

Subject No. 102

Sub- VUDA - Visakhapatnam - PMU Wing - Study on "Evaluation of Ground Water Quality in Visakhapatnam GVMC area with a focus on certain Industrial Pockets" by VUDA - Approval.

Agenda Note:

The VUDA has directed by the District Administration to workout modalities for taking-up of detailed study on "Evaluation of Ground Water Quality in Visakhapatnam GVMC area with a focus on certain Industrial Pockets" in consultancy with the faculty of Andhra University and A.P. Pollution Control Board (APPCB). The matter has been examined in detail by the Vice Chairman, VUDA with the senior faculty of Engineering Department, Andhra University to understand the influence of ground water discharge, its impact on urban settlements, evaluation of Ground Water Quality in GVMC area and to plan remedies for affected ground water and to suggest for control of the propagation of Ground Water Pollution in Visakhapatnam GVMC area and other identified pockets near Atchullapuram.

In view of the above, a study on "Comprehensive Environmental Assessment of Industrial Clusters" has been brought out by the Central Pollution Control Board (CPCB), New Delhi in December 2009 and consequent to the study, certain ban has been imposed with effective from 13.01.2010 on issuance of Environmental Clearance to the New Industries in Visakhapatnam and is made applicable for the entire Visakhapatnam District. Consequent to this order, A.P. Pollution Control Board (APPCB) requested CPCB, New Delhi to restrict the above ban only in the limits of Visakhapatnam bowl area i.e., area lying between Yarada Hills & Simhachalam Hills as major pollution potential industries are located in Visakhapatnam bowl area only. Accordingly, the MoEF vide their order dated 15.03.2010 appears to have issued an office memo restricting the ban to the Visakhapatnam bowl area only. It is also learnt that A.P. Pollution Control Board (APPCB) is also finalizing an action plan for improving the environment of the city of Visakhapatnam, duly aiming at reducing the Comprehensive Environmental Pollution Index (CEPI), a score stood at 70 in the CPCB study. In the meanwhile APPCB is also contesting on the above score which in their opinion shall be in the range of 30 to 35 only. As per the directions of the Dist. Collector & Magistrate, Visakhapatnam, an Environmental Study of Visakhapatnam is being entrusted to School of Planning & Architecture, Vijayawada under the aegis of HRD Ministry, Government of India.

Further, during a Workshop conducted at Visakhapatnam on Pollution Control and Water Contamination in Visakhapatnam District on 18.5.2010, certain issues pertaining to Ground Water Pollution such as 1) Seepage of Industrial Effluents; 2) Preventive measures for safe and healthy underground water; 3) Treatment of Industrial Effluents before discharging, etc., which have greater impact on urban settlements have been deliberated at length.

Need of the Study & Focus Areas:

The city of Visakhapatnam is bounded by hills on one side and sea on the other side forming bowl area. The water in the watershed area percolates and ground water is being recharged. The industrial effluents treated (or) untreated will be discharged or stored in the premises. In the surroundings there are several settlements and several industrial pockets are depend on the groundwater. It is now the high time to have an idea of groundwater quality to understand the influence and impacts of industries. In the year 1984-85, a study revealed that certain villages surrounding the industries showed higher accounts of heavy metals like Zinc and Lead. The peripheral pockets of GVMC area is surrounded by newly upcoming industrial Special Economic Zones (SEZ). Therefore, there is a need to evaluate the groundwater quality in GVMC areas so as to plan remedies for effected groundwater and to control the propagation of groundwater pollution.

The proposed study may also evaluate the ground water quality needs of the urban settlements in GVMC area duty covering the following suggestive area of focus:

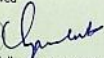
1. Collection and compilation of data available in pieces.
2. Existing data analysis and conversion into thematic maps in GIS environment
3. Defining the area to be studied (GVMC and pockets of industries-300 Km² area) through discussion.
4. Grid wise collection of water samples not exceeding 500 samples.
5. Analysis of water samples for important parameters which indicate pollution (pH, Conductivity, COD, Chlorides, Fluorides, Nitrates, Sulphates).
6. Further analysis of water samples in the vicinity of industries (Heavy metals, Arsenic, etc.)
7. Thematic map generation using GIS.
8. Groundwater modeling using software for the study of hydraulics.
9. Groundwater quality modeling software for the study of transport of contaminating pollutants in the city.

The Urban Planning applications, such study requires to be in close coordination with the planning policies/strategies foreseen in relation to the geographic area and urban settlements. As part of the study, the consultants engaged may utilize any valuable data and inputs/studies available in GVMC, VUDA and other Ground water related research bodies. In view of the above this office letter dated 19.7.2010 was addressed to the Director, Andhra University Development Centre (AUDC), Andhra University, Visakhapatnam to furnish suitable proposals along with consultancy fee with a time frame for preparing the study report and send the connected officials for further process.

In view of the above, the matter is placed before the VUDA Board for taking up study on Evaluation of Ground Water Quality in Visakhapatnam GVMC area through AUDC, Andhra University, Visakhapatnam for approval.

VUDA Resolution No. 102, dated. 30-7-2010

Approved

02/115 

Collector & Chairman
VUDA