



# Punjab Government Gazette

## EXTRAORDINARY

*Published by Authority*

---

CHANDIGARH, TUESDAY, SEPTEMBER 17, 2019 (BHADRA 26, 1941 SAKA)

---

### GOVERNMENT OF PUNJAB

#### DEPARTMENT OF LOCAL GOVERNMENT

(Local Government-4 branch)

(Punjab Municipal Bhawan, Plot No. 3, Sector 35 A, Chandigarh)

#### NOTIFICATION

The 17th September, 2019

**Notification No.5/29/2017-1lg4/2717.**-The Governor of Punjab is pleased to notify the Action Plan for Reuse of Treated Waste Water for various urban activities, as following:-

#### 1. BACKGROUND

Looking at the importance of water for the sustainability of the urban areas, the Department of Local Government Punjab has already notified "The State Treated Waste Water Policy – 2017" vide notification no. 5/29/2017 - ILG4/ 1107 dated 18/05/17. This Action Plan mandates reuse of treated waste water as broader guidelines for provision of adequate wastewater collection and treatment facilities for all the cities and towns in Punjab and consideration of treated effluents as a source for reuse i.e. for irrigation and industrial.

Now, in pursuance of the same, specifically for the use of waste water for construction purposes Action Plan has been prepared highlighting the various steps required to bring back treated water flow Sewerage Treatment Plants (STP's) up to the users.

#### 2. NEED FOR ACTION PLAN

The Government of Punjab is implementing various Schemes which are supplementing the sanitation infrastructure. All these schemes are augmenting the collection system of municipal sewage and its treatment capacity in the State leading to need for comprehensive Action Plan on reuse of treated waste water. There are 167 Urban Local Bodies in the State of Punjab with a population of 1.03 cr. persons as per 2011 Census. At present, 92 STPs have been installed having a collective capacity of 1578.8 MLD. The treated unused water from these STPs is being discharged into the nearby drains/canals and other water bodies. It is a travesty of circumstances that on the one hand the surface and ground water resources are highly stressed and depleting fast whereas on the other hand the treated unused water is being allowed to go waste without any purposeful application. It is therefore

imperative that a meaningful and tangible action plan is formulated to harness and channelize the treated unused water so as to bridge the gap between demand and supply, to the maximum possible extent.

### 3. VISION AND OBJECTIVE

The Action Plan for promotion of use of Treated Waste Water for urban activities is prepared with a vision *reuse of treated wastewater for construction and other urban activities like gardening, street cleaning, industrial use etc. thereby reducing dependency on fresh water resources*. To achieve this vision, the plan lays a time-bound and systematic plan with an ultimate goal of reusing Treated Waste Water fully within a fixed timeline.

### 4. MANDATE OF REUSE OF WASTE/ TREATED WASTE WATER FOR VARIOUS URBAN ACTIVITIES

This Action Plan has been prepared with the primary objective of utilizing treated waste water to substitute fresh water. However, suitability of treated waste water shall be considered prior to its allocation for substituting the fresh water supply for construction activities while substituting fresh water with treated waste water, necessary care shall be taken that treated waste water is not mixed with or used with potable water. Treated waste water shall be mandated for use for various urban activities depending on its availability with a special emphasis on construction activity.

#### APPROACH

Reuse of waste/ treated waste water for various urban activities like construction of buildings, Industrial process, gardening etc. is already made compulsory under the Punjab Municipal Building Byelaws -2018. The clause-3.10.7 provides for:

*“Separate conveying system to be provided for sewerage and sullage to facilitate reuse of sullage water for gardening and washing purposes. This may require suitable storage facilities that are to be indicated on the building plans”.*

Clause 11.2.2 provides for:

#### ***Water Re-use and Recycling***

- (i) *Ground water shall not be used for construction purposes.*
- (ii) *All building having a minimum discharge of 10,000 l. and above per day shall incorporate waste water recycling system. The recycled water should be used for horticultural purposes.*

In order to implement the same, the Government also issued necessary directions to the ULBs to comply with the same.

Now, to reuse the waste treated water of STPs for the construction, gardening and other purposes, the following approach is envisaged:

1. Feasibility study of transportation of treated water from 90 STPs to the end users;
2. Mechanism of transportation and Private participation;
3. Pricing of Treated Waste Water (TWW);
4. Implementation of Water metering policy;
5. Ban on use of fresh supply of potable water for such activities;
6. Enforcement of the PMBBL-2018 for reuse and recycling of waste water.
7. Enforcement of Treated Waste Water (TWW).

#### **4.1 Mandatory conditions to be fulfilled**

The concerned ULB/implementing agency shall undertake feasibility study of transportation of treated water from STP to the end users thereafter as per the outcome of the study shall strive to:

- a. Provide facility of supplying treated waste water to construction sites through tankers/lorries/reservoirs near STP's as well as in cities for temporary storage against a fixed, pre-determined charge. Locations for setting up filling stations for treated waste water in tankers/lorries shall be developed after assessment of the demand at local level and subject to availability of land and funds with respective ULBs.
- b. Lay special supply lines for treated waste water in developing areas/new localities, if found feasible.
- c. Treated waste water can also be used for emergency purpose like fire brigade etc also thereby reducing dependency on fresh water resources.
- d. The water quality of Treated waste water shall be checked whether Treated waste water is fit for construction activities /other purposes.
- e. Stop supply of fresh water for construction purposes, once the above infrastructure is functional and found satisfactory by the user.

### **5. ALLOCATION OF WATER**

#### **5.1 Availability of Treated Waste Water**

The ULB shall declare availability of treated waste water within 6 months of notification of this Action Plan. The coming in to effect shall contain details on both quantity and quality of water besides location of treatment plants where treated waste water is available. However, ULBs should consider the economic feasibility for the implementation of reuse facility which requires substantial capital expenses. In addition to capital cost associated with reclaimed water facility, there are also additional operation, maintenance, replacement and administrative costs. So, depending upon the economic viability, ULBs shall check the feasibility within a period of 6 months of the notification of this Action Plan and shall make provisions accordingly so that treated waste water should reach to the end users.

#### **5.2 Application by user**

All water users who are consuming more than 1 lac litre of water per day including industrial clusters shall apply to the Punjab Water Supply & Sewerage Board (PWSSB) which is the Nodal agency on central portal indicating their requirement of water. All new applicants shall also follow similar procedure.

#### **5.3 Allocation of water**

Keeping in view availability of treated waste water, PWSSB/ Local Authority as the case may be depending upon the work allocation, shall allocate treated waste water or fresh water; in following manner:

##### ***5.3.1 Where availability of treated waste water is more than demand***

In case, the availability of treated waste water is more than demand, then all the mandatory users will be provided with the required quantity of treated waste water. After this provisioning to mandatory users, the other users or other mandatory users outside the supply zone (20-25 kms distance from STP) can be allocated water. Utilization of the balance treated waste water after providing to mandatory users shall be decided by the local authority.

##### ***5.3.2 Where availability of treated waste water is less than demand***

In case the availability of treated waste water is less than demand, the treated waste water shall be provided to users proportionally or in such manner as may be decided by the Government.

### ***5.3.3 Where there is no availability of treated waste water***

Efforts will be made to create infrastructure for collection and treatment of waste water to make treated waste water available. Use of fresh water may be continued till the time treated waste water is made available for these activities.

## **6. ON PRICING, FINANCING AND INVESTMENT**

The treated waste water shall be considered as an economic commodity while determining the price of treated waste water depending upon the feasibility report. The price of treated waste water shall be determined keeping in view a host of factors such as investment made on developing infrastructure for sewage collection and treatment, quality of treated water supplied, requirement of distribution infrastructure and other social, cultural and business factors.

1. In view of increasing marginal cost of wastewater collection (where waste water is available other free water should not be there) and treatment fees , wastewater charges, connection fees and sewerage taxes shall be set to cover at least the operation and maintenance costs. It is also highly desirable that part of the capital cost of the services shall be recovered. The ultimate aim is for a full cost recovery.
2. Appropriate criteria in order to apply the "polluter pays" principle shall be established.
3. Treated effluent shall be priced and sold to end users at a price covering at least the operation and maintenance costs of delivery.
4. It is the intention of the Government, through private sector participation, to transfer management of infrastructure and services from the public to the private sector, in order to improve performance and upgrade the level of service.
5. The role of the private sector will expand with management contracts, concessions and other forms of private sector participation in wastewater management.
6. The concepts of PPP (Public Private Partnership) shall be entertained, and the impact of such concepts on the consumers shall be continually addressed and negative impacts mitigated.
7. The private sector role in reuse of treated effluent shall be encouraged and expanded.

## **7. SOURCE OF FUNDS FOR REUSE OF TREATED WASTE WATER**

1. In general, implementation of reuse facility requires substantial capital expenses. In addition to capital cost associated with treated water facility, there are also additional operation, maintenance and replacement and administrative costs. Hence responsible agencies may consider following sources of "Funds for Construction" of "Reuse of treated waste water Project" from:
  - i. Own source of funds of ULB
  - ii. Funds provided by GOI under centrally sponsored schemes.
  - iii. Grant from Central/State government
  - iv. Loan taken by State Government from multinational / international organizations
  - v. Loan from financial institutions
  - vi. Funds deployed by PPP operators.
  - vii. VAT share

2. The ULB's are proposed to have following sources for funds for O&M:

- i. Revenue from sale of treated waste water
- ii. Revenue from sale of fertilizer
- iii. Revenue from sale of electricity generated.

**Timelines: Following timelines shall be adhered to by the implementing agencies:**

Sr. No.	Actions	Timelines (to be counted from the date of Notification of this Action Plan )	Implementing Agencies
1	Awareness to all stakeholders (Architects, Engineers, ULBs)	2 months	ULB
2.	i) Enforcement without fine in 3rd & 4th month	-	ULB
	ii) Enforcement with fine in 5th month		ULB
2.	Provision of infrastructure for transportation of treated waste water from STP to end users	i) Where treated water is available = 6 months ii) Where treated water is not available = not more than 24 months	ULB
3	Ban on use of fresh supply of potable water for such activities as per para 5.3 of this Action Plan	12 months	ULB
4	Implementation of Water Metering Policy	12 months	Department of Local Government

Chandigarh  
The 16th September, 2019

**A VENU PARSAD, IAS**  
Principal Secretary, Government of Punjab,  
Department of Local Government.