

## **Compliance with environmental legislations in Bangalore Metropolitan Region**

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Bangalore has witnessed a fast paced multifarious growth and development. Its population increased from 12 lakh in 1970 to 75 lakh and the vehicle population in the city increased exponentially over the years. The rapid growth of industries and commercial activities have created tremendous pressure on the finite natural resources. The increasing population has had an undesirable impact on water supply, sanitation, transport and management of waste in Bangalore. Air quality has also been badly affected. In recognition of the need for environmental protection, various legislations have been enacted to safeguard the precious resources and to improve the quality of life. Karnataka State Pollution Control Board (KSPCB) headed by the Chairman and assisted by the Member Secretary and 15 other members enforces the environmental legislations relating to water and air pollution in the State. Eleven Regional Offices of KSPCB enforce these legislations in Bangalore Metropolitan Region (BMR). While Bangalore Water Supply and Sewerage Board (BWSSB) is responsible for water supply and sewerage services to the Bangalore City, Department of Mines and Geology (DMG) monitors ground water quality. Lake Development Authority (LDA) under the Department of Ecology and Environment is entrusted with the task of protection, conservation, reclamation, restoration, regeneration and integrated development of lakes in Bangalore.

A performance audit covering the period 2005-10 was conducted to examine the operation of the safeguards in matters relating to water and air pollution and construction activities in Bangalore.

### **Audit objectives**

The objectives of the audit were to examine whether:

- KSPCB utilised its financial resources economically, effectively and efficiently;
- the administration of Water and Air Acts by KSPCB and monitoring of air and water quality was efficient and effective in BMR and whether the environmental safeguards prescribed for construction projects/activities functioned effectively; and the institutional capacity of KSPCB was adequate to discharge its mandated functions.

### **Audit findings:**

The Karnataka State Pollution Control Board had not drawn up any concrete action plan to address pollution related issues, leading to under-utilisation of available funds. The Board had unspent balance of ₹ 208.03 crore at the end of March 2010. The Board did not maintain a proper inventory of polluting sources and faced huge shortage of manpower. This resulted in ineffective identification and inspection of polluting units and facilitated operation of a large number of polluting units without installing pollution control systems. The existing sewage network covered only 40 *per cent* of BMR and the

sewage treatment plants received only 47 *per cent* of the sewage generated. The remaining 53 *per cent* was discharged directly into storm water drains and lakes, contaminating the water bodies and ground water. The ground water quality in BMR was affected due to presence of pollutants in excess of permissible limits. Although concentrations of air pollutants continued to be high at many places in BMR, an effective plan to control air pollution could not be drawn up due to non-finalisation of source apportionment studies. Due to ineffective identification and inspection of polluting units, a large number of polluting units operated in BMR without installing pollution control systems. As the sewage network in BMR was poor and inadequate, 53 *per cent* of sewage generated was discharged directly into storm water drains and lakes, contaminating the water bodies and ground water. Despite data being available on air pollution trends at different locations in BMR, no action plan had been prepared due to non-finalisation of source apportionment studies.