

COMPLIANCE REPORT
SUBMITTED
TO
HON'BLE NATIONAL GREEN TRIBUNAL (NGT)
PRINCIPAL BENCH, NEW DELHI
FOR THE DIRECTION ISSUED VIDE
ORDER DATED: -20.11.2020
IN THE MATTER OF
ORIGINAL APPLICATION NO. 105/2019
(AJITSINH BHARUBHA VAGHELA VS. STATE OF GUJARAT)



सत्यमेव जयते

**URBAN DEVELOPMENT & URBAN HOUSING
DEPARTMENT,
GOVERNMENT OF GUJARAT**



GUJARAT POLLUTION CONTROL BOARD

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI
ORIGINAL APPLICATION NO. 105/2019**

IN THE MATTER OF:-

Ajitsinh Bharubha Vaghela

Applicant(S)

Versus

State of Gujarat

Respondent(S)

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COMPLIANCE REPORT ON THE DIRECTIONS PASSED IN THE HON'BLE NGT ORDER DATED 20.11.2020 WITH RESPECT TO KHARI RIVER

Background:

The application filed by Ajitsinh Bharubha Vaghela of Kheda District by letter to Hon'ble NGT which states:

“untreated industrial effluents are being discharged in Kharicut Canal which is meeting Khari River in Gujarat affecting irrigation facilities of the inhabitants and the only source of water for irrigation and for consumption by animals like cattles and sheep etc. Borewells have been dug in Bheraj, Pinngloj, Navagaon, Lali etc. villages”

In the matter of O.A. No. 105/2019 Hon'ble NGT has issued order dated 17.01.2020; wherein the tribunal has appointed Hon'ble Retd. Chief Justice of High Court of Delhi, Shri B.C. Patel to oversee the steps taken by the Authority and submit an independent report to the Hon'ble Tribunal.

Thereafter, the Hon'ble NGT has issued the order dated 01.09.2020 upon reviewing the independent report submitted by Hon'ble Retired Chief Justice of High Court Delhi, Shri B. C. Patel. The order dated 01.09.2020 is annexed herewith as **Appendix-1**.

In compliance of the directions given in the order dated 01.09.2020, a report submitted on 02.11.2020 by GPCB and Secretary Urban Development, Gujarat to the Hon'ble NGT.

In the hearing of dated 20.11.2020, upon considering the compliance report submitted by GPCB and Secretary Urban Development, Hon'ble NGT has issued an order. The order dated 20.11.2020 is annexed herewith as **Appendix-2**.

The direction mentioned in the order in para 5 & 6 are reproduced as under;

“Para 05: Directions

“We have heard Commissioner, Ahmedabad Municipal Corporation and the Member Secretary, State PCB who are present by video conference. They have

highlighted the steps already taken mentioned above and explained that further work is in progress. Substantial work is to be completed by 31.03.2021 and the remaining by June, 2021.”

“Para 06: Directions

“In view of above, we direct that the progress report as on 31.03.2021 may be furnished by the GPCB and the Secretary, Urban Development, Gujarat before the next date by e-mail at judicialngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF.”

The conclusion part of the compliance report submitted on 02.11.2020 by the GPCB and Secretary Urban Development, Gujarat and same was mentioned in the said order dated 20.11.2020 is reproduced as under:

1. *“Additional Chief Secretary, UD & DH has convened three review meetings with the AMC, Irrigation Department and GPCB for implementation of the directions issued by Hon’ble NGT order dated: 01.09.2020.*
2. *For the Reconciliation of the outlets in the Kharicut Canal survey was carried out by AMC and GPCB on 28-10-2020. Thereafter as per the report submitted by AMC on 31.10.2020; out of 169 outlets as mentioned in the report of Hon’ble Retired Chief Justice of Delhi High Court Shri B C Patel, at present no discharge of sewage was observed from 156 outlets. Out of the remaining for remaining 13 outlets, 3 are of STPs discharging treated waste water. The work for remaining 10 outlets to divert sewage in to the existing drainage line with overall budget of Rs. 25.81 Crore is under progress.*
3. *AMC has installed online pH Measurement at the Vinzol trunk main pipeline of Domestic sewage carrying waste water to the Vinzol STP of 35 & 70 MLD in August -2020.*
4. *For the augmentation and repairing work at Vinzol STP of 70 MLD Rs. 5.50 Cr has been spent for the pumping machineries and pH meter with hooter system at additional cost of 29.47 Lacs installed.*

5. *46 manholes are sealed with concrete of main trunk pipeline of Domestic sewage carrying domestic waste water to the Vinzol STP of 35 & 70 MLD.*
6. *Under Sujalam Sufalam Jal Sanchay Campaign-2018, AMC had taken up the task of cleaning the Kharicut Canal by using number of Machineries like JCBs, Excavators, Tractors, etc. and cleaned approximate 31446 MT. of waste from Kharicut Canal.*
7. *AMC had installed chain link fencing of about 8308 running meters on both sides of canal and at the crossing points of the canal to prevent direct disposal of solid waste into canal at a cost of Rs. 1.56 Cr. Further 1592 running meter work for installing of grill and fencing work is in progress.*
8. *AMC has put total 73 warning signage boards with direction to prevent disposal of solid waste in to Kharicut Canal. Furthermore 82 warning signage boards work is under progress with total cost of Rs. 7.69 lacs.*
9. *AMC had held around 985 awareness meetings with nearby residents for not throwing the garbage into the canal and keep clean the canal.*
10. *AMC had installed 24 CCTV cameras on the canal.*
11. *There are total 66 silver trolleys placed at area of Kharicut Canal for collection of solid waste.*
12. *Along the Kharicut canal, old drainage and illegal connections were regularized under the 'Nal Se Jal' Scheme; old connections are permanently closed and diverted from Kharicut canal outlet to regular drainage network. Under this scheme total 1971 houses connections are regularized. Thus AMC has resolved the issue permanently.*
13. *Irrigation and AMC started joint cleaning of Canal from 27.10.2020, for repairing, removing waste, vegetation and debris from the canal.*
14. *Joint visit was carried out on 28.10.2020 by ACS- UD & DH with stake holders to take stock of the ground situation for the work carried out by AMC and Irrigation Department.*
15. *On regular basis work for cleaning, repairing of Kharicut Canal shall be done jointly by Irrigation and AMC, twice every year during the period when canal remains dry. (October-November and April-May)*

16. ACS, UD & DH has directed to install 0.5 MLD Packaged Treatment Plant with MBR technology at Nikol Storm water pumping station and explore more locations after doing technical feasibility survey.
17. Irrigation Department, in phase-wise execution of work, construction of canal lining in 7 km length starting from the Ahmedabad-Vadodara Expressway to Vatva Kotha, new five VRBs, construction of seven deck slabs, installation of cast iron/mild steel grill on the newly constructed parapet on both sides of the canal and decoration of the parapet of the bridge with mild steel architecture of different architectural designs have been completed during the year 2013-14, Thus development work has been executed in the total length of 9.4 km by Irrigation Department.
18. During the year 2020, estimates of jungle cutting and clearing operations in Kharicut Canal from Raipur to Vatva Kotha have been prepared. Accordingly, at present, in Kharicut Canal, Section-1 from chainage 8100 m to 20830 m, work has been started to remove vegetation from the bottom of the canal, side slope, and sides of parapet. Mechanical machineries are deployed in canal for cleaning, desilting and jungle cutting work. For execution of these works, Irrigation Department is working jointly with Ahmedabad Municipal Corporation for dumping of waste from canal to suitable dumping site.
19. From December -2019 to till October-2020, Task force carried out total 417 visits (Days - 313 and Night-104) and collected total 1878 nos. of waste water samples from various locations.
20. GPCB has issued Legal Notice to Ahmedabad Municipal Corporation under section 4 of Water Act – 1974 on 01.10.2020 with direction to show cause and submit compliance report of the directions dated:- 13-08-2020 with interim Environment Compensation of Rs. 25 Lacs.
21. GPCB has issued Direction u/s 33(A) of Water Act-1974 to Irrigation Department, Ahmedabad on 03.10.2020.
22. GPCB has issued letter is issued to Nodal Officer, Task Force of Kharicut Canal and Khari River on 03.10.2020 for intensive monitoring.

23. *GPCB and AMC, in the area of Odhav GIDC, where the coloured water was found discharged from the pumping station in to the Canal, identified the defaulting industrial unit and the GPCB has issued Direction of Closure under section 33(A) of Water Act – 1974 with immediate effect on 23.10.2020.*
24. *For the permanent solution, AMC and GPCB have decided to disconnect the drainage connections of all the industrial unit where CETP connections are provided for discharge of industrial effluent and also disconnect the drainage connection for the unit having ZLD consent. The work for disconnection of drainage line from industrial unit is under progress.*
25. *Joint Task Force is formed comprising of officials from Ahmedabad Municipal Corporation (AMC), GPCB, Police Department and Industrial Associations to prevent the illegal acidic/industrial effluent discharge through tankers. Task force started monitoring the suspected locations which have potential of illegal discharge of acidic/industrial effluent & Vinzol Trunk main drainage line since december-2019 during day and night.*
26. *Since it is long standing issue which started in 1984, it is very difficult to fix individual responsibility for flow of industrial waste water and domestic sewage. In view of the remedial action taken by AMC, Irrigation and GPCB in recent years and on-going execution of upgradation of STPs, better maintenance of canals, monitoring of industrial units etc., it is humbly requested that Hon'ble NGT may consider the request to not take action against individual officer.*
- Thus, Irrigation Department, AMC and GPCB are jointly making maximum efforts to stop the flow of industrial waste water and domestic Sewage in Kharicut Canal. “*

In compliance with the directions of the Hon'ble NGT order dated 20.11.2020; the Action Taken Report submitted by the authorities is as under;

Sr. No.	Details of Action Taken Report (With Photographs)	No. of Appendix
1.	Action taken report submitted by Ahmedabad Municipal Corporation (AMC)	Appendix -3
2.	Action taken report submitted by Irrigation Department, Government of Gujarat	Appendix -4

In view of the additional action taken report submitted up to 31.03.2021 by the AMC and Irrigation Department brief **conclusions are as under;**

1. To prevent domestic waste water disposal into canal:

- (i) There are total 169 outlets provided into Kharicut canal. Out of these, 152 outlets already sealed/no discharge. Another 09 outlet stopped as per action plan. So, currently 08 nos. of outlet is having domestic discharge into Kharicut canal. Out of these work of sealing is in process for 05 outlets and 03 outlets are having treated waste water discharge.
- (ii) There are total 128 outlets provided for the disposal of storm water during monsoon. Out of these, 122 are discharging only storm water in monsoon. 4 outlets are stopped discharging as per the action plan work. For remaining 2 outlets, work is in progress for diversion of the drainage as per the action plan and then there will be discharged only storm water during monsoon only.
- (iii) 05 outlets of drainage are stopped discharging as per the action plan work. Remaining 03 outlets of drainage discharge will be stopped after completion of the work as per the action plan.

Thus, out of 169 total outlets; 161 outlets are already sealed/no discharge/stopped as per action plan, 03 outlets are having treated wastewater discharge and for remaining 05 outlets work under progress. (i.e. for 02 outlets work is in progress for diversion of the drainage and for 03 outlets drainage discharge will be stopped after completion of the work as per the action plan)

Work which was planned to be completed in May are likely to be completed by June - 2021 due to Covid - 19 pandemic.

2. To prevent direct dump of solid waste into canal :

AMC has completed the installation of Grill fencing and Signboards on the canal crossings and the other places to prevent direct dump of Solid waste into canal.

3. Removal of overgrown bushes in Kharicut canal :

(i) In order to maintain maximum carrying capacity of Kharicut Canal as well as to prevent damage to the lining of the canal, cleaning, desilting and jungle cutting are carried out in the canal from time to time by Irrigation Department.

(ii) During the year 2020, estimates of jungle cutting and clearing operations in Kharicut Canal from Raipur to Vatva Kotha have been prepared. Accordingly, at present, in Chandola Section, Bareja-A Section, Bareja-B Section of Kharicut Canal, work has been started to remove vegetation from the bottom of the canal, side slope, and sides of parapet.

(iii) On urgent basis, in the problematic reach of Section 1 and 2 of Kharicut Canal, jungle clearance and disposing of the material is carried out by providing labours through the agency as it was not possible with mechanical machineries.

(iv) Mechanical machineries are used to remove the silting of Section 1 and 2 of Kharicut Canal and garbage is being disposed of to the suitable dumping site with the help of AMC. In section 3 and 4 of Kharicut Canal, jungle clearance work is going on with the help of mechanical machineries.

4. Construction of grill on Kharicut canal:

(i) Parapet walls have been constructed on both the sides of the canal during the year 2010, 2012 and various stages of beautification in the year 2013-14.

- (ii) Cast Iron/Mild Steel grill has been installed on the newly constructed parapet on both the sides of canal. For remaining/damage work of grill, an estimate (costing Rs. 4.77 crores) is approved from competent authority. Phase-wise work will be executed on the basis of availability of grant. It is planned to start the work in Kharicut Canal in very short time.

5. Dismantling old damaged parapet and providing new parapet on different locations of Section 1 of Kharicut Canal:

- (i) Parapet walls have been constructed on both the sides of the canal during the year 2010, 2012 and various stages of beautification in the year 2013-14.
- (ii) The estimate (costing Rs. 2.31 crore approximately) for providing new parapets at various locations between chainage 10400 m to 23830 m of Kharicut Canal- Section-1 has been approved from the competent authority. Phase-wise work will be executed on the basis of availability of grant. It is planned to start the work in Kharicut Canal in very short time.

6. Plaster, Kota, Color work:

Parapets and grills which have been constructed on Kharicut Canal in past decade are now in deteriorated condition. At various locations, kota stones provided over parapet are broken and parapets are damaged. Due to deterioration of color and plaster, existing parapets and grills are subjected to weathering effect which may further lead these structures in vulnerable condition. In order to restore these old parapets and grills, an estimate is prepared and submitted to competent authority for necessary approval. Phase-wise work will be executed on the basis of availability of grant and approval from the competent authority. It is planned to start the work in Kharicut Canal in very short time.

7. Prevention of polluted water in Kharicut Canal:

Currently, irrigation water is supplied through Kharicut Canal and its branches to the villages of Ahmedabad City Taluka and Daskroi Taluka. Supply of water will remain continue for the Rabi Season 2020-21. Field staff

of irrigation department is constantly observing the canal for prevention of polluted water. In addition to that, Irrigation Department has planned to seal all illegal connections provided in Canal after completion of current irrigation season.

8. Restoration of damaged lining in Kharicut Canal:

Regarding restoration of damaged lining in Kharicut Canal, the work has been started in February, 2021 in Kharicut Canal to repair damaged canal lining at various locations and completed. Most of the damaged linings have been repaired and remaining minor repairing works will be completed soon once the supply of irrigation water to the crops would be completed for the Rabi season 2021.

Thus, Irrigation Department, AMC and GPCB have jointly made maximum efforts to stop the flow of domestic sewage in Kharicut Canal.

Appendix - 1

Item No. 06

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

(By Video Conferencing)

Original Application No. 105/2019
(With report dated 19.08.2020)

Ajitsinh Bhurubha Vaghela & Inhabitants of several
Villages of Kheda Taluka, Distt. Kheda

Applicant(s)

Versus

State of Gujarat

Respondent(s)

Date of hearing: 01.09.2020

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE S. P. WANGDI, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

ORDER

1. The issue for consideration is the steps to be taken for controlling untreated industrial effluents discharged in *Kharicut* Canal which is a tributary of Khari River in District Khera, Gujarat. According to the applicants, the said river is source of irrigation and drinking of water by animals. Illegal bore-wells are said to have been dug without permission of the Gujarat Pollution Control Board (GPCB) affecting the water level. Sewage from STPs set up by Ahmedabad Municipal Corporation was overflowing into the river.

2. The Tribunal has considered the matter on several occasions, including on 01.07.2019, 11.10.2019 and 17.01.2020 in the light of status reports filed by the Central Pollution Control Board (CPCB) and

the State PCB. On the last date, the Tribunal considered the reports of CPCB and the State of Gujarat dated 31.12.2019 and 15.01.2020 respectively and observed:

“6. Accordingly, further reports have been filed on 31.12.2019 by CPCB and on 15.01.2020 by the State of Gujarat. The report filed by CPCB *inter alia* states as follows:

“*RESULT AND DISCUSSION* The grab sample of wastewater collected in the stretch was analyzed at GPCB Gandhinagar Laboratory. The analysis results are depicted in Annexure-3. Sample description, observations based on the findings and analysis results are detailed below;

- **The flow in the Kharicut canal increases with the increase of domestic sewage as it passes through areas of Naroda, Odhav and Vatva of Ahmedabad before entering GIDCVatva.** One grab sample was collected from Kharicut canal at Nirma Bridge, GIDC-Vatva. (Upstream part of GIDC-Vatva, reflected as K1). **The Kharicut canal crosses GIDC Vatva, one grab sample was collected from Kharicut canal at GIDC Vatva - Vinzol village Road Bridge, near Phase II, GIDC Vatva. (Downstream part of GIDCVatva, reflected as location K2).** The canal crosses at S.P. Ring road, Railway Bridge at Vinzol Village. **The AMC storm water drain was found meeting the Kharicut canal at above mentioned place.** During visit wastewater was not flowing into Kharicut Canal from this storm water line. A grab Sample from Kharicut canal on the other side of S.P. Ring road Railway Bridge towards TSDF site at Vinzol Village was also collected. (Location K3). Kharicut canal meets the Khari River at Village Ropda under the Railway Bridge. No flow was observed in the upstream of Khari River until the confluence of Kharicut canal at Village Ropda. In other words, the River Khari at downstream of Ropda village carries only wastewater received from the Kharicut canal. Grab sample was collected from River Khari at Ropda foot over bridge, near Railway bridge, Village Ropda (Location K4). Grab sample of wastewater was collected from Khari River stretch i.e. from Chosar Village (location K5) and grab sample of wastewater from Khari River stretch at Lali Village. (Location K6) was collected during visit.
- During visit in entire stretch of Kharicut Canal and River Khari; no acidic waste water discharge / flow was observed. Analysis results of the sample collected are annexed as (Annexure-3) shows variation of pH from 6.69 to 7.68 in the entire stretch (Location K1 to K6), concentration of **COD and BOD varies from 272 mg/l to 502 mg/l and 87 mg/l to 153 mg/l respectively.** In the overall stretch concentration of COD, BOD, TDS, Iron, Sulphate, Chloride shows increasing trend. It is worth to mention that the stretch of Khari River is under priority I.

- During joint visit and sampling at Location K5 Chosar bridge, a tanker no. GJ-01 ET-3534 was observed. The sampling location being located inside the village, the tanker was suspected and checked. As per records/challan available with the driver of the tanker, the tanker contained Oleum (23 %) and was coming from Madhya Pradesh. **As informed, the tanker had filled acid from M/s Krishna Phoschem Ltd (Acid Division) 126A-134, AKVN Industrial area, Meghnagar, Jhabua-Madhya Pradesh-457779 and buyer was M/s Shital Chemicals-C-805/A, Ganesh Maridian, Opp. Kargil Petrol Pump, Near Sola Over Bridge, S.G. Highway, Ahmedabad-Gujarat.** M/s Shital Chemicals is a trader having its office at the said address. The driver has informed that, he will be informed on his mobile where the acid has to be delivered. Thereafter entire team of CPCB, GPCB, AMC, Police and representative CETPs along with tanker went to the location where tanker would be supposed to be empty. **It was found that there exist a unit namely M/s. Surajmani Corporation. On inspection it was found that unit was engaged in manufacturing of Sulpho Tobias Acid. The unit has started manufacturing activities about three months ago. Raw materials for the manufacturing of Sulpho Tobias Acid, like Tobias Acid & Oleum was also observed in the plant premises.** The unit has one reactor, 3-dumping vessel, 3-filter nutch and 1-oleum storage tank. The location of the unit is bank of River Khari at Istolabad Village. **The unit is illegally operating at the premises without obtaining EC/CTE/CCA from GPCB. It was observed that the unit has provided discharge line to Khari River for discharge of acidic wastewater from centrifuge directly into River Khari as the river flows back side of the factory premises.** During visit, lean flow from the line into river Khari was observed. The joint team has collected one grab sample of wastewater having pH of 2.0 on pH strip which the unit was discharging into River Khari without any treatment. **Unit has not provided any treatment facility.**
- **Analysis results of the sample collected from the premises of the unit reveals highly acidic and concentrated wastewater having concentration of pH: 0.73, Color : 600 Hazen Unit, TSS: 1644 mg/l, NH3-N: 14 mg/l, Acidity as CaCO3: 700000 mg/l, Chloride: 8200mg/l, Sulphate: 320320 mg/l, COD: 17833 mg/l, O&G: 2.3 mg/l, Phenolic Compounds : 3.56mg/l, BOD: 4600 mg/l, Percentage of acid: 56.51% was discharged to Khari River.**
- The GPCB has issued Closure Direction under section 33 A of the Water Act 1974 and under section 5 of E(P)Act 1986 on 17th December 2019 to M/s Surajmani Corporation. The power supply of the unit is disconnected by Uttar Gujarat Vij Company Ltd (UGVCL) on 24th December 2019.

During visit, the joint team has also visited STP provided in by Ahmedabad Municipal Corporation located at Vinzol which is in eastern part. The Ahmedabad Municipal Corporation (AMC) has provided extensive sewerage network in residential/commercial areas for collection of sewage from the eastern part of the Ahmedabad. Installation of pH meter by AMC on 22 km long network of sewerage line at fixed interval would help in identification of spots at where acidic wastewater is getting illegally discharged. There are presently two Sewage Treatment Plant (STPs) in the same premises, old STP having 70 MLD design capacity and new STP 35 MLD. Operation and Maintenance of both the STP are carried out by separate agencies hired by AMC. **The STP receives about 170 MLD wastewater. Hence, the excess untreated wastewater is bypassed directly into the final disposal chamber along with treated waste water which ultimately leads to River Khari. Additional STP of capacity 100 MLD is under construction. AMC has obtained CCA for 70 MLD STP and CTE for 35 MLD STP.**

- During visit of Vinzol STP of AMC, 70 MLD STP was found in operation. **In STP system, bypass line provision is provided at inlet of STP line and at the time of visit bypass of wastewater was observed, also the inlet chamber was found broken from the lower side. The new STP 35 MLD was found operational. The records of waste water received at STP was checked. It was found that as per instructions from AMC to the operator of STP, pH of wastewater received is checked on hourly basis manually and when pH is found in acidic range, the wastewater is bypassed and discharged directly to Kharicut canal. As per records, the STP has received acidic wastewater at the inlet for about 1-2 hours for about 7 different dates till the date of visit in the month of December 2019.**
- **During the visit excess untreated wastewater was bypassed from inlet line and discharged into the Kharicut canal which ultimately meets Khari River.**
- During visit, grab samples of wastewater were collected from following locations:

Location	Description	Date/Time(hours)	Lat.	Long.	Color of sample
S1	From Inlet well pumping station of 70 MLD & 35 MLD STP at Vinzol village	13.12.19 09:15	22.93791	72.6453911	Grayish

S2	From	13.12.19	22.93748	72.64393	Light
	Outfall of 70 MLD STP of Ahmedabad Municipal Corporation, Vinzol	09:30			Brownish
S3	From Outfall of 70 MLD + 35 MLD + bypass line of STP	13.12.19 09:45	22.93784	72.64324	Grayish
S4	From Outfall of 35 MLD STP of Ahmedabad Municipal Corporation, Vinzol	13.12.19 09:55	22.93650	72.64424	Grayish

*The analysis results are depicted in Annexure-4. **The analysis results of the sample collected from inlet (S1) and outlet of 70 MLD (S2) reveals 85.5% and 93.5% reduction in concentration of COD and BOD respectively. The analysis results of the sample collected from inlet (S1) and outlet of 35 MLD (S4) reveals only 31.9% and 34.7% reduction in concentration of COD and BOD respectively. However, the final discharge (S3) from Vinzol STP comprising of outlet from 70 MLD, outlet from 35 MLD and untreated bypass shows only 7.7% and 8.8% reduction in concentration of COD and BOD respectively. Thus, the analysis results of final discharge reveal that the STP is grossly noncomplying.***

CONCLUSIONS:

*Based on the directions of Hon'ble NGT, updated status of Khari River and Kharicut Canal is prepared based on the monitoring of Kharicut Canal and Khari River, meeting with various stake holders for the status of compliance of action plans on the subject finalised by RRC, steps taken by various stake holders. **During present visit, a unit namely M/s. Surajmani Corporation located on the bank of Khari River was found illegally operating and manufacturing Sulpho Tobias Acid without consent/authorisation from GPCB and illegally discharging acidic wastewater into Khari River. GPCB has issued closure directions to the unit. The Vinzol STP found not meeting the discharge standards and found bypassing and discharging untreated/partially treated wastewater to Kharicut Canal. GPCB has issued legal notices to AMC in this regard. Task Force team has started***

monitoring since 02nd December 2019. **It was reported by task force team that the acidic wastewater at the inlet of Vinzol STP was observed once and there after frequency of receiving of acidic wastewater at the inlet of STP was not observed. Acidic wastewater receiving frequency was reportedly reduced however, provision of online pH meter at the inlet and neutralization facility at Vinzol STP as precautionary principle may need to provide so as to ensure no acidic discharge in Khari Cut canal and Khari River in addition all the action plan suggested by RRC need to be complied by different stake holders on time bound manner as the stretch is under priority I of polluted river stretch.** Thus, the action taken in compliance of the directions of Hon'ble NGT in the matter has resulted in decrease in the frequency of acidic wastewater at the Vinzol STP as reported and no acidic wastewater in the stretch of Khari River and Khari cut Canal during recent visits was observed by GPCB and task force committee."

7. The situation emerging from the report based on site visits shows that the **action taken by the State PCB is not adequate in terms of taking preventive and remedial action against the polluters particularly recovering compensation on 'Polluter Pays' principle, including from the Ahmedabad Municipal Corporation.** The corporation needs to take further remedial action to prevent discharge of pollutants in the river system which has been clearly found in the report. The Corporation has to be made accountable for illegal discharge of pollutants amounting to criminal offence, apart from compensation to bear the cost of restoration.

8. The report filed on behalf of the State on 15.1.2020 is as follows:

"GENERAL REVAMPING OF THE REGULATORY BODY

a) For revamping of the regulatory body, GPCB is directed to constitute a committee of Senior Staff and engage experts to carry out a study for improvement of existing mechanism in terms of manpower, infrastructure of the Board and furnish their report within two months to the Government after constitution of committee.

b) GPCB is directed in addition to the rules applicable; the officers who have been found negligent in curbing environment pollution shall be transferred without any notice.

c) **GPCB is directed that few specialized experts from reputed organizations like NEERI, Nagpur; IIT; DDIT; SVNIT etc., in the field of land, air and water pollution shall be appointed on a retainer basis to give expert advice and impart technical knowledge.**

d) GPCB is directed to collaborate with the local police in order to ensure that no violation of environmental laws takes place in the future.

e) GPCB is directed to conduct awareness programs so as to make general public aware regarding the environmental laws and their implementation.

f) The existing engineers, officers and scientists in the organization shall be given sessions on technical and scientific knowledge in light of the improving pollution control mechanisms, techniques, equipment's and environmental laws.”

CASE SPECIFIC MEASURES

As far as the question of the matter related to Khari River Stretch, it is kindly submitted that;

- **Ahmedabad Municipal Corporation (AMC) is directed for augmentation for upgradation of their existing 70 MLD STP. New 35 MLD STP is under trial run and shall be functional by March 2020. New 100 MLD STP by September shall be functional by 2020.**
- RRC constituted since 29th November, 2018, is continuously working to rejuvenate all major polluted rivers of the state. Action plans for the same prepared and being regularly reviewed in the RRC meetings and seven meetings have already organised till the date.
- River Khari stretch separately reviewed in the RRC meetings on 26th August and 5th December 2019 in presence of concerned authority and they were directed to comply action points decided in the meetings.
- **A joint task force team of officers of AMC, RO GPCB ABD East, Police, Industrial Association, CEO of Mega Pipeline as directed by RRC under the nodal role of AMC Chief Engineer. The team has started continuous monitoring of the stretch during day and night time from December 2019.**
- **Police Department directed for strengthened their vigilance and patrolling to stop illegal discharge through tanker into Kharicut Canal and Khari River. The Police Commissioner, Ahmedabad has published notification to ban on parking of tankers on the Ring Road and surrounding areas to avoid illegal discharge into AMC sewerage network through tankers.**
- **GPCB is also directed to strengthen their existing monitoring & in this regard GPCB Head Office has given additional technical people for strengthening of monitoring.”**

9. In view of above, **further remedial action needs to be taken expeditiously and further report filed by the GPCB as well as the Ahmedabad Municipal Corporation before the next date.**

*We note that a Division Bench of the Gujarat High Court, vide order dated 25.11.2005 in SCA No. 4690/2004 gave directions to the Pollution Board to control industrial pollution and to the Ahmedabad Municipal Corporation to control discharge of sewage. The order refers to several earlier directions. **This shows that orders of the courts have not been duly followed and situation remains to be alarming inspite of earlier orders.** Having regard to the seriousness of the ground situation and long pending problem, we request Justice B.C. Patel, former Chief Justice of High Court of Delhi, who is available at Ahmadabad, to oversee the steps taken by the authorities. Justice Patel may be assisted by the CPCB and GPCB. The State PCB may provide all requisite facilities to Justice Patel. Justice Patel may send an independent report in the matter by April 10, 2020 by e-mail at judicial-ngt@gov.in with a copy to State PCB and Ahmadabad Municipal Corporation who may file response before the next date.*

10. The Tribunal may consider the issue of compensation on 'Polluter Pays' principle, direction for prosecution and action against erring officers after considering the reports."

3. Accordingly, a report has been filed by Justice B.C. Patel on 19.08.2020. It is stated that function of *Khari Cut Canal* is to provide water to *Chandola lake* for irrigation in villages. **The canal was totally choked with garbage due to negligence of the civic authorities. Lake bed has become garbage dump and is used for open defecation. Civic authorities have turned a blind eye to the problem. Residents and the Municipal Corporation discharge sewage in the canal which ultimately meets the river Sabarmati. Many illegal buildings have been constructed. Canal is to be looked after by the Irrigation Department. The Irrigation Act provides for punishment to the polluters. The STP does not have sufficient capacity to treat the sewage. Waste water is being bypassed without treatment and is being discharged into the canal. Acidic water is not being utilized.** Water samples from different locations taken on 18.02.2020, 09.03.2020, 18.04.2020, 01.08.2020 establish discharge of untreated sewage by the Municipal Corporation. **Out of 169 outlets, 56 outlets are discharging untreated sewage into the canal.** Even when the industries are closed,

samples taken on 01.08.2020 show huge pollution. The conclusions in the report are:

“In view of what is stated above it is clear that

- 1. That Neither the Department of Irrigation, Government of Gujarat nor its Canal Officer took any action in the matter, either about the piercing of the Canal by the residents or the AMC or Polluting the Canal water by them. They have never tested the quality of the water of the Canal.**
- 2. Even GPCB which took samples of canal water and found that at various places through pipes which were fixed in the canal untreated sewage/Trade effluent was seen being discharged in the canal but has taken no coercive action.**
- 3. The AMC is a public body and it is required to discharge the duties under The Gujarat Municipal Corporation Act and also under the Environmental Laws. It has failed in erecting treatment plants for the sewage generated. **AMC in the eastern part of Ahmedabad is receiving 170-180 MLD sewage and it has two plants to treat only 105 MLD of sewage. The excess sewage is discharged in the canal contrary to the provisions of the law, leaving the poor farmers to the mercy of the almighty God. Even after treatment the sewage was not found on any occasion meeting the norms laid down under the law. It is bounded duty of AMC to treat the sewage and then to discharge the same in accordance with the norms in the river and not in to the Canal.****
- 4. It is very clear that as stated about the various inspection carried by the officers of GPCB, it was found that on several occasions without any treatment the entire sewage was discharged or on some occasions it was partly discharged after treatment. Many defiance has been indicated in the report and despite of various notices given to the AMC, the AMC is not discharging sewage as per norms. Unfortunately, no prosecution has been filed against these authorities indulging in discharging the sewage which is not meeting with the norms. Though its serious crime against people at large as no action is taken, the direction is required to be given to the GPCB to prosecute and not to allow untreated sewage to be discharged. About the beautification of the canal, the same is dealt in the report. For the time being the AMC as well as Department of irrigation are required to be directed to remove the grass growing haphazardly in the canal and both the sides of the canal, so as to protect the water and the Environment.**

5. **The irrigation department and the Commissioner, Ahmedabad Municipal Corporation must close all the outlets opening in to the canal through piercing or otherwise and be securely closed so as to see that no liquid enters and action be taken against concerned person.** Despite the rain much natural water entered the canal, yet there is much difference in the parameters at the initial stage and at subsequent stages as indicated in the report. Therefore, aforesaid action is required to be initiated by the authorities urgently.”

4. The list of locations at which untreated sewage is being discharged is annexed to the report (as a part of inspection report dated 01.08.2020 conducted by the State PCB) as follows:

Sr. No.	Location Name	Total Outlets	Sample Collection Details, if	Operative discharge of untreated sewage during visit
1	Kharicut Canal at Naroda Dehgam Road Bridge	2		
2	Nikol Naroda Pumping Station	1		
3	Sundervan Society New Naroda	1		
4	Vyasvadi Bridge New Naroda	5	01	3
5	Dahyalal Park Society New Naroda	12	02	2
6	Adishwar Police Chowki	1		
7	Adishwar Police Chowki	2		
8	Best English School New Naroda	2		
9	Ashirwad Residency	2		
10	Ashirwad Residency	2		
11	Navyug Pumping Station	1		
12	Navyug Pumping Station	2		
13	Gajanand Park Nikol	1	03	1
14	Avadhesh Park	2		1
15	Prabuddha Ashram Nikol	2		2
16	Bhakti Nagar Nikol	1		1
17	Bhakti Nagar Pumping Station	1		
18	Amardeep Park Nikol	2	04	2
19	SRP Gujarati Prathmik Shala	1		
20	Shyam Vihar Society Nikol	1		1
21	Sarjan Shopping Centre	1	05	1
22	Ashray Apartment	1		1
23	Sargam Park Society Nikol	1		1
24	Nijanand Mansi	1		1
25	Opposite Nijanand Mansi	2		2
26	Sarathi Duplex	3		3
27	Vasundhara Park	1		1
28	Vasundhara Park (Noble English School)	1		1
29	Bhumi Park Society	1	06	1
30	Parshwanath Township	2		
31	Thakkar Nagar Bridge,	2	07	1
32	Rajiv Park SWD Pumping Station, Sardar Chok	2	08	1
33	Sardar Chok Bridge	2		1
34	Narayan Park Nikol	3		1
35	Narayan Park Nikol	1		

36	Nikol Ward Pumping Station	4	09	2
37	Kavya Residency Thakkar	1		1
38	Shree Ram Park Thakkar	2		1
39	Gopal Chok Bridge	2		1
40	Shyam Wadi Bapunagar	1		
41	Narayan Park Pumping	5		1
42	Umang Apartment	1		1
43	Sundervan Apartment Thakkar	1		
44	Shivkrupa Thakkar Nagar	1		
45	Rameshwar Park	1		
46	Nilkanth Multi Speciality	1		1
47	Swami Narayan Society	1		1
48	Ashirwad Park Pumping	3	010	3
49	Hari Villa Pumping Station	3		1
50	Trisha Hospital	2		
51	Ganesh kunj Society	1		
52	Bala Hanuman Mandir	3		
53	Maruti Nagar Co Op Housing So.	7		
54	Ambika Nagar	1		1
55	Ambika Nagar Odhav	7		1
56	Overseas Enterprise	1		
57	Kharicut Canal at Odhav	1		
58	Kharicut Canal Storm Water	10		1
59	Keshav Park Odhav	3		2
60	Bhavani Nagar Soni Ni Chal	2		2
61	Ranchhod Park	1		
62	Krushna Nagar Odhav	3		1
63	Mukesh Nagar Odhav	1		
64	Kharicut Canal at Arbuda Nagar	3		
65	Jogeshwari Bagh Co. Op.	2		
66	Mahavir Smruti Co. Operative	2		
67	Shiv Park Society	5		1
68	Storm Water Pumping Station	2		
69	Sumit Nagar Mahadev Nagar	2		
70	RTO Vastral	2		
71	RTO Vastral	1		
72	RTO Vastral	2		2
73	Ramdev Park Mahadev Nagar	2		
74	Jamfal Wadi	3		
75	Ramol CTM Road Bridge	1		1
76	Ramol Hathijan Highway	2		
77	Outfall of Combined Final	2	011	2
	TOTAL	169		56

5. Brief about action taken against Municipal Corporation has been filed alongwith the report as follows:

“Brief about action taken against Ahmedabad Municipal Corporation (AMC) Vinzol STP 70 MLD & 35 MLD –

Sr. No.	Date of action	Type of Action	Reason of Direction	Remarks
70 MLD				

1.	10/04/2019	Notice of Direction issued u/s 33(A) of the Water (Prevention & Control of Pollution) Act 1974 w.r.to visit dtd.22/11/2018, 24/12/2018, 24/01/2018	<ul style="list-style-type: none"> • STP bypasses total@115 MLD of untreated sewage and only treats @ 70 MLD waste water out of total 185 MLD waste water coming to STP. • Analysis Report of sample collected from final out let of STP as well as from the bypass of STP shows BOD & COD exceeding the norms 	
2.	06/07/2019	Legal Notice under the Water (Prevention & Control of Pollution) Act 1974 w.r.to visit dtd 29/04/2019 30/05/2019	<ul style="list-style-type: none"> • STP bypasses @ 115 MLD of untreated sewage out of @ 185 MLD domestic waste water ultimately going into Khari River • Result of untreated sewage sample collected on 29/04/2019 & 30/05/2019 shows BOD = 140 & 96 mg/l and Suspended Solid (SS) 250 mg/l & 208 mg/l which are higher than limit given. 	
3.	06/08/2019	Direction issued u/s 33(A) of the Water (Prevention & Control of Pollution) Act 1974 w.r.to visit dtd. 27/06/2019, 17/07/2019	<ul style="list-style-type: none"> • Visit on 27/06/2019 STP was not in operation since 04/05/2019 & hence incoming domestic waste water @ 145 MLD of untreated sewage water is discharged into RiverKhari without any treatment • During visit on 27/06/2019 all STP tanks were found empty • Joint visit on 17/07/2019 by CPCB & GPCB w.r.to direction in the Hon'ble NGT matter, observed that STP was not in operation and hence all influent was bypassed and was discharged into River Khari without treatment. • STP found receiving acidic waste water frequently and discharging entire acidic inflow quantity into Khari river by bypassing • STP found receiving acidic waste water frequently and discharging entire acidic inflow quantity into Khari river by bypassing 	<p>Unit has not submitted any compliance w.r.to Notice of</p> <p>Direction dtd 11/04/2019 & legal notice dtd 06/07/2019 hence further Direction</p>
4.	05/11/2019	Legal Notice under the Water (Prevention & Control of	<ul style="list-style-type: none"> • During inspection dtd 21/08/2019, provided STP was found not in operation and all STP units are found empty • Visit on 21/08/2019 STP was found not in operation and all 	

		<p>Pollution) Act 1974 w.r.to visit dtd. 19/07/2019, 29/07/2019, 07/08/2019,21/08/2019</p>	<p>incoming domestic waste water & acidic was Wastewater is bypassed and is discharged into River Khari without any treatment</p> <ul style="list-style-type: none"> • During inspection dtd 21/08/2019 domestic waste water is discharged into Kharicut canal near S.P.Ring Road • During inspection it was observed that 07/08/2019 bypass gate at the inlet waste water tank found broken and due to which part of the waste water is bypassed from the inlet tank only • Visit on 07/08/2019 acidic waste water at the inlet are bypassed the directly to Kharicut canal • As per report dtd 19/07/2019, STP by-passes their untreated waste water, incoming waster water found acidic, incoming waste water flow is in huge quantity • STP frequently receives the acidic waste water and bypasses it without any treatment • STP authority has not submitted proper action plan in compliance of NOD dtd 11/04/2019 • STP authority has not submitted proper compliance of legal notice dtd 06/07/2019 <ul style="list-style-type: none"> • Analysis report of sample shows non-compliance w.r.to the discharge norms of Consolidated Consent & Authorisation (CCA) 	
5.	13/11/2019	<p>Notice of Direction issued u/s 33(A) of the Water (Prevention & Control of</p>	<ul style="list-style-type: none"> • Regular observation shows that STP bypasses the untreated waste water into Khari River indicate continuous non-compliance <ul style="list-style-type: none"> • STP record shows continuous incoming acidic waste water and bypass of waste water into Khari River 	
		<p>Pollution) Act 1974</p>	<ul style="list-style-type: none"> • STP has not submitted any reply w.r.to the Direction dtd 06/08/2019 • AMC was asked to submit Time bound action plan to achieve norms and stop bypass and submit other alternative of disposal of treated/untreated/partially treated waste water apart from Khari river/ Kharicut canal within 15 days 	

6.	13/11/2019	Notice of Intention u/s 27 of Water Act 1974	AMC was asked to submit other alternative of disposal of treated/untreated/partially treated waste water apart from Khari river/ Kharicut canal within 15 days
7.	18/02/2020	Notice of Direction issued u/s 33(A) of the Water (Prevention & Control of Pollution) Act 1974 w.r.to visit dtd. 06/11/2019 21/11/2019	<ul style="list-style-type: none"> • AMC has not taken any steps for stoppage of acidic wastewater coming into STP and bypass the acidic wastewater into River Khari • AMC was asked to submit satisfactory reply with time bound action plan to stop bypass into Khari cut canal/Khari River and upgradation of STP • AMC has not submitted satisfactory action plan to achieve norms • AMC has not submitted any reply w.r.to the Legal Notice dated 05/11/2019
8.	21/03/2020	Notice of Direction issued u/s	<ul style="list-style-type: none"> • Analysis report of sample taken at final outlet of STP shows noncompliance with
		33(A) of the Water (Prevention & Control of Pollution) Act 1974 w.r.to visit dtd. 18/01/2020 29/02/2020	<ul style="list-style-type: none"> • respect to the discharge norms of Consolidated Consent & Authorisation (CCA) Entire quantity of the received domestic wastewater into inlet chamber was bypassed directly into Khari due to maintenance work of valves & pumps at inlet section
9.	14/05/2020	Show Cause Notice issued w.r. to visit dtd. 18/04/2020	<ul style="list-style-type: none"> • Around 70 MLD to 75 MLD wastewater is by pass directly through inlet chamber into final disposal chamber without any treatment ultimately leading to Kharicut cannal. • Excess foaming in both the aeration tanks is observed. Flow meter provided on final outlet of the STP is found non operational. Provided SCADA system is found not in operation. Wastewater simply passing through the STP
10.	13/08/2020	Direction issued u/s 33(A) of the Water (Prevention & Control of Pollution) Act 1974 w.r.to visit dtd. 10/07/2020	<ul style="list-style-type: none"> • STP is receiving @ 180 MLD Sewage Waste water from which 35 MLD is sent to the STP having 35 MLD capacity and rest @ 145 MLD is taken to the STP of 70 MLD in which @ 8590 MLD sewage waste water is bypass from the inlet chamber of 70 MLD STP.

			<ul style="list-style-type: none"> ● SCADA system is found not working during inspection. ● Unit has provided flow meter on final outlet line but it was found not in operation. ● Sewage Waste Water sample are collected from outfall for treated sewage w/w of 70 MLD STP of 70 MLD STP. Result sewage shows BOD 80 mg/l, COD 305 mg/l, SS 324 mg/l, Faecal Coliform 4 MPN/100 ml which are not meeting with the prescribed norms. 	
35 MLD STP				
11.	24/06/2019	Show Cause Notice w.r.to visit dtd 30/05/2019	<ul style="list-style-type: none"> ● STP operation without CCA of the board ● Bypassing the sewage wastewater without treatment ● Analysis report more than prescribed norms 	
12.	24/09/2019	Notice of Direction issued u/s 33(A) of the Water (Prevention & Control of Pollution) Act 1974 w.r.to visit dtd 27/06/2019, 17/07/2019, 19/07/2019, 29/07/2019, 07/08/2019, 21/08/2019	<ul style="list-style-type: none"> ● STP has not applied for CCA even after the instructions given by RO officials ● STP has yet not submitted action plan of restart of the plant ● STP is not neutralizing the acidic waste water ● STP has not identified the point source from where the acidic waste water arrives in to their sewage network ● Incoming domestic waste water was found discharged into River Khari without any treatment through Bypass line ● STP units were found not in operation ● As per the observations during visit dtd 21/08/2019 domestic wastewater is discharging into 'Kharicut Cannel, Near SP Ring road' ● As per the observation visit dtd 17/07/2019, it was noticed that all four SBR tanks are filled with acidic waste water ● As per the observations during visit dtd 19/07/2019, STP by pass their untreated waste water if incoming waste water found acidic or incoming wastewater flow is in huge quantity STP frequently the acidic waste water ● As per the observations during visit dtd 07/08/2019, observed that by providing flexible pipe at the SBR tank-2, emptying into the waste water in to the Kharicut Canal 	

			<ul style="list-style-type: none"> • Analysis report of samples collect non-compliance with respect to the prescribed Discharge norms
13.	13/01/2020	Notice of Direction	<ul style="list-style-type: none"> • The STP has not obtained CCA of the Board.
		<p>issued u/s 33(A) of the Water (Prevention & Control of Pollution) Act 1974 w.r.to visit 23/09/2019 05/10/2019 06/11/2019 21/11/2019</p>	<ul style="list-style-type: none"> • STP is bypassing the domestic wastewater directly into the Kharicut canal without any treatment. • Installation of aerator in equalization tank is not done and chlorination system is not fully operated stage. • The received sewage is simply pass from all the units with no treatment and discharged in to the Kharicut Canal. • Provided SCADA system is also not working. • As per visit dated 21-11-2019, no inlet sewage is taken into the Plant as the inlet pipeline • flange at the equalization tank is broken and so that the STP is not in operation since 17/11/2019. <p>Analysis report of samples taken from final outlet is not complying with norms.</p>
14.	21/03/2020	<p>Notice of Direction issued u/s 33(A) of the Water (Prevention & Control of Pollution) Act 1974 w.r. to visit dtd. 18/01/2020 29/02/2020</p>	<ul style="list-style-type: none"> • STP has not applied for CCA of the board. • Analysis Reports of sample taken from final outlet of STP shows non-compliance with respect to STP discharge norms
15.	13/08/2020	<p>Direction issued u/s 33(A) of the Water (Prevention & Control of Pollution) Act 1974 w.r.to visit dtd. 10/07/2020</p>	<ul style="list-style-type: none"> • STP is receiving @ 180 MLD Sewage Waste water from which 35 MLD is sent to the STP having 35 MLD capacity and rest @ 145 MLD is taken to the STP of 70 MLD in which @ 85- 90 MLD sewage waste water is bypass from the inlet chamber of 70 MLD STP. • SCADA system is found not working during inspection. • Unit has provided flow meter on final outlet line but it was

			<p><i>found not in operation.</i></p> <ul style="list-style-type: none"> • Sewage Waste Water sample are collected from outfall for treated • sewage w/w of 70 MLD STP of 70 MLD STP. Result sewage shows BOD 80 mg/l, COD 305 mg/l, SS 324 mg/l, Faecal Coliform 4 MPN/100 ml which are not meeting with the prescribed norms.
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6. The report also annexes a letter dated 09.06.2020 from the Municipal Corporation to the State PCB giving the following plan:

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Sr. No.	Location	Planning
1	Gajanand Park Nikol	Minor water discharge found. This residential area
2	Avadhesh Park	is low laying about 3 to 5 feet from Canal service road. Laying of new 180 running
3	Prabuddha Ashram Nikol	meter pipeline from Avdhesh Park to Gajanand Park via Narayani School to divert the flow is planned.
4	Amardeep Park Nikol	Minor water discharge found. This residential area is low laying about 3 to 5 feet from Canal service road. laying of new 120 running meter Pipeline from Amardeep Park to Bhaktinagar to divert
5	Sarjan Shopping Centre	De-silting work is completed and Laying of new 200 running meter Pipeline from Shyam Vihar to Canal culvert to divert the flow is planned.
6	Sardar Chok Bridge	It is planned to divert this flow to recently installed Drainage trunk main line on SP ring road.
7	Narayan Park Nikol	Laying of new 180 running meter pipeline from Narayan Park to Rajiv Park to divert the flow is planned.
8	Nikol Ward Pumping Station	Augmentation of Jivanwadi Drainage Pumping with new network is planned.
9	Kavya Residency Thakkar Nagar	
10	Ashirwad Park Pumping Station	Technical consultant is appointed to work out the techno-economical survey.

11	Ambika Nagar	Drainage pumping stations like (1) Rabari DPS (2) Chotalal DPS discharge is planned to divert to Vinzol Main trunk line by laying new Rising line. As a long term permanent solution, Microtunneling work is taken up from Jashodanagar to Pirana to overcome the drainage backing in Pirana trunk main line.
12	Keshav Park Odhav	

7. The report also annexes letter of the State PCB dated 13.08.2020 as follows:

“DIRECTION UNDER SECTION 33(A) OF THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT, 1974 (HEREINAFTER REFERRED TO AS THE “WATER ACT”) AS AMENDED FROM TO TIME.

- (1) WHEREAS Ahmedabad Municipal Corporation (AMC) having the Sewage Treatment Plant (STP) for the treatment of domestic waste water (Sewage) located at Plot No. 93, 10,113, 115, 117(p), 118, 92, 104, 105, 109, 111, 112, 116, 120 near Vinoba Bhave Nagar, Village – Vinzol, Ahmedabad.
- (2) AND WHEREAS the Gujarat Pollution Control Board has granted you Consolidated Consent and Authorization (CC&A) under the provisions of the Environmental Acts/Rules by its Consent Order No. W-100525 dated 04.04.2029 which is valid up to 30.06.2023 for the treatment of domestic waste water (Sewage) subject to the conditions mentioned therein.
- (3) AND WHEREAS there is a matter Original Application No. 105/2019 in the Hon’ble National Green Tribunal (Principal Bench), New Delhi, regarding pollution in the Kharicut Canal and Khari River.
- (4) AND WHEREAS the monitoring of Kharicut Canal stretch from GIDC Naroda to downstream of Vatva GIDC was carried out on 18.02.2020, and it was observed that untreated domestic waste water is being discharged in to Kharicut canal at different locations.
- (5) AND WHEREAS it was also observed on 18.02.2020 that many outlet have been created by Ahmedabad Municipal Corporation (AMC) for discharge of untreated domestic waste water and storm water discharge.
- (6) AND WHEREAS the Kharicut Canal Stretch from Muthiya Village at Naroda to Village Lali was visited on 09.03.2020 with Hon’ble Chairman appointed by the Hon’ble NGT, with the officials of Ahmedabad Municipal Corporation, GPCB and Irrigation Department and various discussion took place to solve the problem with the Chairperson to concerned Departments.
- (7) AND WHEREAS action plan was asked vide letter dated 18.03.2020 w.r.t. observation during the visit dated 18.02.2020 and 09.03.2020 and the various discussion took place with the Chairperson with concerned Departments.

- (8) *AND WHEREAS AMC has submitted reply w.r.t. the letter dated 18.03.2020 shows compliance not made completely.*
- (9) *AND WHEREAS Regional Office GPCB has visited your STP was visited on 10.07.2020 under Section 23 of the Water (Prevention and Control of Pollution) Act, 1974 by authorized officers of the Board, during the said visit it was observed that:*
- *STP is receiving total @180 MLD sewage waste water from which 35 MLD is sent to the STP having 35 MLD capacity and rest @ 145 MLD is taken to the STP to 70 MLD in which @85-90 MLD sewage waste water is bypass from the inlet chamber of 70 MLD STP.*
 - *SCADA system is found not working during inspection.*
 - *Unit has provided flow meter on final outlet line but it was found not in operation.*
 - *Sewage waste water sample are collected from outfall for treated sewage w/w of 70 MLD STP of 70 MLD STP. Result of sewage shows BOD 80 mg/l, COD 306 mg/l, SS 324 mg/l, Fecal Coliform of 4 MPN/100 ml, which are not meeting with the prescribed norms.*
- (10) *AND WHEREAS looking to the observation during the said visit you have violated provisions of the Environmental laws and you are in non-compliance of the conditions granted to you.*

UNDER THE CIRCUMSTANCES, I Rajesh Kumar Parmar, Environmental Engineer of the Gujarat Pollution Control Board issue the direction under Section 33(A) of the Water (Prevention and Control of Pollution) Act, 1974 as under:

- 1) *To submit compliance of the observation and instruction were given during the above said joint visits.*
- 2) *To stop discharge of untreated domestic waste water into Kharicut Canal ultimately goes in to Khari River.*
- 3) *To update, improvement in treatment of STP to achieve prescribed norms.*
- 4) *To submit the time bound action for to remove drainage connection into the Kharicut canal.*
- 5) *To submit compliance for above directions within 15 days.*

If the above directions are not complied, you are liable for prosecution under Section 41(2) of the Water (Prevention and Control of Pollution) Act, 1974 which provides punishment with imprisonment for a term not less than one year and six months and may extend to six years and with fine.

This order is issued after approval of competent authority.”

8. It is clear from the above resume of the report furnished by Justice B.C. Patel with due notice to the Municipal Corporation that serious violation of the Water (Prevention and Control of Pollution) Act, 1974 is taking place. Action initiated by the State PCB so far is highly inadequate. Neither compensation for the damage to the environment

has been assessed and recovered nor prosecution initiated. This is failure of duty of the State PCB as well as the Irrigation Department. Such failure is actionable as it is resulting in denial of basic right of clean environment. The Hon'ble Supreme Court in *Paryavaran Suraksha Samiti Vs. Union of India*¹ observed :

“10. Given the responsibility vested in municipalities under Article 243-W of the Constitution, as also, in Item 6 of Schedule XII, wherein the aforesaid obligation, pointedly extends to “public health, sanitation conservancy and solid waste management”, we are of the view that the onus to operate the existing common effluent treatment plants, rests on municipalities (and/or local bodies). Given the aforesaid responsibility, the municipalities (and/or local bodies) concerned, cannot be permitted to shy away from discharging this onerous duty. In case there are further financial constraints, the remedy lies in Articles 243-X and 243-Y of the Constitution. It will be open to the municipalities (and/or local bodies) concerned, to evolve norms to recover funds, for the purpose of generating finances to install and run all the “common effluent treatment plants”, within the purview of the provisions referred to hereinabove. Needless to mention that such norms as may be evolved for generating financial resources, may include all or any of the commercial, industrial and domestic beneficiaries, of the facility. The process of evolving the above norms, shall be supervised by the State Government (Union Territory) concerned, through the Secretaries, Urban Development and Local Bodies, respectively (depending on the location of the respective common effluent treatment plant). The norms for generating funds for setting up and/or operating the “common effluent treatment plant” shall be finalised, on or before 31-3-2017, so as to be implemented with effect from the next financial year. In case, such norms are not in place, before the commencement of the next financial year, the State Governments (or the Union Territories) concerned, shall cater to the financial requirements, of running the “common effluent treatment plants”, which are presently dysfunctional, from their own financial resources.

11. Just in the manner suggested hereinabove, for the purpose of setting up of “common effluent treatment plants”, the State Governments concerned (including, the Union Territories concerned) will prioritise such cities, towns and villages, which discharge industrial pollutants and sewer, directly into rivers and water bodies.

¹ (2017) 5 SCC 326

12. We are of the view that in the manner suggested above, the malady of sewer treatment, should also be dealt with simultaneously. We, therefore, hereby direct that “sewage treatment plants” shall also be set up and made functional, within the timelines and the format, expressed hereinabove.

13. We are of the view that mere directions are inconsequential, unless a rigid implementation mechanism is laid down. We, therefore, hereby provide that the directions pertaining to continuation of industrial activity only when there is in place a functional “primary effluent treatment plants”, and the setting up of functional “common effluent treatment plants” within the timelines, expressed above, shall be of the Member Secretaries of the Pollution Control Boards concerned. **The Secretary of the Department of Environment, of the State Government concerned (and the Union Territory concerned), shall be answerable in case of default. The Secretaries to the Government concerned shall be responsible for monitoring the progress and issuing necessary directions to the Pollution Control Board concerned, as may be required, for the implementation of the above directions.** They shall be also responsible for collecting and maintaining records of data, in respect of the directions contained in this order. The said data shall be furnished to the Central Ground Water Authority, which shall evaluate the data and shall furnish the same to the Bench of the jurisdictional **National Green Tribunal.**

(emphasis supplied)

9. To comply with the mandate in the above judgement, this Tribunal vide order dated 21.05.2020 in *Paryavaran Suraksha Samiti Vs. Union of India*, OA 593/2017, issued directions as follows:

“26. Summary of directions:

- i. All States/UTs through their concerned departments such as Urban/Rural Development, Irrigation & Public Health, Local Bodies, Environment, etc. may ensure formulation and execution of plans for sewage treatment and utilization of treated sewage effluent with respect to each city, town and village, adhering to the timeline as directed by Hon'ble Supreme Court. STPs must meet the prescribed standards, including faecal coliform.**

CPCB may further continue efforts on compilation of River Basin-wise data. Action plans be firmed up with Budgets/Financial tie up. Such plans be overseen by Chief Secretary and forwarded to CPCB

before 30.6.2020. CPCB may consolidate all action plans and file a report accordingly.

Ministry of Jal Shakti and Ministry of Housing and Urban Affairs may facilitate States/UTs for ensuring that water quality of rivers, lakes, water bodies and ground water is maintained.

As observed in para 13 above, 100% treatment of sewage/effluent must be ensured and strict coercive action taken for any violation to enforce rule of law. Any party is free to move the Hon'ble Supreme Court for continued violation of its order after the deadline of 31.3.2018. This order is without prejudice to the said remedy as direction of the Hon'ble Supreme Court cannot be diluted or relaxed by this Tribunal in the course of execution. PCBs/PCCs are free to realise compensation for violations but from 1.7.2020, such compensation must be realised as per direction of this Tribunal failing which the erring State PCBs/PCCs will be accountable.

- ii. The CPCB may study and analyse the extent of reduction of industrial and sewage pollution load on the environment, including industrial areas and rivers and other water bodies and submit its detailed report to the Tribunal.**
- iii. During the lockdown period there are reports that the water quality of river has improved, the reasons for the same may be got studied and analysed by the CPCB and report submitted to this Tribunal. If the activities reopen, the compliance to standards must be maintained by ensuring full compliance of law by authorities statutorily responsible for the same.**
- iv. Accordingly, we direct that States which have not addressed all the action points with regard to the utilisation of sewage treated water may do so promptly latest before 30.06.2020, reducing the time lines in the action plans. The timelines must coincide with the timelines for setting up of STPs since both the issues are interconnected. The CPCB may compile further information on the subject accordingly.**
- v. Needless to say that since the issue of sources of funding has already been dealt with in the orders of the Hon'ble Supreme Court, the States may not put up any excuse on this pretext in violation of the judgment of the Hon'ble Supreme Court."**

10. In view of above, the joint Committee of CPCB and GPCB must comply with its statutory obligation of initiating action for assessment and recovery of compensation and initiating prosecution against erring officers. The Municipal Commissioner is directed to initiate action against the erring officers and take immediate further remedial action by preparing a time bound action plan which may be furnished to the State PCB within one month. This may be overseen by the Secretary Urban Development, Gujrat Govt. A compliance report may be furnished within two months from today by GPCB, Secretary Urban Development, Gujrat by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF, failing which this Tribunal may have to consider action personally against all the above concerned senior officers which may include stopping of salary till they perform their statutory duty and initiating prosecution personally. The Secretary Urban Development, Gujrat, Municipal Commissioner, AMC/MS State PCB may remain present in person/by video conferencing on the next date with action taken reports.

List for further consideration on 20.11.2020.

A copy of this order be sent to CPCB, GPCB, Secretary Urban Development, Gujrat and Commissioner, Ahmedabad Municipal Corporation by e-mail for compliance.

Adarsh Kumar Goel, CP

S. P. Wangdi, JM

Dr. Nagin Nanda, EM

September 01, 2020
Original Application No. 105/2019
DV

Appendix - 2

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 105/2019

(With report dated 02.11.2020)

Ajitsinh Bhurubha Vaghela & Inhabitants
of several Villages of Kheda Taluka, Distt. Kheda

Applicant

Versus

State of Gujarat

Respondent

Date of hearing: 20.11.2020

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER
HON'BLE DR. SATYAWAN SINGH GARBYAL, EXPERT MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

Respondent: Mr. Mukesh Kumar, Commissioner, Ahmedabad M.C.
Mr. A.V. Shah, Member Secretary, GPCB

ORDER

1. The issue for consideration is the steps to be taken for controlling untreated industrial effluents discharged in *Kharicut* Canal which is a tributary of Khari River in District Kheda, Gujarat. According to the applicants, the said river is source of irrigation and drinking of water by animals. Illegal bore-wells have been dug, affecting the water level. Sewage from STPs set up by Ahmedabad Municipal Corporation was overflowing into the river, apart from untreated industrial effluents.

2. The matter has been considered earlier on several occasions. The Central Pollution Control Board (CPCB) and the State of Gujarat furnished reports dated 31.12.2019 and 15.01.2020 from which it was noticed that untreated effluents were being discharged into the canal

from 169 outlets and action taken was inadequate. There was failure of the Ahmedabad Municipal Corporation to upgrade the existing Sewage Treatment Plant (STP) and to provide new STP to treat the sewage. In view of such unsatisfactory state of affairs, the Tribunal requested Justice B.C. Patel, former Chief Justice of Delhi High Court, presently at Ahmedabad to oversee the remedial steps.

3. The matter was last considered on 01.09.2020 in the light of report of Justice B.C. Patel filed on 19.08.2020 finding that unsatisfactory state of affairs continued and there was serious negligence of the civic authorities. Untreated sewage was being discharged into the canal which was meeting river Sabarmati. STP did not have the adequate capacity. The waste water was being bypassed without treatment and discharged into the canal. The PCB in its report mentioned that it had taken action against the Ahmedabad Municipal Corporation for its failure. Accordingly, the Tribunal issued further directions for remedial action to be overseen by the Secretary, Urban Development Department, Government of Gujarat. Extracts from the order dated 01.09.2020 are:

“
...
3. Accordingly, a report has been filed by Justice B.C. Patel on 19.08.2020. It is stated that function of Khari Cut Canal is to provide water to Chandola lake for irrigation in villages. **The canal was totally choked with garbage due to negligence of the civic authorities. Lake bed has become garbage dump and is used for open defecation. Civic authorities have turned a blind eye to the problem. Residents and the Municipal Corporation discharge sewage in the canal which ultimately meets the river Sabarmati. Many illegal buildings have been constructed. Canal is to be looked after by the Irrigation Department. The Irrigation Act provides for punishment to the polluters. The STP does not have sufficient capacity to treat the sewage. Waste water is being bypassed without treatment and is being discharged into the canal. Acidic water is not being utilized.** Water samples from different locations taken on 18.02.2020, 09.03.2020, 18.04.2020, 01.08.2020 establish discharge of untreated sewage by the Municipal Corporation. **Out of 169 outlets, 56 outlets are discharging untreated sewage into the canal.** Even when the
...”

industries are closed, samples taken on 01.08.2020 show huge pollution. The conclusions in the report are:

“In view of what is stated above it is clear that

1. ***That Neither the Department of Irrigation, Government of Gujarat nor its Canal Officer took any action in the matter, either about the piercing of the Canal by the residents or the AMC or Polluting the Canal water by them. They have never tested the quality of the water of the Canal.***
2. *Even GPCB which took samples of canal water and found that at various places through pipes which were fixed in the canal untreated sewage/Trade effluent was seen being discharged in the canal but has taken no coercive action.*
3. *The AMC is a public body and it is required to discharge the duties under The Gujarat Municipal Corporation Act and also under the Environmental Laws. It has failed in erecting treatment plants for the sewage generated. **AMC in the eastern part of Ahmedabad is receiving 170-180 MLD sewage and it has two plants to treat only 105 MLD of sewage. The excess sewage is discharged in the canal contrary to the provisions of the law, leaving the poor farmers to the mercy of the almighty God. Even after treatment the sewage was not found on any occasion meeting the norms laid down under the law. It is bounded duty of AMC to treat the sewage and then to discharge the same in accordance with the norms in the river and not in to the Canal.***
4. *It is very clear that as stated about the various inspection carried by the officers of GPCB, it was found that **on several occasions without any treatment the entire sewage was discharged or on some occasions it was partly** discharged after treatment. Many defiance has been indicated in the report and **despite of various notices given to the AMC, the AMC is not discharging sewage as per norms. Unfortunately, no prosecution has been filed against these authorities indulging in discharging the sewage which is not meeting with the norms. Though its serious crime against people at large as no action is taken, the direction is required to be given to the GPCB to prosecute and not to allow untreated sewage to be discharged.** About the beautification of the canal, the same is dealt in the report. **For the time being the AMC as well as Department of irrigation are required to be directed to remove the grass growing haphazardly in the canal and both the sides of the canal, so as to protect the water and the Environment.***
5. ***The irrigation department and the Commissioner, Ahmedabad Municipal Corporation must close all the***

outlets opening in to the canal through piercing or otherwise and be securely closed so as to see that no liquid enters and action be taken against concerned person. Despite the rain much natural water entered the canal, yet there is much difference in the parameters at the initial stage and at subsequent stages as indicated in the report. Therefore, aforesaid action is required to be initiated by the authorities urgently.”

... ..

8. It is clear from the above resume of the report furnished by Justice B.C. Patel with due notice to the Municipal Corporation that serious violation of the Water (Prevention and Control of Pollution) Act, 1974 is taking place. Action initiated by the State PCB so far is highly inadequate. Neither compensation for the damage to the environment has been assessed and recovered nor prosecution initiated. This is failure of duty of the State PCB as well as the Irrigation Department. Such failure is actionable as it is resulting in denial of basic right of clean environment. The Hon'ble Supreme Court in *Paryavaran Suraksha Samiti Vs. Union of India*¹ observed:

“10. Given the responsibility vested in municipalities under Article 243-W of the Constitution, as also, in Item 6 of Schedule XII, wherein the aforesaid obligation, pointedly extends to “public health, sanitation conservancy and solid waste management”, we are of the view that the onus to operate the existing common effluent treatment plants, rests on municipalities (and/or local bodies). Given the aforesaid responsibility, the municipalities (and/or local bodies) concerned, cannot be permitted to shy away from discharging this onerous duty. In case there are further financial constraints, the remedy lies in Articles 243-X and 243-Y of the Constitution. It will be open to the municipalities (and/or local bodies) concerned, to evolve norms to recover funds, for the purpose of generating finances to install and run all the “common effluent treatment plants”, within the purview of the provisions referred to hereinabove. Needless to mention that such norms as may be evolved for generating financial resources, may include all or any of the commercial, industrial and domestic beneficiaries, of the facility. The process of evolving the above norms, shall be supervised by the State Government (Union Territory) concerned, through the Secretaries, Urban Development and Local Bodies, respectively (depending on the location of the respective common effluent treatment plant). The norms for generating funds for setting up and/or operating the “common effluent treatment plant” shall be finalised, on or before 31-3-2017, so as to be implemented with effect from the next financial year. In case, such

¹ (2017) 5 SCC 326

norms are not in place, before the commencement of the next financial year, the State Governments (or the Union Territories) concerned, shall cater to the financial requirements, of running the “common effluent treatment plants”, which are presently dysfunctional, from their own financial resources.

11. Just in the manner suggested hereinabove, for the purpose of setting up of “common effluent treatment plants”, the State Governments concerned (including, the Union Territories concerned) will prioritise such cities, towns and villages, which discharge **industrial pollutants and sewer, directly into rivers and water bodies.**
12. We are of the view that in the manner suggested above, **the malady of sewer treatment, should also be dealt with simultaneously.** We, therefore, hereby direct that “sewage treatment plants” shall also be set up and made functional, within the timelines and the format, expressed hereinabove.
13. **We are of the view that mere directions are inconsequential, unless a rigid implementation mechanism is laid down.** We, therefore, hereby provide that the directions pertaining to continuation of industrial activity only when there is in place a functional “primary effluent treatment plants”, and the setting up of functional “common effluent treatment plants” within the timelines, expressed above, shall be of the Member Secretaries of the Pollution Control Boards concerned. **The Secretary of the Department of Environment, of the State Government concerned (and the Union Territory concerned), shall be answerable in case of default. The Secretaries to the Government concerned shall be responsible for monitoring the progress and issuing necessary directions to the Pollution Control Board concerned, as may be required, for the implementation of the above directions.** They shall be also responsible for collecting and maintaining records of data, in respect of the directions contained in this order. The said data shall be furnished to the Central Ground Water Authority, which shall evaluate the data and shall furnish the same to the Bench of the jurisdictional **National Green Tribunal.**

(emphasis supplied)

9. To comply with the mandate in the above judgement, this Tribunal vide order dated 21.05.2020 in Paryavaran Suraksha Samiti Vs. Union of India, OA 593/2017, issued directions as follows:

“26. Summary of directions:

- i. **All States/UTs through their concerned departments such as Urban/Rural Development, Irrigation & Public Health, Local Bodies, Environment, etc. may**

ensure formulation and execution of plans for sewage treatment and utilization of treated sewage effluent with respect to each city, town and village, adhering to the timeline as directed by Hon'ble Supreme Court. STPs must meet the prescribed standards, including faecal coliform.

CPCB may further continue efforts on compilation of River Basin-wise data. Action plans be firmed up with Budgets/Financial tie up. Such plans be overseen by Chief Secretary and forwarded to CPCB before 30.6.2020. CPCB may consolidate all action plans and file a report accordingly.

Ministry of Jal Shakti and Ministry of Housing and Urban Affairs may facilitate States/UTs for ensuring that water quality of rivers, lakes, water bodies and ground water is maintained.

As observed in para 13 above, 100% treatment of sewage/effluent must be ensured and strict coercive action taken for any violation to enforce rule of law. Any party is free to move the Hon'ble Supreme Court for continued violation of its order after the deadline of 31.3.2018. This order is without prejudice to the said remedy as direction of the Hon'ble Supreme Court cannot be diluted or relaxed by this Tribunal in the course of execution. PCBs/PCCs are free to realise compensation for violations but from 1.7.2020, such compensation must be realised as per direction of this Tribunal failing which the erring State PCBs/PCCs will be accountable.

- ii. The CPCB may study and analyse the extent of reduction of industrial and sewage pollution load on the environment, including industrial areas and rivers and other water bodies and submit its detailed report to the Tribunal.**
- iii. During the lockdown period there are reports that the water quality of river has improved, the reasons for the same may be got studied and analysed by the CPCB and report submitted to this Tribunal. If the activities reopen, the compliance to standards must be maintained by ensuring full compliance of law by authorities statutorily responsible for the same.**
- iv. Accordingly, we direct that States which have not addressed all the action points with regard to the utilisation of sewage treated water may do so promptly latest before 30.06.2020, reducing the time lines in the action plans. The timelines must coincide with the timelines for setting up of STPs since both the issues are interconnected. The CPCB**

may compile further information on the subject accordingly.

- v. Needless to say that since the issue of sources of funding has already been dealt with in the orders of the Hon'ble Supreme Court, the States may not put up any excuse on this pretext in violation of the judgment of the Hon'ble Supreme Court."**

10. In view of above, the joint Committee of CPCB and GPCB must comply with its statutory obligation of initiating action for assessment and recovery of compensation and initiating prosecution against erring officers. The Municipal Commissioner is directed to initiate action against the erring officers and take immediate further remedial action by preparing a time bound action plan which may be furnished to the State PCB within one month. This may be overseen by the Secretary Urban Development, Gujrat Govt. A compliance report may be furnished within two months from today by GPCB, Secretary Urban Development, Gujrat by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF, failing which this Tribunal may have to consider action personally against all the above concerned senior officers which may include stopping of salary till they perform their statutory duty and initiating prosecution personally. The Secretary Urban Development, Gujrat, Municipal Commissioner, AMC/MS State PCB may remain present in person/by video conferencing on the next date with action taken reports."

4. Accordingly, the joint Committee comprising State PCB and the Urban Development Department, Gujarat has filed compliance report on 02.11.2020 mentioning the steps taken. The conclusions in the said report are:

"In view of the action taken report submitted by the concerned authority brief conclusions are as under;

1. *Additional Chief Secretary, UD & DH has convened three review meetings with the AMC, Irrigation Department and GPCB for implementation of the directions issued by Hon'ble NGT order dated: 01.09.2020.*
2. *For the Reconciliation of the outlets in the Kharicut Canal survey was carried out by AMC and GPCB on 28-10-2020. Thereafter as per the report submitted by AMC on 31.10.2020; out of 169 outlets as mentioned in the report of Hon'ble Retired Chief Justice of Delhi High Court Shri B C Patel, at present no discharge of sewage was observed from 156 outlets. Out of the remaining for*

remaining 13 outlets, 3 are of STPs discharging treated waste water. The work for remaining 10 outlets to divert sewage in to the existing drainage line with overall budget of Rs. 25.81 Crore is under progress.

3. *AMC has installed online pH Measurement at the Vinzol trunk main pipeline of Domestic sewage carrying waste water to the Vinzol STP of 35 & 70 MLD in August -2020.*
4. *For the augmentation and repairing work at Vinzol STP of 70 MLD Rs. 5.50 Cr has been spent for the pumping machineries and pH meter with hooter system at additional cost of 29.47 Lacs installed.*
5. *46 manholes are sealed with concrete of main trunk pipeline of Domestic sewage carrying domestic waste water to the Vinzol STP of 35 & 70 MLD.*
6. ***Under Sujalam Sufalam Jal Sanchay Campaign- 2018, AMC had taken up the task of cleaning the Kharicut Canal by using number of Machineries like JCBs, Excavators, Tractors, etc. and cleaned approximate 31446 MT. of waste from Kharicut Canal.***
7. ***AMC had installed chain link fencing of about 8308 running meters on both sides of canal and at the crossing points of the canal to prevent direct disposal of solid waste into canal at a cost of Rs. 1.56 Cr. Further 1592 running meter work for installing of grill and fencing work is in progress.***
8. ***AMC has put total 73 warning signage boards with direction to prevent disposal of solid waste in to Kharicut Canal. Furthermore 82 warning signage boards work is under progress with total cost of Rs. 7.69 lacs.***
9. ***AMC had held around 985 awareness meetings with nearby residents for not throwing the garbage into the canal and keep clean the canal.***
10. ***AMC had installed 24 CCTV cameras on the canal.***
11. ***There are total 66 silver trolleys placed at area of Kharicut Canal for collection of solid waste.***
12. ***Along the Kharicut canal, old drainage and illegal connections were regularized under the 'Nal Se Jal' Scheme, old connections are permanently closed and diverted from Kharicut canal outlet to regular drainage network. Under this scheme total 1971 houses connections are regularized. Thus AMC has resolved the issue permanently.***

- 13. Irrigation and AMC started joint cleaning of Canal from 27.10.2020, for repairing, removing waste, vegetation and debris from the canal.**
- 14. Joint visit was carried out on 28.10.2020 by ACS- UD & DH with stake holders to take stock of the ground situation for the work carried out by AMC and Irrigation Department.**
- 15. On regular basis work for cleaning, repairing of Kharicut Canal shall be done jointly by Irrigation and AMC, twice every year during the period when canal remains dry. (October-November and April-May).**
- 16. ACS, UD & DH has directed to install 0.5 MLD Packaged Treatment Plant with MBR technology at Nikol Storm water pumping station and explore more locations after doing technical feasibility survey.**
- 17. Irrigation Department, in phase-wise execution of work, construction of canal lining in 7 km length starting from the Ahmedabad-Vadodara Expressway to Vatva Kotha, new five VRBs, construction of seven deck slabs, installation of cast iron/mild steel grill on the newly constructed parapet on both sides of the canal and decoration of the parapet of the bridge with mild steel architecture of different architectural designs have been completed during the year 2013-14, Thus development work has been executed in the total length of 9.4 km by Irrigation Department.**
- 18. During the year 2020, estimates of jungle cutting and clearing operations in Kharicut Canal from Raipur to Vatva Kotha have been prepared. Accordingly, at present, in Kharicut Canal, Section-1 from chainage 8100 m to 20830 m, work has been started to remove vegetation from the bottom of the canal, side slope, and sides of parapet. Mechanical machineries are deployed in canal for cleaning, desilting and jungle cutting work. For execution of these works, Irrigation Department is working jointly with Ahmedabad Municipal Corporation for dumping of waste from canal to suitable dumping site.**
- 19. From December -2019 to till October-2020, Task force carried out total 417 visits (Days - 313 and Night-104) and collected total 1878 nos. of waste water samples from various locations.**
- 20. GPCB has issued Legal Notice to Ahmedabad Municipal Corporation under section 4 of Water Act – 1974 on 01.10.2020 with direction to show cause and submit compliance report of the directions dated:- 13-08-2020 with interim Environment Compensation of Rs. 25 Lacs.**

21. **GPCB has issued Direction u/s 33(A) of Water Act-1974 to Irrigation Department, Ahmedabad on 03.10.2020.**
22. **GPCB has issued letter is issued to Nodal Officer, Task Force of Kharicut Canal and Khari River on 03.10.2020 for intensive monitoring.**
23. **GPCB and AMC, in the area of Odhav GIDC, where the coloured water was found discharged from the pumping station in to the Canal, identified the defaulting industrial unit and the GPCB has issued Direction of Closure under section 33(A) of Water Act – 1974 with immediate effect on 23.10.2020.**
24. **For the permanent solution, AMC and GPCB have decided to disconnect the drainage connections of all the industrial unit where CETP connections are provided for discharge of industrial effluent and also disconnect the drainage connection for the unit having ZLD consent. The work for disconnection of drainage line from industrial unit is under progress.**
25. **Joint Task Force is formed comprising of officials from Ahmedabad Municipal Corporation (AMC), GPCB, Police Department and Industrial Associations to prevent the illegal acidic/industrial effluent discharge through tankers. Task force started monitoring the suspected locations which have potential of illegal discharge of acidic/industrial effluent & Vinzol Trunk main drainage line since december-2019 during day and night.**
26. **Since it is long standing issue which started in 1984, it is very difficult to fix individual responsibility for flow of industrial waste water and domestic sewage. In view of the remedial action taken by AMC, Irrigation and GPCB in recent years and on-going execution of upgradation of STPs, better maintenance of canals, monitoring of industrial units etc., it is humbly requested that Hon'ble NGT may consider the request to not take action against individual officer.**

Thus, Irrigation Department, AMC and GPCB are jointly making maximum efforts to stop the flow of industrial waste water and domestic Sewage in Kharicut Canal.”

5. We have heard Commissioner, Ahmedabad Municipal Corporation and the Member Secretary, State PCB who are present by video conference. They have highlighted the steps already taken mentioned above and explained that further work is in progress. Substantial work is to be completed by 31.03.2021 and the remaining by June, 2021.

6. In view of above, we direct that the progress report as on 31.03.2021 may be furnished by the GPCB and the Secretary, Urban Development, Gujarat before the next date by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF.

List again on 27.04.2021.

Adarsh Kumar Goel, CP

S.K. Singh, JM

Dr. S.S. Garbyal, EM

Dr. Nagin Nanda, EM

November 20, 2020
Original Application No. 105/2019
DV

Appendix - 3

**PROGRESS REPORT AS ON 31.03.2021 OF THE ACTION PLAN
REGARDING
ORDER OF HON'BLE NATIONAL GREEN TRIBUNAL (NGT)
DATED 20/11/2020
IN THE MATTER OF
ORIGINAL APPLICATION NO: 105/2019**



Ahmedabad Municipal Corporation

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1. Progress report as on 31.03.2021 with respect to the action taken report of 29.10.2020 (submitted by AMC to GPCB on 01.11.2020).

1.1 Progress report as on 31.03.2021 of 169 outlets of the Kharicut Canal.

- Ahmedabad Municipal Corporation has developed the drainage network on both eastern(kharikat to Narol-Naroda BRTS route) and western(kharikat to Sardar Patel ring road) sides of kharicut canal. Trunk main lines are provided on eastern side from Naroda to Pirana with pumping stations and on western side from Naroda to Vinzol with pumping stations to convey the drainage to Sewage treatment plants.
- Since last two decades, urban area has developed all along Kharicut canal, the flood water during heavy rain spread into the residential, industrial and commercial area, adjoining the Kharicut canal which were originally agriculture fields.
- The top section width of canal is 10.0 to 35.0 mts. And bottom width is 7.0 to 12.0 mts. Rain water is to be discharged through pumping only as canal embankments are at higher level 2-3 mt. from surrounding areas. So that AMC has developed the infrastructure to lift and dispose the storm water into kharicut canal by sumps/pumping stations. Thus during monsoon storm water pumping is the only solution to prevent flood havoc in the surrounding area.
- Kharicut canal is around 110 years old having legacy issue of around 30-35 years, AMC has taken up the works on war foot basis for management of liquid waste and solid waste in coordination with GPCB and irrigation department.
- Hon'ble Justice Shri B.C. Patel, Former Chief Justice, High Court of Delhi carried out the visit on 09.03.2020 along with officials of AMC, GPCB & Irrigation Department. With respect to his report, There are 77 locations of the total 169 outlets mentioned in the report. **Present status as on 31.03.2021 of the all outlets is as below.**

Sr. No.	Location No.	Location Name	Outlets			Domestic wastewater discharge (Yes/No)	No. of Operative Discharge	Remarks
			Total	Outlet No.	Type of Outlet (SWD/ Drainage/ Other)			
1	L1	Kharicut Canal at Naroda Dehgam Road Bridge	2	L101	SWD	No	0	SWD Pumping
				L102	SWD	No		SWD GIDC
2	L2	Niko Naroda Pumping Station	1	L201	SWD	No	0	TP 2 SWD Pumping
3	L3	Sundervan Society New Naroda	1	L301	SWD	No	0	Gravity SWD
4	L4	Vyasvadi Bridge New Naroda	5	L401	SWD	No	0	Vyasvadi SWD Sump

				L402	SWD	No		Vyasvadi SWD Sump	
				L403	SWD	No		Vyasvadi SWD Sump	
				L404	SWD	No		Vyasvadi SWD Sump	
				L405	SWD	No		Vyasvadi SWD Sump	
	L5	Dahyalal Park Society New Naroda	12	L501	SWD	No	0	Canal Service road Storm water Outlet	
				L502	SWD	No			
				L503	SWD	No			
				L504	SWD	No			
				L505	SWD	No			
				L506	SWD	No			
				L507	SWD	No			
				L508	SWD	No			Gravity SWD
				L509	SWD	No			Gravity SWD
				L5010	SWD	No			Gravity SWD
				L5011	SWD	No			Gravity SWD
				L5012	Drainage	No			Sealed
6	L6	Adishwar Police Chowki	1	L601	SWD	No	0	Gravity SWD	
7	L7	Adishwar Police Chowki	2	L701	SWD	No	0	Gravity SWD	
				L702	SWD	No			Gravity SWD
8	L8	Best English School New Naroda	2	L801	SWD	No	0	Gravity SWD	
				L802	SWD	No			Gravity SWD
9	L9	Ashirwad Residency	2	L901	SWD	No	0	Gravity SWD	
				L902	SWD	No			Gravity SWD
10	L10	Ashirwad Residency	2	L1001	SWD	No	0	Gravity SWD	
				L1002	SWD	No			Gravity SWD
11	L11	Navyug Pumping Station	1	L1101	SWD	No	0	Navyug SWD Pumping	
12	L12	Navyug Pumping Station	2	L1201	SWD	No	0	Pushpak SWD Pumping	
				L1202	SWD	No			

13	L13	Gajanand Park Nikol	1	L1301	Drainage	No	0	Sealed as per the Action Plan, Sr. No. 1,2 & 3
14	L14	Avadhesh Park	2	L1401	Drainage	No	0	
				L1402	Drainage	No		
15	L15	Prabuddha Ashram Nikol	2	L1501	Drainage	No	0	
				L1502	Drainage	No		
16	L16	Bhakti Nagar Nikol	1	L1601	Drainage	No	0	Sealed
17	L17	Bhakti Nagar Pumping Station	1	L1701	SWD	No	0	Gravity SWD
18	L18	Amardeep Park Nikol	2	L1801	Drainage	No	0	Sealed as per the Action Plan, Sr. No.4
				L1802	Drainage	No		
19	L19	SRP Gujarati PrathmikShala	1	L1901	SWD	No	0	Gravity SWD
20	L20	ShyamVihar Society Nikol	1	L2001	Drainage	No	0	Sealed
21	L21	Sarjan Shopping Centre	1	L2101	Drainage	No	0	Sealed as per the Action Plan, Sr. No. 5
22	L22	Ashray Apartment	1	L2201	Drainage	No	0	Sealed
23	L23	Sargam Park Society Nikol	1	L2301	SWD	No	0	Gravity SWD
24	L24	NijanandMansi	1	L2401	Drainage	No	0	Sealed
25	L25	Opposite NijanandMansi	2	L2501	Drainage	No	0	Sealed
				L2502	Drainage	No		Sealed
26	L26	Sarathi Duplex	3	L2601	Drainage	No	0	Sealed
				L2602	Drainage	No		Sealed
				L2603	Drainage	No		Sealed
27	L27	Vasundhara Park	1	L2701	Drainage	No		Sealed
28	L28	Vasundhara Park (Noble English School)	1	L2801	Drainage	No		Sealed
29	L29	Bhumi Park Society	1	L2901	SWD	No	0	Gravity SWD
30	L30	Parshwanath Township	2	L3001	SWD	No	0	Rajiv Park SWD Pumping
				L3002	SWD	No		
31	L31	Thakkar Nagar Bridge, SardarChowk	2	L3101	SWD	No	0	Gravity SWD

				L3102	SWD	No		Gravity SWD
32	L32	Rajiv Park SWD Pumping Station, SardarChok Bridge, Thakkar Nagar	2	L3201	SWD	No	1	Rajiv Park SWD Sump
				L3202	Drainage	Yes		Work in progress as per action plan, Sr. No. 6
33	L33	SardarChok Bridge	2	L3301	SWD	No	0	Gravity SWD
				L3302	Drainage	No		Sealed
34	L34	Narayan Park Nikol	3	L3401	Drainage	Yes	1	Work completed as per the Action Plan, Sr. No.7. But Minor leakage will be sealed shortly.
				L3402	Drainage	No		
				L3403	Drainage	No		
35	L35	Narayan Park Nikol	1	L3501	SWD	No	0	Narnarayan SWD Sump
36	L36	Nikol Ward Pumping Station	4	L3601	SWD	No	2	Gravity SWD
				L3602	SWD	No		Gravity SWD
				L3603	SWD	Yes		Work in progress as per action plan, Sr. No. 8
				L3604	PTP	Yes		Package Treatment Plant (PTP) Outlet
37	L37	Kavya Residency Thakkar Nagar	1	L3701	SWD	Yes	1	Work in progress as per action plan, Sr. No. 9
38	L38	Shree Ram Park Thakkar Nagar	2	L3801	Drainage	No	0	Sealed
				L3802	SWD	No		Canal Service road Storm water Outlet
39	L39	GopalChok Bridge	2	L3901	SWD	No	0	Gravity SWD

				L3902	SWD	No		Gravity SWD
40	L40	ShyamWadiBapunagar	1	L4001	SWD	No	0	Gravity SWD
41	L41	Narayan Park Pumping Station	5	L4101	SWD	No	0	Madhuli SWD Pumping
				L4102	Drainage	No		Sealed
				L4103	Drainage	No		Sealed
				L4104	Cavity in Canal Lining	No		Cavity in Canal Lining
				L4105		No		
42	L42	Umang Apartment	1	L4201	SWD	No	0	Gravity SWD
43	L43	Sundervan Apartment Thakkar Nagar	1	L4301	SWD	No	0	Gravity SWD
44	L44	ShivkrupaThakkar Nagar	1	L4401	SWD	No	0	Gravity SWD
45	L45	Rameshwar Park	1	L4501	SWD	No	0	Gravity SWD
46	L46	Nilkanth Multi Speciality Hospital	1	L4601	SWD	No	0	SWD Sump
47	L47	Swami Narayan Society	1	L4701	SWD	No	0	Gravity SWD (Sealed)
48	L48	Ashirwad Park Pumping Station	3	L4801	SWD	No	0	Work Completed as per the Action Plan, Sr. No. 10
				L4802	SWD	No		
				L4803	SWD	No		
49	L49	Hari Villa Pumping Station	3	L4801	SWD	No	0	SWD Pumping
				L4802	SWD	No		SWD Pumping
				L4803	SWD	No		SWD Pumping
50	L50	Trisha Hospital	2	L5001	SWD	No	0	SWD Pumping
				L5002	SWD	No		SWD Pumping
51	L51	Ganesh kunj Society	1	L5101	SWD	No	0	SWD Sump
52	L52	Bala Hanuman Mandir	3	L5201	SWD	No	0	SWD Pumping
				L5202	SWD	No		SWD Pumping
				L5203	SWD	No		SWD Pumping

53	L53	Maruti Nagar Co Op Housing So. Li	7	L53O1	SWD	No	0	SWD Pumping
				L53O2	SWD	No		SWD Pumping
				L53O3	SWD	No		Canal Service road Storm water Outlet
				L53O4	SWD	No		
				L53O5	SWD	No		
				L53O6	SWD	No		
				L53O7	SWD	No		
54	L54	Ambika Nagar	1	L54O1	Drainage	No	0	
55	L55	Ambika Nagar Odhav	7	L55O1	SWD	No	0	Gravity SWD
				L55O2	SWD	No		Work in progress as per action plan, Sr. No. 11
				L55O3	SWD	No		SWD Pumping
				L55O4	SWD	No		SWD Pumping
				L55O5	SWD	No		Canal Service road Storm water Outlet
				L55O6	SWD	No		
				L55O7	SWD	No		
56	L56	Overseas Enterprise	1	L56O1	SWD	NO	0	Gravity SWD
57	L57	Kharicut Canal at OdhavKathwada Bridge	1	L57O1	SWD	No	0	Gravity SWD
58	L58	Kharicut Canal Storm Water Pumping Station (Odhav Fire Station)	10	L58O1	Drainage	Yes	1	Work in progress as per action plan, Sr. No. 13
				L58O2	SWD	No		SWD Pumping
				L58O3	SWD	No		SWD Pumping
				L58O4	Cable Trench	No		Cable Trench
				L58O5		No		
				L58O6		No		
				L58O7		No		
				L58O8	SWD	No		Canal

				L5809	SWD	No		Service road Storm water Outlet
				L58010	SWD	No		
59	L59	Keshav Park Odhav	3	L5901	SWD	No	0	Work Completed as per action plan, Sr. No. 12
				L5902	SWD	No		Gravity SWD
				L5903	SWD	No		Gravity SWD
60	L60	Bhavani Nagar Soni Ni Chal	2	L6001	SWD	No	0	Gravity SWD (Sealed)
				L6002	SWD	No		
61	L61	Ranchhod Park	1	L6101	Drainage	No	0	Sealed
62	L62	Krushna Nagar Odhav	3	L6201	Drainage	No	0	Work completed as per action plan, Sr. No. 14
				L6202	SWD	No		Gravity SWD
				L6203	SWD	No		Gravity SWD
63	L63	Mukesh Nagar Odhav	1	L6301	SWD	No	0	Gravity SWD
64	L64	Kharicut Canal at Arbuda Nagar	3	L6401	SWD	No	0	Gravity SWD
				L6402	SWD	No		Canal Service road Storm water Outlet
				L6403	SWD	No		
65	L65	JogeshwariBagh Co. Op. Housing So. Li.	2	L6501	SWD	No	0	Gravity SWD
				L6502	SWD	No		Gravity SWD
66	L66	MahavirSmruti Co. Operative Housing So. Li.	2	L6601	SWD	No	0	Gravity SWD
				L6602	SWD	No		Gravity SWD
67	L67	Shiv Park Society	5	L6701	SWD	No	0	Gravity SWD
				L6702	SWD	No		Gravity SWD
				L6703	SWD	No		Gravity SWD
				L6704	SWD	No		Gravity

				L67O5	SWD	No		SWD Gravity SWD
68	L68	Storm Water Pumping Station Mahadev Nagar	2	L68O1	SWD	No	0	SWD Sump
				L68O2	SWD	No		SWD Sump
69	L69	Sumit Nagar Mahadev Nagar Metro Station	2	L69O1	SWD	No	0	Gravity SWD
				L69O2	SWD	No		Gravity SWD
70	L70	RTO Vastral	2	L70O1	SWD	No	0	SWD Pumping
				L70O2	SWD	No		SWD Pumping
71	L71	RTO Vastral	1	L71O1	SWD	No	0	Gravity SWD
72	L72	RTO Vastral	2	L72O1	SWD	No	0	Gravity SWD
				L72O2	SWD	No		Gravity SWD
73	L73	Ramdev Park Mahadev Nagar Tekra	2	L73O1	SWD	No	0	SWD Sump
				L73O2	SWD	No		Gravity SWD
74	L74	JamfalWadi	3	L74O1	SWD	No	0	SWD Sump
				L74O2	SWD	No		Gravity SWD
				L74O3	SWD	No		Gravity SWD
75	L75	Ramol CTM Road Bridge	1	L75O1	SWD	No	0	Gravity SWD
76	L76	RamolHathijan Highway Pumping Station	2	L76O1	SWD	No	0	SWD Pumping
				L76O2	SWD	No	0	Gravity SWD
77	L77	Outfall of Combined Final outlet (70 MLD & 35 MLD)of STP	2	L77O1	STP	Yes	2	Outlets of 70 MLD & 35 MLD
				L77O2	STP	Yes		
		Total	169				5 + 3 (STP/PTP)	

- Summary of all the 169 outlets are as under:

Summary of 169 Kharicut Canal Outlets						
Sr. No.	Type of drain	No. of Total Outlets	Already Sealed/ No Discharge	No of Outlets Stopped as per the action plan	No of Outlets Having Domestic Wastewater Discharge	Remarks
1	SWD Gravity	65	61	3	1	Work in progress as per action plan Sr.No. 9
2	SWD Pumping Station	26	25	0	1	Work in progress as per action plan Sr.No. 8
3	SWD Sump	16	15	1	0	--
4	SWD Canal Service road	20	20	0	0	--
5	SWD GIDC	1	1	0	0	--
6	Drainage	32	24	5	3	Work in progress as per action plan Sr.No. 6 &13
7	STP/TTP	3	0	0	3 (Treated Wastewater is discharged)	--
8	Cable Trench	4	4	0	0	--
9	Canal Cavity	2	2	0	0	--
	Total	169	152	09	05 + 03 (STP/PTP)	--

- There are total 128 outlets provided for the disposal of storm water during monsoon. Out of these, 122 are discharging only storm water in monsoon. 4 outlets are stopped discharging as per the action plan work. For remaining 2 outlets, work is in progress for diversion of the drainage as per the action plan and then there will be discharged storm water during monsoon only.
- 5 outlets of drainage are stopped discharging as per the action plan work. Remaining 3 outlets of drainage discharge will be stopped after completion of the work as per the action plan.

1.2 Latest progress of the time bound action plan to stop the discharge is as below:

National Green Tribunal Original Application No. 105/2019, Order Dated-01.09.2020												Status on 31.03.2021
Sr · No.	Location	Action Plan (Type of Work)	Dia of Pipeline (mm)	Lengh (RMT)	Cost in Lakhs (Rs.)	Timeline given to Ho'bleNG T	Probable Date of Completi on of work	Pipeline laid till Date (RMT)	Physical % of Work Comple ted	Stat us	Domestic Waste water discharge (Yes/No)	Remark
1	Gajanand Park Nikol	New RCC NP3 gravity pipeline	300mm	95	10.00	31.10.2020	--	95	100%	WC	No	--
2	Avadhesh Park										No	
3	Prabuddha Ashram Nikol	Desilting of Connecting line	450mm	725		31.10.2020	--	725	100%	WC	No	
4	Amardeep Park Nikol	New RCC NP3 gravity pipeline	300mm	130	12.00	31.10.2020	--	130	100%	WC	No	
5	Sarjan Shopping Centre										No	
6	SardarChok Bridge	New RCC NP3 gravity pipeline	600mm	2000	110.00	31.01.2020	--	2000	100%	WC	Yes	--
		New DI rising line	500mm	3500	350.00	31.01.2021	--	3168	100%	WC		--
		Naroda Satyam DPS Pumping AUG.	--	--	169.42	31.05.2021	31.05.2021	--	25%	WIP		--
7	Narayan Park Nikol	DesiltingDraina ge pipe line	300mm	110	8.00	31.10.2020	--	110	100%	WC	Yes (Minor leakage)	Minor leakage will be sealed shortly.

8	Nikol Ward Pumping Station										Yes	Timeline extended due to 132 K.V. Power Line is in the alignment of this Drainage line work. Thuspit excavation is in progress for pushing the line.
9	Kavya Residency Thakkar Nagar	New RCC NP4 gravity pipeline	600mm	2938	277.00	31.03.2021	31.05.2021	1492	51%	WIP	Yes	
10	Ashirwad Park Pumping Station	New Rising Line	900mm	850	261.00	31-03-2021	31-03-2021	850	100%	WC	No	--
		Viratnagar Pumping station Augmentation	--	--	152.34	31.10.2021	--	--	100%	WC		--
11	Ambika Nagar	(1) RabariVasahat DPS Rising Line	500mm	1178 + 560=1738	226.00	30-06-2021	--	1738	100%	WC	No	--
			400	1522				1523.5	100%			
		RabariVasahat Pumping station Augmentation	--	--	156.94	30-06-2021	30-06-2021	--	20%	WIP		Sub Pump & Expansion beellow& LT panel Drawing Submitted for Approval
		(2) Chhotalal DPS Rising Line	500mm	1500 + 560=2060	168.00	30-06-2021	30-06-2021	2060	100%	WC		--
		Chhotalal Pumping station Augmentation	--	--	160.00	30-06-2021	30-06-2021	--	20%	WIP		70 H.P. Pump installed.]

12	Keshav Park Odhav	(3) Ambicanagar DPS Rising Line	500mm	3100	364.00	30-06-2021	--	3200.5	100%	WC	No	--
13	Kharicut Canal Storm Water Pumping Station (Odhav fire station)	Ambicanagar Pumping station Augmentation	--	--	159.4	30-06-2021	31-05-2021		70%	WIP	Yes	--
14	Krushna Nagar Odhav	New RCC NP3 gravity pipeline	300mm	200	3.00	01-11-2020	--	200	100%	WC	No	--
		Total		18968	2587.10			17292.00				

1.3 Photographs of the 14 Outlets of Kharicut Canal as per the Action Plan

Name	Gajanand Park Nikol		
Photograph			
Latitude	23.06152	Longitude	72.65104
Domestic waste water discharge	No (Sealed)		
Remarks	Work Completed as per the action plan and stopped discharge		

Name	Avadhesh Park		
Photograph			
Latitude	23.0613	Longitude	72.65081
Domestic waste water discharge	No (Sealed)		
Remarks	Work Completed as per the action plan and stopped discharge		

Name	Prabuddha Ashram Nikol		
Photograph			
Latitude	23.06087	Longitude	72.65027
Domestic waste water discharge	No (Sealed)		
Remarks	Work Completed as per the action plan and stopped discharge		

Name	Amardeep Park Nikol		
Photograph			
Latitude	23.0593	Longitude	72.64989
Domestic waste water discharge	No (Sealed)		
Remarks	Work Completed as per the action plan and stopped discharge		

Name	Sarjan Shopping Centre		
Photograph			
Latitude			
Domestic waste water discharge	No (Sealed)		
Remarks	Work Completed as per the action plan and stopped discharge		

Name	SardarChok Bridge		
Photograph			
Latitude			
Domestic waste water discharge	Yes		
Remarks	Pipeline laying work is completed as per the action plan. Pumping station augmentation work is in progress as per the action plan.		

Name	Narayan Park Nikol		
Photograph			
			
Latitude	23.044867	Longitude	72.65315
Domestic waste water discharge	Yes (Minor Leakage)		
Remarks	Work Completed as per the action plan but Minor leakage will be sealed shortly.		

Name	Nikol Ward Pumping Station		
Photograph			
			
Latitude	23.04667	Longitude	72.65395
Domestic waste water discharge	Yes		
Remarks	Work in progress for laying the pipeline. Timeline extended due to 132 K.V. Power Line is in the alignment of this Drainage line work. Thus pit excavation is in progress for pushing the line.		

Name	Kavya Residency Thakkar Nagar		
Photograph			
Latitude	23.04603	Longitude	72.65395
Domestic waste water discharge	Yes (Minor)		
Remarks	Work in progress for laying the pipeline. Timeline extended due to 132 K.V. Power Line is in the alignment of this Drainage line work. Thus pit excavation is in progress for pushing the line.		

Name	Ashirwad Park Pumping Station		
Photograph			
Latitude	23.0332	Longitude	72.65205
Domestic waste water discharge	No		
Remarks	Work Completed as per the action plan and stopped discharge.		

Name	Ambika Nagar		
Photograph			
Latitude	23.02734	Longitude	72.6495
Domestic waste water discharge	No		
Remarks	Pipeline laying work is completed as per the action plan. Pumping station augmentation work is in progress as per the action plan.		

Name	Keshav Park Viratnagar		
Photograph			
Latitude	23.01897	Longitude	72.64333
Domestic waste water discharge	No		
Remarks	Pipeline laying work is completed as per the action plan. Pumping station augmentation work is in progress as per the action plan.		

Name	Kharicut Canal Storm Water Pumping Station (Odhav fire station)		
Photograph			
Latitude		Longitude	
Domestic waste water discharge	Yes		
Remarks	Pipeline laying work is completed as per the action plan. Pumping station augmentation work is in progress as per the action plan.		

Name	Krushna Nagar Odhav		
Photograph			
Latitude	23.01722	Longitude	72.6421
Domestic waste water discharge	No		
Remarks	Work Completed as per the action plan and stopped discharge		

2. Progress report of the action plan for the prevention of solid waste disposal into the Kharicut canal.

- AMC has completed the installation of Grill fencing and Signboards on the canal crossings and the other places to prevent direct dump of Solid waste into the canal. Present Progress status of the same is as below:

INSTALLATION OF <u>GRILL FENCING</u> TO PREVENT DIRECT DUMP OF SOLID WASTE INTO KHARICUT CANAL									Status as on 31-03-2021
Zone	Existing (No.)	Planned (No.)	Total (Nos.)	Length of Existing Grill (RMT)	Length of New Grill to be Fixed (RMT)	New Grill Fixed till date (RMT)	Physical % of Work Completed	Cost in Lakhs(R s.)	Remarks
EAST	11	11	22	758.10	1247.45	1247.45	100%	24.33	Work Completed
NORTH	15	15	30	2152.8	1443.55	1443.55	100%	49.77	Work Completed
SOUTH	10	28	38	747	3552	3552	100%	81.79	Work Completed
Total	36	54	90	3657.90	6243	6243	--	155.89	--

ACTION PLAN OF <u>SIGN BOARDS</u> TO PREVENT DIRECT DUMP OF SOLID WASTE INTO KHARICUT CANAL							Status as on 31-03-2021
Zone	Existing (No.)	Planned (No.)	Total (Nos.)	Board installed till date (Nos)	Physical % of Work Completed	Cost in Lakhs(Rs.)	Remarks
EAST	7	33	40	33	100%	1.32	Work Completed
NORTH	0	40	40	40	100%	4.5	Work Completed
SOUTH	0	75	75	75	100%	1.87	Work Completed
Total	7	148	155	155	--	7.69	--

All the works of Grill fencing and Signboards are completed as per the action plan.

Appendix - 4

**Action Taken Report based on the order of Hon'ble National Green Tribunal,
Principal Branch, New Delhi (Application No. 105/2019)**

In pursuance of the judgment of Hon'ble National Green Tribunal, Principal Branch, New Delhi (Application No. 106/2018: Ajit Singh Bhurubha Vaghela and residents of Kheda Taluka v. State of Gujarat: Kharikat Canal and Khari River). The issue of Khari River and Kharicut Canal was discussed on Dt. 08/09/2020 and Dt. 15/09/2020 under the chairmanship of Shri Mukesh Puri, IAS, Additional Chief Secretary, Urban Development and Urban Housing Department. In these meetings, Irrigation Department is advised to look after maintenance works of Kharicut Canal such as removal of vegetation from the canal, cleaning of canal, restoration of damaged lining and parapet, provision of grill, stoppage of polluted water in canal, etc. In this regard, the following operations are in progress for the month of March by the Irrigation Department.

(1) Removal of overgrown bushes in Kharicut canal:

In order to maintain maximum carrying capacity of Kharicut Canal as well as to prevent damage to the lining of the canal, cleaning, desilting and jungle cutting are carried out in the canal from time to time by Irrigation Department. Jungle cutting work had been carried out on large scale bases with the help of mechanical machineries in year 2015-16. As per Hon'ble NGT order dated :20-11-2020: Point no. 3.3.4, it is stated that *“For the time being the AMC as well as Department of irrigation are required to be directed to remove the grass growing haphazardly in the canal and both the sides of the canal, so as to protect the water and the Environment”*. During the year 2020, estimates of jungle cutting and clearing operations in Kharicut Canal from Raipur to Vatva Kotha have been prepared. Accordingly, at present, in Chandola Section, Bareja-A Section, Bareja-B Section of Kharicut Canal, work has been started to remove vegetation from the bottom of the canal, side slope, and sides of parapet. On urgent basis, in the problematic reach of Section 1 and 2 of Kharicut Canal, jungle clearance and disposing of the material is carried out by providing labours through the agency as it was not possible with mechanical machineries. [Photographs are attached herewith (Annexure-I)]. Mechanical machineries are used to remove the silting of Section 1 and 2 of Kharicut Canal and garbage is being disposed of to the suitable dumping site with the help of AMC. In section 3 and 4 of Kharicut Canal, jungle clearance work is going on with the help of mechanical machineries.

(2) Construction of grill on Kharicut canal:

Parapet walls have been constructed on both the sides of the canal during the year 2010, 2012 and various stages of beautification in the year 2013-14. Cast Iron/Mild Steel grill has been installed on the newly constructed parapet on both the sides of canal. For remaining/damage work of grill, an estimate (costing Rs. 4.77 crores) is approved from competent authority. Phase-wise work will be executed on the basis of availability of grant. It is planned to start the work in Kharicut Canal in very short time.

(3) Dismantling old damaged parapet and providing new parapet on different locations of Section 1 of Kharicut Canal:

Parapet walls have been constructed on both the sides of the canal during the year 2010, 2012 and various stages of beautification in the year 2013-14. At various locations, these parapet walls are damaged and are in dangerous conditions which need to be replaced by new parapet. Entire portion of the Section 1 of Kharicut Canal was not provided with parapet wall. Therefore, it is required to provide parapet wall in the remaining length of the Section 1 of Kharicut Canal. The estimate (costing Rs. 2.31 crore approximately) for providing new parapets at various locations between chainage 10400 m to 23830 m of Kharicut Canal- Section-1 has been approved from the competent authority. Phase-wise work will be executed on the basis of availability of grant. It is planned to start the work in Kharicut Canal in very short time.

(4) Plaster, Kota, Color work:

Parapets and grills which have been constructed on Kharicut Canal in past decade are now in deteriorated condition. At various locations, kota stones provided over parapet are broken and parapets are damaged. Due to deterioration of color and plaster, existing parapets and grills are subjected to weathering effect which may further lead these structures in vulnerable condition. In order to restore these old parapets and grills, an estimate is prepared and submitted to competent authority for necessary approval. Phase-wise work will be executed on the basis of availability of grant and approval from the competent authority. It is planned to start the work in Kharicut Canal in very short time.

(5) Prevention of polluted water in Kharicut Canal:

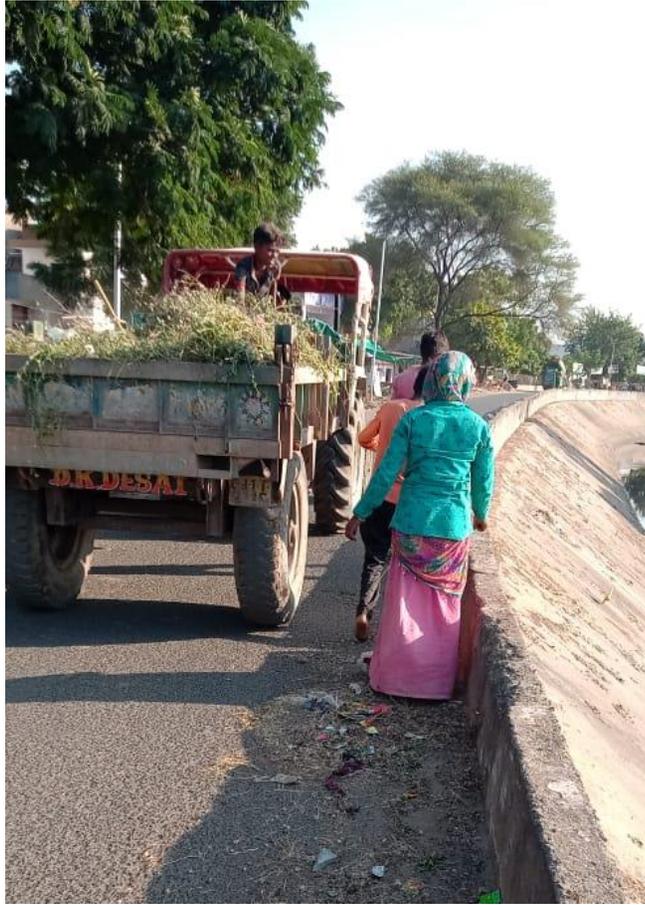
As per Hon'ble NGT order dated :20-11-2020: Point no. 3.3.5, [it is stated that "*The irrigation department and the Commissioner, Ahmedabad Municipal Corporation must close outlets opening in to the canal through piercing or otherwise and be securely closed so as to see that no liquid enters and action be taken against concerned person*".] it is required to take necessary action. Currently, irrigation water is supplied through Kharicut Canal and its branches to the villages of Ahmedabad City Taluka and Daskroi Taluka. Supply of water will remain continue for the Rabi Season 2020-21. Field staff of irrigation department is constantly observing the canal for prevention of polluted water. Office of the Deputy Executive Engineer, Ahmedabad Irrigation Sub Division, Ahmedabad has sent so many letters to the concerned authorities of Ahmedabad Municipal Corporation for prevention of polluted water in canal through sumps and other connections provided in canal. In addition to that, Irrigation Department has planned to seal all illegal connections provided in Canal after completion of current irrigation season.

(6) Restoration of damaged lining in Kharicut Canal:

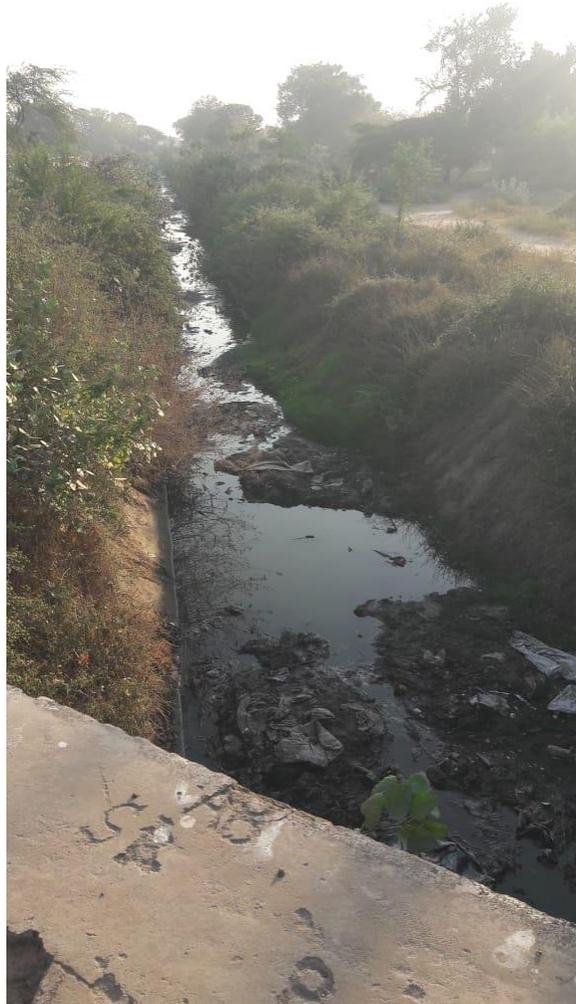
As per the instructions given by Hon'ble NGT regarding restoration of damaged lining in Kharicut Canal, the work has been started in February, 2021 in Kharicut Canal to repair damaged canal lining at various locations and completed. Most of the damaged linings have been repaired and remaining minor repairing works will be completed soon once the supply of irrigation water to the crops would be completed for the Rabi season 2021. [*Photographs are attached herewith (Annexure-I)*]

Annexure-I

Labour work: Photos of Canal Before and After Execution of Work (Section-1, Naroda)



Machinery Work: Photos of Canal Before and After Execution of Work (@ Hathijan Distributary of Section-1, Hathijan Village)



Machinery Work: Photos of Canal Before and After Execution of Work (@ Ch. 6830 m of Section-3 Canal, Ord Village)



Machinery Work: Photos of Canal Before and After Execution of Work (@ approx ch. 5800 m of Section-4 Canal, Chosar Village)



Repairing Work: Photos of Canal Before and After Execution of Work (Section-3 Canal)



Repairing Work: Photos of Canal Before and After Execution of Work (Section-3 Canal)

