

**Meeting Minutes**

**2nd Multi-Stakeholder Committee Meeting on Policy Framework for Wastewater Reuse in Karnataka**

8 June 2016

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1. Mr R. P. Mallik (KUWSDB- Chief Engineer) welcomed the Multi-Stakeholder Committee members and invited guests on behalf of the multi-stakeholder committee Chairman and Member Secretary, as they were both unable to join due to other commitments. He presented the outcomes from the last meeting and indicated that most of them have been incorporated either in the draft policy document or in the accompanying annex document. Furthermore, he stated that the consulting services TOR for the Wastewater Reuse and Transaction Centre is being finalized and will be circulated shortly.
2. 2030 WRG presented the objectives of the meeting:
   1. KUWSDB draft policy developed in consultation with various stakeholders as a first draft for discussion was presented. It will be revised based on the outcomes of the meeting. An annex to the policy draft containing data and information to support the draft policies was also presented.
   2. The policy document will be supplemented with a complementary implementation manual to further support the general policy areas presented in the policy document.

Each of the draft policies was discussed in the international and local context.

1. The following points were made in the open discussion that followed:
   1. **Coverage of the Policy**:
      * Ecological use of water (environmental flow) should be considered a critical function of treated wastewater, alongside agricultural and industrial reuse. In some cases, wastewater constitutes the minimum flow requirements of watercourses, including lakes (reference Lake Development Policy). Hence, decentralized wastewater treatment and reuse for ecological purposes should be incorporated in the policy.
      * In the context of the 20% threshold level for reuse of wastewater mandated by the National Service Level Benchmark, it should be clarified which of the reuse options qualify under this benchmark (for example, does agricultural reuse qualify under the 20% reuse goal?).
      * When discussing wastewater reuse, nutrient reuse should be considered within a systems approach.
      * With reference to the draft policy related to groundwater and surface abstraction, it was suggested that this could be a policy overreach. However, the importance of engaging with and motivating other sectors to establish an enabling environment for wastewater reuse in the context of integrated urban water resources management was also iterated.
      * The wastewater reuse policy should not contradict any national level policy or guidelines.
      * The policy should include the role of the irrigation department as the institution that provides surface water allocations to industry.
      * Health implications of untreated wastewater should be considered in the context of the agricultural lobby for using raw sewage.
   2. **Feasibility of Reuse:** 
      * Due to Zero Liquid Discharge policy for certain industries, treated wastewater post-industrial use cannot be reused. Under zero discharge guidelines, water should not leave the industrial premises. To adhere to this policy, some industries are over-irrigating green belts on site with treated wastewater. In addition, technical feasibility of implementing ZLD norms is difficult in certain industries.
      * Residential complexes over a certain size without access to a sewer system recycle water internally, further limiting availability for reuse.
      * Estimates of water available for reuse as indicated in the annex to the draft policy takes into account these factors.
      * When further developing the policy, it should be considered that small- and medium-scale industries are likely to be the primary off-takers.
      * Current Pollution Control Board (PCB) guidelines for ULBs promote centralized STPs. These guidelines are conducive to wastewater reuse.
      * For the PCB, maintaining environmental standards is the main priority. Any wastewater reuse policy should explicitly consider this aspect.
      * When developing the implementation guidelines, it should be considered that the coastal zone, Greater Bangalore Metropolitan Area and Northern Karnataka have some unique requirements.
   3. **Cost Recovery and Business Case:** 
      * Cost of wastewater treatment and reuse should be compared against the marginal cost of freshwater in order to develop the business case for reuse.
      * The policy should establish who pays for wastewater treatment, including possible application of the ’Polluter Pays’ principle. Similarly, the policy should set cost recovery principles for wastewater reuse. For example, BWSSB works on a no-profit, no-loss principle.
      * Clear mechanisms should be established for cost recovery for ULBs and STP operators. Currently, many ULBs have insufficient funds for operation and maintenance of STPs. Wastewater reuse initiatives should be structured to at least partially alleviate this problem.
      * Financial sustainability of the technology choice should be considered (e.g., energy recovery from wastewater treatment).
      * A technology certification process for STPs may be considered to promote the long-term sustainability of wastewater reuse initiatives and incentivise private operators to accept O&M contracts.
      * For residential complexes, ability to pay for wastewater treatment should be considered, in view of Sanitary Cess and cost of wastewater treatment both borne by consumers.
      * To ensure quality treatment of wastewater, the market can be used to force discipline in performance through well-structured contracts and public-private transactions.
   4. **Proposed Wastewater Reuse and Transaction Centre** should:
      * Focus on awareness creation and advocacy for wastewater reuse in addition to the proposed project facility role.
      * Serve as a resource for Integrated Urban Water Resource Management (IUWRM) for ULBs and develop a citywide wastewater reuse plan across sectors through a consultative process.
      * Include an O&M provision for any wastewater reuse initiatives.
      * Establish a multi-sectoral coordination with the multi-stakeholder committee which should also function as a mechanism to address grievances and complaints.
      * Explore opportunities and cost-recovery mechanisms for wastewater reuse by agriculture and horticulture, in addition to industry.
2. The Multi-Stakeholder Committee agreed to the following next steps:
   1. The policy should be finalized and submitted to the multi-stakeholder committee for written comments.
   2. An accompanying implementation guideline should also be developed and submitted to the multi-stakeholder committee, along with a compilation of best practice cases from across the state.
   3. The implementation guidelines should include an institutional alignment diagram.
   4. The Wastewater Reuse and Transaction Centre should be implemented as soon as possible considering the above recommendations.