BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
Original Application No.544/2019

Kiran Kamble & Anr. ... Applicant(s)

v/s

State of Maharashtra and Ors. . ... Respondent(s)

Report of Maharashtra Pollution Control Board

1. The Maharashtra Pollution Control Board has issued proposed directions to the Trimbak Municipal Council vide letter dtd.27/08/2020 on the basis of following non-compliances observed during the visit on 22/07/2020 :-

   i. The existing STP having capacity of 1 MLD was not found in operation due to temporary electricity failure, however, no back up is provided for operation of STP.

   ii. No flow meter was provided at the inlet of STP for ascertaining the incoming flow of sewage to STP for treatment and overflow from inlet sump of STP was observed, which was meeting directly to Godavari river.

   iii. Trimbak Municipal Council is directly discharging sewage in the Godavari river through two other nallas i.e. Neelganga Nalla and Mhatarroad Nalla.

   iv. No in-situ treatment such as phytoremediation or bio-remediation is provided on the said nallas etc.

   A copy of the proposed directions dated 27/08/2020 is enclosed herewith and marked as an **Annexure-'I'.**

2. Thereafter, the officials of the Maharashtra Pollution Control Board at Nashik visited to the Sewage Treatment Plant (STP) provided by the Trimbak Municipal Council on 28/08/2020 and observed as follows :-

   i. During visit STP of capacity 1 MLD was found in operation. The said STP is based on FAB technology.

   ii. In this STP about 2 to 2.5 MLD domestic effluent is received for treatment.

   iii. There is no underground drainage system in the Council area. The effluent received for treatment is through nallas.

iv. Total generation of domestic effluent at present is about 3 MLD as informed by Council representative. However, it is not confirmed as to how much quantity of effluent has been treated in the current STP because from the inlet concreted nalla of STP overflow meeting to Godavari river directly without any treatment.

v. During visit, it was raining in Trimbakeshwar.

A copy of the visit report dated 28/08/2020 along with analysis results of samples of STP outlet is enclosed and marked as an **Annexure-'II'.**

4. The Maharashtra Pollution Control Board has granted Consent to Operate vide letter dated 09/09/2020 subject to certain terms and conditions, which is valid up to 31/12/2023.

5. Trimbak Municipal Council vide letter dated 19/10/2020 informed that they have appointed NEERI for preparation of DPR and submitted Preliminary Report on Installation of RENEU-Restoration of Nalla with Ecologica l(NEERI-IP) for two drains in Trimbakeshwar, Nashik. A copy of the Preliminary Report received from Trimbak Municipal Council is enclosed herewith and marked as an **Annexure-'III'**.

27/10/2020

(Upendra Kulkarni)
Sub-Regional Officer-Nashik

Place : Nashik.

Date : 27/10/2020

Annexure – I

MAHARASHTRA POLLUTION CONTROL BOARD

Phone : 0253-2365150
Fax :0253-2365140
Website: http://mpcb.gov.in.
E-Mail: ronashik@mpcb.gov.in

UdyogBhavan, First Floor
TrimbakRoad,Near ITI,
Satpur,Nashik-422007.

BY R.P.A.D./FAX/HAND DELIVERY

L. No: ~~MPCB/ONLINE/Direction/~~ MPCB/PO/20082700003 /~~2020~~ Date: -27/08/2020

To,
The Chief Officer,
Trimbakeshwar Municipal Council
Tal.Trimbakeshwar & Dist – Nashik.

Sub:-Proposed Directions u/s 33A of the Water (Prevention & Control of Pollution) Act, 1974

Ref:-1. Directions issued by MPCB vide letter dated 11/9/2019
2. Order dated 4/2/2020 passed by the Hon'ble NGT inO.A No.544/2019.
3. visit of the officers of the Board at MPCB on 22/7/2020

WHEREAS, the Maharashtra Pollution Control Board has issued directions to you vide letter dated 11/9/2019, wherein you were directed to submit the time bound action plan for 100% treatment of the generated sewage & achieving effluent discharge standards for STPs. However till the date this office has not received any response from your end.

ANDWHEREAS, One Kiran Kamble & anr. have filed an Application bearing No.544/2019 before the Hon'ble NGT against the State of Maharashtra regarding no functioning of Sewage Treatment Plant at Trimbkeshwar, Dist. Nashik. In the said matter, the Hon'ble NGT vide order dated 25/11/2019 directed to prepare Action Plan with specific time line and budgetary support and no untreated sewage be discharged into the river. The Hon'ble NGT further directed that pending setting up of STP, in-situ remediation of drain may be ensured.

ANDWHEREAS in order to verify the compliance, Sub-Regional Officer,MPCB, Nashikh as visited the site in question on 22/07/2020 and observed as follows :

1. The existing STP having capacity 1 MLD not found in operation due to temporary electricity failure, however no back up is provided for operation of STP.
2. No flow meter provided at the inlet of STP for ascertaining the incoming flow of sewage to STP for treatment and overflow from inlet sump of STP was observed which was meeting directly to Godavari river.
3. You are directly discharging sewage in the Godavari river through two other nallas i.e.Neelganga Nalla & Mhatarroad Nalla.
4. No in– situ treatment such as phytoremediation or bioremediation is provided on the said nallas as per Hon'ble NGT order.
5. Present generation of sewage from the jurisdiction of Council is 3.0 MLD and only STPof capacity 1.0 MLDis installed for treatment of sewage and rest of sewage meets to River Godavari through nallas without any treatment.
6. You have also not submitted proposal for time bound action plan for completion of Sewage treatment plant.

P.T.O

Proposed Directions

ANDWHERAS, in view of the non-compliance, you are hereby directed to show cause as to why :

1. Environmental Compensation shall not be imposed upon your council?
2. Prosecution shall not be initiated against your council.

You reply shall reach this office within 7 days from the receipt of this proposed directions , failing which, appropriate legal action will be initiated against you, which please note.

(Amar Durgule)
Regional Officer, Nashik.

Copy Submitted to :-

1. The Member Secretary, MPC Board, Mumbai.
2. The Principal Scientific Officer, M.P.C. Board, Mumbai.
3. The Joint Director (WPC), M.P.C. Board, Mumbai.

Copy forwarded to:-

1. The Law Officer,MPCBoard,Mumbai
2. Sub-Regional Officer MPCB, Nashik – It is directed to serve the copy of these directions to the corporation and take follow up towards compliance of these directions.

Annexure – II

MAHARASHTRA POLLUTION CONTROL BOARD

Grams: PREPOLL
Tel Nos : 0253 / 2365150
Fax : 0253 / 2365150

Sub-Regional Office
Udyog Bhavan, 1 st floor,
Trimbak Road,MIDC Compound,
Near ITI.,Satpur Nashik.-422007.

VISIT REPORT

Name of Industry: - M/s. Trimbak Municipal council (STP)
'c' class municipal council. At/P trimbakes
Tal & Dist Nashik

Date of Visit: - 28.08.2020

Consent Status: - 31.12.2017 & Applied for renewal.

Board Officer: - M. A. Mahajan. F.O.

Observations:-

1) During visit STP of capacity 1 MLD found in operation. This STP is based on FAB technology.
2) In this STP about 2 to 2.5 MLD domestic effluent is ercived for treatment.
3) There is no underground drainage system in council area. the effluent relived for treatment is through Nallas
4) Total generation of domestic effluent at present is about 3 MLD as informed by council representative However. It is not confirm howmuch quantity of effluent has been treated in the current STP because from the inlet connected nalla of STP overflow meeting to godavari river directly without any treatment.
5) During visit it was daining in trimbakeshwar. Sample of STP outlet collected for analysis.

(R. G. Ahire) लिपीक.
त्रिंबक नगरपालिका

(M. A. Mahajan
F.O

Maharashtra Pollution Control Board
महाराष्ट्र प्रदूषण नियंत्रण मंडळ

REGIONAL LABORATORY, NASHIK
(An ISO: 9001:2015 & OHSAS: 18001:2007 Certified Laboratory)

To,
The Sub-Regional Officer,
M.P.C. Board. Nashik

Lab Report No. :- 117
Sample Code No.:- SRON/JVS/173/20

Date of Collection:- 28/08/2020
Date of Receipt: - 28/08/2020

ANALYSIS REPORT

Type of Industry	**STP outlet**
Particulars	**Results**
pH	7.46
B.O.D. (3 Days 27 ^{0}C)	4.8
C.O.D.	20.0
Suspended Solids	32.0
Total Dissolved Solids	182.0
Chloride	60.0
Sulphate	16.0
Oil & Grease	BDL
Sample collected by	Mr. M. A. Mahajan (FO)
Seal No.	245

Note:- 1) All Results are expressed in ppm expect pH.
2) BDL indicates Below Detectable Level.

STP outlet
M/s. Trimbakeshwar Municipal council
Tal. Trimbakeshwar
Dist. Nashik

(S.H.Nagare)
Scientific officer,
Regional Laboratory, Nashik.

Udyog Bhavan 1 st Floor, Near ITI Signal, Trimbak Road,
MIDC Compound, Nashik - 422007.
Tel: 0253, 2362820 Fax:-0253, 2365150
Email :- sonashiklab@mpcb.gov.in

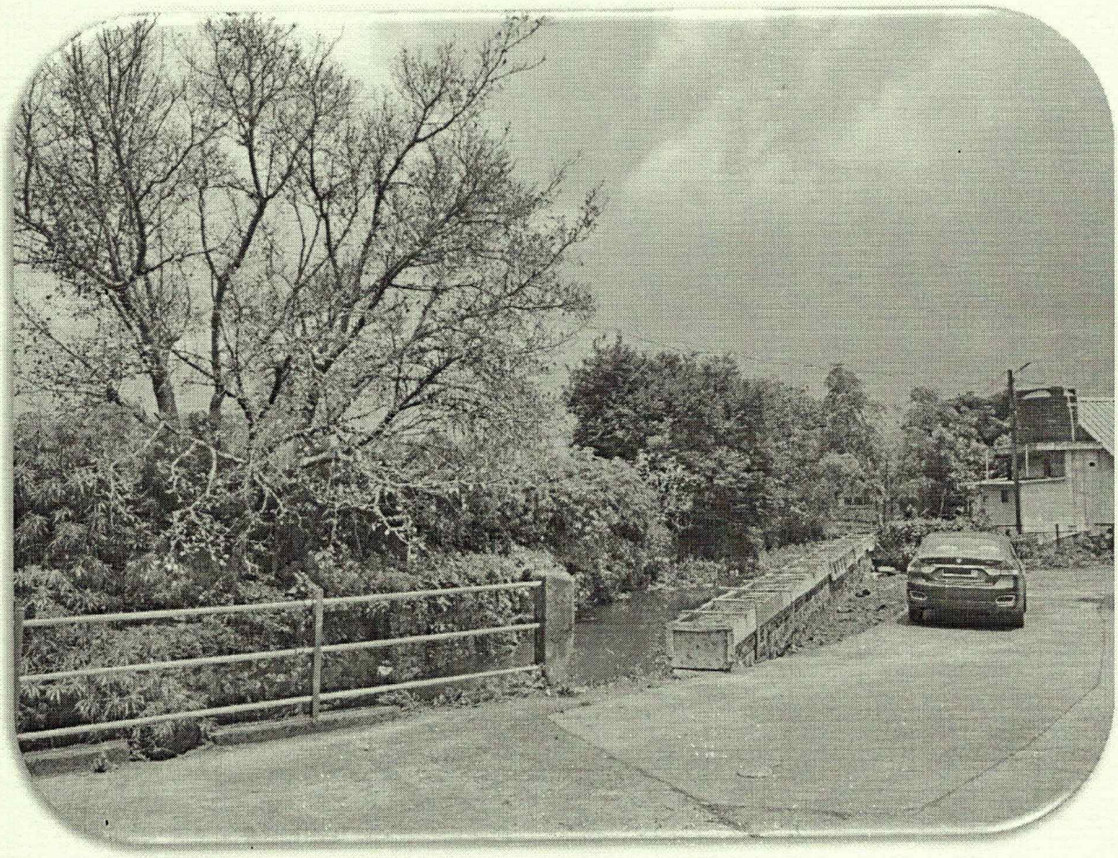
Annexure - III

Preliminary Report on Installation of

RENEU (NEERI IP)

(Restoration of Nallah with Ecological Units) for two drains in

Trimbakeshwar, Nashik



by:

SINE IIT BOMBAY COMPANY

(EMERGY Enviro Private Limited)

CM-02, 3rd Floor, CSRE Building, SINE,

Indian Institute of Bombay, Powai,

Mumbai, Maharashtra- 400076

Table of Contents

1 Treatment Details & Process Description

REstoration of Nallah with Ecological Units (RENEU) is an decentralised in-situ Nallah Treatment technology developed by CSIR- NEERI (National Environmental Engineering Research Institute) which provides a simple, feasible, eco-friendly and cost-effective solution. RENEU treats the nallah by most natural and environment friendly way and has the following characteristics,

1. Low capital cost
2. Low operation and maintenance cost
3. No electricity use (instead solar energy can be utilized)
4. No need of extra land for treatment
5. Gravity flow (so no pumping)
6. No odour
7. Beautiful aesthetics

1.1 Implementation of RENEU Technology:

Three major nallahs, located in Jhunsi, Prayagraj, carrying sewage and ultimately draining into River Ganga were selected for in-situ nallah rejuvenation. Schematic of various unit operations/processes installed in the nallahs are as shown in below picture.

Gates with rectangular notches are provided to maintain a sufficient hydraulic retention time at each unit zone and for flow measurement.

Figure 1-1 General Arrangement of RENEU

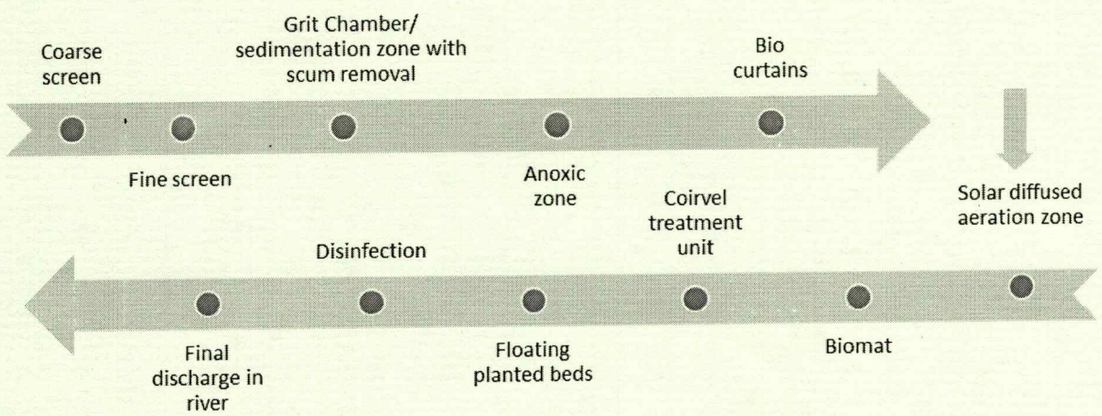


Table 1 Treatment Efficiency of In-situ Nallah Treatment Technology

S. No.	Parameters	Units	Inlet Concentration	Outlet Concentration
1	BOD	mg/L	70-150	<20-50
2	COD	mg/L	100-200	<50-80
3	TSS	mg/L	100-150	<30-50
4	pH	-	6.5-8.0	6.5-8.0
5	TN	mg/L	20-50	<7.5
6	TP	mg/L	5	<1
7	Fecal Coliform	MPN	10^6-10^7	<1000

The above mentioned is the standard treatment efficiency of the In-situ Nallah Treatment (through RENEU technology). Inlet and outlet Treatment parameters are subjected to the wastewater characterisation and the effluent requirement as per regulatory bodies or government authorities.

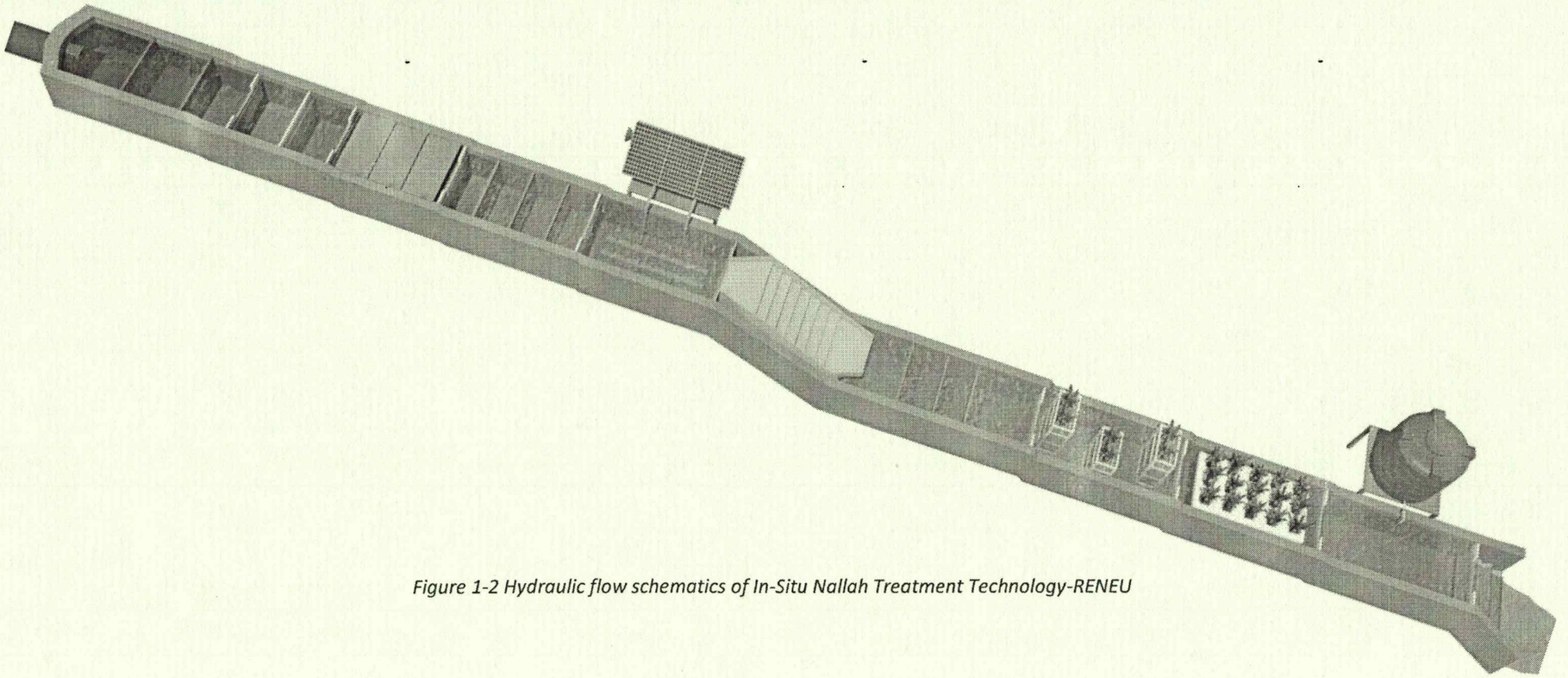


Figure 1-2 Hydraulic flow schematics of In-Situ Nallah Treatment Technology-RENEU

2 Operation Details

The RENEU technology works on minimal operation. As such workforce intervention is not required.

RENEU doesn't need everyday operation as it works under gravity flow. Following points may be considered in maintenance,

Table 2 Indicative Maintenance Plan

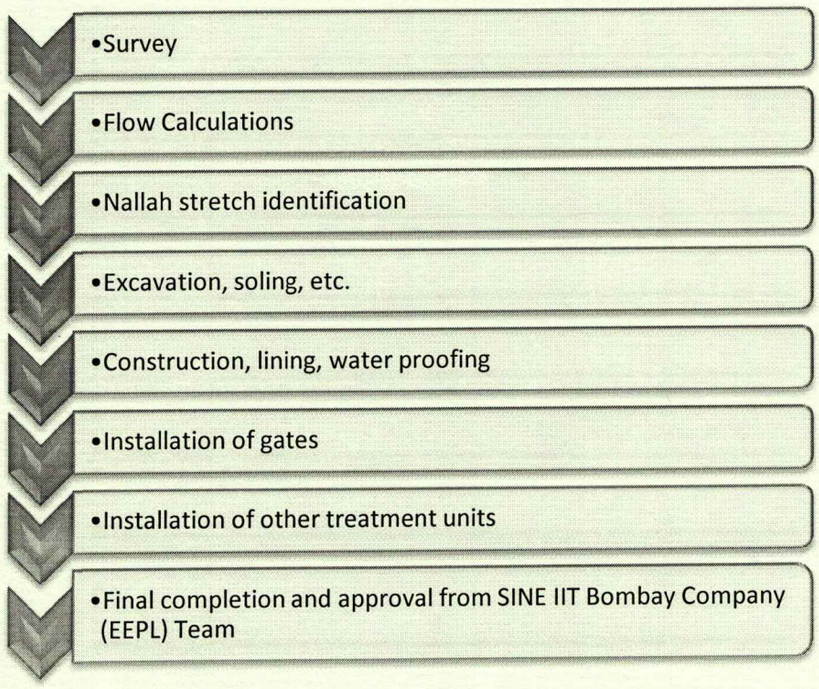
S. No.	Work	Time
1	Dusting of pathways constructed for beautification	Daily
2	Removal of sludge from sedimentation zone	Quarterly
3	Cutting and Trimming of overgrown plants in Coirvel Treatment units, florafts.	After 3-4 months
4	House-keeping of treatment units and general maintenance	As required/ Daily
5	Removal of floating matter from screens	Daily

The detailed operation and maintenance timeline will be shared in the form of SOP, after the designing and implementation of technology on site.

3 Approach & Methodology

Implementing RENEU is a skilled task and will be done under the supervision of a technical person from SINE IIT Bombay Company- EEPL team. As the RENEU system is an in-situ treatment, there's no extra space required for installing treatment units.

Following is the basic flow of work while installing RENEU,



After the completion of work, an approval from the technical lead of the particular project will be required from SINE IIT Bombay Company. And then the project will be hand over to the client.

TIME REQUIRED FOR COMPLETION OF PROJECT:

The work on installing RENEU technology for treatment of each nallah will take approximately four months for completion considering the local availability of all required materials and under standard settings without effect of any natural circumstances.

A Tentative Project Schedule is as mentioned on further page,

Table 3 Indicative project schedule after award of tender

S/N	Activity Name	Weeks													
		Month- 1				Month- 2				Month- 3				Month 4	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Site Clearing and Nallah Diversion														
2	Marking & Excavation for Nallah and stores room														
3	Construction of water proof Nallah Bed														
4	Construction of Nallah walls and columns for gates														
5	Construction of stores room and other ancillary works														
6	Installation and fabrication of specialised process units by EEPL Team														
7	Installation of all treatment units and accessories equipments														
8	Beautification, Landscaping of Nallah and surroundings														
9	Allowing Nallah sewage water to flow through the treatment technology														
10	Final completion of auxiliary works with verification from EEPL														
11	Commissioning and Final Approval														

**This schedule doesn't consider Peak monsoon period and its effects on project implementation. An additional buffer time should be considered for the same and other technical and social challenges.*

4 Site Visit Details and Tentative Action Plan

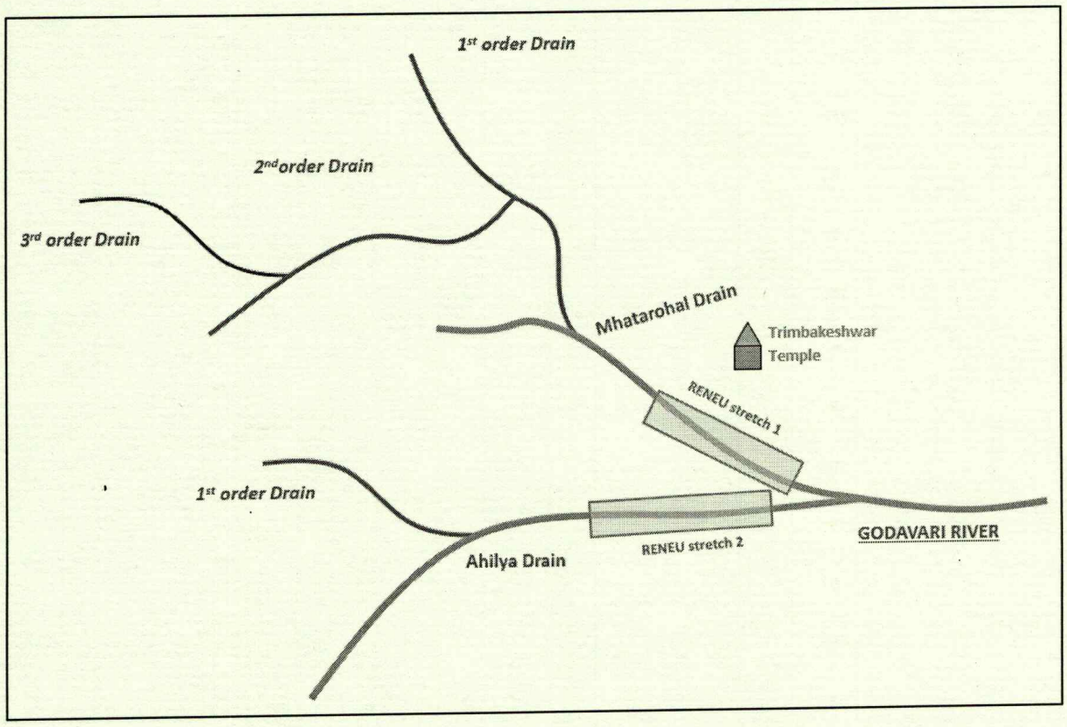
The Godavari River starts from Trimbakeshwar in the Nashik district of Maharashtra about 80 km from the Arabian Sea at an elevation of 1,067 m. The total length of Godavari from its origin to outfall at Rajahmundry into the Bay of Bengal is 1,465 km.

Godavari basin extends over states of Maharashtra, Andhra Pradesh, Chhattisgarh and Odisha in addition to smaller parts in Madhya Pradesh, Karnataka and Union territory of Puducherry having a total area of 3,12,812 Sq.km. In Trimbakeshwar, multiple tributary drains confluences to form River Godavari. Mhatarohal and Ahilya drain are the main drain and the first order, second order and the third order drains meet the Mhatarohal at different intersections.

The RENEU Treatment units are installed at the latter phase of the drain before discharge into river for ensuring maximum treatment.

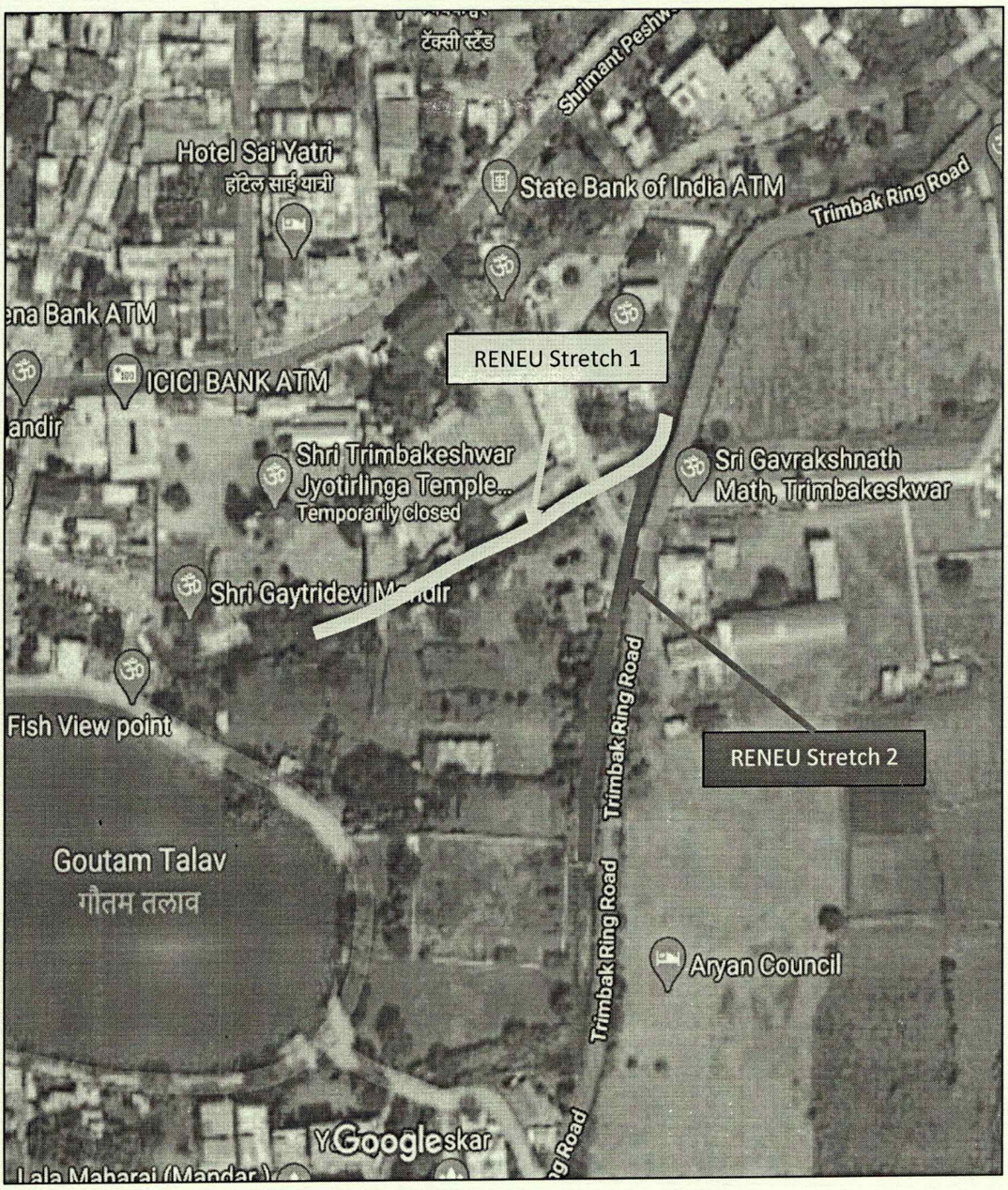
Here, The tributary drains are flowing open at some location and have a covered top slab at multiple locations, due to which identification of drain intersection points is a difficult task. And hence the 100% treatment of drains at the upstream locations is not possible.

Figure 3 Schematic of Godavari river and its tributaries



The most feasible stretches for the treatment of Drain by RENEU (NEERI IP) in Mhatarohal drain and Ahilya Drain are recognized just before the Sangam point behind the Trimbakeshwar Jyotirlinga temple highlighted in green coloured section in the above layout. Google image for final confluence is as shown in next picture.

Figure 4 Google imagery of Confluence of Ahilya Drian & Mhatarohal drain



As seen in the above imagery, most feasible stretch for In-situ Nallah Treatment (through RENEU) are identified.

The Mhatarohal drain flows besides the Goutam Talav where first feasible stretch (RENEU Stretch 1) of treatment is proposed and secondly (RENEU Stretch 2) is proposed in the Ahilya drain which flows along the Trimbak Ring Road. The drains confluence at the point near Shri Gavrakshnath Math.