

## CHAPTER 3

### COMPLIANCE AUDIT

Compliance Audit of the Economic Sector departments, their field formations as well as that of the autonomous bodies brought out instances of lapses in management of resources and failures in the observance of the norms of regularity, propriety and economy. These are presented in the succeeding paragraphs:

#### Commerce and Industries Department

##### 3.1 Parking of funds

##### **Unutilised grants of ₹ 16.96 crore were parked in fixed deposit accounts without surrendering it to the Government.**

As per Karnataka Budget Manual<sup>30</sup>, no money should be drawn from the Treasury unless the occasion so demands and no money on any account was to be drawn in advance of requirements or transferred to deposit accounts as a reserve in order to prevent it from lapsing so as to utilise the funds in subsequent financial years. The money, which was not required for immediate use should be surrendered to the Government account forthwith for re-appropriation.

Scrutiny (April 2016) of records in the office of the Commissioner for Industrial Development and the Director of Commerce and Industries, Bengaluru, revealed improper implementation of employment generation programme besides flouting of statutory provisions in administration of grants.

- ❖ The Government announced (February 2014) an employment generation programme “Karnataka Self Employment Programme”, which intended to cover 1,000 micro enterprises in the rural areas by investing capital upto ₹ 10 lakh in each micro enterprise through District Industries Centres. The programme intended to train entrepreneurs for establishment of industrial units, assist them in obtaining working capital from banks and provide subsidy upto 25 per cent (35 per cent for special categories) of the investment amount subject to an upper limit of ₹ 2.50 lakh (₹ 3.50 lakh for special categories). The subsidy amount would be released only after successful commissioning of the unit, directly to the banks from where investment loan was obtained. The programme was administratively approved (September 2014) for ₹ 17.52 crore by the Government with a budgetary grant (January 2015) of ₹ 11.25 crore. This was released (31 March 2015) to Karnataka Council for Technological Upgradation (KCTU), a joint venture of the Government of India, the Government of Karnataka and Industry Associations of Karnataka, which was established

<sup>30</sup> Rule 264.

primarily with an objective to enhance the competitive status of MSMEs<sup>31</sup> of Karnataka through technological upgradation.

The subsidy amount, which was to be released after successful commissioning of the unit was released to KCTU even before identification of the beneficiaries. The KCTU drew the amount on the last day of the financial year (2014-15) in order to avoid lapse of funds. The programme was renamed as “Chief Minister’s Self Employment Generation Programme” and ₹ 4.29 crore was released to 247 beneficiaries’ bank accounts by KCTU against target of 1,000 beneficiaries during 2015-16. Despite the utilisation being only 38 per cent of the amount released to KCTU, the Department released (February 2016) another instalment of ₹ 10 crore to KCTU without ascertaining requirements. The KCTU too did not intimate the Department that funds were not required and drew the amount of ₹ 10 crore on the last day of March 2016 and kept the amount in fixed deposit accounts.

- ❖ The action of the Department in releasing funds before identifying beneficiaries and the release of budget grants to an agency without ascertaining the requirement of the same was irregular in view of the statutory provisions. Furthermore, the projection of such releases as funds spent under the programme, though in reality, they were not actually disbursed to beneficiaries, was also incorrect. Though Codal provisions stipulated surrender of unutilised funds, KCTU continued to keep the funds in the fixed deposit accounts, including the interest earned on the same. The unutilised fund of ₹ 16.96 crore<sup>32</sup> was parked in fixed deposit accounts, which could have been utilised by the Government for other Departments or projects had it been surrendered by this Department.

The matter was referred to the Government in March 2017 and reminded in August 2017; their reply was awaited (November 2017).

## **Food, Civil Supplies and Consumer Affairs Department**

### **3.2 Financial burden on account of non-observance of statutory provisions**

**Commissioner deposited the income tax deducted at source to the Central Government account belatedly resulting in extra financial burden of ₹ 1.01 crore to exchequer.**

As per the provisions of Rule 30 of Income Tax (IT) Rules, all sums deducted in accordance with the provisions of Chapter XVII-B<sup>33</sup> of IT Act, 1961, shall be remitted to the credit of the Central Government account on or before seven days from the end of the month in which the deduction was made or income

<sup>31</sup> Micro, Small, Medium Enterprises.

<sup>32</sup> (₹ 11.25 crore + ₹ 10 crore - ₹ 4.29 crore = ₹ 16.96 crore).

<sup>33</sup> Collection and Recovery of Tax.

tax was due. Further, under section 201(1A) of the said Act, any default in remitting the tax collected entails payment of tax with simple interest at one and half *per cent* for every month or part of a month on the amount of such tax from the date on which such tax was deducted to the date on which such tax was paid. Furthermore, Karnataka Financial Code (Article 331) stipulates that Cash Book should be closed regularly and cash balance as per Cash Book should be reconciled with that of the treasury at the end of each month.

Scrutiny (May 2016) of records in the Office of the Commissioner of Food, Civil Supplies and Consumer Affairs, Bengaluru (Commissioner) revealed that the Commissioner engaged (March 2006) M/s Comat Technologies (P) Limited (Agency) for a comprehensive computerisation project to create a database for issuing permanent computerised ration cards. During the year 2008-09, the Commissioner deducted ₹ 2.34 crore as Income Tax Deducted at Source (TDS) from 18 bills of the Agency while making payments of ₹ 18.56 crore. Audit scrutiny further revealed that the cheques for TDS were drawn but were not remitted to the Central Government account. These cheques were subsequently cancelled and fresh cheques were drawn during August 2010 after delays ranging from 17 to 23 months. Similarly, TDS of ₹ 1.03 crore collected during 2009-10 and 2010-11 was remitted with delays from the scheduled date. The details are given below (**Table 3.1**):

**Table 3.1: Delay in deposit of TDS**

Sl No.	Year	TDS amount (₹ in lakh)	Period of deduction	Due date of deposit	Actual date of deposit	Period of delay
1	2008-09	91.91	Aug 2008	Sept 2008	Aug 2010	23 months
2		29.20	Sept 2008	Oct 2008	Aug 2010	22 months
3		13.07	Oct 2008	Nov 2008	Aug 2010	21 months
4		14.88	Dec 2008	Jan 2009	Aug 2010	19 months
5		29.89	Jan 2009	Feb 2009	Aug 2010	18 months
6		54.78	Feb 2009	Mar 2009	Aug 2010	17 months
<b>Sub Total</b>		<b>233.73</b>				
7	2009-10	44.10	Apr 2009	May 2009	Nov 2010	18 months
8		10.43	June 2009	July 2009	Aug 2010	13 months
9		2.93	July 2009	Aug 2009	Aug 2010	12 months
10		15.42	Aug 2009	Sept 2009	Aug 2010	11 months
<b>Sub Total</b>		<b>72.88</b>				
11	2010-11	30.58	April 2010	May 2010	Aug 2010	3 months
<b>Sub Total</b>		<b>30.58</b>				

(Source: Information furnished by the Commissioner)

As there were inordinate delays in paying the TDS amounts into the Central Government account, the IT authorities issued notice (October 2012) for delayed remittance of TDS. The IT Department did not accept Commissioner's justification (October 2012) that delay was due to excess workload and lack of knowledge in filing of returns. IT Department issued another demand notice in January 2013 under Sections 200A and 201(1A) of IT Act, demanding ₹ 14.19 lakh and ₹ 2.10 lakh towards interest on late payment of TDS pertaining to financial years 2009-10 and 2010-11, which

were remitted in February 2013. Another notice was served (September 2015) demanding interest on late payment amounting to ₹ 1.01 crore for the delayed remittance of TDS for 2008-09 to 2010-11, which included ₹ 16.29 lakh that was already paid. The balance interest amount of ₹ 84.49 lakh<sup>34</sup> was yet to be paid (January 2017) and the reasons for non-payment were not on record.

Reconciliation of entries in the Cash Book each month with the Treasury cash balance would have brought non-remittance of cheques drawn to the notice of Head of Office. Failure to reconcile the Cash Book and to comply with statutory provisions resulted in unwarranted liability of ₹ 1.01 crore to exchequer and loss to the State Government, which were avoidable.

The matter was referred to the Government in February 2017, and reminded in July 2017 and August 2017; their reply was awaited (November 2017).

## **Forest, Ecology and Environment Department**

### **3.3 Implementation of Environmental Laws and Rules by Karnataka State Pollution Control Board**

#### **3.3.1 Introduction**

The Environment (Protection) Act, 1986, sets out that ‘environment includes water, air and land and the inter-relationships, which exist among and between water, air and land, human beings, other living creatures, plants, micro-organisms and property’.

Sustainable development embraces integration of social, environmental and economic objectives. The focus of policies and programmes should, therefore, be to achieve an integrated balance amongst the three objectives and to preclude/prevent the destruction or degradation of environmentally relevant features and characteristics that impact future generations. The need for sustainable development presupposes protection of the environment.

The Karnataka State Pollution Control Board (KSPCB) was constituted (September 1974) under Section 4 of the Water (Prevention and Control of Pollution) Act, 1974, enacted by the Parliament. Air (Prevention and Control of Pollution) Act, 1981, and Environment (Protection) Act, 1986, enacted by the Parliament further widened the scope of the activities of KSPCB.

The objective of conducting this Thematic Audit was to assess whether planning, implementation of programmes for prevention, control and abatement of pollution, enforcement of provisions of following Acts and Rules and monitoring mechanism of KSPCB was adequate:

---

<sup>34</sup> Total demand: ₹ 100.78 lakh *minus* Paid: ₹ 16.29 lakh = Balance: ₹ 84.49 lakh.

- ❖ The Water (Prevention and Control of Pollution) Act, 1974, (hereinafter referred to as Water Act) and the Rules framed thereunder;
- ❖ The Air (Prevention and Control of Pollution) Act, 1981, (hereinafter referred to as Air Act) and the Rules framed thereunder;
- ❖ The Environment (Protection) Act, 1986, and the Rules framed thereunder;
- ❖ Bio-medical Waste Management Rules, 2016; and
- ❖ The National Water Policy, 2002.

The Audit was conducted between February and June 2017 covering the period 2012-13 to 2016-17. A sample of 13 Regional Offices (ROs)<sup>35</sup> out of 44 ROs of KSPCB was selected by simple random sampling for test-check of records. An Exit Meeting was also held on 23 August 2017.

## Audit findings

### 3.3.2 Absence of a comprehensive database and its consequences

Section 17 of the Water Act and the Air Act mandated KSPCB to formulate a comprehensive programme for the prevention, control and abatement of pollution of streams, wells as well as air pollution, and securing the execution thereof. The National Water Policy (2002), also envisaged development of an information system for water related data at the State level for resource planning. In order to formulate the plan and to implement the programme, KSPCB should have a detailed database of the pollutant's sources and pollution loads.

Audit observed that KSPCB did not have a comprehensive database of pollution loads and pollutant's source. The data relating to category of industries were maintained in the form of "F" Register at Regional Offices' level, which comprised of only the names, consent validity periods and category of industries *i.e.* Red<sup>36</sup>, Orange<sup>37</sup> or Green<sup>38</sup> category. Apart from having these details in individual files, none of the Regional Office had a comprehensive database of the extent of water being used, the effluents so generated and being discharged by the industries in their jurisdiction. Though KSPCB was in existence for more than four decades, it did not prepare and collate the database, which was of vital importance for undertaking effective pollution control measures.

Thus, it was not possible for KSPCB to exercise effective control over consent management for industries, pollution load assessment, planning for pollution abatement measures and its statutory function of dissemination of information

<sup>35</sup> Mahadevapura, Hoskote, Kolar, Chikkaballapura, Dasarahalli, Nelamangala, Yelahanka, Doddaballapura, Belagavi, Bagalkot, Vijayapura, Mangaluru and Karwar.

<sup>36</sup> Highly Polluting.

<sup>37</sup> Moderately Polluting.

<sup>38</sup> Least Polluting.

to other agencies. As a result, risks to the environment and health caused by water and air pollution could not be assessed independently by KSPCB.

In the Exit Meeting, the Member Secretary stated (August 2017) that the KSPCB had implemented online consent management mechanism wherein the data pertaining to pollution sources would be made available and kept in public domain.

**It is recommended that Board should maintain comprehensive database of sources of pollution and assess pollution loads, which would aid in formulating effective plans for implementing pollution controlling measures.**

### **3.3.2.1 Consent to industrial units**

Section 21(1) of the Air Act and Section 25(3) of the Water Act authorise KSPCB to grant consent for operation of an industrial unit in an air pollution control area or for units, which are likely to discharge sewage or trade effluent into a stream or well or sewer or on land. The consent was issued in two stages, *i.e.*, Consent for Establishment (CFE) followed by Consent for Operation (CFO) after successful compliance of CFE stage. Under Section 25 (4) (iii) of the Water Act, the consent granted shall be valid only for such period as may be specified in the Order. As per general condition appended to the consent order, the occupier shall make an application for consent at least 45 days before expiry of the consent.

It was however, observed that:

- ❖ There was no monitoring regarding expiry of validity period of the consents granted to various industrial units. Scrutiny of the records of 13 test-checked Regional Offices revealed that consent for operation in 2,836 cases were not renewed for a period ranging between one year and 12 years, as shown in **Table 3.2**:

**Table 3.2: Non-renewal of consents**

Sl No	Period of non-renewal	No. of cases ( <i>per cent</i> )
1	Between 1-2 years	1,198 (42)
2	Between 2-5 years	972 (34)
3	Between 5-10 years	502 (18)
4	More than 10 years	164 (06)

(Source: Information compiled during Audit)

Though KSPCB issued directions to the defaulting industrial units, no legal action was taken as required under the Section 33(1)<sup>39</sup> of the Water Act;

<sup>39</sup> To make application to courts for restraining apprehended pollution of water in streams or wells.

- ❖ Absence of a comprehensive database made the work of monitoring more difficult. Thus, the important regulatory control of authorising/barring establishment of potentially polluting operations was not exercised effectively by KSPCB, despite specific directions (June 2012) from the Department of Forest, Ecology and Environment that inventorisation of industrial units can be outsourced to reputed institutions.
- ❖ Ineffective monitoring of the polluting sources enabled many polluting units to operate without obtaining the consent. According to information furnished by KSPCB itself in respect of 31 Regional Offices, 392 industrial units spread over the State were operating without consent as of March 2017.

In the Exit Meeting, the Member Secretary stated (August 2017) that KSPCB had taken steps to update the software for issue of online consent. However, the online consent approval would monitor non-renewal cases only and not be able to detect units operating without any consent.

### 3.3.2.2 Absence of scrutiny of consent applications

Applications for consents, both Consent for Establishment and Consent for Operation, were to be processed within four months from the date of application {Section 25(7) of Water Act}. If not refused or returned within this period, consent was deemed to have been issued in consonance with the policy of Ease of Doing Business. KSPCB could not scrutinise all the applications in time and 37 per cent of the consents were deemed to have been issued as of June 2017. The number of applications remaining un-processed *i.e.*, for beyond four months and consequently deemed to have received consent are shown in **Table 3.3**:

**Table 3.3: Details of deemed consents**

SI No.	No. of applications received for consent (January 2016 to June 2017)	Consent granted within four months (percentage)	Deemed consent (percentage)
1	3,314	2,103 (63)	1,211 (37)

(Source: Information furnished by KSPCB)

Automatic grant of consent from the perspective of Ease of Doing Business was no doubt a reasonable measure to ensure that operations were not stopped for want of approvals. However, it was imperative on the part of KSPCB to inspect the establishments, which were granted deemed consents to ensure that all prerequisites or conditions which were required to be satisfied were in place and functional. Audit scrutiny revealed that KSPCB did not take up inspections of establishments where deemed consent was granted even though some Red category industrial units were also involved, to check whether the facts stated in the applications were correct and necessary infrastructure like Effluent Treatment Plants (ETPs) were in place to ensure control of pollutants.



### 3.3.2.3 Irregular consents

According to Environment Impact Assessment (EIA) Notification, 2006, of Ministry of Environment, Forests and Climate Change (MoEF), Environmental Clearance (EC) is mandatory for eight categories<sup>40</sup> of projects/activities. These projects/activities are further grouped into two categories<sup>41</sup>: Category 'A' and Category 'B' based on the spatial extent of potential impacts on human health and natural/man-made resources. While MoEF was to issue EC for category 'A' projects, the State Environment Impact Assessment Authority (SEIAA) was responsible for issue of EC for category 'B' projects at the State level. Proposals for EC are to be submitted by the entrepreneurs to the MoEF/SEIAA and work on the project was to commence only after EC was issued.

It was observed that:

- ❖ KSPCB was issuing Consent for Establishment without insisting upon EC required under EIA Notification, 2006. In a meeting (November 2015), SEIAA observed that Consent for Establishments were issued by KSPCB without the Environmental Clearance required under EIA Notification 2006 and directed (December 2015) KSPCB to issue Consent for Establishment only after the applicant had submitted the EC issued in accordance with law.
- ❖ As per the records relating to issue of Environmental Clearance for construction projects during 2012-13 to 2016-17, the SEIAA had either rejected or closed the file without issuing Environmental Clearance in 28 cases. However, in two cases (**Table 3.4**) in which the SEIAA had closed the file without issuing Environmental Clearance, KSPCB issued Consent for Establishment without insisting on Environmental Clearance and works on the projects commenced based on such Consent for Establishments.

**Table 3.4: Issue of Consent for Establishment without Environmental Clearance**

Sl. No.	SEIAA file No.	Name of the proponent	CFE issued on	EC status
1	89 CON 2016	M/s Krishna Constructions C/o Residential apartments	15.12.2016	Not issued
2	207 CON 2015	M/s Puravankara Projects Ltd C/o Residential apartments	24.02.2016	Not issued

(Source: Information furnished by KSPCB)

<sup>40</sup> 1) Mining and Power generation 2) Primary Processing – Coal washeries and Mineral beneficiation 3) Materials Production – Metallurgical industries and Cement Plants 4) Materials Processing – Petroleum refining, Coke oven plants, etc. 5) Manufacturing/Fabrication – Chemical fertilizers, Pesticides industry, etc. 6) Service Sectors – Oil and Gas transportation pipe line and Handling of Hazardous chemicals 7) Physical Infrastructure – Air Ports, Industrial Estates, Common hazardous waste treatment, Ports, Harbours, Highways, Common Effluent Treatment Plants, etc. and 8) Building and Construction projects and Township and Area Development Projects.

<sup>41</sup> Based on the threshold limits which are specified in Schedule to Environment Impact Assessment Notification, 2006.



- ❖ A joint inspection conducted (April 2017) by Audit along with KSPCB team of the units/industrial units falling under the jurisdiction of the Regional Officers, Hoskote and Kolar revealed that KSPCB issued Consent for Establishment to two hospitals (Red category) without insisting upon Environmental Clearance which was mandatory for these hospitals as per EIA Notification, 2006. The details are shown in **Table 3.5:**

**Table 3.5: Institutions operating without Environmental Clearance**

Sl No.	Name of the hospital	Built-up area in Sqm	Functioning since	Remarks
1	M/s Akash Institute of Medical Science and Research Centre, Devanahalli Taluk, Bengaluru Rural District	92,296	September 2013	Environmental Clearance not obtained
2	M/s Sambram Charitable Trust, Bangarpet Taluk, Kolar District	63,483	December 2014	

(Source: Information furnished by KSPCB)

However, KSPCB did not take any action to withdraw the consents as prescribed under the Act.

- ❖ Similarly, during joint inspection of a construction project, namely ‘M/s Sowparnika Projects Limited (Phase-II)’ located in Survey No.13/2a under Regional Office, Mahadevapura, Bengaluru, Audit observed that the construction commenced (30 January 2014) without obtaining the necessary Environmental Clearance from SEIAA. It was further noticed that the project situated in Survey No. 13/2b (Phase I) was completed (2014) and handed over without applying and obtaining the Consent for Operation from KSPCB.

Section 15 of the Environment (Protection) Act, prescribes imprisonment extending to five years or levy of a fine extending to one lakh rupees or both for contravention of the provisions of the Act. However, no penalty was levied in any of the above cases.

Environmental Clearance is a regulatory mechanism to ensure admissibility of a particular activity with remedial measures for the expected environmental impact. The action of issuing Consent for Establishment without Environmental Clearance showed that the controls prescribed to ensure balance between development and environmental concerns were not exercised as evidenced.

Audit further observed a case where KSPCB issued “consent to operate” despite non-compliance in the past and simultaneously filed a criminal case. The details are given in **Box 3.1.**

**Box 3.1**

**Irregular issue of Consent for Operation**

Consent for Operations to M/s Nirani Sugars Limited (Distillery), Bagalkot, (Large-Red category) was not renewed from July 2015 for violation of pollution norms on multiple counts. Despite non-renewal of Consent for Operation, the Company continued to function in violation of Rules. KSPCB issued show-cause notices in this regard. Central Pollution Control Board also issued (August 2016) a closure order for non-installation of online monitoring equipment, which was revoked (January 2017) as the Company complied with the requirement by then, by installing the online monitoring system. Based on the report of Regional Office, the Consent for Operations for a further period of five years (2016-21) was granted (16 February 2017) by the Consent Committee of KSPCB subject to several conditions. Audit scrutiny revealed that on the same day of granting consent by the Committee, KSPCB filed a criminal case against the Company in the Court of Hon'ble Judicial Magistrate First Class at Mudhol for offence under Section 25, 26 of the Water Act, 1974, for discharging of trade effluents into agricultural lands without treatment in excess of the standards stipulated by KSPCB. It was also noticed that KSPCB did not take action as contemplated under Section 33A of the Water Act, 1974, *i.e.*, stoppage of operations or closure. Thus, the grant of Consent for Operations was irregular.

Thus, consents were issued without the necessary environmental clearance.

In the Exit Meeting, the Member Secretary stated (August 2017) that at present, Consent for Establishments are issued only after issue of Environmental Clearance.

**3.3.3 Non-installation of Effluent Treatment Plant**

Section 25 of the Water Act, envisage that every person, to whom consent is granted by State Pollution Control Boards, has to install a treatment plant in the premises where the industry is carrying on its operations and keep it in good running condition. Water pollution caused by major industrial units can be controlled at the point of generation by installing Effluent Treatment Plants (ETPs) for individual industrial units. Common Effluent Treatment Plants (CETPs) are established for clusters of medium and small-scale industrial units where the characteristics of industrial waste water would not differ considerably.

Scrutiny of records revealed that:

- ❖ As per records of KSPCB, there were 8,038 water pollution prone industrial units in the State, as of March 2016<sup>42</sup>. Of these, 1,165 industrial units had no effluent treatment facilities;
- ❖ As per Karnataka Industrial Areas Development Board (KIADB) records, there were 162 Industrial Areas in the State comprising of 18,578 industrial units. The State had 11 CETPs, of which, nine were functioning and two were under construction. Out of 18,578 industrial units, only 7,451 industrial units were covered by CETPs and remaining 11,127 industrial units were operating without CETPs.
- ❖ KSPCB was allotted (October/November 2012) nine *acres* of industrial land by KIADB for establishment of CETP at Raichur (five *acres*) and Mundaragi (four *acres*). As per KIADB records, 23 fly-ash brick units, 22 bulk drug/pharmaceutical units and two fertilizer units were operating in Raichur Growth Centre Industrial Area, while at Mundaragi 4<sup>th</sup> Phase Apparel Park Industrial Area, 80 industrial units were operating. However, as of August 2017, construction of CETP was not started in Raichur and Mundaragi by the Regional Offices of KSPCB. This resulted in letting out of industrial effluents and sewage water in open drains. An illustrative image of industrial effluents being discharged in the open drainages and water bodies noticed during inspection in Mundaragi 4<sup>th</sup> Phase Apparel Park Industrial Area is shown in **Photograph 3.1**:

**Photograph 3.1: Effluents being discharged into water bodies  
- Mundaragi 4<sup>th</sup> Phase Apparel Park Industrial area**



(Source: Photograph taken by Audit party during field visit)

<sup>42</sup> While audit enquiries were issued in April 2017 seeking details as of March 2017 and KSPCB also issued directions in April 2017 for furnishing relevant data/information from the 44 ROs, the necessary information was not furnished till date (11 December 2017). The non-availability of data for period 2016-17 even at the end of November 2017 indicated that updation of data was not a priority.

Due to insufficiency of Common Effluent Treatment Plants/non-installation of Effluent Treatment Plants, untreated trade effluents were discharged through Under Ground Drainage which flow directly into nearby water bodies causing water pollution. In the absence of any effective action, these industrial units continued to contravene the provisions of the Water Act with impunity and with no monitoring of any kind. The fact that KSPCB issued consents to such industrial units without ensuring compliance was evidence of its failure in discharge of its duties as an enforcer.

In the Exit Meeting, the Member Secretary stated (August 2017) that all new Industrial Areas are mandated to have Common Effluent Treatment Plants, besides clustering of industries in line with the nature of effluents generated.

### **3.3.4 Deficiencies in Water Quality Monitoring and Management**

The National Water Policy (2002) envisaged regular monitoring of both surface water and groundwater quality. The policy specified a phased programme for improvement in water quality, treatment of effluents to acceptable levels and standards before discharging them into natural streams, adoption of the principle of 'Polluter Pays' in management of polluted water and formulation of necessary legislation for preservation of existing water bodies. The policy also indicated that the research efforts in various areas, including water quality needed to be intensified for effective and economical management of water resources.

The Water Act, empowered KSPCB to make any order for the prevention, control or abatement of discharge of waste into streams or wells. The Act, also mandated KSPCB to order any person or agency to construct new systems for the disposal of sewage and trade effluents or to modify, alter or extend any such existing system or to adopt such remedial measures as were necessary to prevent, control or abate water pollution. Failures noticed are discussed below:

#### ***3.3.4.1 Insufficient capacity of Sewage Treatment Plants in Bengaluru Metropolitan Region***

Bengaluru generates 1,440 MLD (Million Litres per Day) of waste water. Bengaluru Water Supply and Sewerage Board (BWSSB) established 14 Sewage Treatment Plants (STPs) with a total capacity of 721 MLD. It was reported that 600 MLD were being treated in these STPs as per Central Pollution Control Board (CPCB) Study Report (March 2017). Thus, only 42 *per cent* of the sewage generated was being treated and the remaining 840 MLD of untreated waste water were disposed in lakes in Bengaluru Metropolitan Region through storm water drains.

#### ***3.3.4.2 Sub-par efficiency of Sewage Treatment Plants***

Study conducted by Central Pollution Control Board in respect of all the 14 Sewage Treatment Plants in Bengaluru Metropolitan Region indicated that in all the Sewage Treatment Plants, total coliform and faecal coliform count of

treated sewage were beyond the specified limits. In 50 *per cent* of the Sewage Treatment Plants, the treated sewage was not complying with the stipulated standards, for removal of Bio-chemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and Total Suspended Solid (TSS) and in most of the Sewage Treatment Plants, Ammonia-N of treated sewage was not within the stipulated standards, which directly affect aquatic life. The findings call for remedial measures for improving the efficiency of the existing Sewage Treatment Plants and monitoring by KSPCB.

#### **3.3.4.3 Inadequate Sewage Management**

According to an Action Plan for 2011-12 submitted (June 2012) to the Hon'ble Public Accounts Committee, KSPCB should have ensured commissioning of Sewage Treatment Plants in all the Local Bodies by 2014-15.

It was, however, observed that out of 3,777 MLD of sewage and sullage generated in 219 Local Bodies, only 1,304 MLD of sewage and sullage was treated in 53 Local Bodies, leaving the balance 2,473 MLD of waste water to be discharged into water bodies without treatment. The source and load of sewage and sullage generated in the newly upgraded (2015) 57 City Municipal Councils/Town Municipal Councils were yet to be assessed by KSPCB. Thus, the important function of abatement of water pollution was not exercised effectively by KSPCB.

KSPCB did not prepare comprehensive plans for prevention, control and abatement of pollution as it did not assess the generation of sewage and sullage for these Local Bodies.

In the Exit Meeting, the Member Secretary of KSPCB stated (August 2017) that the line departments prepared an Action Plan to install STPs in the State by 2020.

### **3.3.5 Issues in Monitoring of Water Quality of Lakes in Bengaluru**

Lakes help in maintaining microclimate and ecological integrity, regulating temperature and providing livelihood for local people. As per Karnataka Lake Conservation and Development Authority (KLCDA) records, Bengaluru has 210 lakes under various Departments for purpose of protection and taking up of development activities relating to the lakes. Water quality<sup>43</sup> in lakes is classified from Class-A to Class-E based on designated best use and activities as per CPCB norms.

<sup>43</sup> Class "A" – Drinking water source without conventional treatment but after disinfection;  
Class "B" – Outdoor bathing (organised);  
Class "C" – Drinking water source with conventional treatment followed by disinfection;  
Class "D" – Propagation of wild life, fisheries; and  
Class "E" – Irrigation, Industrial Cooling, Controlled Waste disposal.



KSPCB is the agency responsible for ensuring that all effluents disposed into surface water bodies meet discharge standards, and that surface water bodies meet the water quality criteria for the designated use.

Audit observed that:

- ❖ The Hon'ble High Court of Karnataka in response to Writ Petition No. 817/2008, constituted (November 2010) a High Power Committee to examine the ground reality and for drawing up an Action Plan for preservation of lakes. Accordingly, KSPCB identified 189 lakes in and around Bengaluru Metropolitan Region for monitoring. However, during 2011-12, only 90 lakes were monitored and balance 99 lakes were proposed to be covered subsequently. During 2014-15, 67 lakes were monitored, which mainly conformed to designated best use 'Class E' (lake water being affected by entry of sewage). Thus, KSPCB did not monitor all 189 lakes at any given point of time; and
- ❖ KSPCB used the water quality criteria to rank the water bodies, but, did not adequately implement the concept of designated use<sup>44</sup> of these water bodies by the general public *i.e.*, to warn the public on water quality and suitability of its usage.

### **3.3.5.1 Bellandur and Varthur Lake**

Koramangala and Challaghatta valley (KC valley), Tavarekere-Madivala valley and Agaram valley confluence at Bellandur Lake in Bengaluru and water from Bellandur Lake flows into Varthur Lake. The catchment area of these two lakes is spread over in core area of erstwhile Bommanahalli, Mahadevapura and KR Puram City Municipal Council area and adjoining areas of 110 villages, which were later added (2007) to the Bruhath Bengaluru Mahanagara Palike (BBMP) limit. All these areas were not provided with any Under Ground Drainage facility. Thus, the entire domestic sewage as well as industrial effluents from these areas flow into these two lakes. The Bellandur Lake receives about 480 MLD<sup>45</sup> (230 MLD treated in the KC Valley and the balance 250 MLD untreated) sewage. Both the treated water and the untreated sewage are being let out in the same networks. As a result, the treated water also gets contaminated and remains highly polluted with sewage. This has also resulted in depletion of wildlife<sup>46</sup> in and around the lake. The land around the lake has also become the dumping yard of building waste and industrial waste. The combination of these factors had made Bellandur Lake a cesspool and residents in neighbouring areas complain of odious stench emanating from the lake. The presence of industrial chemicals in the water causes the lake surface

---

<sup>44</sup> "Designated Uses" of lakes include fisheries, fodder, irrigation, recreation, groundwater recharge and biodiversity conservation.

<sup>45</sup> This is about 35 *per cent* of the treated/untreated sewage water of Bruhath Bengaluru Mahanagara Palike.

<sup>46</sup> Kingfishers, parrots, parakeets, wood pigeons, cobras, *etc.*



to froth, catch fire and burn. Formation of foam and its floating in the air in the adjacent areas obstructs traffic and is a severe hazard both for health, as well as traffic safety.

Though Bellandur Lake falls within the BBMP limits, the Government transferred the lake to Bengaluru Development Authority (BDA) for rehabilitation/rejuvenation. BDA completed partial fencing of the lake (at a cost of ₹ 3.31 crore) but did not prepare any comprehensive plan for rejuvenation or rehabilitation of the lake, which was the primary objective for its transfer.

As the deterioration of the lake reached alarming levels, the Government constituted (May 2016) an Expert Committee, under the chairmanship of Additional Chief Secretary to the Government, Urban Development Department, and with members drawn from other civic agencies and experts in the field. The Expert Committee in its report not only highlighted the magnitude of the problem but opined that there was no easy or techno quick-fix solution and that even long term solutions would need a combination of technological and ecological solutions with social process (involvement of local people). The Expert Committee suggested several short term measures (installation of surveillance cameras at the inlet of lakes, surveying and mapping of water bodies and buffer zones, to stop dumping of municipal waste, construction waste and demolition waste) and long term measures (completion of Sewage Treatment Plants, cancellation of allotment of land made by KIADB between Agara lake and Bellandur lake) and recommended to invite an Expression of Interest to obtain proposals for feasible and viable short term solutions.

Subsequently, at the directions (April 2017) of National Green Tribunal (NGT), all industrial units discharging effluents, either treated or untreated and located in the vicinity of Bellandur Lake were closed by the State. KSPCB identified (April 2017) 488 such industrial units in the Bellandur Valley. NGT also directed (April 2017) KSPCB to inventorise all urban centers and industrial units discharging effluents directly to the lakes and to take steps<sup>47</sup> to prevent and control pollution in polluted stretches along with specific Action Plans. It is pertinent to note that these initiatives/actions were the prime mandates of KSPCB, which they failed to achieve.

Snapshots of Bellandur Lake given in **Photograph 3.2 and 3.3** show that a clean lake (1942) transformed into an extremely polluted lake over the years.

---

<sup>47</sup> As per NGT's orders, apart from closing of all the industries, action was to be taken for desilting, as well as removal of municipal solid waste, construction debris and chemicals stored in the lake.

**Photograph 3.2: Bellandur Lake, Bengaluru in 1942 (inlet) and in September 2017**



(Source: Photographs taken from internet)

**Photograph 3.3: Fire and Froth in Bellandur Lake, Bengaluru**



(Source: Photographs taken from internet)

In the Exit Meeting, the Member Secretary opined (August 2017) that it would be better to have Centralised Sewage Treatment Plant instead of individual Sewage Treatment Plants for apartments and industrial units situated around these lakes. However, final decision was not taken by KSPCB in this regard (November 2017).

### 3.3.6 Issues relating to Groundwater Pollution

The Department of Mines and Geology (DMG) monitors the quality of groundwater by testing samples of water collected from dug wells and bore wells, while KSPCB is tasked with the responsibility for the prevention, control or abatement of discharges of waste into streams or wells. Groundwater quality comprises of the physical, chemical and biological qualities of groundwater.

Scrutiny of records revealed that:

- ❖ Water results obtained from analysis of 1,167 groundwater samples from observation wells of DMG in the State during 2014-15 showed excessive fluoride in 93 samples (8 per cent) and excessive nitrate in 271 samples (23.2 per cent). Hardness was found in 111 samples (9.5 per cent) and iron in 136 samples (11.6 per cent) above the permissible limits specified in 'Indian Standard Drinking Water Specification IS 10500:2012'. As per specification, nitrate concentration greater than 45 ppm is unfit for domestic purposes, and hardness in groundwater causes encrustation<sup>48</sup> in water supply system and has adverse effect on domestic use. The excess iron in the water favours the growth of iron bacteria such as *crenotherix*, supports rusting and its consumption for long duration may lead to *haemochromotosis*<sup>49</sup>. Thus, groundwater quality remained adversely affected in the State due to presence of pollutants in excess of permissible limits.
- ❖ The study by DMG (2010) under 'World Bank Aid to evaluate the groundwater quality in and around Bengaluru city' revealed that 31 per cent of groundwater in the study area was polluted by various constituents and was not fit for human consumption. The constituents in 60 per cent of groundwater were within the permissible limits though not in the desirable limits and the remaining nine per cent only was safe for drinking. The study attributed the pollution to anthropological activities.

The study underlined the need for taking up detailed study to find out the source of contamination and advised for steps to be taken to control the contamination by restricting the entry itself.

- ❖ In one instance, Audit observed that M/s Pepsico India Limited (industry), under the Jurisdiction of Regional Office, Nelamangala, Bengaluru Rural District, was engaged in the production (since June 1997) of bottled drinking water in addition to the soft drinks (beverages). The industry approximately consumes 17.95 lakh KL of water per day sourced from six bore wells located within its premises. The Regional Officer,

<sup>48</sup> A crust or hard coating on the surface of something.

<sup>49</sup> Increase of iron levels in the body.

Nelamangala, reported (September 2016) to the Groundwater Authority that the industry was located in Tippa Gondanahalli Reservoir Catchment Area where over-exploitation of the groundwater was restricted. Further, it was reported that the industry did not explore the alternative measures for groundwater recharge. Despite the adverse report the Consent for Operation was renewed (September 2016) by KSPCB.

Though monitoring of groundwater quality in and around significant waste water generating industrial units and important industrial areas was the responsibility of KSPCB, it did not take effective measures for abating groundwater pollution.

### **3.3.7 Non-utilisation of treated water**

In order to conserve fresh water and to reduce the demand for potable water, Bengaluru Water Supply and Sewerage Board (BWSSB) set up (2003-05) four Tertiary Treated Sewage Plants with an installed capacity of 73 MLD of treated water. BWSSB was to identify potential buyers for use of treated water in the industrial units, garden irrigation *etc.*, to reduce overall water consumption and to recover the cost of operating the plants.

However, only 10 MLD out of 19 MLD of the treated water was being utilised for industrial use, horticulture and construction activities, while the remaining nine MLD was discharged directly to lakes or to the drains. There was no enforcement by KSPCB to ensure use of treated water, which was otherwise a scarce resource.

### **3.3.8 Continuation of unauthorised Slaughter Houses**

Slaughter houses and meat producing units consume huge quantity of water for their operation. Due to high potential of contamination of groundwater on account of release of pollutants, they are classified under Red category units. Standards for discharge of effluents from slaughter houses were notified under the Environment (Protection) Act, 1986, and it is mandatory to obtain license for their operation. The license is valid for a one-year period and is renewed every year subject to fulfilling certain conditions. The slaughter houses are also governed by Prevention of Cruelty to Animals (Slaughter Houses) Rules, 2001. Central Pollution Control Board has framed guidelines for slaughter houses and also its location.

Slaughter house at Tannery Road, Bengaluru, was established in 1920 and operated by Bruhath Bengaluru Mahanagara Palike, which is situated in the core residential area. On an average, about 800 small animals<sup>50</sup> and 200 large animals are being slaughtered on normal day and goes upto 5,000 small animals and 800-1,000 large animals during festival seasons/holidays. Since

---

<sup>50</sup> Hens, Sheep and Goat.

the slaughter house was not maintaining the Effluent Treatment Plant and was discharging the trade effluents to Under Ground Drainage and adjacent storm water drain, KSPCB did not renew consent for operation from July 2009. Despite denial of consent by KSPCB, the slaughter house continued to function polluting the environment and KSPCB issued periodical notices listing out the violations. Though Section 33A of Water Act, empowers KSPCB to issue closure order, the same was not exercised, indicating leniency in enforcing its statutory duties.

Audit scrutiny also revealed that KSPCB did not have a list of slaughter houses operating in the State, which also might have compromised the enforcement in this regard.

### 3.3.9 Air Pollution

Substances that are generally recognised as air pollutants include Suspended Particulate Matters (SPM), Respirable Suspended Particulate Matter (RSPM), Sulphur Dioxide (SO<sub>2</sub>), Nitric Oxide (NO<sub>2</sub>), Carbon Monoxide (CO) and Dioxide (CO<sub>2</sub>), Methane (NH<sub>3</sub>) and Ozone (O<sub>3</sub>) depleting substances such as Chlorofluorocarbons (CFC). Increase in the incidence of respiratory illness including *asthma*, *bronchitis* and *emphysema* and possible cancer of the respiratory organs can be attributed to high air pollution. KSPCB is the designated authority for enforcement of the provisions of the Air Act by making comprehensive programme for prevention and control of air pollution in the State and to advise the State Government on any matter pertaining thereof.

KSPCB, however, did not prepare a comprehensive plan as of November 2017 for improving air quality in the State and especially in Bengaluru Metropolitan Region (BMR).

#### 3.3.9.1 Air quality below the National Ambient Air Quality Standard

Central Pollution Control Board (CPCB) mandated (November 2009) State Pollution Control Boards to follow National Ambient Air Quality Standards (NAAQS)<sup>51</sup>. RSPM level is the indicator of air pollution. KSPCB installed air quality monitors at 34 locations {including two Continuous Ambient Air Quality Monitoring Stations in Bengaluru Metropolitan Region} in 19 Districts of Karnataka.

<sup>51</sup> The Air Act identifies two types of national ambient air quality standards. *Primary standards* provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. *Secondary standards* provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.



In the following locations, the annual average value of Respirable Suspended Particulate Matter exceeded the national ambient air quality standard ( $60 \mu\text{g}/\text{m}^3$ ) by three folds during 2013-16, which is shown in **Table 3.6**:

**Table 3.6: Annual average value of Respirable Suspended Particulate Matter**

SI No.	Location	2013-14	2014-15	2015-16
1	Karnataka Housing Board Industrial Area, Yelahanka, Bengaluru	128	121	109
2	AMCO Batteries, Mysuru Road, Bengaluru	170	209	119
3	Central Silk Board, Bengaluru	175	189	165
4	Mothi Talkies, Davanagere	147	167	216

(Source: Annual Reports of KSPCB)

Ambient Air quality at Tumakuru, Hubballi, Kalaburagi and Raichur locations was also above the prescribed safe standards ( $60 \mu\text{g}/\text{m}^3$ ).

The Air Act mandates KSPCB to advise the State Government for prevention, control or abatement for air pollution. Audit scrutiny revealed that advice to control pollution was confined to Bengaluru Metropolitan Region only, even though steady deterioration in air quality was observed in other districts also.

### **3.3.10 Inadequate action against highly polluting industrial units**

Ministry of Environment and Forest (MoEF) identified (January 1991) 17 type of industries categorized as highly polluting, which were discharging environmental pollutants directly or indirectly into the ambient air and water. Accordingly, KSPCB identified (March 2016) 243 industrial units under this category, out of which, one was closed (November 2016) by KSPCB and the remaining 242 industrial units were operating. Of these, 33 industrial units were not complying with any pollution control norms. However, no action<sup>52</sup> as envisaged under Sections 33A of Water Act and 31A of Air Act was taken by KSPCB. Reasons for non-enforcement were not available on record.

Further, in respect of 143 industrial units, Central Pollution Control Board directed (February 2014) to install and commission online monitoring system to check the emission and effluents generated by them. It was noticed that 14 industrial units out of 143 industrial units so identified, involved in processing of sugar, sugar and co-gen, thermal power, drugs and pharmaceutical and distillery had not installed online monitoring system as of August 2017. KSPCB did not take any action<sup>53</sup> against these industrial units resulting in non-monitoring of the emission from these units.

<sup>52</sup> (a) The closure, prohibition or regulation of any industry, operation or process; or (b) the stoppage or regulation of supply of electricity, water or any other service.

<sup>53</sup> Under Sections 33A of Water Act and 31A of Air Act.



### 3.3.11 Management of Bio-Medical Waste

Bio-Medical Waste (BMW) is the waste generated by hospitals and other Health Care Establishments (HCEs) and consists of discarded drugs, waste sharps, microbiological and biological waste, human/animal anatomical waste, etc. HCEs generate three types of wastes, namely municipal solid waste, infectious waste and liquid waste.

With a view to controlling indiscriminate disposal of wastes generated at HCEs, Government of India enacted (March 2016) Bio-Medical Waste Management Rules, 2016 (BMW Rules), under the Environment (Protection) Act 1986, in supersession of the Bio-Medical Waste (Management and Handling) Rules, 1998. As per the provisions of the Act, it is the duty of every HCE generating BMW to take all steps to ensure that such waste is handled without any adverse effect to the human health and environment. The infectious wastes are required to be collected, transported, treated and disposed of in accordance with the norms laid under the BMW Rules. KSPCB is the designated authority for enforcement of the provisions of these Rules and for according permission for generation, collection, reception, storage, transportation, treatment, disposal and/or any other form of handling of BMW.

As per Rule 7(3) of the BMW Rules, no occupier shall establish on-site treatment and disposal facility, if a service of Common Bio-Medical Waste Treatment Facility (CBMWTF) is available within a distance of 75 km. Where distance exceeds 75 kms, the occupier shall set up requisite bio-medical waste treatment equipment with prior authorisation from the competent authority. Disposal by deep burial is permitted only in rural or remote areas where no access to CBMWTF is available.

As per KSPCB Annual Report of 2016, 26,724 Health Care Establishments (HCEs) were operating in the State, out of which, 23,251 HCEs were either covered by CBMWTF, on-site treatment or deep burial. KSPCB does not have details of the mode of treatment and disposal of BMW for the balance 3,473 (13 per cent) HCEs. Hence, disposal of a significant portion of the Bio-Medical Waste using unscientific methods cannot be ruled out.

Scrutiny of records in seven test-checked Regional Offices<sup>54</sup> of Bengaluru East and Bengaluru North Zone revealed that though CBMWTF was designated by KSPCB, 899 HCEs (out of 2,644 HCEs) were not utilising the facility and the possibility of unscientific method of disposal by these HCEs cannot be ruled out.

<sup>54</sup> Mahadevapura, Hoskote, Kolar, Chikkaballapura, Doddaballapura, Yelahanka and Nelamangala.

Further, Central Pollution Control Board guidelines envisage that KSPCB should ensure that one CBMWTF cater to a maximum of 10,000 beds. In following four Districts, each CBMWTF operator was catering to beds in excess of the permissible limit as depicted in **Table 3.7:**

**Table 3.7: Statement showing CBMWTF catering to more beds than permissible limit**

Sl. No.	District	Number of beds catered to by each CBMWTF operator
1	Bengaluru Rural	19,826
2	Ramanagara	14,839
3	Bengaluru City	16,170
4	Mangaluru	12,710

(Source: Information furnished by KSPCB)

The limit was fixed with the intention of scientific and proper disposal of Bio-Medical Waste and permitting the operators to operate in excess of permissible limit was not only irregular but also give a scope for suspecting the appropriateness of treatment and disposal.

Further audit analysis in test-checked Regional Offices of Belagavi and Mangalore revealed inadequate capacity on part of engaged agency to be able to cater to the requirement of disposing Bio-Medical Waste being generated by Health Care Establishments of these districts. Details are given in **Box 3.2.**

In the Exit Meeting, the Member Secretary agreed (August 2017) with the audit observations and stated that unscientific disposal of Bio-Medical Waste was an area of grave concern and that this would be looked into on a priority basis.

**Box 3.2****Issues relating to operation and performance of common bio-medical treatment facility**

KSPCB norms for approval to Common Bio-Medical Waste Treatment facility is as under:

Average BMW generated per day per bed	600 grams
Occupancy rate of beds	60 per cent
Period allowed to treat collected BMW Waste	48 hours
Incinerable waste	60 per cent of BMW

- ❖ M/s Association of Medical Establishment, Belagavi, (CBMWTF) with an incineration capacity of 50 kg per hour was facilitating the disposal of Bio-Medical Waste generated from 1,315 Health Care Establishments in Belagavi district, having a cumulative capacity of 4,291 beds.

On an average, if the Common Bio-Medical Waste Treatment Facility collects Bio-Medical Waste as per norms mentioned aforesaid, the cumulative waste generated and ideally be incinerated, would work out to 927 kg per day (4,291 beds × 60 per cent × 600 grams per day × 60 per cent).

A further scrutiny of reports of the inspections undertaken by the Regional Office revealed that the actual BMW collected and stated to be incinerated was only 610 kg per day, which was way below the yardstick fixed by KSPCB. Multiple Inspection Reports also pointed out that the facility was not in operation during many times and that the waste was getting accumulated beyond the stipulated 48 hours. The Common Bio-Medical Waste Treatment Facility was also stated to be not adhering to the timelines and to the temperatures specified for treatment of Bio-Medical Waste.

This indicated that the KSPCB did not ensure whether the Common Bio-Medical Waste Treatment Facility was fully equipped to handle such quantum of waste as being generated. They also did not ascertain whether the quantity stated to be lifted and treated were in line with the waste actually generated by the Health Care Establishments. In the absence of such critical information, the possibility of unscientific disposal of Bio-Medical Waste cannot be ruled out.

- ❖ There were 1,128 Health Care Establishments in Mangalore District and M/s Ramky Energy and Environment Limited, Mulky, Mangaluru, was the sole Common Bio-Medical Waste Treatment Facility service provider. As per the returns filed by the service provider, only 576 Health Care Establishments were utilising the Common Bio-Medical Waste Treatment Facility. Manner of disposal by 552 Health Care Establishments was not available on records and KSPCB did not investigate the manner of Bio-Medical Waste disposal by these Health Care Establishments. Even assuming, conservatively, that each of these HCEs has only one bed, the quantum of Bio-Medical Waste generated per day worked out to 331 kg per day (552 beds × 600 grams). The details of actual waste generated was not furnished by KSPCB. Under the circumstances, unscientific manner of disposal of Bio-Medical Waste cannot be ruled out.

Since the objective of scientific disposal of Bio-Medical Waste was to control the spread of infectious diseases, the objective was defeated as KSPCB did not ensure providing common facility for all the Health Care Establishments.

### 3.3.11.1 Absence of Common Facility

Common Bio-Medical Waste Treatment Facility (CBMWTF) was not commissioned in five districts, namely Mandya, Chamarajanagar, Kodagu, Tumakuru and Chikkamagalur, and KSPCB authorised HCEs in these districts to avail common facility in the adjacent districts for bio-medical disposal. Though KSPCB had authorised CBMWTF of other districts to collect the Bio-Medical Waste, it apprehended that the waste might not be collected at the required frequency. Despite these apprehensions, KSPCB did not initiate action (as of March 2017) to establish CBMWTF in these five Districts.

### 3.3.12 Non-conduct of research studies

Section 17 of Water Act, prescribes that Pollution Control Boards (PCBs) shall encourage, conduct and participate in investigations and research relating to prevention, control or abatement of pollution. Scrutiny of Annual Accounts of KSPCB revealed that despite having surplus funds ranging between ₹ 456.20 crore and ₹ 654.44 crore during 2012-13 to 2016-17, KSPCB did not take any initiative to undertake research activities relating to pollution mitigation measures so as to advice the Government suitably, based on the research/study findings.

### 3.3.13 Inadequate manpower

Adequate manpower was the prerequisite for effective functioning of an organisation and especially for a regulatory authority to carry out its mandate. The manpower position in KSPCB as on October 2010 was only 225 against the sanctioned strength of 547. The sanctioned strength was increased to 700 in October 2010 and consequently, vacancy position increased to 475. However, KSPCB called for (October 2010) applications for filling up posts of only 153 posts against vacancy of 475 posts. The vacancy position at the end of March 2017 are given in **Table 3.8**:

**Table 3.8: Statement showing vacancy in different cadres**

Sl No.	Category	Sanctioned strength	Working strength	Shortage	Percentage of shortage
1	Chief Environmental Officer, Senior/Deputy/Assistant Environmental Officer	267	163	104	39
2	Scientific and Field Assistants	142	59	83	58
3	Non-technical posts	291	118	173	59
<b>Total</b>		<b>700</b>	<b>340</b>	<b>360</b>	<b>51</b>

(Source: Information furnished by KSPCB)

- ❖ The action of KSPCB to fill up 153 posts (32 per cent of the vacancy) was inadequate and defeated the very purpose of undertaking an upward revision of sanctioned strength.

- ❖ The staff composition of Regional Offices showed that each Regional Office had only one Environmental Officer (EO), one Deputy Environmental Officer (DEO), 1-2 Assistant Environmental Officers (AEO) and meager support staff. KSPCB had not undertaken any scientific assessment of the requirements of technical and scientific staff, as the allocation of staff *vis-a-vis* industrial units among the Regional Offices, was uneven.

A table showing the zone-wise number of Industrial units, Red category industrial units among them and monitoring officers assigned thereto illustrating the discrepancy in allocation is shown in **Table 3.9**:

**Table 3.9: Discrepancy in allocation of technical staff**

Sl No.	Zonal Office	Total number of units	Red Category units	Staff Strength			
				EO	DEO	AEO	Total
1	Bengaluru East	1,007	400	4	3	9	16
2	Bengaluru City	747	259	4	4	12	20
3	Ballari	924	566	6	6	18	30
4	Dharwad	1,673	1,155	7	5	19	31

(Source: Information furnished by KSPCB)

As depicted above, Zonal Office, Bengaluru East, had 16 Officers for 400 Red category industrial units while Bengaluru City had 20 officers for 259 such industrial units. Similarly, Ballari had 30 officers for 566 Red category industrial units whereas Dharwad had only 31 officers for 1,155 such industrial units.

The Member Secretary in the Exit Meeting acknowledged (August 2017) that huge vacancies existed and that improvement in the staff strength would lead to better functioning of KSPCB.

**It is recommended that the Government should strengthen the institutional capacity of KSPCB by providing adequate technical and scientific staff to fulfill its mandate.**

### **3.3.14 Shortfall in inspections of industrial units/organisation**

The industrial units are classified into Red, Orange and Green categories, based on the degree of pollution they create. The frequency of inspection of industrial units prescribed (December 1999) by MoEF in Red (highly polluting), Orange (moderately polluting) and Green (least polluting) category is shown in **Table 3.10**:

**Table 3.10: Frequency of inspections**

SI No.	Category	Small Scale Industry	Large and Medium Industry
1	Red	Once in a year	At least once in three months
2	Orange	Once in three years	At least once in six months
3	Green	Once in three years	At least once in one year

(Source: Schedule IV of Notification dated December 1999)

- ❖ While prescribing the frequency, Ministry of Environment and Forests, also permitted the State Pollution Control Boards to improve upon the frequency as deemed necessary. However, on account of the shortage of manpower, KSPCB reduced (November 2002) the frequency of inspections for Orange and Green category industrial units as shown in **Table 3.11:**

**Table 3.11: Reduction in number of inspections**

SI No.	Category	Small Scale Industry	Large and Medium Industry
1	Orange	Once in three years	Once in a year
2	Green	Once in five years	Once in two years (random check)

(Source: Information furnished by KSPCB)

The frequency of inspections was not revised despite recruitment of staff done during October 2010, as pointed out in **Paragraph 3.3.13.**

- ❖ KSPCB's inventory of Red, Orange and Green categories of industrial units/organisations did not have information on the number of small, medium and large industrial units/organisations. Hence, the shortfall, if any, in the number of inspections to be undertaken by KSPCB for each category could not be assessed in audit. On a conservative basis, even if the units were considered as small category (*i.e.*, with lesser frequency of inspection), there was a shortfall in inspections stated to have been conducted during the period 2012-13 to 2016-17 as detailed in **Table 3.12:**

**Table 3.12: Shortfall in inspection of industrial units/organisations**

SI No.	Year	Number of organisations				Expected number of inspections at reduced rate for small scale industrial units				Actual number of inspections	Shortfall (per cent)
		Red	Orange	Green	Total	Red	Orange	Green	Total		
1	2012-13	25458	3724	24064	53246	25458	1241	4813	31512	17986	13526 (42.92)
2	2013-14	28233	5071	29391	62695	28233	1690	5878	35801	20268	15533 (43.39)
3	2014-15	29744	7990	27109	64843	29744	2663	5422	37829	22192	15637 (41.34)
4	2015-16	38083	8259	28452	74794	38083	2753	5690	46526	23680	22846 (49.10)
5	2016-17	Figures not made available till November 2017									
<b>Total</b>		<b>121518</b>	<b>25044</b>	<b>109016</b>	<b>255578</b>	<b>121518</b>	<b>8347</b>	<b>21803</b>	<b>151668</b>	<b>84126</b>	<b>67542 (44.53)</b>

(Source: Annual Reports of KSPCB)



The shortfall in the number of inspections ranged from 41.34 *per cent* to 49.10 *per cent* during 2012-13 to 2015-16. Any shortfall in assessing compliance dilutes enforcement for ensuring compliance by the industrial units with the standards prescribed. Scrutiny of Analysis Reports in Central Environmental Laboratory, Bengaluru, revealed that out of 736 samples in respect of five test-checked Regional Offices, 493 samples (66 *per cent*) did not conform to the prescribed standards. Thus, the shortfall in inspections of industrial units assumes significance.

In the Exit Meeting, the Member Secretary assured (August 2017) that mechanism would be evolved in getting authentic test reports from the industries. The reply does not address to the issue highlighted in audit *i.e.*, about inadequate inspections and non-scrutiny of the analysis reports by KSPCB.

### 3.3.15 Inadequate monitoring

As per Rule 14 of the Environment (Protection) Rules, 1986, every person carrying on an industry, operation or process and has obtained consent under respective Acts should submit annually an Environmental Audit Report (EAR) in prescribed form, which gives the status of compliance level by the industrial units/organisations and is thus, an invaluable document for State Pollution Control Boards for checking compliance level and taking appropriate action.

Audit scrutiny revealed that more than 95 *per cent* of industrial units were not submitting EARs. Details are shown in **Table 3.13**:

**Table 3.13: Shortfall in submission of Environmental Audit Report by Industrial units**

Sl No.	Year	Number of industrial units	EARs actually submitted	Percentage of non-compliance
1	2012-13	53,246	2,232	96
2	2013-14	62,695	2,400	96
3	2014-15	64,843	2,505	96
4	2015-16	74,794	2,445	97
5	2016-17	Figures not made available till November 2017		

(Source: Annual Reports of KSPCB)

KSPCB did not pursue submission of Environmental Audit Reports despite large number of industrial units not complying with the norms. Failure to pursue submission of EAR indicated laxity in monitoring and weak internal control as intended mechanism for ensuring better compliance levels was not ensured.

### **3.3.16 Submission of reports by industrial units from non-accredited laboratories**

Under Section 12 of the Environment (Protection) Act, 1986, the Central Government shall establish or recognise one or more environmental laboratories to carry out the functions entrusted to an environmental laboratory under the said Act.

Further, as per Paragraph 4.1 of the guidelines for recognition of Environmental laboratories under the Environment (Protection) Act, 1986, prepared by Central Pollution Control Board in consultation with the Ministry of Environment, Forests and Climate Change, an industry may hire agencies accredited by National Accreditation Board for Testing and Calibration Laboratories (NABL) for test-check of environmental parameters.

Audit noticed that the industrial units were submitting test reports of various environment related parameters through third party agencies (laboratories<sup>55</sup>), whose accreditation had expired. Acceptance of the test reports from these laboratories by KSPCB without verifying their authenticity was irregular.

### **3.3.17 Conclusion**

Karnataka State Pollution Control Board did not maintain inventory of polluting sources and loads to aid a comprehensive plan for prevention, control and abatement of pollution. There was inadequate mechanism in place to track renewal or expiry of consents granted to industrial units. Consent for establishment and operations to Red and Orange industrial units were granted without mandatory inspections. Frequency of inspections in respect of Orange and Green category of industrial units were less due to shortage of manpower. Requirement of Sewage Treatment Plants in the State was not assessed by KSPCB. Action to prevent entry of untreated sewage to lakes was not taken. Ambient air quality checks in five districts showed presence of particulates/noxious gases above the prescribed safe standards. Possibility of unscientific method of disposal of bio-medical waste cannot be ruled out as 899 Health Care Establishments were not utilising designated Common Bio-medical Waste Treatment Facility notified by KSPCB.

The matter was referred to the Government in August 2017; their reply was awaited (November 2017).

---

<sup>55</sup> M/s Eco Green Solution Systems, Doddaballapura, M/s Prasad Enviro Labs Private Limited, Bengaluru and M/s Geological and Metallurgical Laboratories, Goreguntapalya, Bengaluru.

### 3.4 Compensation payment due to Departmental lapses

**Out of ₹ 24.93 crore paid as compensation to an agency, ₹ 20.59 crore was avoidable owing to poor defence in arbitration court and avoidable appeals in higher courts.**

Karnataka Forest Department (KFD) sought (July 1998) *post-facto* approval from Government of India for diversion of forest area for leasing of a tourist complex within the forest area to M/s Gateway Hotels and Gateway Resorts Limited, which was renovated by the lessee. Government of India rejected (November 1999) the proposal on the ground that there was no justification for such tourist complex within the core of the Nagarahole National Park area. Government of Karnataka cancelled (2002) the lease agreement by forfeiting the security deposit (₹ 5.00 lakh) and lease rent (₹ 47.39 lakh) paid by the lessee. Aggrieved by this, the lessee approached (2005) District Court of Madikeri, which directed both the parties to settle the dispute through arbitration. The lessee preferred (April 2006) a claim for ₹ 21.66 crore *plus* annual interest at 24 *per cent*. The Arbitrator held KFD responsible for cancellation of the project and passed (April 2009) the award in favour of lessee for payment of ₹ 10.02 crore (inclusive of the amount forfeited) with 10 *per cent* interest from the date of cancellation of the lease agreement. The award was challenged in various courts, which was dismissed by all the courts and ultimately KFD paid (September 2016 and January 2017) ₹ 24.93 crore<sup>56</sup>.

Scrutiny (August 2016) of records of the Conservator of Forests and Field Director, Rajiv Gandhi National Park<sup>57</sup>, Hunsur, revealed that the extra compensation amounting to ₹ 20.59 crore had to be given because of department's lapses and delays in settling the matter as discussed below:

- ❖ The Government Order (July 1992) forming part of the lease agreement, which approved the lease of the tourist complex, estimated that the lessee needed to spend ₹ 1.20 crore for completing the balance works of renovation to make the tourist complex operational. Against this, the lessee claimed refund of ₹ 9.70 crore<sup>58</sup> *plus* 24 *per cent* interest during arbitration. The quantum of amount stated to have been spent by the lessee was not disputed by KFD though there had been an upper ceiling of ₹ 1.20 crore as per the Government Order. Therefore, the Arbitrator allowed recoupment of ₹ 9.50 crore on the ground that the lessee had spent such an amount. Since the liability of KFD was limited to ₹ 1.20 crore only, the reasons for not bringing this crucial and material factor before the Arbitrator in order to reduce financial implications were not on record. Principal Chief Conservator of Forest (Head of Forest

<sup>56</sup> ₹ 10.02 crore *plus* interest of ₹ 14.28 crore (from July 2002 to September 2016) *plus* stamp duty of ₹ 0.60 crore *plus* cost of award - ₹ 0.03 crore.

<sup>57</sup> Earlier known as Nagarahole National Park.

<sup>58</sup> Expenditure of ₹ 7.00 crore and ₹ 2.70 crore towards interest on the amount spent.

Force) did not reply to a specific query (February 2017) as to whether the lessee had sought prior approval for increase in the expenditure limit of ₹ 1.20 crore and whether the same was approved by the Department.

The compensation admissible considering the stipulated cost of ₹ 1.20 crore *plus* interest on the amount spent, forfeited amounts and 10 *per cent* interest on the claims as allowed by the Arbitrator would have worked out to ₹ 4.34 crore<sup>59</sup>.

- ❖ KFD preferred (August 2009) petition against the Award under Section 34<sup>60</sup> of the Arbitration and Conciliation Act, 1996 (Act), in the District Court. The award was challenged on the ground of *Force Majeure*<sup>61</sup>. This ground was not applicable in this case and also not covered under Section 34 (2) of the Arbitration Act (*i.e.* cases fit for appeal in a Court against Arbitration Award). The Court dismissed the petition as there were “absolutely no grounds to set aside the award”. An appeal preferred in the High Court under the same Section 34 was also dismissed (April 2015). The Advocate General of Karnataka opined (June 2015) that the award was not a fit case for appeal. Contrary to the opinion, an appeal was preferred in the Supreme Court, which ultimately dismissed (August 2015) the case. The entire process took more than seven years (2009 to 2016) which resulted in increase in financial burden by ₹ 7.26 crore on account of additional interest.

Thus, out of ₹ 24.93 crore paid to lessee towards compensation, ₹ 20.59 crore<sup>62</sup> was avoidable.

In reply, the Government stated (May 2017) that all legal departments were consulted at every stage to ascertain the merit of the case and preferred the appeals. The Government also stated that appeal against the award cannot be unilaterally decided by the Department and correspondence with various government forums was inevitable.

---

<sup>59</sup> Considering expenditure of ₹ 1.20 crore *plus* proportionate interest on the amount spent (₹ 0.46 crore) *plus* forfeited amount (₹ 0.52 crore) *plus* interest on the above for seven years (₹ 1.53 crore) *plus* cost of award (₹ 0.03 crore) *plus* stamp duty (₹ 0.60 crore). Three months from April 2009 were allowed for arranging arbitral payment.

<sup>60</sup> Section 34 of Arbitration and Conciliation Act, 1996, specifies the time limit for filing applications to set aside arbitral award as three months which can be extended by thirty days if the court is satisfied that the applicant was prevented by sufficient cause from making the application.

<sup>61</sup> *Force majeure* shall mean and include outbreak of war hostility (whether war is declared or not), acts of foreign enemies, riots, earthquakes, tree accidents, floods, civil commotion, invasions, insurrection or any other similar cause beyond the control of the parties hereto and which in spite of exercise of due diligence neither party is able to overcome to enable it to fulfil its obligations under this agreement.

<sup>62</sup> ₹ 24.93 crore - ₹ 4.34 crore = ₹ 20.59 crore.

However, it was clear that:

- (i) the KFD did not contest the claims of M/s Gateway Hotels and Gateway Resorts Limited that it spent ₹ 7.00 crore despite the fact that it was to spend only ₹ 1.20 crore for renovation as per terms of initial lease; and
- (ii) KFD ignored the negative opinion of Advocate General and preferred appeals in higher courts, which were ultimately rejected. Resultantly, the liability on account of interest increased considerably.

## Public Works, Ports and Inland Water Transport Department

### 3.5 Injudicious utilisation of funds

**Funds of ₹ 105.44 crore allocated for State Highways were utilised for improvement of roads, which were notified as National Highways, which could have been utilised for other State roads as responsibility of development and maintenance of National Highways rest with the Government of India.**

National Highways Act, 1956, specifies<sup>63</sup> that any Highway notified in the official gazette by the Government of India (GoI) shall be deemed to be National Highways (NH) from the date of publication of the notification. Further, the Act states<sup>64</sup> that the responsibility for development and maintenance of the NH vests with the GoI.

Scrutiny (December 2016) of records of the Office of the Executive Engineers (EE), Public Works, Ports and Inland Water Transport (PWD) Divisions, Koppal and Raichur revealed that Ministry of Road Transport and Highway, GoI declared (March 2014) two<sup>65</sup> State Roads as NH. Chief Engineer (CE), NH, Bengaluru, requested (March 2014) EEs to furnish the details of these roads for inclusion in the Action Plan of his office for 2014-15. The details sought by CE, NH, from EEs *inter alia* included condition of the roads, crust details, details of on-going works, defect liability period for already completed works, proposed projects *etc.* CE, NH, issued (August 2014, October 2014) reminders to hand over these roads to NH.

EEs did not furnish the details or transfer the roads to CE, NH, but took up reconstruction and improvement works on some reaches of the roads declared as NH after the date of notification on the ground that they were approved budgeted works of 2013-14. However, budget provision of 2013-14 earmarked for these works could not be utilised as the process of awarding of contracts was not completed during that financial year. The contracts were

<sup>63</sup> Section 2 of the NH Act, 1956.

<sup>64</sup> Section 5 of the NH Act, 1956.

<sup>65</sup> Srirangapatna – Jewargi Road (SH 19) and Chikkaheisarur – Mudagal – Mundargi Road (SH 129).

awarded during 2014-15 and 2015-16 and the details of entrustment, expenditure are given in the **Table 3.14**:

**Table 3.14: Details of tender and entrustment of the works**

(₹ in crore)

Sl No.	Name of the work	Tender Notification date	Agreement date	Tender cost	Upto date payment
1	Koppal Division: Improvements and Asphaltting to SH 129 – Chikkahesarur – Mudagal – Mundargi km 112.00 to 139.92	09.07.2014	27.11.2014	17.55	17.78 (March 2017)
2	Koppal Division: Improvements and Asphaltting to SH 129 – Chikkahesarur – Mudagal – Mundargi km 95.20 to 102.00	27.04.2015	05.10.2015	3.71	3.90 (March 2017)
3	Koppal Division: Improvements and Asphaltting to SH 129 – Chikkahesarur – Mudagal – Mundargi km 102.00 to 104.00 and 108.00 to 111.00	27.04.2015	28.10.2015	3.47	3.47 (September 2016)
4	Koppal Division: Improvements and Asphaltting to SH 129 – Chikkahesarur – Mudagal – Mundargi km 88.00 to 102.00	04.02.2014	20.05.2014	3.15	3.14 (March 2016)
5	Raichur Division: Improvements to SH 19 –Srirangapatna – Jewargi Road km 425.45 to 473.64	24.02.2014	26.07.2014	77.82	77.15 (August 2017)
<b>Total</b>				<b>105.70</b>	<b>105.44</b>

(Source: Information furnished by the Divisions)

The State exchequer was, therefore, burdened with expenditure of ₹ 105.44 crore, which was avoidable for the reasons given below:

- i) As per NH Act, jurisdiction of the State Government ceases once the road gets upgraded as NH and development and maintenance of NH road vests with GoI. CE, NH, reminded EEs to hand over the roads for inclusion in the Action Plan of his Office. The Superintending Engineer and CE of PWD did not ensure transfer of road to NH and also allocated funds for execution of these works. Thus, incurring expenditure from State funds after March 2014 was avoidable;
- ii) The contention that these works could not be left unexecuted as they were budgeted works was not tenable as even the tender process was not completed during 2013-14. Taking up the works in subsequent years was improper as these were neither sanctioned as fresh works nor ongoing works to provide funds in the subsequent years. Thus, these works were devoid of sanction; and



- iii) The improvement work at Sl. No. 5 of Table 3.14 was sanctioned for a length of 48.19 km with widening upto 7 mtr. However, on the pretext of meeting NH standards, the carriage way width was increased from 7.00 mtr to 10.00 mtr, which involved execution of additional quantities. To keep the expenditure within tender cost, the scope of work was restricted to 31.15 km and the balance length of 17.04 km (km 456.600 to 473.640) including carriageway was excluded though the road condition was bad. The unjustified modification only resulted in keeping length of 17 km in bad condition and legislative sanction was also violated as it had provided funds for improvement of 48.19 km against 31.15 km undertaken.

Thus, execution, without sanction, for improvement and reconstruction works on the roads declared as NH, resulted in burdening the State exchequer of ₹ 105.44 crore, which could have been utilised for other State roads.

The matter was referred to the Government in March 2017 and reminded in July 2017 and August 2017; their reply was awaited (November 2017).

### **3.6 Short-collection of registration and renewal fee from contractors**

**Revised fee for registration of contractors and renewal of registration prescribed in the Karnataka Public Works Departmental Code was not effected resulting in short-recovery of ₹ 18.31 crore.**

Contractors desirous of executing works in Karnataka Public Works, Ports and Inland Water Transport Department (KPWD) should register themselves with the Department. The contractors are categorised based on the cost of work for which, they are qualified to execute. Class I contractors, who are qualified to tender for all works and Class II contractors, who are qualified for works upto ₹ five crore are registered by the Chief Engineer (CE) and Class III contractors who are qualified for works upto ₹ two crore are registered by the Superintending Engineers (SEs). The registration is valid for five years and may be renewed for a further period of five years, on application for renewal of registration along with the prescribed fee. The revised rates and pre-revised rates are mentioned in **Table 3.15**.

The Government Order<sup>66</sup> (GO) dated 27 October 1994, which prescribed fees for registration and renewal of registration, was superseded by the Karnataka Public Works Departmental Code (Revised) which came into effect from 24 June 2014. The revised rates of registration and renewal fee indicated in **Tables 3.15 and 3.16** are contained in Paragraph 254 and 256 of the revised Code.

<sup>66</sup> PWD 195 CRM 91.

Scrutiny of records at the Offices of CE, Communication and Buildings (C&B) (South), Bengaluru, CE, C&B (North) Dharwad and SE, KPWD, Mysuru Circle, Mysuru, revealed that the authorities continued to collect the fee for registration or renewal during July 2014 to November 2016 on the basis of pre-revised rates as per the GO dated 27 October 1994, as detailed below:

- ❖ Non-collection of revised fee for registration of Class I, II and III contractors resulted in short-collection of fee of ₹ 7.14 crore as detailed in **Table 3.15:**

**Table 3.15: Short-collection of registration fee**

SI No.	Class of contractor	Revised fee (₹)	Old rates i.e., fee collected (₹)	Difference (₹)	Number of contractors	Short-collection of fee (₹ in crore)
1	Class I	10,000	1,000	9,000	4,834 <sup>67</sup>	4.35
2	Class II	5,000	500	4,500	5,789 <sup>68</sup>	2.61
3	Class III	3,000	300	2,700	675	0.18
<b>Total</b>						<b>7.14</b>

(Source: Information furnished by the Department)

- ❖ As per Karnataka Public Works Departmental Code (Revised), every registration granted shall be valid for a period of five years. Renewal of registration shall be subject to all the conditions for first application of registration and payment of renewal fee of registration. Collection of renewal fee of registration of Class I, II and III contractors at pre-revised rates instead at revised rates resulted in short-collection of fee of ₹ 11.17 crore as detailed in **Table 3.16:**

**Table 3.16: Short-collection of renewal fee**

SI No.	Class of contractor	Revised fee (₹)	Old rates i.e., fee collected (₹)	Difference (₹)	Number of contractors	Short-collection of fee (₹ in crore)
1	Class I	10,000	1,000	9,000	12,011 <sup>69</sup>	10.81
2	Class II	2,000	500	1,500	2,036 <sup>70</sup>	0.31
3	Class III	1,500	300	1,200	418	0.05
<b>Total</b>						<b>11.17</b>

(Source: Information furnished by the Department)

On this being pointed out (May 2017), CE (North), Dharwad, replied (June 2017) that revised fee was not given effect as the Government Order was not issued in this regard.

<sup>67</sup> CE, C&B (South) = 3,722; CE, C&B (North) = 1,112.

<sup>68</sup> CE, C&B (South) = 4,361; CE, C&B (North) = 1,428.

<sup>69</sup> CE, C&B (South) = 9,204; CE, C&B (North) = 2,807.

<sup>70</sup> CE, C&B (South) = 1,453; CE, C&B (North) = 583.

The reply is, however, not justifiable for the reason that the earlier GO dated 27 October 1994 was issued as an amendment to the Karnataka Public Works Departmental Code and hence rates included in the revised Code shall prevail.

The matter was referred to the Government in May 2017 and reminder issued in August 2017; their reply was awaited (November 2017).

### **3.7 Excess payment due to incorrect measurements and non-recovery of extra cost**

**Excess payment of ₹ 1.22 crore was made by making incorrect entries in the Measurement Books and extra cost of ₹ one crore due to non-completion of work was not recovered from the contractor.**

Karnataka Public Works Departmental Code<sup>71</sup> stipulates that measurements for all works and repairs should in the first instance be taken by subordinates in charge of the works and checked by the Sub-Divisional Officers and Divisional Officers. Every opportunity must be taken by upper subordinates<sup>72</sup>, Sub-Divisional Officers and Divisional Officers to check the accuracy of the detailed measurements. The object of check measurements is to detect errors in measurements and to prevent fraudulent entries.

Executive Engineer, Public Works, Ports and Inland Water Transport Division, Ramanagara (EE), awarded (June 2010) a contract for 'Improvements to road from Mysore Road Junction to Coca Cola Factory (Bidadi Industrial Area) Ch 0.00 km to 3.00 km' to a contractor at his tendered cost of ₹ 17.75 crore with a stipulation to complete the work by June 2011. The contractor was paid ₹ 14.46 crore (March 2011) after retaining ₹ 1.01 crore as Security Deposit (SD) from the Running Account Bills. As the contractor stopped (March 2011) the work without assigning any reasons and did not complete the work despite repeated instructions of EE, the work was rescinded (May 2014) at the risk and cost of the contractor after a delay of three years. The balance work estimated to cost ₹ 3.34 crore was entrusted (April 2015) to another contractor at a cost of ₹ 4.53 crore and was completed (July 2016).

Scrutiny of records at the Office of EE revealed excess payment due to inflated measurements, irregular release of SD and failure to take action to recover extra cost as discussed below:

- ❖ The final measurements taken (June 2014) after rescinding of the work revealed that the quantities actually executed were far less than the quantities measured and paid for in the earlier bills. As per the final measurements, the total value of work done by the contractor was

<sup>71</sup> Vol II - Appendix VII: Rules for taking measurements and keeping Measurement Books.

<sup>72</sup> Superior to the one who takes measurements.

₹ 14.25 crore against ₹ 15.47 crore paid, resulting in excess payment of ₹ 1.22 crore. Failure to check the accuracy of measurements by the upper subordinates resulted in excess payment. Audit could not ascertain whether the prescribed quantum of check measurements were made as the Measurement Books (MBs) were not furnished to Audit for scrutiny and were stated to be in the possession of the then Engineer-in-charge of the work who had since been transferred from the sub-division. Sub-Divisional Officers are responsible for safe custody of all MBs in their charge. However, the Engineer-in-charge was relieved from the sub-divisional office without handing over of MBs concerned.

- ❖ As per clause 29 of Instruction to Tenderers, SD shall be provided to the employer within 20 days of receipt of letter of acceptance. Further, as per clause 43 of Conditions of Contract, SD was required to be retained until 30 days from the expiry of the defects liability period which was 24 months from the date of completion. But, EE allowed the contractor to execute the work without obtaining SD (₹ 0.83 crore) in any forms prescribed for securities.
- ❖ SD of ₹ 1.01 crore deducted from the Running Account Bills was also irregularly refunded in June 2011 to the contractor without obtaining any other form of security. SD was refunded despite knowing that the contractor had stopped the work since March 2011 without assigning reasons. Thus, no security was available with the Division to adjust towards excess payment.
- ❖ As per clause 50.1 of Conditions of Contract, the amount to be recovered towards additional cost for completion of balance work was 30 *per cent* of the value of work not completed. Though contract was rescinded at the risk and cost of the contractor, EE had not taken action to recover the extra cost of ₹ one crore (30 *per cent* of ₹ 3.34 crore) from the contractor.

Thus, due to entrustment of work without obtaining SD and irregular refund of SD deducted from the bills, no security was available with the Division to adjust towards excess payment and action was not taken to recover the extra cost. The total amount recoverable from contractor worked out to ₹ 2.22 crore<sup>73</sup>.

The matter was referred to the Government in April 2017 and reminded in August 2017; their reply was awaited (November 2017).

---

<sup>73</sup> ₹ 1.22 crore + ₹ 1.00 crore.

### 3.8 Extra benefit to contractor

**Adoption of rates for manual excavation for foundation, which was executed by using machineries had resulted in extra benefit of ₹ 1.71 crore to a contractor in a building construction work.**

Schedule of Rates (SR) for 2013-14 of Public Works, Ports and Inland Water Transport Department (PWD), provide separate rates for excavation by manual means and mechanical means in various types of soil strata including soft rock/hard rock. The cost of excavation by mechanical means is lower when compared to excavation by manual means. Manual excavation is resorted to when the quantum of excavation is meagre or where there are space constraints for movement of heavy machineries like hydraulic excavators, tipper, *etc.* Also, general notes forming part of the SR provide that in the case of non-availability of rate for any of the items of work, the SRs of Minor Irrigation/National Highways/Panchayat Raj Engineering Divisions/Karnataka Urban Water Supply and Drainage Board/Bengaluru Water Supply and Sewerage Board shall be referred to.

The rates for excavation by manual means and mechanical means as per SR of 2013-14 are shown in **Table 3.17**:

**Table 3.17: Rates for excavation through manual and mechanical means**

Sl No.	Description	Manual means upto 1.5 m (₹/ cum)	Mechanical means upto 3 m (₹/ cum)
1	Excavation in hard soil for levelling (SR item 2.2)	162	*
2	Excavation in hard soil for foundation (SR item 2.4)	208	30.20
3	Excavation in soft rock without blasting (SR item 2.6)	644	40.20

(Source: Schedule of Rates 2013-14)

\* SR 2013-14 did not specify rate for levelling by mechanical means and hence rate for similar item from any other SR should be adopted or data rates<sup>74</sup> should be worked out as per Rules.

The Executive Engineer, Public Works, Ports and Inland Water Transport Division, Dharwad (EE), awarded (March 2014) a contract for construction of a new court complex building in M Thimmasagar at Hubballi to a contractor at a cost of ₹ 62.34 crore. The cost was 4.20 *per cent* above the estimate prepared based on the SR of 2013-14. The work was under progress and the contractor was paid (January 2017) ₹ 84.27 crore, which included payment for additional quantities.

<sup>74</sup> A data rate is prepared for any item not found in the sanctioned SR on the basis of actual cost of materials, labour, lead, lifts and weightage (Paragraph 14.11 of Karnataka Public Works Departmental Code).

Scrutiny of records in the Office of EE in January 2017 revealed that the sanctioned estimate provided for conventional type of foundation for the building with 20,133.78 cum of excavation by manual means instead of mechanical means. Reasons for not preparing the estimate by considering mechanical means of excavation with suitable lifts, which was not only economical but also allows for speedy execution of work was not on record.

During execution, the conventional type foundation was modified to RCC<sup>75</sup> raft foundation. As a result, foundation depth increased and consequentially, quantity of excavation also increased to 34,809.15 cum. EE did not alter the item of excavation from manual means to mechanical means as a variation item as per Clause 34<sup>76</sup> of the agreement in view of the substantial quantum involved and as there was no space constraint for movement of machineries. The contractor adopted mechanical means of excavation as evidenced from **Photograph 3.4** taken during the course of the work by the Division:

**Photograph 3.4: Excavation by mechanical means**



(Source: Photograph furnished by the Division)

Failure to substitute the manual means of excavation with mechanical means resulted in extra benefit of ₹ 1.71 crore to contractor, as shown in **Table 3.18**:

---

<sup>75</sup> Reinforced Cement Concrete.

<sup>76</sup> Clause 34 of the agreement *inter alia* states that “The Employer shall have power to change the character or quality or kind of any item of work; change in any specified sequence, methods or timing of construction of any part of work”.



**Table 3.18: Details of extra cost**

(Amount in ₹)

Sl No.	Reference to SR 2013-14	Quantity executed in cum	Rate at which paid	Rate as per SR for mechanical means	Rate payable <sup>77</sup>	Excess per cum	Extra cost
1	2.2	4,560.00	180.00	30.20 <sup>78</sup>	33.99	146.01	6,65,805
2	2.4	6,969.31	200.00	30.20 <sup>79</sup>	33.99	166.01	11,56,975
3	2.6	23,279.84	700.00	40.20 <sup>80</sup>	45.23	654.77	1,52,42,941
<b>Total</b>		<b>34,809.15</b>					<b>1,70,65,721</b>

(Source: Information furnished by the Division)

On this being pointed out (March 2017), the Government stated (September 2017) that:

- ❖ Department did not indicate estimated rate of each item of the work in Bill of Quantities (BoQ) of the contract and the contractor was not guided by the departmental estimated rates as he would not be aware of individual rates of an item of work;
- ❖ Specifications of the items of work observed in audit stipulated that the work had to be executed manually and it was left to the contractor to execute the work manually or mechanically or in combination of both;
- ❖ PWD SR, provided for excavation by mechanical means upto a maximum depth of three meters and actual depth of excavation in the instant case was six meters. The rates adopted in audit are not comparable and they were without basis.

Reply of the Government was not justifiable for the following reasons:

- ❖ Though the BoQ did not contain the rates of items of work, reference to item number of SR of PWD was mentioned in the BoQ appended to Notice Inviting Tender, which also specified the execution methodology. Further, contractor could ascertain the estimated rate of the item from SR, which is available for sale. Hence, the Government's contention was not factually valid;
- ❖ Specification as per the agreement had to be followed by the contractor and manual excavation was to be adopted as per specification of the items. It was the responsibility of the executing officers to ensure that methodology specified was followed by the contractor. As the change in methodology of execution of work was accepted, it was imperative on the part of Department to revise the rates by invoking Clause 34.1 of the Conditions of Contract. Department was aware of the fact that mechanical

<sup>77</sup> Including Basic Rate as per SR plus area weightage at 8% plus Tender premium of 4.2%.

<sup>78</sup> Rate available for comparative item by mechanical means.

<sup>79</sup> SR rate of mechanical means.

<sup>80</sup> SR rate of mechanical means.

excavation was highly economical compared to manual method of excavation and failure to invoke Clause 34.1 resulted in extra benefit to the contractor;

- ❖ For mechanical means of excavation, PWD SR, provided rates for excavation upto three meters of depth while the rates for manual means were for depth of 1.5 meters. Still the Department adopted the rates of manual excavation though the depth of excavation for conventional type of foundation contemplated in the sanctioned estimate was upto 1.50 meters. Considering that comparable item was not available in PWD SR, it was open for the Department to either work out data rate factoring the depth of excavation upto six meters or adopt comparable item from other SRs. The Water Resources Department (WRD) SR for 2013-14 contained the rates for mechanical excavation for depth upto 18 meters<sup>81</sup>, *i.e.*, three times more than depth of excavation required in this work and WRD rates were far lower than the rates adopted and paid for by the Department.

Thus, making payment for excavation at the rates applicable to manual excavation even after knowing that the contractor had actually carried out the excavation work cheaply using machineries was irregular and resulted in extra benefit of ₹ 1.71 crore.

## Department of Tourism

### 3.9 Improper planning leading to stoppage of work

**Wasteful expenditure of ₹ 1.23 crore on partly constructed suspension bridge, which was taken up as a tourism development work but later abandoned on the ground of high project cost.**

Canons of financial propriety<sup>82</sup> stipulate that every Government servant should exercise the same vigilance in respect of expenditure incurred from the Government revenues as a person of ordinary prudence would exercise in respect of the expenditure of his own money. Also, it is the duty of every Government servant not merely to observe complete integrity in financial matters but also to be constantly watchful to obtain best possible value for all public funds spent and guard scrupulously against every kind of wasteful expenditure from public funds.

The Department of Tourism (DoT) accorded administrative approval (September 2009) for “Construction of suspension bridge between Sulthanbatheri and Thannirubavi across Gurupur river in Mangaluru” at a cost of ₹ five crore at the request of the Chairman, District Tourism Promotion Council (DTPC). The Chairman, DTPC, in addition to seeking funds, also

---

<sup>81</sup> Item No. WRD 3.1-Excavation in all kind of soil upto a depth of 18 meters-rate was ₹ 70.00 per cum and Item No. WRD 3.3-Excavation in soft rock without blasting upto depth of 18 meters-rate was ₹ 95.00 per cum.

<sup>82</sup> Article 15(1) and 16 of Karnataka Financial Code.

requested that the work be entrusted to Nirmithi Kendra<sup>83</sup>, Mangaluru for execution, which was accepted by DoT. Accordingly, DoT released ₹ one crore in two instalments (September 2009 - ₹ 40 lakh; September 2010 - ₹ 60 lakh) to Nirmithi Kendra through DTTC.

The Nirmithi Kendra, without starting the work, proposed changes in designs of the bridge in consultation with experts, which increased the cost of the project. DoT accorded (January 2012) revised administrative approval for ₹ 12 crore. Technical sanction was accorded (June 2012) by Karnataka Rajya Nirmithi Kendra (KARNIK)<sup>84</sup>, which awarded (December 2012) the contract to an agency for ₹ 11.35 crore for completion in 11 months. The Nirmithi Kendra paid (September 2013) ₹ 73.73 lakh to the agency against financial progress of ₹ 1.23 crore achieved by the contractor. DoT did not release the funds thereafter, which led to stoppage (December 2013) of the work.

In the meeting (June 2014) chaired by the Minister for Higher Education and Tourism, it was decided to transfer the work to Public Works, Ports and Inland Water Transport Department (PWD) for completion. Accordingly, the work was transferred (August 2015) to PWD, but the work was not resumed. The contractor had been regularly demanding Nirmithi Kendra for payment of balance amount (₹ 49 lakh) towards work already executed and payment of compensation (₹ 2.26 crore including interest), as the work was stopped at the convenience of the employer.

Audit scrutiny revealed the following:

- ❖ The Government, while according revised administrative approval (January 2012) for ₹ 12 crore, stipulated that one-third of the cost of the work (₹ four crore) should be provisioned in the budget and the work should be awarded on tender basis. However, DoT did not earmark the funds as stipulated in the Government Order. Instead of providing funds in the next year, DoT abandoned the project citing huge project cost as the reason and indicated that providing connectivity was not its priority. The necessity of the project was not re-examined while approving the revised project cost, which increased from ₹ five crore to ₹ 12 crore and due diligence was not followed while sanctioning the project. Thus, improper planning led to stoppage of work. The work, which was sanctioned during September 2009 could not be completed as PWD did not take any decision to restart the work, even after three years after its transfer.
- ❖ The direct entrustment of work to Nirmithi Kendra was also irregular as the Government directed to award the work by inviting tenders.
- ❖ After obtaining necessary details from Nirmithi Kendra, the Superintending Engineer (SE), PWD Circle, Mangaluru, reported

<sup>83</sup> A Society established in all districts for promotion of cost-effective technologies in construction of building using environmental friendly materials and technologies.

<sup>84</sup> State Level Society of all Nirmithi Kendras.

(August 2015) to the Chief Engineer that steel piles were rusting due to saline water. Revisions in designs were made by Nirmithi Kendra without approval from competent authority. The load carrying capacity had to be reassessed as no test had been conducted to ascertain the strength of piles. SE, Quality Control, Mysuru, also reported (March 2016) (after site inspection) that the suspension bridge would not be cost-effective, and being a foot bridge, would require high maintenance cost. Alternatively, a RCC bridge could have been constructed at the same cost, which would also have catered to vehicular movement. The issue was also discussed in State Level Technical Committee meetings, which directed (August 2016) the Department to consult structural engineers for obtaining inputs for modifications. However, no progress was made in this regard (June 2017). Due to passage of time, possibility of further deterioration of steel piles on account of back waters of the sea cannot be ruled out thereby rendering the expenditure already incurred as wasteful.

Thus, the expenditure of ₹ 1.23 crore incurred on partly constructed suspension bridge, which was taken up as a tourism development work by Tourism Department but later abandoned on the ground of high project cost, had become wasteful.

The matter was referred to the Government in June 2017 and reminded in August 2017; their reply was awaited (November 2017).

### **Water Resources Department (Minor Irrigation)**

#### **3.10 Duplication of project leading to wasteful expenditure**

**A project to provide water to three minor irrigation tanks through lift irrigation, at an expenditure of ₹ 13.50 crore was rendered wasteful as another project with the same objective had already been completed by a Government Company.**

The Government approved (January 2013) a Lift Irrigation Scheme (LIS) for lifting water from Sulleri tank to feed Sankalagere, Malurpatna and Akkuru Tanks in Channapatna Taluk of Ramanagara District at an estimated cost of ₹ 9.25 crore. The Scheme proposed to pump 3.3756 Million cubic meter (Mcum) of water to the above three tanks from Sulleri tank during monsoon season of 120 days out of available allocation of water in Cauvery basin to augment irrigation of suffering command area of 333.15 ha for minor irrigation.

The Executive Engineer, Minor Irrigation Division, Bengaluru (EE), entrusted the work to a contractor (tender cost ₹ 10.34 crore) in December 2013. The work was completed in March 2016 and final bill for ₹ 13.50 crore was paid in August 2016.

Audit scrutiny (February 2016) of records of EE showed that taking up of LIS was unwarranted due to duplication of the scheme as discussed below:

- ❖ Cauvery Neeravari Nigama Limited (CNNL), a Government of Karnataka undertaking, had as early as February 2011 proposed a project for lifting water from foreshore of Iggalur Barrage Project to fill one reservoir<sup>85</sup> and 17 tanks for the purpose of drinking water supply, which was administratively approved by the Government in May 2012. The 17 tanks included the three minor irrigation tanks that were proposed for filling up by EE.

CNNL took up (February 2013) their project for execution at a cost of ₹ 180.78 crore and was completed in April 2014. The filling of the three tanks ranged between 71 *per cent* and 85 *per cent* of their capacity during 2015. The capacity details of the tanks are as shown in **Table 3.19**:

**Table 3.19: Details of capacity of the tanks**

(Capacity in Mcum)

SI No.	Name of the tank	Capacity	Proposed to be filled	Actually filled up	Level of actual filling to capacity ( <i>per cent</i> )	Balance capacity
1	Sankalagere	0.6264	0.5351	0.5351	85	0.0913
2	Malurpatna tank	1.5235	1.0869	1.0869	71	0.4366
3	Akkuru tank	0.7198	0.6033	0.6033	84	0.1165
<b>Total quantity available for Irrigation</b>						<b>0.6444</b>

(Source: Information furnished by the CNNL)

- ❖ EE proposed (October 2012) a Lift Irrigation Scheme to fill these three tanks to provide irrigation to suffering command area. For justifying this proposal, a confirmation letter (16 January 2013) was obtained by EE from CNNL to the effect that CNNL project was meant for drinking water purpose and not for irrigation. Audit scrutiny, however, revealed that LIS scheme was only to recharge the groundwater and was not meant to provide direct irrigation. The percolation of water improves the groundwater table and recharge wells/bore wells of the adjoining areas of these tanks. CNNL project was planned to meet 71 to 85 *per cent* filling capacity of these three tanks and left over capacity of these tanks was minimal (15 to 29 *per cent*). The balance water storage capacity (0.6444 Mcum) was insufficient for establishing a LIS scheme to meet the irrigation needs of the suffering command area, which required 3.3756 Mcum of water. The sanctioned estimate of LIS totally ignored the filling up of tanks by CNNL Project. Instead, it had projected LIS as the sole scheme for filling up of these three tanks, which was not the case. Thus, LIS estimate was not only ill-conceived but faulty also.

<sup>85</sup> Reservoir built across Kanwa River coming under Cauvery Basin.

- ❖ EE reported (September 2015) to the Chief Engineer (CE), Minor Irrigation (South) Zone, Bengaluru, that CNNL had already taken up the project with the same objective of filling up the tanks as that of LIS and suggested to have a rethink on the continuation of the scheme, when LIS was at its early stage of execution (₹ 2.20 crore was incurred *i.e.*, 21.48 *per cent* of the tender amount of ₹ 10.34 crore). However, CE did not take action to stop the work nor apprised the Government of its non-utility, which would have reduced the wasteful expenditure by ₹ 11.30 crore<sup>86</sup>.

Thus, LIS Scheme to provide water to three minor irrigation tanks, at an expenditure of ₹ 13.50 crore, was rendered wasteful.

The matter was referred to the Government in April 2017 and reminded in July and August 2017; their reply was awaited (November 2017).

### **3.11 Extra cost due to non-availment of Excise Duty exemption**

**Exemption of Central Excise Duty was not availed for pipes used for water supply, resulting in extra cost of ₹ 3.28 crore to the Government besides undue benefit of ₹ 39 lakh to the contractor.**

All items of machinery, including instruments, and pipes needed for delivery of water from its source to water supply plant and from there to storage facility are exempted<sup>87</sup> from the levy of Central Excise Duty (CED). A certificate to the effect that such goods are cleared for the use specified above, issued by the Deputy Commissioner (DC) of the district, in which the project is located, is necessary for claiming the exemption.

Executive Engineer (EE), Minor Irrigation (MI) Division, Vijayapura awarded (March 2013) the work of construction of a Lift Irrigation Scheme (LIS) for ₹ 58.47 crore. EE, MI Division, Mysuru awarded (March 2015) three LIS works to two contractors for a total cost of ₹ 26.94 crore. The works were stipulated for completion between September 2014 and June 2016 but are still under progress (March 2017).

Scrutiny (February 2015 and April 2016) of records relating to these works revealed that the tenders for the works were invited without stating that CED exemption was available for these works. Estimates for the above four works *inter alia* provided for supply of ductile iron (DI) pipes for raising main<sup>88</sup>. In the absence of any mention of CED exemption, the rates quoted by the contractors for DI pipes were inclusive of CED. CED applicable on DI pipes of length 20,000 running meter (Rmtr) used for these four works amounted to ₹ 3.28 crore, as shown in **Table 3.20**:

<sup>86</sup> ₹ 13.50 crore – ₹ 2.20 crore.

<sup>87</sup> Vide Notification No. 3/2004 dated 8 January 2004 issued by Ministry of Finance, Government of India.

<sup>88</sup> Pipes installed for carrying water from the foreshore of reservoirs or wells to an elevated reservoir.



**Table 3.20: Details of CED forgone in LIS works**

SI No.	Name of the work	Tender cost (₹ in crore)	Cost of pipes (₹ in crore)	Quantity of pipes in Rmtr	CED per Rmtr in ₹	CED foregone (₹ in crore)
1	LIS from Krishna river near Chikkalaki village	58.47	25.53	6,900	3,170.04	2.19
2	LIS for supply of water from Lakshmana Theertha river to Bijaganahallikere, Yemmekoppalukere, Belekere	6.83	3.76	3,950	766.32	0.30
3	LIS for supply of water from Lakshmana Theertha river to Jeenahallikere, Belekere, Halebeedukere.	7.47	4.97	5,720	766.32	0.44
4	LIS from Shimsha river to Bhima tank and other tanks in Halaguru hobli, Malavalli Taluk	12.65	4.68	3,430	1,021.75	0.35
<b>Total</b>		<b>85.42</b>		<b>20,000</b>		<b>3.28</b>

(Source: Information furnished by the Divisions)

Specifying CED exemption in the tender documents and furnishing certificate to the contractor would have resulted in a saving of ₹ 3.28 crore to the Government, which was not done. The reasons for omission were not on record.

Audit scrutiny revealed that in respect of two works (SI No. 2 and 3 of the Table 3.20), based on the recommendations of EE, MI Division, Mysuru, DC, Mysuru, certified that DI pipes of 9,600 Rmtr were intended for the use of water supply project. As the rates quoted by the contractor for the item were inclusive of all taxes and levies, furnishing the certificate resulted in extending undue benefit of ₹ 74 lakh<sup>89</sup> towards CED to the contractor. The action of EE was contrary to agreement, which did not contemplate issue of such certificate.

On this being pointed out, EEs replied that suitable clauses would be included for future works. EE, MI Division, Mysuru, stated (November 2016) that an amount of ₹ 35 lakh was already recovered from the contractor and the balance amount would be recovered in subsequent claims. However, the details of the recovery were not furnished.

Thus, non-availment of CED on DI pipes resulted in extra cost of ₹ 3.28 crore to Government besides undue benefit of ₹ 39 lakh to contractor.

The matter was referred to the Government in March 2017 and reminded in July 2017 and August 2017; their reply was awaited (November 2017).

<sup>89</sup> (3,900 Rmtr + 5,700 Rmtr) i.e., 9,600 Rmtr × ₹ 766.32 = ₹ 73,56,672.

### 3.12 Irregularities in rehabilitation of minor irrigation tank

#### Adoption of inflated rate for item of work for formation of new embankment using excavated soil resulted in an undue benefit of ₹ 1.19 crore to the contractor.

Executive Engineer (EE), Minor Irrigation (MI) Division, Hassan, took up work of 'Rehabilitation and improvement of Arasikere Doddakere Tank in Arasikere Taluk of Hassan District' at an estimated cost of ₹ 4.72 crore {based on Schedule of Rates (SR) for 2010-11} for stabilising the suffering tail end command area of 88 hectare. The work was awarded (August 2012) to a contractor on tender basis for ₹ 5.21 crore (12 *per cent* above SR of 2012-13) with a stipulation to complete it by May 2013. The contractor was paid ₹ 5.18 crore as of September 2017.

Scrutiny (August 2016) of records of EE revealed the following:

- ❖ Sanctioned estimate of the work *inter alia* provided for formation of new embankment adjoining to existing bund by using the soil from approved borrow area with two km lead (Item 'A' - ₹ 151.84 per cum<sup>90</sup>) and by using the silt excavated from the tank bed (Item 'B' - ₹ 218.68 per cum<sup>91</sup>). The estimated rate for the Item 'B' was, however, inflated by adding ₹ 127.68 per cum towards conveyance charges and loading and unloading charges. Conveyance, loading and unloading charges were not admissible for Item 'B' since only the excavated soil from tank bed was to be utilised as per specification and also the basic rate of ₹ 89 was inclusive of initial lead charges and lift. Tenders for the work were invited on inflated estimated rate. The rates quoted by the contractor for both the types of embankment were 12 *per cent* above the estimated rates, which showed that quoted rates were influenced by the estimated rates. Factoring 12 *per cent* tender premium, the rate for Item 'B' works out to ₹ 101.92 per cum (on scheduled rate of ₹ 91 per cum<sup>92</sup>) against ₹ 244.92 per cum quoted by the contractor on the inflated estimate rate, which resulted in overpayment of ₹ 143 per cum to the contractor. The undue benefit for executed quantity of 83,079.32 cum for Item 'B' works out to ₹ 1.19 crore.
- ❖ The tank was previously rejuvenated (May 2010) under a different scheme with an estimated cost of ₹ 61 lakh for desilting of tank bed, repair to sluice gates, bund improvements, excavation for feeder canal, turfing, *etc*, and total payment made to contractor was ₹ 47.73 lakh (as per final bill paid during October 2014). Audit scrutiny, however, revealed that the information regarding these improvement works carried out in the recent

<sup>90</sup> Basic rate of ₹ 140 (with initial lead of 1 km) *plus* additional lead charge (1 km) of ₹ 9.84 *plus* royalty charges of ₹ 2 as per SR 2010-11.

<sup>91</sup> Basic rate of ₹ 89 *plus* conveyance charges and lead charges of ₹ 127.68 *plus* royalty charges of ₹ 2 as per SR 2010-11.

<sup>92</sup> Including difference in royalty of ₹ 2.

past was not disclosed in the report accompanying the estimate of ₹ 4.72 crore and stabilisation of command area was again taken up despite poor inflow of water into the tank. The Assistant Executive Engineer (AEE) in his letter (31 October 2012) reported that the taluk, where the tank was situated, was declared as a drought prone area for the past five years and that the tank was not filled more than 50 *per cent*. Hence, water was not let out for irrigation during this period. Even subsequent to 2012, the tank was not filled or provided irrigation benefits as reported (November 2013) by AEE.

- ❖ Scope of the present work included mainly beautification by providing park, play area for children, walking path, fencing, formation of islands, parking area, boat jetty, security room and office room, toilets, *etc*, (which formed 81 *per cent* of the estimated cost) apart from desilting of tank and repairs to waste weir. Thus, the primary objective of the present work was beautification of the tank and not the stabilisation of the suffered command area. The irrigation tank beautified required regular maintenance including providing watch and ward. AEE was corresponding with the Municipal authorities since September 2014 intimating that the works carried out were getting damaged due to non-maintenance but no response for taking over was received from Municipal authorities. Besides, MI Division, also, did not take up any subsequent maintenance. This indicated that the beautification work was taken up without any coordination/consultation with local authority. The expenditure of ₹ 5.18 crore incurred on beautification may become wasteful due to lack of maintenance.

Thus, adoption of inflated rate for an item of work for formation of new embankment from excavated soil resulted in undue benefit of ₹ 1.19 crore to the contractor. Non-maintenance of the tank may also render the expenditure of ₹ 5.18 crore as wasteful.

The matter was referred to the Government in February 2017; and reminded in July 2017 and August 2017; their reply was awaited (November 2017).

### **3.13 Irregularities in entrustment of works**

**Contracts were concluded by the Executive Engineer without obtaining confirmation of genuineness of Bank Guarantees for ₹ 1.42 crore, which turned out to be fake.**

Official Memorandum dated 17 August 1981 issued by Finance Department, stipulated that for bank guarantees produced as security for performance of works, contracts, *etc*, confirmation were to be obtained from the issuing banks to eliminate the risk of forgeries. General instructions to tenderers<sup>93</sup> specify

<sup>93</sup> Clause 25.1 of KW 1, 26.1 of KW 3 of Standard bid documents issued by GoK.

that the contracts managed through fraudulent means should be cancelled and the firms shall become ineligible either indefinitely or for a stated period of time.

Scrutiny of records at the Office of Executive Engineer, Minor Irrigation Division, Kolar (EE), revealed that contracts for works were not cancelled even after being aware of the fact that the bank guarantees (BG) submitted by the contractors were fake. Details are as follows:

EE awarded (April 2011 and June 2013) contracts for execution of eleven works (**Appendix 3.1**) to four contractors on tender basis for ₹ 6.89 crore. BGs amounting to ₹ 1.42 crore furnished by the contractors towards security deposit<sup>94</sup> and additional performance security<sup>95</sup> were not verified for their authenticity from the issuing banks before issue of work orders, which was mandatory as per Official Memorandum dated 17 August 1981. Later, on the basis of complaints over phone about the genuineness of BGs, EE requested (September 2013) for the confirmation of BGs from the issuing banks. The banks stated (September and October 2013) that none of the BGs amounting to ₹ 1.42 crore were issued by them and requested EE to initiate legal action against the contractors.

Instead of cancelling the contracts obtained through fake documents, EE sought (October 2013) direction from the Superintending Engineer (SE) and allowed the contractors to continue with execution of the works. SE requested (November 2013) the Chief Engineer (CE), Minor Irrigation (South), Bengaluru, to give suitable guidelines in this issue. CE in the meeting held on 26 December 2013, instructed to file criminal case against those who cheated the Government. The matter was not brought to the notice of the Government and police complaint was filed on 15 February 2014. EE obtained fixed deposit receipts for ₹ 0.48 crore between April 2014 and November 2014 *in lieu* of BGs from one of the contractors, which were neither renewed nor encashed. One contractor was entrusted (October 2013) another work costing ₹ 10 lakh. Proposals for blacklisting the four contractors were forwarded (January 2015) to CE, Communication and Buildings (South), Bengaluru, after a delay of 15 months. The contractors were yet to be blacklisted (September 2017).

EE allowed the contractors who furnished fake BGs to execute the works and paid ₹ 0.72 crore between January 2014 and March 2015 despite clear instructions for cancellation of works in the tender documents.

---

<sup>94</sup> Five *per cent* of the tender amount.

<sup>95</sup> Difference between the estimated rate and the tender rate, if the difference is more than 25 *per cent*.

Though five works costing ₹ 4.45 crore were not completed (May 2017), the Department could not take action to recover the penalty as the security deposits were not available.

Thus, the action of EE in concluding contracts with fake bank guarantees for ₹ 1.42 crore resulted in non-recovery of penalty as there was no security to encash.

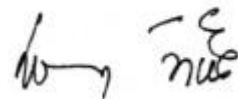
The matter was referred to the Government in May 2017 and reminded in August 2017; their reply was awaited (November 2017).



**Bengaluru**  
**The 25 January 2018**

**(Bijit Kumar Mukherjee)**  
**Accountant General**  
**(Economic and Revenue Sector Audit)**  
**Karnataka**

**Countersigned**



**New Delhi**  
**The 6 February 2018**

**(Rajiv Mehrishi)**  
**Comptroller and Auditor General of India**