOMES	SALCETE	GREEN	30-12-2021
1309	M/S. CONMAR HERITAGE	SALCETE	GREEN	05-05-2021
1310	TAVORA CATERING SERVICES (NAVTARA)	SALCETE	GREEN	10-12-2021
1311	HULIGEMMAA APARTMENTS	SALCETE	GREEN	26-01-2022
1312	Adrushjyot Private Limited	SALCETE	GREEN	22-06-2021
1313	MIKES OASIS BEACH SHACK	SALCETE	GREEN	03-03-2022
1314	M/S BEACH PARADISE	SALCETE	GREEN	28-06-2021
1315	Chandra Orgo Chem Combines	SALCETE	ORANGE	09-12-2021
1316	Sanofi Healthcare India Pvt. Ltd.	SALCETE	ORANGE	16-11-2021
1317	M/s. GOOD FAITH LODGE	SALCETE	GREEN	28-04-2021
1318	Springfields (India) Distilleries	MORMUGAO	ORANGE	22-07-2021
1319	SUN N MOON GUEST HOUSE	CANACONA	GREEN	09-02-2022

1320	M/S SALDANHA DEVELOPERS	MORMUGAO	ORANGE	05-11-2021
1321	M/S FRAGINA GUEST HOUSE	SALCETE	GREEN	16-11-2021
1322	Carlos's Sapphire	SALCETE	GREEN	28-10-2021
1323	Cosy Bedrooms in Benaullim	SALCETE	GREEN	03-03-2022
1324	M/s Daffodils Hotels Pvt Ltd	SALCETE	RED	22-12-2021
1325	Dr. Lawande's Hospital & medical Research Centre	SALCETE	ORANGE	27-12-2021
1326	Composite Material Industries Pvt Ltd	MORMUGAO	RED	23-11-2019
1327	Ching Chang Restaurant	SALCETE	GREEN	01-10-2021
1328	M/s DOWN TOWN BAR & RESTAURANT	QUEPEM	GREEN	22-11-2021
1329	M/s Kamat Criticare & Research Center (KCRC's Horizon ICU & Hospital)	SALCETE	ORANGE	18-10-2021
1330	M/S JACINTA PAYING GUEST HOUSE	SALCETE	GREEN	28-07-2021
1331	M/S PATHARVAT INDUSTRIES	SALCETE	ORANGE	01-07-2021
1332	Rima Rice & Flour Mill	QUEPEM	GREEN	08-09-2021
1333	M/s Shankar Metal Quarry Industries	SALCETE	ORANGE	03-03-2022
1334	M/s UNITED MARINE PRODUCTS	SALCETE	ORANGE	24-02-2022
1335	Zealtek Enterprises Pvt Ltd	MORMUGAO	WHITE	12-05-2021
1336	TOM JET	CANACONA	GREEN	23-11-2021
1337	Goa Granite	SALCETE	ORANGE	20-06-2021
1338	Lorix Enterprises Quick Shine	SALCETE	WHITE	24-03-2022
1339	POLYCLASS INDUSTRIES	SALCETE	ORANGE	20-06-2021
1340	RUNWAY HAIR & BEAUTY SALON	MORMUGAO	GREEN	26-10-2021
1341	Goa Shipyard Limited Unit II	MORMUGAO	ORANGE	08-08-2021
1342	Choksi Laboratories Limited	SALCETE	ORANGE	12-07-2021
1343	M/s CLAREM GUEST HOUSE (FLAT NO 101)	SALCETE	GREEN	23-11-2021
1344	Tonia Liquor Industries	SALCETE	ORANGE	15-06-2021
1345	SANTOSH KRISHNA GAONKAR	DHARBANDORA	ORANGE	03-03-2022
1346	M/S. CECILIA BEACH SHACK	SALCETE	GREEN	05-05-2021
1347	M/S VALANKANNI WORKSHOP	SALCETE	WHITE	16-11-2021
1348	Tulip Diagnostics (P) Ltd. (Div-Coral Clinical Systems)	SALCETE	ORANGE	18-08-2021

1349	AMBICA FARMING	QUEPEM	RED	13-09-2021
1350	M/S CRISMIN GUEST HOUSE	SALCETE	GREEN	13-12-2021
1351	M/s Lotus Inn Pvt. Ltd	SALCETE	ORANGE	20-06-2021
1352	SHRI BALAJI ROLLINGS PVT. LTD	SALCETE	ORANGE	26-10-2021
1353	Veeniola Holiday Home	SALCETE	GREEN	20-12-2021
1354	Hotel Paulino	SALCETE	GREEN	21-06-2021
1355	M/S. SALIDA DEL SOL	CANACONA	GREEN	11-06-2021
1356	S2 Recycling and Enviro Management	MORMUGAO	ORANGE	26-10-2021
1357	HFCL Limited	SALCETE	ORANGE	20-06-2021
1358	Cotyar Beverages	QUEPEM	ORANGE	20-06-2021
1359	M/S LEO BOY SERVICE CENTRE	QUEPEM	ORANGE	07-09-2021
1360	Tato Holdings	MORMUGAO	ORANGE	30-09-2021
1361	Meno's Villa	SALCETE	GREEN	01-03-2022
1362	M/s MADANANT CONSTRUCTIONS GOA PVT LTD	SALCETE	ORANGE	24-06-2021
1363	PARADISE	SALCETE	GREEN	15-06-2021
1364	M/S FRANCON GUEST HOUSE	SALCETE	GREEN	16-11-2021
1365	BARKELO TILU GAONKAR	DHARBANDORA	ORANGE	26-10-2021
1366	M/s Indoco Remedies Ltd (Plant-I)	SALCETE	ORANGE	11-07-2021
1367	HOTEL PANCHSHEEL	SALCETE	ORANGE	11-07-2021
1368	MORESHWAR TRADING COMPANY PVT.LTD.	MORMUGAO	ORANGE	18-08-2021
1369	M/S VAILANKANNI GUEST HOUSE	SALCETE	GREEN	08-04-2021
1370	French bakery	SALCETE	ORANGE	05-11-2021
1371	M/S MX HOMESTAY	SALCETE	GREEN	28-06-2021
1372	Elva Mansion	SALCETE	GREEN	26-01-2022
1373	RODRIGUES REAL ESTATE PVT LTD	SALCETE	ORANGE	22-04-2021
1374	NIRVANA HILL RESTAURANT	SALCETE	GREEN	19-10-2021
1375	COSTI LATERITE QUARRY (Dr. Damodar Dessai Gaunkar)	SANGUEM	ORANGE	08-04-2021
1376	Watson Pharma Private Limited	SALCETE	ORANGE	06-05-2021
1377	MORMUGAO PORT TRUST BERTH NO.10,11 & GENERAL	MORMUGAO	RED	06-05-2021
1378	Ion Exchange India Ltd	SALCETE	GREEN	30-09-2021

1379	M/S. QUINTA DE SANTANA HERITAGE	SALCETE	GREEN	05-05-2021
1380	ITC Grand Goa Resort & Spa	SALCETE	RED	13-07-2021
1381	M/S DREAM SKYLINE	SALCETE	ORANGE	23-02-2022
1382	ALSONY MONTEIRO FABRICATION WORKSHOP	SALCETE	WHITE	13-07-2021
1383	M/s OASIS BEACH RESORT	CANACONA	GREEN	11-01-2022
1384	IDEAL FURNITURE	SANGUEM	GREEN	05-08-2021
1385	Goa Shipyard Limited Unit II	MORMUGAO	ORANGE	31-10-2021
1386	MARGAO RESIDENCY	SALCETE	ORANGE	05-05-2021
1387	A's Retreat	SALCETE	GREEN	09-06-2021
1388	HOTEL SUNAINA	SALCETE	ORANGE	08-08-2021
1389	AIRPORTS AUTHORITY OF INDIA PTT WORK	MORMUGAO	RED	28-05-2021
1390	NATIONAL SCRAP TRADERS	MORMUGAO	ORANGE	13-01-2022
1391	PRINCESS ANJU	SALCETE	GREEN	03-03-2022
1392	M/S HOTEL RESTART	QUEPEM	GREEN	08-09-2021
1393	M/S AVONTADE BISTRO & PUB	QUEPEM	GREEN	16-11-2021
1394	M/S OLD GOA OILS AND FOODS PVT.LTD	SALCETE	ORANGE	08-04-2021
1395	ANTONETTES GUEST HOUSE	SALCETE	GREEN	25-11-2021
1396	The Zuri White Sands Goa Resort & Casino	SALCETE	RED	06-05-2021
1397	Quality Foods	SALCETE	ORANGE	31-10-2021
1398	M/s KALIM GARAGE DENTING & WELDING	SALCETE	WHITE	06-12-2021
1399	Goa Tourism Development Corporation Ltd.	SANGUEM	ORANGE	10-10-2021
1400	FANRIA GUEST HOUSE	SALCETE	GREEN	13-01-2022
1401	M/s CLAREM GUEST HOUSE (FLAT NO 04)	SALCETE	GREEN	23-11-2021
1402	Godinho bakery	SALCETE	ORANGE	13-01-2022
1403	VASCO-DA-GAMA RAILWAY STATION	MORMUGAO	ORANGE	09-12-2021
1404	COSTI LATERITE QUARRY (Dr. Damodar Dessai Gaunkar)	SANGUEM	ORANGE	09-12-2021
1405	Indospirit Beverages Pvt Ltd	SALCETE	ORANGE	22-07-2021
1406	M/s Vedanta Limited Savordem Barge Loading Jetty	SANGUEM	RED	16-11-2021

1407	M/s SHANTADURGA HOT MIX ENTERPRISES	QUEPEM	ORANGE	11-07-2021
1408	M/s WHITE SANDS APARTMENT	SALCETE	GREEN	11-01-2022
1409	National Institute of Technology Goa	SALCETE	RED	19-01-2022
1410	Green Park Resorts	CANACONA	GREEN	18-02-2021
1411	Jorina Guest House	SALCETE	GREEN	16-02-2022
1412	NAIK MOTORS	SALCETE	ORANGE	08-04-2021
1413	6.7 MLD STP FOR MARGAO TOWN (PWD DIV XXI PHE))	SALCETE	RED	28-05-2021
1414	GOA SHIPYARD LIMITED - Unit V	MORMUGAO	ORANGE	03-08-2021
1415	M/S. CAM INDUSTRIAL SERVICES	QUEPEM	ORANGE	23-09-2021
1416	HOTEL SURYA PALACE	SALCETE	GREEN	15-02-2022
1417	Neelchand by Ciarans	CANACONA	GREEN	30-11-2021
1418	M/S GEMINI DISTILLERIES (GOA) PRIVATE LIMITED	MORMUGAO	ORANGE	14-07-2021
1419	Autobahn Goa	SALCETE	ORANGE	08-08-2021
1420	Zeolites & Allied Products Pvt. Ltd	SALCETE	RED	28-05-2021
1421	Shree Maa Gayatri Enterprises	MORMUGAO	RED	03-01-2022
1422	French bakery	SALCETE	ORANGE	31-05-2021
1423	Bhisso Fuel Station (IOCL fuel station)	QUEPEM	WHITE	17-06-2021
1424	SUYOG RESIDENCY	SALCETE	GREEN	21-06-2021
1425	M/S ELLORA MANSION	SALCETE	GREEN	10-12-2021
1426	HOTEL SILVA ROSA	SALCETE	GREEN	10-12-2021
1427	M/s TULIP DIAGNOSTIC PVT LTD (DIV: CORAL CLINICAL SYSTEMS) PLOT NO. M-46 & M-47, BUILDING E	SALCETE	ORANGE	27-09-2021
1428	M/S BARTON FIRTOP ENGINEERING(I) PVT.LTD	SALCETE	ORANGE	18-08-2021
1429	VAILANKANI GARAGE	QUEPEM	ORANGE	12-05-2021
1430	M/s Hideaway Hospitality	SANGUEM	GREEN	29-06-2021
1431	Gopikishan Mills	DHARBANDORA	GREEN	15-04-2021
1432	IFB INDUSTRIES LIMITED	SALCETE	GREEN	24-03-2022
1433	M/S. PATXA GUEST HOUSE	SALCETE	GREEN	14-07-2021
1434	Siemens Ltd Energy Automation	SALCETE	GREEN	09-03-2022

1435	M/s CLAREM GUEST HOUSE (FLAT NO 02)	SALCETE	GREEN	23-11-2021
1436	TOP SHINE CAR WASH SERVICING CENTRE	SANGUEM	ORANGE	02-09-2021
1437	M/s. Seagull Resort	SALCETE	GREEN	30-12-2021
1438	VIJAYA BAKERY	QUEPEM	GREEN	13-07-2021
1439	PALM FRINGED PLAZA	CANACONA	GREEN	09-04-2021
1440	Medizest Pharmaceuticals Pvt. Ltd.	SALCETE	ORANGE	18-08-2021
1441	OM SAI STEEL & HARDWARE	QUEPEM	WHITE	07-03-2022
1442	Sociedade De Formento Industrial Private Limited -SN 100/2-A	SALCETE	GREEN	13-12-2021
1443	PEE GEE ASSOCIATES	SALCETE	ORANGE	06-12-2021
1444	M/S MANORA AUTO WORKS	SALCETE	ORANGE	15-07-2021
1445	PROVIDENCE REALTY & RESOURCES LLP	SANGUEM	RED	18-02-2022
1446	M/s. MURDESHWAR PLASTICS	SALCETE	GREEN	21-06-2021
1447	BR COTTAGES AND SHACKS	CANACONA	GREEN	22-07-2021
1448	GMI ZARHAK MOULDERS PRIVATE LIMITED	SALCETE	GREEN	17-08-2021
1449	M/S JERONES HOME STAY	SALCETE	GREEN	19-11-2021
1450	GOA SPONGE & POWER LTD	SANGUEM	RED	30-07-2021
1451	M/S M F DIAS BAR AND RESTAURANT	QUEPEM	GREEN	02-09-2021
1452	Medizest Pharmaceuticals Pvt. Ltd.	SALCETE	ORANGE	23-08-2021
1453	Sahil Packaging	SALCETE	GREEN	16-11-2021
1454	M/s ZIVA HOLIDAY HOMES	SALCETE	GREEN	09-02-2022
1455	MAJESTIC PALMS	SALCETE	GREEN	05-05-2021
1456	M/s. CISEN PHARMACEUTICALS INDIA PRIVATE LIMITED	SALCETE	ORANGE	09-04-2021
1457	G M SERVICE ZONE	SALCETE	ORANGE	16-12-2021
1458	LAMINEX	MORMUGAO	GREEN	26-10-2021
1459	St. Anthony Guest House	SALCETE	GREEN	02-08-2021
1460	M/s. COUNTO AUTOMOBILES PVT. LTD.	SALCETE	ORANGE	18-08-2021
1461	M/s VILLA DE DAVID	CANACONA	GREEN	10-12-2021
1462	TONY'S DEN	SALCETE	GREEN	28-04-2021
1463	Princely Cars Pvt Ltd	SALCETE	ORANGE	22-07-2021

1464	20 MLD STP NAVELI MARGAO	SALCETE	RED	04-02-2022
1465	Raghuvir Glass Centre	CANACONA	ORANGE	16-11-2021
1466	CAR SERVICE POINT	MORMUGAO	GREEN	28-12-2021
1467	DEEPAK ENTERPRISES	SALCETE	ORANGE	05-04-2021
1468	Princely Cars Pvt Ltd	SALCETE	ORANGE	15-07-2021
1469	Blue Cross Laboratories Private Limited	SALCETE	ORANGE	06-05-2021
1470	PAPAYAS GUEST HOUSE	CANACONA	GREEN	08-04-2021
1471	SICGIL INDUSTRIAL GASES LTD	MORMUGAO	ORANGE	10-10-2021
1472	MOLBIO DIAGNOSTICS PRIVATE LIMITED	SALCETE	ORANGE	06-05-2021
1473	M/s R.N. TRANSPORT	SANGUEM	RED	16-11-2021
1474	M/s CLAREM GUEST HOUSE (FLAT NO 104)	SALCETE	GREEN	23-11-2021
1475	M/S. APARTMENT WITH VINTAGE FURNITURE	SALCETE	GREEN	28-04-2021
1476	JOERIA GUEST HOUSE	SALCETE	GREEN	10-12-2021
1477	M/s. Bio-Med Ingredients Private Limited	SALCETE	GREEN	01-02-2022
1478	Shri Kamakshi Aquatics Private Limited	DHARBANDORA	ORANGE	29-11-2021
1479	M/S VIENA FERNANDES GUEST HOUSE	CANACONA	GREEN	14-07-2021
1480	M/S. BEACH RETREAT VILLA	SALCETE	GREEN	23-06-2021
1481	COLORCON ASIA PVT. LTD.	SALCETE	ORANGE	16-11-2021
1482	M/s DONA ROSA BY THE SEA	SALCETE	GREEN	11-01-2022
1483	M/s TURNING POINT BAR & RESTAURANT	QUEPEM	GREEN	27-01-2022
1484	GSL SERVICE CENTRE	SALCETE	ORANGE	16-11-2021
1485	Essen Whispering Willows Co-op Housing Maintenance Society Ltd.	MORMUGAO	GREEN	08-04-2021
1486	MICRO LABS LIMITED	SALCETE	ORANGE	09-04-2021
1487	MS ANTONIO & LUIZINHA RESIDENCE	SALCETE	GREEN	30-12-2021
1488	M/s JnB ORCHARDS	SALCETE	GREEN	10-12-2021
1489	KUSHAL PACKAGING INDUSTRIES	SALCETE	GREEN	30-09-2021
1490	APARTMENT NO.7	SALCETE	GREEN	03-11-2021
1491	Savianzie Guest House	SALCETE	GREEN	03-09-2021
1492	JYMI'S COTTAGES	SALCETE	GREEN	15-02-2022

1493	ARCO IRIS BOUTIQUE HOMESTAY	SALCETE	GREEN	28-06-2021
1494	CAROLINE GUEST HOUSE	SALCETE	GREEN	22-11-2021
1495	Aakaash Manufacturing Company Private Limited	MORMUGAO	GREEN	11-01-2022
1496	CHOWGULE AND COMPANY PVT. LTD. SBD	MORMUGAO	ORANGE	24-03-2022
1497	ROMYA GUEST HOUSE	CANACONA	GREEN	25-05-2021
1498	Dempo Industries Private Limited	SALCETE	ORANGE	02-09-2021
1499	RIYA PACKAGING	MORMUGAO	GREEN	08-09-2021
1500	Dream Voyagers Guest House	SALCETE	GREEN	28-12-2021
1501	Grace Intensive Cardiac Care Centre	SALCETE	ORANGE	30-09-2021
1502	M/S. SERENE WELLNESS CENTRE	MORMUGAO	WHITE	15-02-2022
1503	FLY ASH DUST TRANSPORTER GA-02-U-7899 GA-06-T-7899	MORMUGAO	GREEN	12-08-2021
1504	BY THE BEACH GOA	SALCETE	GREEN	05-08-2021
1505	M/s CLAREM GUEST HOUSE (FLAT NO 202)	SALCETE	GREEN	23-11-2021
1506	ALAGOA RESORTS	SALCETE	ORANGE	06-09-2021

Sr.No	Name of the Industry	Application for	Approval Date
1	SWET DENTAL CLINIC	BMW	15-03-2022
2	Manipal Hospital Laboratory Sample Collection Centre	BMW	25-03-2022
3	Implant Care Dental Clinic	BMW	03-03-2022
4	PET COSMOS	BMW	18-02-2022
5	PAARTH BLOOD COLLECTION CENTRE	BMW	18-02-2022
6	Dental Clinic	BMW	18-02-2022
7	VINAYAKA AYURVEDIC CLINIC	BMW	23-02-2022
8	M/s Daffodils Multi Speciality Hospital	BMW	18-02-2022
9	Shree Krishna Industrial Traders	BATTERY	23-02-2022
10	Dr.Dukle's Hospital & Research Centre	BMW	09-03-2022
11	Global E Waste Management System	EWaste	03-03-2022
12	S2 RECYCLING AND ENVIRO MANAGEMENT	PWM	17-01-2022
13	THRYOCARE DIAGNOSTIC LABORATORY	BMW	02-02-2022
14	Meditab Specialities Ltd.	PWM	23-02-2022
15	DENTALIGN MULTISPECIALITY DENTAL CLINIC AND ORTHODONTIC CENTRE	BMW	02-02-2022
16	NATURE'S HEALING CENTRE	BMW	02-02-2022
17	THE DENTIST	BMW	23-02-2022
18	Nagarsenkars Classic Hospital	BMW	23-02-2022
19	Raj-Tara Clinic	BMW	23-02-2022
20	Mediquick diagnostic	BMW	22-11-2021
21	LIFECARE WELLNESS CENTER	BMW	02-02-2022
22	Campal Clinic Hospital	BMW	03-03-2022
23	M/s PondaEnvocare Limited	HWM	15-11-2021
24	Dr. Nelly De Sa Child Specialist	BMW	15-11-2021
25	Care For You Clinic	BMW	22-11-2021
26	v care diagnostics	BMW	26-11-2021
27	DermAvenue Skin Clinic	BMW	26-11-2021
28	METROPOLIS HEALTHCARE LIMITED	BMW	15-11-2021
29	M/s. Unichem Laboratories Ltd	PWM	14-12-2021
30	Infinity Health	BMW	25-11-2021

31	GRACIAS MATERNITY HOSPITAL	BMW	23-02-2022
32	Blue Cross Laboratories Pvt Ltd.	PWM	07-03-2022
33	Pathkind Diagnostics Pvt Ltd	BMW	28-10-2021
34	SAMPLE COLLECTION CENTRE	BMW	28-10-2021
35	SOLAR SOLUTIONS	BATTERY	16-12-2021
36	PLATICARE HOSPITAL	BMW	22-11-2021
37	LIVOM COSMETIC & DENTAL CLINIC	BMW	26-11-2021
38	SUBURBAN DIAGNOSTICS INDIA PVT LTD	BMW	28-10-2021
39	Suburban Diagnostics (i) Pvt Ltd	BMW	28-10-2021
40	Dr MukulPaiRaiturkar, Consultant Pediatrician	BMW	06-12-2021
41	M/s SHIVRAJ ACCUMULATORS	BATTERY	13-12-2021
42	Vaatsalya Hospital	BMW	29-12-2021
43	Goa Dental College Hospital	BMW	25-11-2021
44	MORMUGAO PORT TRUST HOSPITAL	BMW	07-03-2022
45	Dr. GAJANAN KAMAT	BMW	20-09-2021
46	ROYAL DENTAL AND MEDICAL CENTER	BMW	20-10-2021
47	TAJ PLASTIC PRODUCTS AND TRADERS (WASTE AUTHORIZATION)	PWM	10-12-2021
48	Dr Samiksha's women care	BMW	06-12-2021
49	M/s Indoco Remedies Limited	PWM	10-12-2021
50	Kukki Care Polyclinic (Dr.Vibhav W. Verlekar	BMW	28-10-2021
51	M/S.IFB INDUSTRIES LIMITED	BMW	28-10-2021
52	Dr.ShrikantAjgaonkar	BMW	03-03-2022
53	Devki Beverages	PWM	07-10-2021
54	RAGHUSMRITI DENTAL CLINIC	BMW	22-11-2021
55	ASG HOSPITAL PVT LTD	BMW	06-09-2021
56	Goa Medical College & Hospital	BMW	25-03-2022
57	BETTS INDIA PRIVATE LIMITED	PWM	10-10-2021
58	SYNGENTA BIOSCIENCES PVT. LTD.,	BMW	02-02-2022
59	FABRIZIO INDUSTRIES PVT LTD	PWM	07-10-2021
60	Usgaonkar Children Hospital and Clinic	BMW	12-10-2021

61	Dr.Subhash Chandra ENT Hospital(5 bedded)	BMW	06-12-2021
62	GV Clinic	BMW	25-11-2021
63	VONCO PLASTICS PVT LTD	PWM	10-12-2021
64	PRISTINE SMILES	BMW	14-01-2022
65	Tooth studio	BMW	16-08-2021
66	DHAKANKAR CLINIC	BMW	06-12-2021
67	SIOLIM PATHOLOGY LABORATORY	BMW	28-10-2021
68	TATA CONSULTANCY SERVICES LTD.	PWM	14-12-2021
69	SANJEEVANI CLINICAL LABORATORY	BMW	01-11-2021
70	EncubeEthicals Pvt Ltd	PWM	07-10-2021
71	Gracias Clinic	BMW	28-07-2021
72	MANGUESH DENTAL CLINIC	BMW	14-01-2022
73	CHANDRA ORGO CHEM COMBINES	PWM	10-12-2021
74	DR KEDARS MATERNITY INFERTILITY AND SURGICAL HOSPITAL	BMW	22-07-2021
75	Shiv clinic	BMW	23-02-2022
76	Santa Cruz Diagnostic Laboratory	BMW	12-10-2021
77	MOLBIO DIAGNOSTICS PRIVATE LIMITED	BMW	28-10-2021
78	Crown Electronics	BATTERY	09-09-2021
79	MEDSTAR HEALTHCARE	BMW	27-07-2021
80	Colgate Palmolive (India) Limited	BMW	12-10-2021
81	Happy smile	BMW	25-11-2021
82	JAY KAY PLASTICS	PWM	07-10-2021
83	Hindustan Multitech	PWM	31-07-2021
84	M/s. Cipla Limited	PWM	07-10-2021
85	M/s. Cipla Limited	PWM	07-10-2021
86	Cipla Limited	PWM	07-10-2021
87	Common Bio-medical Waste Treatment Facility	BMW	12-07-2021
88	Child and Newborn Clinic	BMW	06-09-2021
89	SWANSON PLASTICS (INDIA) PRIVATE LIMITED	PWM	10-12-2021
90	Accuro - Centre For Human Genetics	BMW	20-10-2021
91	JAY KAY PLASTIC	PWM	31-07-2021

92	HINDUSTAN INDUSTRIES	PWM	31-07-2021
93	ISHANAS LAB Pathology and blood collection centre and services	BMW	30-04-2021
94	AROGYAM PATHOLOGY CENTRE	BMW	12-05-2021
95	KAMALA POLYCLINIC	BMW	20-10-2021
96	ELIN ELECTRONICS LTD.	PWM	23-02-2022
97	AMBA INDUSTRIES	PWM	10-12-2021
98	RAMDEV POLYPACK	PWM	10-12-2021
99	SHREE NAINA CONTAINERS PVT LTD	PWM	07-10-2021
100	Rainbow Plast	PWM	14-12-2021
101	Dr Aparajita's Pet Clinic	BMW	09-04-2021
102	Modern Plastic Industries	PWM	31-07-2021
103	Sun Pharmaceutical	PWM	07-10-2021
104	DR.SARDESAI X-RAY AND ULTRA-SOUND CLINIC	BMW	15-07-2021
105	Milson Corporation	BATTERY	13-05-2021
106	Filbhamulti speciality dental clinic	BMW	10-05-2021
107	KMAT GOAN DENTAL CARE	BMW	28-04-2021
108	GOLDY FINEPACKS PVT LTD	PWM	13-07-2021
109	NOBEL HEALTH	BMW	09-04-2021
110	Dr Amar Clinic	BMW	22-12-2021
111	Goa dental clinic	BMW	09-04-2021
112	CURCHOREM PATHOLOGY BLOOD COLLECTION CENTRE	BMW	20-10-2021
113	Dr.YeshwantraoPrabhu Desai	BMW	07-04-2021
114	BETTS INDIA PRIVATE LIMITED	PWM	13-07-2021
115	M/S. ONKAR INDUSTRIES	PWM	13-07-2021
116	M/S. HERAMB INDUSTRIES	PWM	31-07-2021
117	Micro Labs Limited	PWM	15-07-2021
118	HEALTHCARE PATH LAB	BMW	10-05-2021
119	AliaxisUtilities and Industry Private Limited	PWM	31-07-2021
120	SHANTI AVEDNA SADAN	BMW	23-02-2022
121	M/S.Shiffer and Menezes India PVT. LTD.	PWM	23-02-2022
122	SALGAOCAR MEDICAL RE-SEARCH CENTRE	BMW	26-05-2021

123	Manipal Hospital	BMW	30-04-2021
124	SUB DISTRICT HOSPITAL PONDA	BMW	22-07-2021
125	Dr Shubhras Sachira wellness centre	BMW	20-09-2021
126	CURADENT MULTISPECIALITY DENTAL CLINIC	BMW	01-11-2021
127	JESLYNS SMILE DENTAL CLINIC	BMW	01-11-2021
128	Dr Abhishek S Bandekar Clinic	BMW	13-07-2021
129	ART Orthodontic Clinic - Sanpurn Polyclinic	BMW	13-07-2021
130	KRUPA POLYMERS (INDIA) PRIVATE LIMITED	PWM	27-07-2021
131	GBC PACKAGING	PWM	27-07-2021
132	GOPALDAS VISHRAM & COMPANY LIMITED	PWM	12-07-2021
133	FILPAK (INDIA) PRIVATE LIMITED	PWM	31-07-2021
134	Datta V Vernekar	BMW	23-02-2022
135	M/s Indoco Remedies Limited (Plant I)	BMW	26-05-2021
136	M/S MAHAGANPATI CLINICAL LABORATORY	BMW	01-11-2021
137	RADIANCE SMILE CARE	BMW	01-11-2021
138	KEMPLAST SYSTEMS	PWM	03-03-2022
139	Paes Medical Clinic	BMW	26-05-2021
140	Sub Centre Anjuna	BMW	25-11-2021
141	UREKA PLAST TECH	PWM	06-09-2021
142	Ayurvedic Clinic & Panchkarma Centre	BMW	20-09-2021
143	GOMANTAK AYURVEDA MAHAVIDYALAYA AND RESEARCH CENTRE	BMW	20-09-2021
144	Asilo District Hospital	BMW	28-06-2021
145	Pereira Medicare	BMW	25-11-2021
146	TATA CONSULTANCY SERVICES LTD.	BMW	12-07-2021
147	TATA CONSULTANCY SERVICES LTD.	EWaste	31-05-2021
148	WORLDWIDE VETERINARY SERVICE INDIA	BMW	26-05-2021
149	JPEE REFINERIES PVT LTD.	HWM	31-07-2021
150	VICTOR HOSPITALS AND MEDICAL SERVICES LTD	BMW	07-04-2021

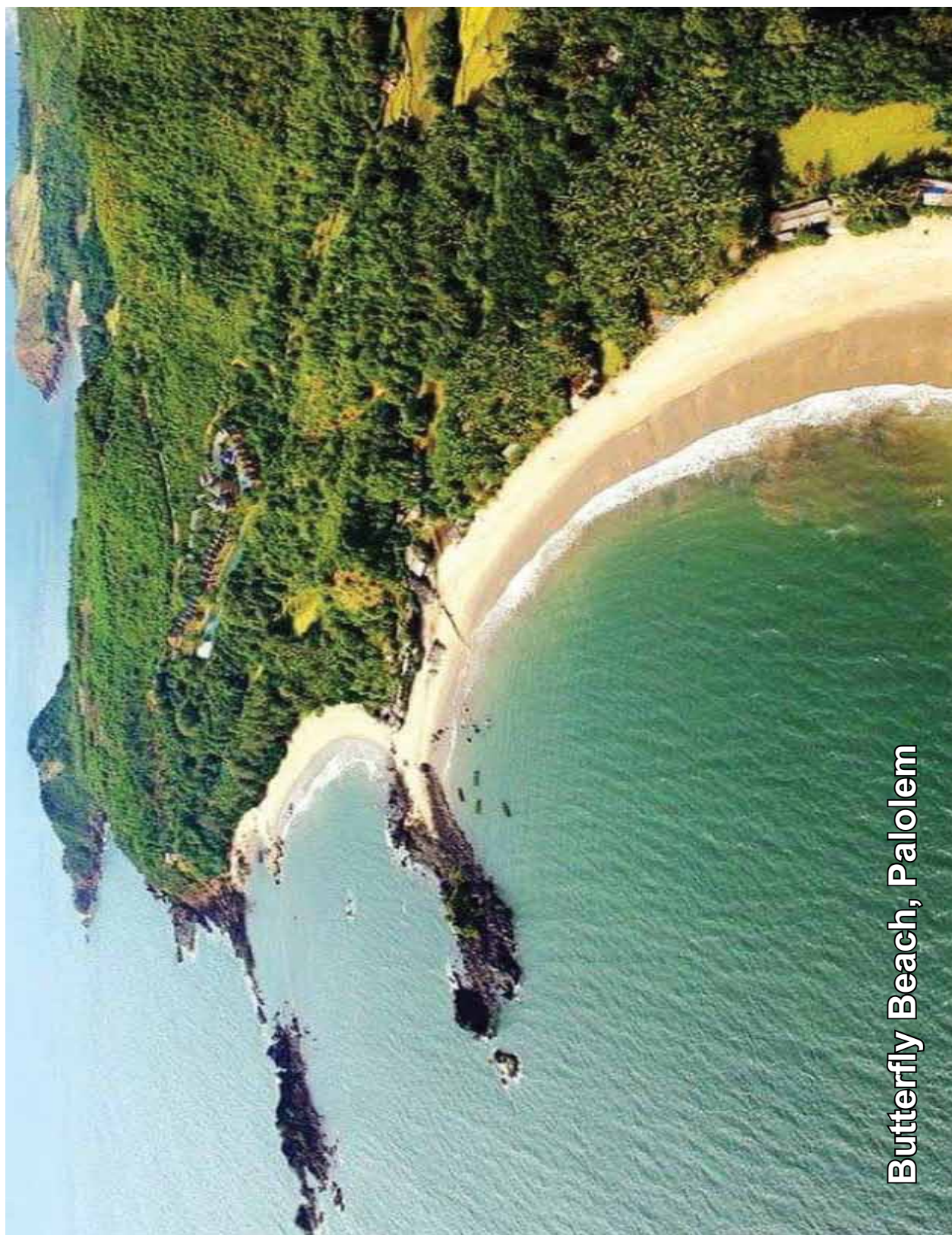
151	Sub Centre Parra	BMW	25-11-2021
152	DR.SEEMA T DIWANI CLINIC	BMW	07-05-2021
153	M/JEEVODAYA NURSING HOME	BMW	06-05-2021
154	Dr SharmilaSiddheshPrabhudesai	BMW	15-07-2021
155	Animal Clinic	BMW	23-02-2022
156	DR. DEEPIKA'S DENTAL CLINIC	BMW	07-09-2021
157	Hospicio Hospital	BMW	09-04-2021
158	BANA REFINERY PVT.LTD.	HWM	02-08-2021
159	Shree Mahalsa Plastics	HWM	31-07-2021
160	Sub Centre Assagao	BMW	25-11-2021
161	RMD Chapora	BMW	25-11-2021
162	S/C NERUL under PHC Candolim	BMW	12-07-2021
163	SUB CENTRE BHATI, SANGUEM GOA	BMW	23-02-2022
164	R.M.D. VADDEM SANGUEM GOA	BMW	23-02-2022
165	Sub Centre Valkini, Sanguem Goa	BMW	03-03-2022
166	Sub Centre, Kurprmsanguem Goa	BMW	03-03-2022
167	Sub Centre Oxel	BMW	25-11-2021
168	Sub Centre Sodiem	BMW	25-11-2021
169	Sub Centre Guddem	BMW	25-11-2021
170	SUB CENTRE KALEY, SANGUEM GOA	BMW	23-02-2022
171	Sub Centre Verla- Canca	BMW	25-11-2021
172	SUB CENTRE VERLEM NETRAVALI SANGUEM GOA	BMW	02-02-2022
173	Sub Centre St. Cruz under Primary Health Centre Ponda	BMW	07-09-2021
174	Sub Centre Prabhunagar under Primary Health Centre Ponda	BMW	07-09-2021
175	Sub centre Shapur Under Primary Health Centre Ponda	BMW	07-09-2021
176	Sub Centre Haveli Curti&Panditwada	BMW	07-09-2021
177	Sub Centre Murdi under Primary Health centre Ponda	BMW	07-09-2021
178	Sub Centre Khandepar under Primary Health Centre Ponda	BMW	07-09-2021
179	Sub Centre Bethoda under Primary Health Centre Ponda	BMW	07-09-2021
180	Sub Centre Dhavli under Primary Health Centre Ponda	BMW	07-09-2021

181	Sub Centre WadiTalaulim under Primary health Centre Ponda	BMW	07-09-2021
182	Sub Centre Bandora under Primary Health Centre Ponda	BMW	07-09-2021
183	Sub Centre Kavle under Primary Health Centre Ponda	BMW	07-09-2021
184	Sub Centre Querim under Primary Health Centre Ponda	BMW	07-09-2021
185	RMD Agapur under primary Health centre Ponda	BMW	07-09-2021
186	Sub Centre Durgabhat under Primay Health Centre Ponda	BMW	06-09-2021
187	SubcenterGuirim	BMW	13-07-2021
188	Subcenter Socorro II	BMW	06-09-2021
189	Subcenter Socorro I	BMW	06-09-2021
190	Sub Center Salvador Do Mundo	BMW	06-09-2021
191	Sub Center Penha De Franca II	BMW	06-09-2021
192	Sub Center Penha De Franca 1	BMW	06-09-2021
193	SubcenterKharpal	BMW	06-09-2021
194	RMD Dodamarg	BMW	06-09-2021
195	Sub health centre, Adwalpal	BMW	06-09-2021
196	Sub Health centre ,Menkurem	BMW	06-09-2021
197	Sub Health Centre Bordem	BMW	06-09-2021
198	Sub health centerMulgao	BMW	06-09-2021
199	Sub Health Center, Nanoda	BMW	06-09-2021
200	Sub Center Sal	BMW	06-09-2021
201	Sub Health Centre Maulingem	BMW	06-09-2021
202	Rural Medical Dispensary Rivona	BMW	02-02-2022
203	TATA CONSULTANCY SERVICES LTD.	BMW	12-07-2021
204	Medicure Clinical Diagnostic Centre	BMW	02-02-2022
205	Kamakshi AYRA Wellness clinic	BMW	23-02-2022
206	Margao Municipal Council (Sonsodo)	MSW	31-07-2021
207	MAHAL PLASTICS AND FIBERS PVT LTD	PWM	09-12-2021
208	Dr Preeti's Dental Clinic	BMW	02-08-2021
209	DR. ANTONIO PINTO DO ROSARIO HOSPITAL	BMW	27-07-2021
210	DEVAJ CLINIC	BMW	20-09-2021

211	Dr.BracosClininc	BMW	12-05-2021
212	BONE AND JOINT CARE	BMW	12-05-2021
213	DR REWA'S GYNECARE	BMW	21-03-2022
214	KAMALA SCANS	BMW	26-11-2021
215	2th KLINIK,DR NADIA'S DENTAL SPECIALTY CENTRE	BMW	20-09-2021
216	Dr. Marianne Saldanha	BMW	03-03-2022
217	Gracias Clinic	BMW	02-02-2022
218	DR TITOS HEALTH CARE CENTRE	BMW	07-05-2021
219	Dr Barreto'sOrthopaedic Consultancy	BMW	07-05-2021
220	Grace Lab	BMW	12-05-2021
221	DR RAJESH NAIK CLINIC	BMW	25-11-2021
222	Dr Rivonkar's Imaging Centre	BMW	29-09-2021
223	Smart Diagnostics	BMW	12-05-2021
224	DR ARNALDO FERNANDES CLNIC	BMW	29-09-2021
225	MEDICAL CLINIC	BMW	06-10-2021
226	DR ABHIJIT P SADEKAR, DENTAL CLINIC	BMW	25-11-2021
227	Satish Phal Dessai	BMW	02-02-2022
228	Dr chawla's pet clinic	BMW	14-12-2021
229	Dr.Abhijit'sFetal Medicine and Infertility Centre	BMW	07-05-2021
230	Dr.Marwin Alberto	BMW	14-01-2022
231	ESI Dispensary Verna	BMW	14-01-2022
232	GSL Medical Centre, Goa Shipyard Limited, Vasco	BMW	03-03-2022
233	ESI Dispensary, Ponda Goa	BMW	29-09-2021
234	SRUJAN POLYCLINIC	BMW	03-03-2022
235	ESI Dispensary, Kundaim	BMW	25-11-2021
236	M/s Dr Shodan V. KamatOrthopedic Surgeon	BMW	13-07-2021
237	M/s. Baracho Hospital and Maternity Home	BMW	26-05-2021
238	PRIMARY HEALTH CENTRE, CANSULIM	BMW	02-02-2022
239	DR. KEITH L. GOMES	BMW	07-05-2021

Salim Ali Bird Sanctuary





Butterfly Beach, Palolem