Annexure 2

Project Proposal

Studies on Rejuvenation of River Godavari and Integrated Action Plan for Improvement of Environmental Status for Nasik region, Maharashtra - May 2013

TOR
Studies on Rejuvenation of River Godavari and Integrated Action Plan for improvement of Environmental status for Nasik region , Maharashtra

1. Introduction

Nashik, the third-largest city in Maharashtra, is the District headquarters and an important node of the industrial triangle with Pune and Mumbai. Located along the river Godavari, Nashik is famous for its grape vineyards and is also an important pilgrim centre. As per provisional reports of Census India, population of Nashik in 2011 is 1,486,973. Although Nashik city has population of 1,486,973; its urban / metropolitan population is 1,562,769. Being an industrial and pilgrim centre, Nashik has a large floating population that needs to be factored in sanitation service (water kiosks, public toilets etc.) delivery and infrastructure for water supply, wastewater and SWM. It gets water supply from wells, lakes and rivers. The dam on river Godavari at Gangapur and Nandurmadhmeshwar Bandhara are constructed to provide water for drinking and irrigation. The current water supply to the city is 390 mld and the quantity of domestic wastewater generated is 280 mld.

Nashik Municipal Corporation has developed the system for treatment of sewage generated from the urban area. This includes development of conveyance system, collection points, pumping towards the designated area, appropriate treatment at six zones, disposal of treated sewage, sludge disposal and maintaining data of related aspects. Corporation has taken important steps towards the development of underground drainage system for collection of sewage from environmental safety and hygiene point of view. The treated sewage water quality is being analyzed routinely. In spite of all steps taken by the Nasik Municipal Corporation, the river Godavari is badly polluted throughout its stretch within Nasik city

The river Godavari originates from Trimbakeshwar 24km from Nashik and flows through various parts of the city. The river forms the northern boundary of the city in some areas and then flows through the old residential settlement in the city.

Nashik host one of the largest religious gatherings in the world known as Maha Kumbh. Kumbh mela (festival) is celebrated once in twelve years. Previous kumbh mela was in year 2003. Next kumbh mela will be held from August 15 to September 13 in 2015. In recent times Godavari river stretches near the Nasik city has become highly polluted and the same has become a major cause of concern to the local citizens, religious group as also all the other stakeholders. It has been desired

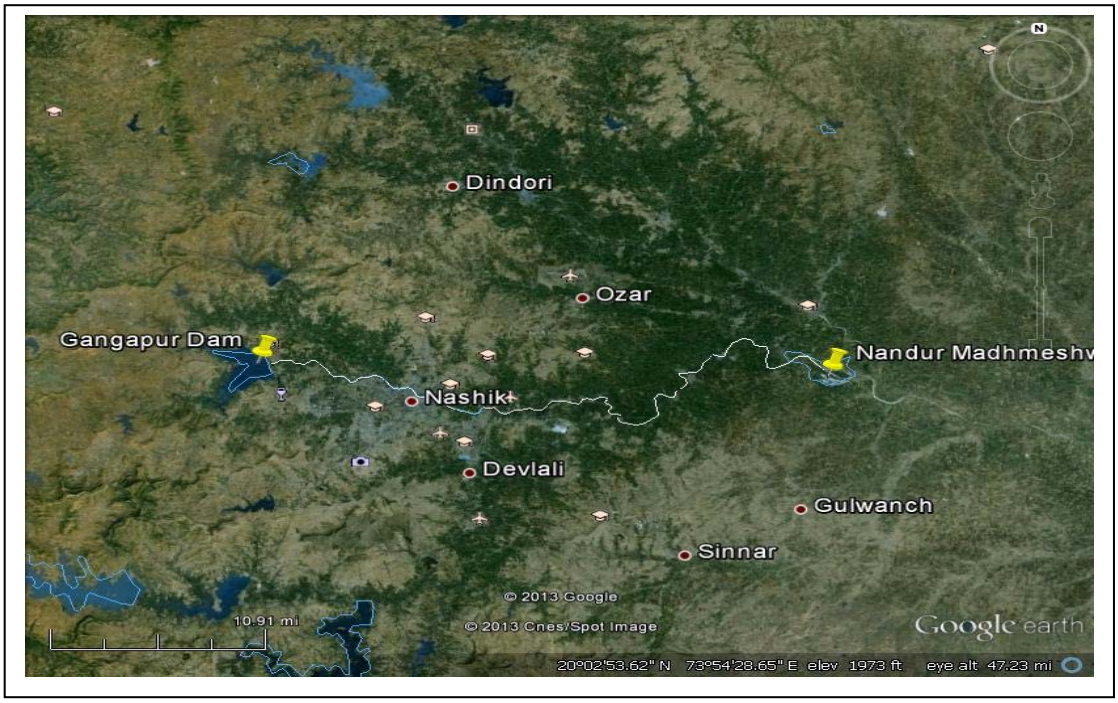
that an immediate attempt should be made to plan the implementation of rejuvenation so that in future, the river Godavari can flow clean through out the year. Keeping this in view, Hon'ble High Court has asked NEERI to submit the proposal for achieving the objectives of clean river.

Under the PIL No.176 of 2012, filed by Mr. Rajesh Madhukar Pandit and Ors as Petitioners and The Nasik Municipal Corporation and Ors. As Respondents, the matter was placed before Hon'ble High Court on 18.4.2013. It was decided that an expert agency like NEERI should be appointed to prepare a comprehensive action plan on cleaning the Godavari river and proper maintenance of river. Accordingly all the necessary documents were received by NEERI for preparation of a project proposal and TOR as per the aspects stipulated by MPCB.

2. Objectives

The main objective of the study is to assist the Nasik Municipal Corporation in overall management of Environmental aspects of all the infrastructural facilities. It includes critical evaluation of current systems, monitoring and suggestions for mitigation measures.

3. Study Area of Godavari River



4. Scope of Work

The scope of work given below has been derived from the PIL documents and issues raised. Primarily the draft TOR suggested by the MPCB has been taken up as it addresses almost all the major issues concerning the cleaning of River Godavari.

The scope of work can be considered in three sub – categories mentioned as under:

1. Initial Survey to asses existing status water quality of River Godavari and waste water disposal and treatment Practices adopted
2. Assessment of solid waste management impacting the river/nallas
3. Social custom and practices (which are impacting the stream)

The major activities to be considered during the whole study are:

- Collection of secondary data for existing situation of water quality, wastewater systems as a whole and solid waste management.
- Reconnaissance survey of the river Godawari from Gangapur dam upto downstream of Nandur madhyameshwar Bandhara covering about 60 km stretch.
- Assessment of water quality in 60 km stretch of Godavari river for pre monsoon and post monsoon season at upstream and downstream of confluence points of 19 natural streams which are converted into nallas carrying waste water.
- Suggest remedial measures to restore and maintain the river ecology for its designated use
- Finalize the appropriate monitoring stations in the identified river stretch and work plan for regular monitoring.
- Evaluation of existing STPs and assess the adequacy of planned and under construction STPs
- Methods for Recycle and reuse of treated effluents from waster water treatment plants
- Assessment of current practices adopted for removal and ultimate disposal of Nirmalya, plastic bags and water hyacinth.
- Establishment of Special Environment Management cell along with analytical Laboratory requirement, staffing pattern, requirement of specialized qualifications and experience in environment protection, duties and responsibilities like O & M of Waste management, creation of vigilance squad
- Examination of issues in respect of O & M of waste Management systems for sewage and solid waste and suggest permanent measures to ensure proper administration, supervision and management of provided waste facilities
- Suggest long term, medium term and short term solutions, especially for waste water disposal through nallas.
- Rejuvenation of river stretches and natural drains through adequate and appropriate design and implementation.
- Evaluation of adequacy and performance of current waste management systems and suggest corrective measures if required
- Development of a model for effective implementation of environmental protocols.
- To prepare detailed Management plan to be implemented during forthcoming “Kumbh Mela”

5. Deliverables

- Existing status of water and waste water quality in the selected study area
- Details for formation of Environmental cell
- Delineation of action plan for monitoring and mitigation after implementation of recommended suggestions for river stretches and nallas

6. NEERI's Expertise

The Institute has vast experience in undertaking environmental assessment and studies related to Inspection of pollution for the past five decades. NEERI shall be deploying a team of experts from water, waste water, drainage, solid waste management, river hydrology etc. Necessary association with local and agencies with expertise in few areas of relevance shall also be associated with the work. The essence of this work shall be achieving the objectives set out earlier.

7. Time Line

The time line shall be keeping in view the issues of providing immediate solutions in next 6 months and provide plan for further work plan for next one year. The plan shall also be prepared in a way that most of it should give necessary improvement in the river quality.

Phase I 0-3 months

- Preliminary site visit and assessment of the complaints received under the PIL
- Sampling and analysis of the whole stretch before monsoon along the river
- Identification of hot-spots and major areas of concern

Phase II 3-9 months

- Adequacy assessment of STP provided, planned and under construction
- Drainage pattern and their issues with regard to the type of drainage, flows and current use of the nallas
- Preliminary plan and conceptual design for solving the water quality issues of Godavari river
- Plan for implementation of short term solutions

Phase III 9-12 months

- Review and supervision of the short term plan
- Discussion on conceptual plan of Godavari river rejuvenation plan
- Revision of the plans based on needs and achievement of targets

8. Project Duration, Cost, Payment Terms and Report Copies

Project Duration	• 12 months
Project Cost	• Rs. 80 Lakhs + ST
Payment Terms	• 1st Installment: 60% + ST - Advance with the work order • 2nd Installment: 30% + ST – After collection of 2nd season field data • 3rd & Final Installment: 10% + ST – After submission of the final report
Project Reports	• Draft report : 2 copies • Final report : 10 copies

Note: Service Tax shall be payable, as applicable at the time of payment. Institute is exempted from paying Income Tax.

9. Inputs from Nasik Municipal Corporation

- Identify persons as coordinator to facilitate interaction/data collection/permissions from relevant agencies
- The NMC shall arrange local logistics during data collection/ field monitoring etc. to the visiting NEERI team

10. Contact Persons

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