Chapter - III

Performance Audit

Civil Departments

Department of Health and Family Welfare

3.1 Performance audit on procurement of drugs and medical equipment and its impact on delivery of health services in Delhi

A Performance audit covering drug policy of Delhi Government, procurement policies, procedures and practices followed in the Department and its subordinate offices i.e. DHS, CPA, Central Store and EPC for procurement of drugs, surgical items, equipments and their testing for the period 2003-2008 was carried out during June to December 2008. In addition, four hospitals, two autonomous bodies/Institutes, three Chief District Medical Officers (CDMOs) and 25 dispensaries were selected. The following are the important audit findings.

In absence of comprehensive procurement policy guidelines and purchase manual, system being followed was ad-hoc as CPA, the Central Store, EPC, GTBH, GBPH, LNH, BSAH, IHBAS and DSCI test checked in audit had not documented written procedure and practices on procurement.

(*Paragraph 3.1.7.3*)

All the hospitals were incurring more than 10 per cent of expenditure on non-CPA items in contravention of the drug policy.

(*Paragraph 3.1.7.5*)

Frequent extensions to rate contracts for drugs and surgical items by CPA resulted in financial benefit to supplying firms whose rates had reduced in the intervening period. CPA could not finalize rate contracts for EDL drugs ranging 24.31 per cent to 37.82 per cent and 12.55 per cent to 36.42 per cent in respect of surgical items during the years 2003-08 even though 15 to 28 per cent of total number of drugs of rate contracts were finalized on single tender basis only in three tenders floated by CPA during 2003-04 to 2007-08.

(Paragraph 3.1.7.6)

Stock out of essential drugs was further compounded by lackadaisical approach of the purchase department for making available essential drugs to needy patients in timely manner.

(Paragraph 3.1.7.7)

Same company was supplying same drug to various hospitals at different rates in contravention to fall clause included in the agreement. All indenting units were deducting maximum of 10 per cent of total value of the supply order in case of delayed supplies irrespective of period of delay. No effort was made to recover extra amount incurred on procuring drugs in case of nonsupply from firms.

(Paragraph 3.1.7.8)

In the absence of a mechanism for better coordination, all the test checked hospitals were getting varied percentage of discounts ranging from 4 to 20 in purchase of drug, surgical items and implants from local chemist.

(Paragraph 3.1.7.9)

Drugs were procured with MRP printed on their labels without requisite markings put these supplies at a risk of misuse and pilferage.

(Paragraph 3.1.7.10)

Different practices of testing of drugs/surgical items were adopted in the test checked hospitals and institutes. GTBH, GBPH, LNH, BSAH, IHBAS, DSCI and the Central Store were relying on inhouse report provided by suppliers in case of non-CPA drugs. Central Store and hospitals were issuing drugs to patients without verifying their quality through lab testing. Further, instead of confiscating sub-standard drugs, suppliers were allowed to replace batches which increased the risk of these drugs being sold in the open market.

(Paragraph 3.1.7.12)

Large amounts of contingent advances given to suppliers remained unadjusted in hospitals test-checked. The Central Store was awarding annual maintenance contracts for equipments provided in dispensaries but did not intimate any dispensaries about award of such contract and releasing payments without any verification from any dispensary leaving scope of fraud by the firm.

(Paragraph 3.1.7.13)

No hospital test checked had computerized system for monitoring performance of suppliers, inventory of essential drugs/surgical items and status of functional equipments. Inspite of incurring an expenditure of Rs. 98.35 lakh in March 2006 by DHS for computerization, no module could be used for the purposes intended.

(Paragraph 3.1.7.14)

3.1.1 Introduction

The Department of Health and Family Welfare (the Department) of the Government of NCT of Delhi caters to health needs of nearly 1.70 crore¹ population of Delhi and also has to share the burden of migratory population from neighbouring states which constitute nearly 33 *per cent* of total intake at major hospitals in Delhi. Directorate of Health Services (DHS) in the Department coordinates implementation of various National and State Health Programmes and regulates the health services being provided by Registered Private Nursing Homes.

The health care facilities in Delhi are being provided by both the government and non-government organizations through a network of 188 health centres

¹ projected population as on March 2008

viz dispensaries, primary health centres, poly clinics, 26 hospitals, nine autonomous bodies, private nursing homes and clinics.

As per the Drug Policy (April 1994) of Delhi government, a limited list of carefully selected drugs should always be available at all health centres and hospitals of Delhi state. These drugs should be procured at reasonable prices thus enabling the drug budget to be used for large number of persons.

A procurement cell, Central Procurement Agency (CPA) for drugs was set up under the state Drug Authority in 1994, later transferred to the DHS (March 2000) with the objective of procuring high quality drugs and other medical stores at competitive rates for hospitals/autonomous bodies/dispensaries. In addition, CPA also finalised rate contract with firms for lab testing of samples of drugs and surgical items. Central Store under the control of DHS carried out procurement, storage and distribution of medicine and surgical items for 188 dispensaries. Procurement of drugs and surgical items was done on the basis of the rate contract finalized by CPA. An Equipment Procurement Cell (EPC) established in 1999, procures medical equipments costing more than Rs. five lakh.

3.1.2 Organizational set up

The Department is headed by Principal Secretary who is assisted by one Special Secretary, two Additional Secretaries. DHS, a subordinate office headed by Director, has overall control over CPA and Central Store. CPA is assisted by Technical Committee $(TC)^2$, Sample Evaluation Committee $(SEC)^3$ and Special Purchase Committee $(SPC)^4$ for procurement of drugs and surgical items.

EPC is headed by an Additional Secretary who is assisted by three committees for procuring equipments costing more than Rs. five lakh, namely Technical Advisory Committee⁵, Technical Evaluation Committee⁶ and Purchase Committee⁷.

² Responsible for evaluation of tenders and recommends acceptance/rejection of firms.

³ Responsible for examining samples as per specification of items mentioned in tender document.

⁴ Responsible for taking final decision of selection/rejection of firms.

⁵ Responsible for cost effectiveness of purchases and advice on maintenance/ repairs of equipments.

⁶ Responsible for evaluation/acceptance/rejection of technical bids, demonstration of equipments.

⁷ Responsible for finalization of purchase proposals and justification for its recommendations for purchase

3.1.3 Audit objectives

Performance audit of procurement of drugs and medical equipments and its impact on delivery of health services was taken up with a view to assessing whether:

- Operational procedures consistent with good pharmaceutical procurement were followed;
- The policies and procedures on tender document preparation, award of contract and contract administration were efficient and effective;
- Availability of good quality drugs and test facilities to the patients was as per the stated policy of the government; and
- Monitoring and evaluation process to ensure efficient delivery of health services to patients was effective.

3.1.4 Scope of Audit

Performance audit covered drug policy of Delhi Government, procurement policies, procedures and practices followed in the Department and its subordinate offices i.e. DHS, CPA, Central Store and EPC for procurement of drugs, surgical items, equipments and their testing during the period 2003-2008. In addition, four hospitals⁸, two autonomous bodies/Institutes⁹, three Chief District Medical Officers¹⁰ (CDMOs) and 25 dispensaries¹¹ were selected for test check.

3.1.5 Audit methodology and sample selection

Audit test checked contracts involving purchases of medical equipment costing Rs. one crore and above, 50 *per cent* of contracts valuing between Rs. 50 lakh to one crore and 25 *per cent* of the contracts with money value of less than Rs. 50 lakh for equipments. Data collected from CPA, Central Store and EPC for procurement of drugs, surgical items and equipments, receipt of drugs, surgical items and equipments and their distribution was verified in the selected four hospitals, two autonomous institutes and 25 dispensaries. Besides commissioning and utilization of equipments was also examined in audit.

⁸ Guru Teg Bahadur hospital (GTBH), GB Pant hospital (GBPH), Lok Nayak hospital (LNH), Baba Saheb Ambedkar hospital (BSAH)

⁹ Institute of Human Behavior and Allied Sciences (IHBAS), Delhi State Cancer Institute (DSCI)

¹⁰ CDMO (North), CDMO (North-East) and CDMO (West)

¹¹ Laxmi Nagar, Kanti Nagar, Vasundhara Enclave, Madipur, Raghubir Nagar, Paschim Vihar, Sultanpuri, Mangolpuri, Narela, Rohini Sector-18, Pitampura, B-4 Keshav Puram, Kalkaji, Khanpur, Sagarpur, Dwarka Sector-12, Old Secretariat, Inderlok, Gulabi Bagh, Seelampur, Seemapuri, Dilshad Graden, Ballimaran, Nabi Karim and Chamelian Road,

The performance audit commenced with an entry conference with Pr. Secretary (Health) on 15 May 2008 wherein audit objectives, scope and methodology were discussed. After conclusion of field audit, an exit conference was held on 6 January 2009 with the team of the department headed by Pr. Secretary (Health) and other senior officials of the department, DHS, CPA, EPC, the Central Store and Medical Superintendents of Hospitals and Institutes audited where draft audit findings and recommendations were discussed.

The draft audit report was issued to the department on 2 December 2008, reply was awaited as of January 2009.

3.1.6 Budget allocation and actual expenditure

Details of budget allocation and actual expenditure on two detailed heads namely 'Supplies & Material' (S&M) and 'Machinery & Equipment'(M&E) alongwith total allotment and expenditure of Grant No.7 under 'Medical and Public Health' during the period 2003-04 to 2007-08 in various hospitals and dispensaries under Delhi government was as given below:

										(Rs .	in crore)
Year	Total	Actual		Supplies a	nd Materia	al	Μ	Machinery and Equipment			Percent
	allotment	exp				~ •				~ •	of exp
	of Grant	under	BE	RE	Actual	Savings	BE	RE	Actual	Savings	on M&S
	no. 7 (Medical)	the Grant									and M&E
	(
2003-04	610.92	573.05	88.03	102.74	101.48	1.26	43.64	50.98	44.79	6.19	25.52
2004-05	740.03	696.06	117.37	137.79	129.84	7.95	66.84	88.38	53.80	34.58	26.38
2005-06	839.36	778.07	119.39	152.35	140.16	12.19	78.00	80.63	79.93	0.70	28.29
2006-07	986.56	957.86	155.89	152.52	148.12	4.40	98.24	81.42	75.21	6.21	23.32
2007-08	1316.57	1175.39	188.36	203.62	176.92	26.70	117.79	145.34	124.04	21.30	25.61

* This table includes budget and actual expenditure on purchase of drugs, surgical items and machinery and equipments by Autonomous bodies and institutes but do not include expenditure by the Ayurvedic, Homeopathic institutions/hospitals

Expenditure on S&M and M&E increased from Rs. 101.48 crore to Rs. 176.92 crore and Rs. 44.79 crore to Rs. 124.04 crore respectively indicating growth rates of 74.34 and 176.94 *per cent* respectively over a period of five years 2003-08. Further, the percentage of expenditure on procurement of drugs and equipment decreased from 28.30 *per cent* in 2005-06 to 23.32 *per cent* in 2006-07. Audit also noted that additional funds of Rs 79.98 crore were allotted through RE under S&M during 2003-07 but the department could utilize only 34 *per cent* of the additional funds. Audit further noted that additional fund of Rs 28.88 crore allotted through RE during 2003-05 under M&E could not be utilised by the department and there were savings of Rs. 40.77 crore. The department also could not utilise the amount of Rs. 6.21 crore during 2006-07 inspite of the fact that funds to the tune of Rs. 16.82 crore were surrendered at the time of RE, under M&E head. Audit also noticed that funds to the tune of Rs. 21.30 crore could not be utilized during 2007-08 under M&E head.

3.1.7 Audit Findings

3.1.7.1 Lack of budgetary control

Audit noted that there was no separate detailed head for procurement of drugs and surgical items and equipments in the detailed demand for grant for the department. Budgetary allocation was being done for two heads, namely supplies and material and machinery and equipments. Under supplies and material head, expenditure on drugs, surgical items and other miscellaneous expenditure were being booked making it difficult to ascertain exact amount incurred by the department annually on procurement of drugs and surgical items separately.

Similarly, expenditure on drugs, surgical items and equipments during the years 2003-08 were booked under both "supplies and material" and "opening of health centres" by the Central Store. Further, during 2003-08, DHS imposed a penalty of Rs. 33.55 lakh in 330 cases on suppliers during 2003-08 for delayed supplies, which was utilised for purchase of drugs and other miscellaneous items and DHS had booked net expenditure (gross amount payable to suppliers minus penalty imposed for delay in supply) under these heads.

Audit noted that savings ranging up to 39 *per cent* in the grant were not surrendered during 2003-08 indicating that expenditure could not be planned and estimated properly. Further shortfall in performance of the activities for which budget was allocated for procurement of drugs, surgical items and equipments was also noted in audit as discussed in the report.

3.1.7.2 Rush of expenditure

According to Rule 56(3) of General Financial Rule, rush of expenditure, particularly in the closing months of the financial year, shall be regarded as a breach of financial propriety and shall be avoided. During test check of four hospitals audit noted that the percentage of expenditure incurred during March under M&E head ranged up to 78.54 *per cent* during 2003-08 as per the details given below:

Name of	Percentage of expenditure in the Month of March						
Hospital	2003-04	2004-05	2005-06	2006-07	2007-08		
GTB Hospital	48.45	29.51	55.56	44.14	7.98		
GB Pant Hospital	NA	47.69	65.85	74.70	49.78		
Lok Nayak	26.68	5.23	10.28	54.03	78.54		
Hospital							
BSA Hospital	25.00	48.87	3.78	50.60	46.11		

In GBPH, the percentage of expenditure incurred during March showed increasing trend from 47.69 *per cent* (2004-05) to 74.70 *per cent* (2006-07),

whereas in GTBH it went upto 55.56 *per cent* during 2005-06, in LNH, 54.03 *per cent* and in BSAH, 50.60 *per cent* during 2006-07. In fact, LNH spent 78.54 *per cent* of its budget in the month of March 2007-08 in violation of the GFR provision ibid.

3.1.7.3 Procurement manual and guidelines not documented

As per the CVC guidelines, a more transparent and effective system must be adopted for tendering process for procurement. All departments and organizations were to prepare codified purchase manuals and instructions containing detailed purchase procedures, guidelines and also proper delegation of powers so that there is a systematic and uniform approach in decision-making. CPA, the Central Store, EPC, GTBH, GBPH, LNH and BSAH test checked in audit had not documented written procedure and practices on procurement.

Similarly there were no guidelines for preparing estimated requirements or emergency procurement. In the absence of comprehensive procurement guidelines, the systems being followed were ad-hoc as brought out in the subsequent paragraphs.

3.1.7.4 Procurement of drugs and surgical items

Drug Policy of 1994 of the GNCT of Delhi aimed at achieving the following goals for procurement of drugs and surgical items: (i) preparation of Essential Drug List¹² (EDL) for the three levels of health care i.e. primary, secondary and at tertiary hospital; (ii) organizing central procurement of drugs; (iii) establishment of centralized procurement, storage and distribution system; (iv) quality assurance of the drugs and surgical items purchased and stocked; and (vi) monitoring and evaluation of the programme.

Further, the policy envisaged that there would be pooled procurement of drugs on the list of essential drugs for all hospitals in Delhi State by establishing a Central Drug Procurement Storage and Distribution Center. The pooled procurement programme was to be implemented in three phases¹³. Audit noted that Central Procurement Agency (CPA) set up in 1994 and

¹² EDL represents a list of minimum generic drugs needed for a basic health care system, listing the most efficacious, safe and cost-effective drugs for priority conditions with the objective of providing drugs to maximum number of patients.

¹³ **Phase I-** Rate contract to be prepared centrally by the Central Procurement Agency for drugs to be ordered

Phase-II- Drugs for all hospitals to be ordered centrally but drugs delivered to hospitals directly

Phase-III- After establishment of computerized environment, all drugs would be ordered and stored centrally and distributed to hospitals therefrom.

subsequently transferred to DHS (March 2000) with the objective of procuring high quality drugs and other medical stores at comparatively low cost, failed to cater the needs of the hospital/autonomous bodies. Audit findings on progress made in implementing various phases are discussed in the subsequent paragraphs.

3.1.7.5 Expenditure on non-CPA procurement

As per the drug policy of Delhi government, only 10 *per cent* of total budget would be spent on procurement of non-CPA drugs. None of the test checked hospitals were maintaining details of expenditure incurred on CPA and non-CPA items separately.

In 2006-07 all the hospitals incurred more than 10 *per cent* of expenditure on non-CPA items as detailed below:

				(Rs. in crore)
Name of hospital	Total budget of supplies and material	Total Expenditure	Expenditure on CPA procurement (per cent of total budget)	Expenditure on non- CPA procurement (per cent of total budget)
(1)	(2)	(3)	(4)	(5)=(3)-(4)
GTBH	19.15	19.14	4.47 (23.34)	14.67 (76.60)
GBPH	27.95	27.95	6.11 (21.86)	21.84 (78.14)
LNH	38.40	38.40	8.31 (21.64)	30.09 (78.36)
BSAH	11.00	10.62	4.25 (40.02)	6.37 (59.98)

It could be seen that all hospitals exceeded limit of 10 *per cent* for purchase on non-CPA items during 2006-07 and percentage of expenditure on non-CPA items ranged from 57.91 to 78.36 *per cent* of their budget on supplies and material.

A test check in BSAH revealed that Rs. 10.62 crore was incurred by the hospital during 2006-07 on procurement of drugs and surgical consumables. Audit noted that the hospital placed supply orders for drugs and surgical items to CPA amounting to Rs. 5.59 crore during 2006-07 out of which supply of Rs. 4.25 crore only was received. The hospital incurred an expenditure of Rs. 6.37 crore (58 *per cent*) on procurement of non-CPA items as the drugs required by the hospital were not available at CPA rate contract and non-supply of drugs by CPA rate contracting firms.

3.1.7.6 Delay in finalization of rate contract

CPA floated tenders for drugs and surgical items for the validity of one year. During the years 2003-04 to 2007-08 CPA finalised three tenders (2003, 2006 and 2007) for procurement of drugs and two tenders (2002 and 2006) for surgical items. Audit noted that time taken in finalization of tendering process of these tenders ranged from five to 21 months. Further as CPA failed to initiate process of next tender in time before completion of the validity of the existing contract, existing rate contracts had to be extended frequently.

(a) Extension of rate contracts without ascertaining market rates

CPA extended rate contracts without ascertaining market trend of value of drugs and surgical items. The rate contract for surgical items finalized in 2002 with validity of one year up to 31 July 2003 was extended six times for 32 months up to 31 March 2006. Audit noted that rates of 109 out of 138 surgical items, which were finalized in 2002 and 2006, had decreased to the extent of 77 *per cent*, whereas rates of only 28 items had increased.

Further, CPA finalized rate contract for 393 drug codes in the year 2005-06, which was valid up to 31 January 2007. As the subsequent tender could not be finalized, the tender was later extended up to August 2007. Audit noted that 14 rate contracting firms involving 75 drugs refused to accept extension as the extension was to be on mutual consent basis. Analysis of finalized rates of these drugs in the next rate contract of 2007 revealed that rates of 44 drugs out of these 75 drug codes had increased whereas rates of 178 drug codes out of remaining 318 drug codes had decreased during this period.

Audit noted that frequent extension of rate contracts for drugs and surgical items by CPA resulted in financial benefit to supplying firms as during extension period only those firms continue to supply drugs and surgical items at higher rates whose rates had reduced in the intervening period. Further, CPA could not ensure uninterrupted supply of drugs and surgical items where firms refused the offer of extension made by CPA.

Audit further noted that the Directorate General of Health Services (DGHS) was entering into rate contract with validity of three years unlike CPA and other hospitals which were finalising rate contract with validity of one year. The DHS might consider finalising rate contracts for longer duration by incorporating appropriate clauses for economical procurement.

(b) Award of rate contract for drugs without obtaining competitive bids

The Special Purchase Committee (SPC) of CPA while noting that seven out of eight samples which failed in quality control tests were of the firms whose annual turnover was less than Rs. 20 crore, recommended on 15 October 2004 an increase in minimum turnover from existing Rs. 12 crore to Rs. 35 crore per annum in immediate preceding two years and a minimum of three years of manufacturing and marketing experience for a firm to become eligible to participate in the tendering process in respect of supply of drugs.

Audit observed that 15 to 28 *per cent* of the total rate contracts were finalized on single bid only in the three tenders floated_during 2003-04 to 2007-08 as indicated in the table below :

	Rate cont	ract finalized ir	n the year
	2003-04	2005-06	2007-08
Total number of drugs for which tender invited	576	632	622
Total number of drugs for which rate contract awarded during a contract year	436	393	431
Total number of drugs for which rate	140	239	191
contract could not be finalized (percentage)	(24.31)	(37.82)	(30.70)
Total number of drugs for which rate contract awarded on the basis of single bid	66	111	98
Percentage of drugs for which rate contract awarded on the basis of single price bids	15	28	23
Turnover criteria for eligibility of firm to submit a tender (Rs. in crore)	12	35	35

Thus, an increase in criteria of turnover from Rs 12 crore to Rs 35 crore lowered the competition to a large extent in subsequent tenders.

(c) Variation in rates finalized by indenting units

Audit noted that due to lack of guidelines/instructions, all four hospitals and IHBAS test checked in audit were entering into the rate contracts with the suppliers on different terms and conditions of agreements as detailed in Appendix-3.1.

Audit analysed rate contracts finalized during 2006-07 in CPA, GTBH, GBPH, LNH and BSAH and noted that there was variation in rates at which EDL drugs were procured by hospitals as indicated in Appendix-3.2. There was a variation in rates of non-EDL drugs procured by four hospitals as well as detailed in Appendix-3.3.

Audit analysis further revealed that each hospital was procuring non-CPA drugs through its own tender without ascertaining cheaper rates availed of by other hospitals as detailed in Appendix-3.4.

In BSAH, comparative analysis of rate contract finalised for drugs by the hospital with the rate contract of CPA in the same period revealed that 36 items were common in both the rate contracts. Out of these items, rates of seven items were less in the hospital compared to CPA's rate contract. Audit further noted that 17 surgical items were common in CPA and hospital's rate contract. Out of these 17 items, rates of eight items were less in the hospital compared to CPA's rate contract.

The Central Store was placing indents to CPA for drugs on CPA rate contract and for non-CPA drugs, supply orders were placed directly with the suppliers of rate contracts finalized by the hospitals. There was no mechanism put in place by the Central Store to ensure that procurement of non-CPA drugs was done economically as no exercise was carried out by the Central Store to ascertain and compare rates contracts of all hospitals.

Lack of coordination between all hospitals and lack of monitoring by CPA resulted in a system which did not serve the intended purpose of economy and efficiency in procurement.

3.1.7.7 Improper assessment of requirements

(a) Inadequate estimation of quantities

In order to achieve economies of scale, there was a need to assess the requirement properly after getting feedback from all the indenting units. Analysis of tenders finalized in 2005-06 and 2007-08 indicated that assessment of requirements of drugs was based on assumptions as audit noted that CPA was not maintaining database/details of quantities of drugs and surgical items procured and supplied through CPA rate contract and actual consumption. Scrutiny of records revealed that identical quantities were mentioned in respect of 429 drug codes out of 632 drug codes and 622 drug codes in the bid documents of CPA drugs tendered in the year 2005-06 and 2007-08 respectively. Further, in respect of 185 drug codes, column for quantities of the bid document of CPA drugs tender for the year 2007-08 was found blank, out of which rate contracts for only 149 drugs were finalized in the year 2007-08. Similarly scrutiny of tender floated for surgical items for 2004-05 (finalized in 2006) revealed that quantity in respect of 112 out of 249 codes were not mentioned in the tender document.

As the rates quoted by the rate contracting firms in the CPA drugs tenders were directly linked with the estimated quantity to be supplied, CPA could not take advantage of competitive rates for bulk quantities of drugs and surgical items to achieve economies of scale as envisaged in drug policy.

(b) Purchases made in excess of requirement

In terms of Rule 37 of General Financial Rules, purchases are to be made in the most economical manner in accordance with the definite requirement of the public service and that care should be taken not to purchase stores much in advance of actual requirement. Scrutiny of records revealed that GTBH made purchases of injections amounting Rs 1.20 crore much in advance of the actual requirements as detailed in Appendix-3.5.

It could be seen from Appendix-3.5 that balance quantity available on 31 March 2008 was sufficient for requirement ranging from 3.37 months to 21.80

months in GTBH. Test check in BSAH also revealed that purchases were not made against any definite requirement which resulted in 17,601 units of 25 drugs costing Rs. 1.14 lakh passing their expiry dates during 2003-08.

(c) Stock out of essential drugs and surgical items

As per instructions of CPA, the hospitals while placing their supply orders for the next four months should keep buffer stock for three months to meet the demand in case of emergency/delayed supply¹⁴/non-supply¹⁵ to prevent stock out of essential drugs and surgical items. There was no realistic basis of assessment of requirement in GTBH, GBPH, LNH and BSAH. Also, there was a delay in sending their requirements to CPA by GTBH, GBPH and BSAH.

- Audit selected 18 essential drugs and noted stock outs in all testchecked hospitals during 2003-08 as detailed in Appendix-3.6. Even essential drugs were not available for periods ranging from one month to three and half years.
- In IHBAS, stock position of many essential drugs were nil for more than three months in the main drug store as detailed in Appendix-3.7.
- Similarly, audit noted stock out in the Central Store ranging from three days to two years in respect of 12 selected essential drugs during 2003-08, as detailed in Appendix-3.8.
- Further, audit test checked selected 12 essential drugs¹⁶ which should normally be available in dispensaries and noted stock-outs during 2003-04 to 2007-08 as detailed in the Appendix-3.9. Audit noted that in the absence of any fixed norms, maintenance of buffer stock was left to discretion of each dispensary; as a result 14 dispensaries were adding quantity of 10 to 50 *per cent* drugs while preparing their estimates for the next four months whereas in case of remaining 11 dispensaries no buffer stock was maintained.
- In BSAH, 18 randomly selected surgical items remained out of stock for a period ranging from 31 days to 541 days during 2003-08.

¹⁴ Drugs received within 14 days after permissible time of 42 days of supply order with levy of penalty.

¹⁵ Drugs not received after 56 days of placing supply order, could be treated as a case of nonsupply.

¹⁶ Tab. Paracetamol (anti-pyretic), Syp. Paracetamol (essential anti-pyretic for children), Tab. Diclofenac Sodium (analgesic), Tab. Cetrizine (anti-allegic), Cap. Amoxycillin (anti-biotic), Syp. (antibiotic for children), Tab. Ferruos Sulphate and Folic acid (iron combination very essential for ante and post natal care), Tab. Enalapril (Antihypertensive), tab. Matformin (Insulin and Anti-diabetic), Ointment Clotrimazole (anti-fungal ointment for local application, Injection Tetanus Toxoid (immunological injection also essential in ANC), Soln. Salbutamol for nebuliser (anti- asthamatic).

- Similarly, 20 selected surgical items remained out of stock for a period ranging from 31 days to 837 days during 2003-08 in GBPH.
- In GTBH, 13 selected surgical items remained out of stock for a period ranging from 60 days to 1110 days during 2003-08. The hospital forwarded its demand for drugs for the quarter March to June 2007 to CPA on 25 January 2007 for which supply orders were placed by CPA on 31 January 2007 to the firms concerned. Audit noted that 57 essential drugs were not received by the hospital till 9 April 2007.
- In LNH, 3 surgical items out of 18 selected items remained out of stock for a period ranging from 8 to 72 days during 2003-08.

The stock out of essential drugs was further compounded by lackadaisical approach of the purchase department for making these available to needy patients in timely manner and thus adversely affecting delivery of health services.

3.1.7.8 Non compliance of terms and conditions of agreements

(a) Non compliance of the Fall Clause

As per CPA tender, bidder was required to declare in tender document that rates quoted are not higher than rate quoted to other government/semigovernment/autonomous/public sector hospitals/institutions/organizations. Further, the contract stipulated that if at any time during the execution of the contract, the controlled price becomes lower on account of the contractor reducing sale price or selling such stores to any organization including department of the central government or any department of the NCT Delhi at lower price compared with rate in the contract, he was to notify such reduction to the purchaser and the price payable under the contract for the stores supplied after the date of coming into force of such reduction or sale or offer of sale shall stand correspondingly reduced. Audit noted that all four hospitals GTBH, GBPH, LNH and BSAH had included the clause while inviting tenders, however, compliance to this clause was not being monitored by DHS, CPA, Central Store and all the four hospitals.

Audit analysis revealed that same company was supplying a particular drug to various hospitals at different rates as detailed in Appendix-3.10 From the Appendix-3.10 it would be observed that in respect of five drugs (Sl. No. 1, 6, 7, 10, 12), the firms quoted lower rates to hospitals compared to rates quoted to CPA in contravention of the clause ibid and should have attracted penalty of forfeiture of the earnest money deposit (EMD) of the firms. Audit noted that since BSAH and LNH allowed and signed agreements with both manufacturers and suppliers, manufactures and suppliers were supplying same branded drugs at different rates as listed at Sl. No. 7, 8 and 12 in the

Appendix-3.10 Thus, supplies were being made by the suppliers in contravention of the terms and conditions of the agreement which defeated the objective of economical purchase of drugs by the department.

Since CPA has also not prescribed any report for monitoring performance of suppliers as per the terms and conditions of the agreements signed with firms, four hospitals, two institutes test checked in audit and the Central Store were not sending any feedback to CPA.

(b) Non enforcement of clauses relating to security deposit

As per tender, CPA was to receive EMD of Rs.1 lakh by demand draft/pay order from the bidding firms/companies and in case of successful tenderer, EMD was to be retained and adjusted as security deposit for performance of a contract. In addition, at the time of placing supply order, the company was to deposit within 15 days of issue of supply order equivalent to five *per cent* of the order with the purchaser. CPA was placing orders after receiving indents from the Central Store and hospitals/ institutes.

As no centralized database for monitoring of security deposit amounts in CPA was available, audit test checked supply orders to six bulk supplying firms during 2006-07 and 2007-08 and observed that CPA was not complying to this clause and failed to get deposits of Rs. 18.11 lakh in respect of five out of six firms as detailed in Appendix-3.11.

(c) Non enforcement of clause relating to delay in supply

As per tender "delivery of store must be completed within 42 days from the actual date of supply order for drugs and delivery must be completed within 6 weeks from the actual date of dispatch. The delivery of goods can be accepted up to 14 days for drugs and 15 days for surgical items after expiry of delivery period with penalty of 5 *per cent* of value of order for every delayed week maximum of 10 *per cent*. In case of any of the items being rejected or not supplied at all, the purchaser shall have liberty to procure the same at the risk and expenses of the supplier". Audit noted that all hospitals and two institutes test checked in audit were not complying with this condition strictly.

Audit noted that though all indenting units were deducting maximum of 10 *per cent* of total value of the supply order in case of delayed supplies irrespective of period of delay as audit noticed that in GTBH where a supply order was placed for 42 drugs on 31 January 2007, supplies were received in respect of 24 drugs beyond permissible 56 days as indicated in Appendix-3.12. There was no effort made to recover extra amount incurred on procuring drugs in case of non-supply from firms though indenting units continue to place supply orders with defaulting firms subsequently.

(d) Non compliance of risk purchase clause

As per order of CPA (December 2006), all indenting units including the Central Store were free to purchase from any other source on risk and cost basis, if any supplier fails to supply the store as per supply order. Scrutiny of records revealed that indenting units were not maintaining records of non supply cases properly as a result audit could not verify complete details of non supply cases. Audit further noted that test-checked hospitals and Central Store had not made any risk purchase in non supply cases during 2003-08.

Audit noted that the GBPH procured only 12 items against 32 items not supplied on risk purchase basis from other sources and spent an extra amount of Rs 1.42 lakh and did not recover excess amount spent on risk purchase. In LNH and BSAH, audit noted that no action was being taken against firms non-supplying items either in part or in full. The supply orders to firms not supplying the items in previous demand were placed in the next demand and items were received without levying any penalty. The firms were withholding their supplies and were supplying the same items in the next demand in order to evade penalty on delayed supply. Audit noted that neither was any intimation sent to CPA nor any action taken by the hospital against the defaulting firms.

Thus undue benefit was extended to suppliers at the risk of patient care as non-supply of drugs and surgical items not only resulted in stock outs of essential drugs/surgical items in hospital but also deprived needy patients from getting required quantity of drugs/surgical items.

3.1.7.9 Local purchases made through chemists by various hospitals

There were no guidelines defined for purchase of drugs from the local chemists. The items not available in the drug store were normally purchased for specific patients on the basis of written prescription of the attending physician. Audit noted that there was variation in discount rate at which hospitals procured drugs, surgical items, devices and implants from local chemists as detailed below:

Name of	Validity period		Percentage of discount offered		
chemist &	From	То	Generic	Branded	Surgical
Hospital				drugs	items
G B Pant	21.08.04	30.08.06	20	7.5	15.1
Hospital					
G B Pant	01.09.06	31.03.08	18.5	18.5	25
Hospital					
LNH	01.04.04	31.03.08	20	20	20
BSAH	22.06.07	31.03.08	20	4	20

It would be seen from above that the rates of discount offered by local chemists varied from four to 25 *per cent*. Further, during the same period (2007-08) BSAH was getting a discount of only four *per cent* on branded drugs while the LNH was getting 20 *per cent* discount. The hospitals should devise a mechanism for better coordination so that the discounts received are comparable.

3.1.7.10 Supply of drugs with MRP Print

One of the conditions for approval of tenders was suppliers' notarised undertaking for embossment/printing of logo on tablets/capsules/vials, etc. Further, as per the terms and conditions of tenders floated and agreement signed with suppliers of drugs, all drugs should be marked *Not For Sale, for DHS supply Govt. of NCT Delhi*, and price should not be printed on wrapper.

Six drugs¹⁷ were procured by the Central Store with MRP printed on their labels without requisite markings. Issuance of these drugs with MRP to dispensaries for further distribution to patients put these supplies at a risk of misuse and pilferage as there was a huge difference in CPA and non-CPA drug prices at which these drugs were actually procured and MRP printed on wrappers.

Audit noted that during a Delhi Police raid at a private clinic in October 2003, certain drugs and surgical consumables were recovered which were exclusively meant for 'Government of NCT of Delhi Supply'. Out of these drugs, supply of two drugs (same batch as recovered in police raid) was also received in the Central Store. In view of pilferage of medicine/surgical supply marked as NCT Hospital supply already happened, the medicine/surgical without the *Not For Sale* mark and with MRP print should not have been accepted by the Central Store as pilferage of these drugs cannot be detected as the supply would be same as that available in open market.

3.1.7.11 Overburdened pharmacy counter

As per committee report on norms for manpower in 100/200 bedded hospitals for Government of NCT of Delhi 2003, a pharmacist can entertain 180 patients depending upon number of drugs per prescription. No such exercise seems to have been done to assess the requirement of pharmacy counters in the selected hospitals and institutes test checked in audit.

However, scrutiny of records made available revealed that pharmacy counters were over burdened in all hospitals except GBPH during 2007-08 as

¹⁷ Asthalin Inhaler, Seroflo Inhaler, Beclate Inhaler, Cipladine Powder, Hemo-cue-microcuvettes, Pregnancy test kit one step

detailed below:

Sl. No.	Name of hospital	Pharmacy counters	Average daily attendance of patients	Patients to counter ratio
1.	GTBH	8	4600	575:1
2.	LNH	9	3074	342:1
3.	BSAH	4	4192	1048:1

3.1.7.12 Quality Assurance

As per the agreement, the purchaser reserved the right to depute persons to visit premises of all manufacturers for ensuring that good manufacturing practices (GMPs) are observed by manufacturers and inspect stores and draw sample from there before dispatch of consignment. Audit noted that CPA or other indenting units did not depute any person for pre delivery inspection and mainly relied on post delivery quality testing for CPA drugs and in-house quality report for non-CPA drugs.

Audit noted that as per the general prudence, every examination system needs confidentiality/secrecy to guard against intrusion of unfair tactics. CPA has not devised any system for maintaining confidentiality/secrecy in the testing process. Samples of drugs and surgical items were being sent in original with complete details viz. constitution of drug, potency and name of its manufacturer, etc. putting at risk effectiveness of testing process. Scrutiny of records revealed that CPA had spent Rs. 1.05 crore during 2003-04 to 2007-08 for testing of samples of drugs/surgical items. Analysis of data revealed that failure rate was only 0.22 *per cent* in respect of total 10160 drug samples tested and 0.26 *per cent* for 1536 sample of surgical items sent for testing during five years 2003-08.

(a) Inadequate testing of drugs and surgical items

CPA finalized two rate contracts with five NABL approved labs each during the years 2003-04 and 2005-06 to ensure testing of each batch of drugs/surgical items supplied to hospitals and the Central Store. As per the rate contract finalized by CPA, all indenting units were to send sample of batches within 7 days to CPA for quality testing. No mechanism/system was adopted by CPA to ensure that sample of each batch of supply was tested before distribution to patients. Audit noted that it was left to the Central store, hospitals and institutes to send samples of the batches of drugs supply received in their stores. Due to ineffective monitoring system at DHS and CPA, different practices of testing of drugs/surgical items were adopted in getting CPA drugs and surgical items tested in the test checked hospitals and institutes.

Audit further noted that in case of CPA drugs and surgical items, GTBH was sending sample drugs to CPA's approved labs whereas BSAH, and IHBAS were not getting drugs tested and GBPH was sending samples of drugs and surgical items since April 2006 to various labs approved by NABL instead of sending samples to CPA approved labs. In GTBH, surgical items were not sent to CPA during 2003-08 for testing and stock of items were issued and consumed before receiving test reports. The Drug store of GTBH intimated audit in August 2008 that it has started sending samples of surgical items to CPA for testing with effect from September 2008. In case of non-CPA drugs, GTBH, GBPH, LNH, BSAH, IHBAS, DSCI and the Central Store were relying on in-house report provided by suppliers.

Further CPA was not maintaining information of pre and post delivery inspections of supplies received by hospitals, institutes and the Central Store, there was no assurance that all batches were sent to laboratories for testing and quality testing reports were received in time before their distribution to patients.

(b) Poor-reporting of test laboratories

As per the section 17 (A) (d) of the Drugs and Cosmetics Act 1940, any drug shall be deemed to be adulterated if it bears or contains, for the purposes of colouring only, a colour other than one which is prescribed. Further, Rule 58(i) envisaged that drugs not of standard quality shall be confiscated and destroyed.

Audit noted that Central Store had procured 9250 and 27000 bottles of drug namely *Chlorhexidine mouthwash* in December 2007 and April 2008. The sample had green colour which was other than prescribed brilliant blue but was declared of standard quality by the testing lab. In June 2008, the supplier replaced the entire batch due to discoloration on the instructions of Central Store. Audit further noted that instructions for stopping distribution of drug to patients was received in CDMO (North-East) office on 3 July 2008 which was further communicated to dispensaries after a delay of 28 days. Audit further noted that in contravention to above provisions 20,841 bottles were returned to the supplier in August 2008 instead of destroying the medicine as balance was already issued to patients.

Similarly, Central Store procured 18,000 vials (two batches) of *Sulphacetamide Eye drop* on 10 May 2007 under CPA rate contract. Samples of both batches were declared of standard quality by two testing labs on 26 June 2007 and 27 July 2007 respectively in spite of the fact that one batch was

of pale yellow colour and another batch was clear colorless solution. In the meanwhile, both batches were issued to patients by various dispensaries. Further supply of 37,000 vials was received on 22 June 2007 by the Central Store. Test report of sample having pale yellow liquid was again declared of standard quality. All vials were issued to the dispensaries till April 2008. Audit noted that the Central Store stopped distribution (July 2008) after receiving a complaint from one of the dispensaries about the solution becoming turbid.

GTBH issued 3,09,160 tab. of *Diclofenac Sodium*, 22,000 tab. of *Phenytoin Sodium*, 6,875 bottle of *Paracetamol* syp and 7,000 bottle of *Promethazine* syp to patients which subsequently failed in lab testing. Similarly, the Central Store also distributed drugs to dispensaries for issue to patients without waiting for their quality test reports which resulted in consumption of substandard drugs by patients viz. 7679, 1370, 19138 and 17025 bottles of syrups *Calcium*, *Diphenydramine*, *Promethazine* and *Cyproheptadine* respectively. Subsequently, the stock of unconsumed drugs in all these cases was replaced by the suppliers.

Further, instead of confiscating sub-standard drugs, hospitals and the Central Store allowed suppliers to replace the batches which increased the risk of these drugs being sold in the open market.

(c) No provision kept for penalising labs for incorrect reporting

CPA awarded work of testing of drugs and surgical item to the NABL approved labs. These labs were required to furnish test reports to CPA within seven days failing which 5 *per cent* penalty would be imposed on these labs for delay in furnishing reports to CPA. Audit noted that there was no penalty clause incorporated in agreements signed with these labs on furnishing incorrect testing reports. In none of three cases noticed in audit, as brought out in paragraph 3.1.7.12 (b) of this report, were the three labs which furnished incorrect test reports penalized.

(d) Inadequate action taken against firms supplying sub-standard drugs

As per agreement finalized by CPA with supplying firms, if a drug(s) supplied by the tenderer is found "Not of Standard Quality", the firm would be debarred from supplying that drug for a period of two years. Test check of records revealed that 22 samples of drugs and 4 samples of surgical items were found "Not of Standard Quality" during 2003-04 to 2007-08.

Scrutiny of records revealed that there were seven manufactures whose samples of more than one drug failed to satisfy quality standards. Accordingly, these manufactures should have been debarred for supply of any drugs for the two years, however, audit noted that CPA failed to initiate action even after a period of more than 5 years and continued to issue supply orders to these manufacturers. Further by allowing suppliers to replace sub standard drugs, chances for these appearing in local markets could not be ruled out putting at risk life of patients.

(e) Defective tender clause incorporated in the NIT for lab testing

Audit noted that CPA had invited limited tenders for laboratory testing of drugs and surgical items for two times during 2003-04 to 2007-08 with the validity of two years. Audit noted that CPA had invited quotations for testing for drugs/ surgical items from NABL approved labs in 2005 and as per clause 4 of NIT, Delhi government could offer L1 rates to others qualifying tenderers also and work of testing samples could be evenly distributed among all qualifying laboratories. Comparison of rates of 2003-04 with current rate contract of 2005-06 revealed that rates for testing of 139 items increased by nine times as indicated in Appendix-3.13.

Thus there was no incentive for laboratories to quote minimum rate for testing drug/ surgical items as each laboratory was aware before submitting its bids that proportional job work will automatically be allotted to it. Audit noted that as a result all laboratories quoted maximum rates for testing of each item.

3.1.7.13 Procurement of equipment

Equipment Procurement Cell (EPC) is responsible for procuring equipments costing Rs. 5 lakh and above for hospitals and institutes through open tenders. After finalization of tenders by EPC the indenting hospital is responsible for receipt, inspection, installation and commissioning of equipment and release of payment to supplying firm. No mechanism was devised by EPC for getting feedback from users for monitoring performance of contract and efficient functioning of the procured equipments.

No annual plan/long term plan for procurement of equipments has been prepared either by EPC or by all hospitals test-checked in audit. No database of suppliers/manufacturers, up-to-date information on technical specifications, list of prices at which the specific version of the equipment are available and being supplied all over country in consonance with the orders of department issued in August 1999, is being maintained by EPC. Audit also noted that EPC had not taken any action on any supplier during 2003-08. There were delays ranging from 5 to 19 months in opening LCs for procurement of equipments from abroad, whose A/Ts were already finalized by EPC.

(a) Outstanding contingent advances

Rule 118 of Receipt and Payment Rules stipulates that money drawn on abstract contingent bills for payment of advances to suppliers should be adjusted within one month from date of drawal.

Audit noted that large amounts of contingent advances given to suppliers remained unadjusted in GBPH (Rs. 28.72 crore) and LNH (Rs. 39.09 crore) for 8 years since 2000; GTBH (Rs. 13.57 crore) for 4 years since 2004 and BSAH (Rs. 2.00 crore) for 5 years since 2003 as 80 *per cent* of payments were released on receipt of equipments in the hospitals and final bills were not received in hospitals for adjustment. None of the hospitals has taken any initiative to settle these advances. Audit noted that reasons of outstanding advances were on account of incomplete civil work, delay in installing equipments, not receiving components as per A/Ts finalized, etc. as discussed in succeeding paragraphs.

(b) Equipments not received after finalization of A/T

For GTBH, EPC finalised Acceptance of Tender (A/T) for 87 equipments during the year 2004-05 to 2007-08. Out of 87 equipments only 44 equipments were received in hospital. In the remaining 43 cases, 5 equipments (A/T finalized in 2004-05), 4 equipments (A/T finalized in 2005-06), 6 equipments (A/T finalized in 2006-07), 28 equipments (A/T finalized in 2007-08), had not been received till August 2008. Reasons for not receiving of these equipments for the period ranging one to five years were not available in the hospital records. As per clause 15 of the A/T for the supply of equipments, the EPC was empowered to make purchase at risk and cost after four months of placing the order. Audit noted that neither EPC nor indenting hospital took any initiative to procure equipments at the risk and cost of the defaulting contractors during the last five years. Audit further noted that in case of non-supply of equipments, security deposit of the firms was to be forfeited which was also not done.

Audit noted that while forwarding proposals for procurement of equipment to EPC, the hospital justified that each equipment was essential for patient care and that budget was available for procurement of equipment. However the hospital did not procure these equipments after finalization of A/T indicating that equipments proposed for procurement were not essential for patient care as neither EPC nor the hospital did not make risk purchase.

(c) Delay in installation of equipments

Audit noted that there was a delay in installation of equipments after receipt in hospitals during 2004-05 to 2007-08 as detailed below:

Name of	No. of	Ť T	Time taken in installation			
indenting unit	equipments	more than 6 months	3 to 6 months	1 to 3 months	less than 1 month	
GTBH	43	6	10	10	17	
GBPH	35	14	12	6	3	
LNH	48	9	6	16	17	
BSAH	08	Nil	03	04	01	

Table: Delay in installation of equipment

As it would be observed from the table delay in installation ranging one month to more than a year in 26 out of 43 equipments received in GTBH, 32 out of 35 equipments were installed after one month from their receipt in GBPH including five equipments which were installed after delay of one year. Audit noted that as per reasons for delay in installation of 12 equipments furnished by the GBPH, in six cases suppliers failed to deliver full parts of the equipments for successful running of equipments and in remaining cases installation sites were not ready. Instances where specific delays were noted have been discussed in succeeding paragraphs.

- GBPH procured (July 2007) 18 ICU ventilators at a cost of Rs. 1.23 crore for providing resuscitation to serious neuro surgical patients requiring artificial respiratory support. Audit noted that 17 ICU ventilators were installed after 15 months (October 2008) of their receipt as the new modular OT ICU complex where these equipments were to be installed was not ready. One ICU ventilator has not been installed as it was 'non-functional'. No action has been taken against the supplier till date.
- GBPH procured four types of equipment (Mobile C-arm, ICU beds, ICU Monitor, Cardiovascular Angiography System Including DSA) and DSCI has procured two equipments (Digital, Radio fluoroscopy unit, Dual Photon Energy Linear Accelerator) which have not been installed for period ranging three to 14 months as of October 2008. DSCI attributed the delay in installation to non-completion of civil works.
- GBPH received a Digital Video EEG Machine on 4 July 2006 and a Video Polysomnography on 26 July 2006 from M/s Rohanika costing Rs 30.14 lakh and Rs 32.80 lakh respectively. The firm provided cameras which were not as per the approved specifications. Audit noted that the hospital released 20 *per cent* of the balance amount without ensuring replacement of these cameras.
- LNH procured 10 Ceiling OT lights costing Rs 1.61 crore in June 2007 for use in emergency operation theatre. These lights could not be

installed till October 2008 due to non-completion of work of operation theatre. Audit noted that the hospital had also imported two infant ventilators for Rs 13.22 lakh in June 2005, which have still not been installed after more than three years even though the case was pointed out in paragraph 3.4 in C&AG report Volume-I on Government of Delhi of 2008.

- CT Scan machine installed at a cost of Rs. 4.25 crore in the GTBH on 27 March 2001 was not being utilized as per its capacity mainly due to non-availability of X-ray tube.
- BSAH imported two multi parameter monitors in March 2005 by spending Rs. 10.70 lakh upto August 2008. The monitors could not be installed as of October 2008 as the accessories did not match and two paediatrics saturation probes were also short supplied. This was also pointed out in paragraph 3.2 in C&AG report Volume-I Government of Delhi of 2008. The equipment was still lying idle and no action has so far been taken against the firm.
- IHBAS procured an imported 1000 Digital X-Ray machine at a cost of Rs. 2.14 crore in 2004 to improve facilities for radiology investigations. The equipment was installed in December 2004. However, there was a problem in proper functioning of the equipment and a phase correction device was to be installed. Audit noted that due to delay in supply of this device, the machine remained idle for nearly two years. No penalty was imposed on the supplier for late supply of device.
- The Central Store in January 2008 procured eight Haemo-analysers alongwith reagents and issued to eight¹⁸ dispensaries between February 2008 and March 2008. The Central Store paid Rs. 32.60 lakh to the supplier in March 2008 without signing any agreement and ascertaining successful installation. Audit noted that equipments could not be made functional since purchase in seven out of eight dispensaries as of October 2008. In the meanwhile, reagents issued earlier with equipments evaporated/crystallized due to their poor quality, and another 10 sets of reagents were purchased in March 2008 by the Central Store at a total cost of Rs. 5.95 lakh in anticipation of future demand. The Central Store did not take any action against the firm and failed to provide a crucial test facility to patients even after incurring an expenditure of Rs. 38.55 lakh.

¹⁸ Dwarka Sector 12, Paschim Vihar, Gulabi Bagh, Keshav Puram, Dilshad Garden, Chamelian Road, Begumpur, Vasundhara Enclave

(d) Improper maintenance of equipments in dispensaries

Test check of records revealed that lab equipments remained non-functional for a period ranging from one month to five years during 2003-08 in 13 dispensaries as detailed in the following table:

Sl. No.	Name of dispensary	Name of non-functional equipment	Period of non- functionality (in months)
1.	Laxmi Nagar	Electronic Microscope	3.5
2.	Vasundhara Enclave	Semi auto blood analyser	5
3.	Paschim Vihar	Urine analyzer	60
		Hemoglobin-o-meter	48
		ESR Analyser	1
4.	Sultanpuri	Glucometer theft*	4
5.	Mangolpuri	Urine analyser	7
6.	Sagarpur	ESR analyser and Hb meter	13 and 4
7.	Dwarka Sector-12	Microscope	4
8.	Gulabi Bagh	Electrolyte analyser	12
9.	Seelampur	Microscope	13
10.	Dilshad Graden	Electrical microscope	16
11.	Nabi Karim	Lipid analyser	2
12.	Madipur	All lab equipments	60**
13.	Tajpur	X ray Machine and film processor	15***

* The dispensary lodged a FIR on account of theft of glucometer.

** Due to non-posting of lab technician

*** due to not posting of radiographer

Though the dispensaries were regularly intimating non-functioning of equipments to DHS through CDMOs, no action was taken by DHS and the Central Store. Further, the Central Store was awarding annual maintenance contracts for equipments provided in dispensaries. Audit noted that the Central Store did not intimate any dispensaries about award of such contract and the Central Store was releasing payments to the firms on the basis of bills presented by the firms without any verification from any dispensary leaving scope of fraud by the firm as brought out in succeeding paragraphs.

- A test check of records in Mahipalpur Dispensary revealed that the service provider (M/s Swastik Diagnostics) actually replaced printer @15,300 and filter @ 9350 in the dispensary and presented its bill for printer @ 15,300 and filter assembly @ 25,500 by tampering (adding the word assembly after filter) in the original service report signed by the MO I/c of the dispensary thereby charged an extra amount of Rs. 16,796. The firm did not return any defective parts to the dispensary.
- In Mangolpuri Dispensary, the service provider replaced printer @ 15,300 and filter @ 9350 and presented its bill for CPU Board @ 28,050 and filter @ 9350 by tampering (replacing printer with CPU Board by applying correction fluid) in the original service report signed by the MO of the dispensary thereby charged an extra amount of Rs. 13,260.

• Test check of records in Gulabi Bagh dispensary revealed that the service provider actually cleaned and serviced the 6 bilurubin meters in the dispensary and presented the bill for replacement of calibration board amounting to an extra amount of Rs. 13,260.

Thus, audit detected an extra amount of Rs. 43,316 in three of the test checked dispensaries against two AMC payments to the same firm by tampering papers and documents, which need to be examined. The Central Store released advance payment to the firm without even ensuring that the firm actually visited all 26 dispensaries for maintenance.

3.1.7.14 Ineffective monitoring

The Department had directed (April 2006) all the hospitals to send monthly status report of key activities containing details of non-functional equipments in laboratory and radiology departments, OPD and IPD attendance, number of lab tests done, waiting time for lab tests/radio-imaging services and elective surgeries, etc. by 7th of every following month to department. Audit noted that GTBH and GBPH were not complying with the requirement whereas, BSAH and LNH were sending their reports.

(a) Ineffective monitoring at hospital level

Audit noted that all indenting hospitals failed to monitor cases of non supply and delayed supplies and did not impose penalty as per the provisions of agreements. No periodical returns for ensuring regular and timely supply of essential drugs/surgical items and its stock out position were submitted to MS/higher authorities of the hospital. None of hospitals test checked in audit had computerized system for monitoring performance of suppliers, inventory of essential drugs/surgical items and status of functional equipments.

(b) Ineffective monitoring at DHS level

The department has not devised any Management Information System (MIS) either in manual or computerized environment for receiving returns/reports from indenting units for tracking status of supply orders, performance of equipments, inventory, stock-outs of essential drugs, performance of suppliers, quality assurance by testing laboratories and enforcing penalty clauses in case of non-performance of rate contract at any level.

Audit noted that DHS was not monitoring performance of CPA and the Central Store and there were stock outs in hospitals and dispensaries as brought out in the report. The dispensaries were sending manual reports/returns to DHS (through CDMOs) about OPD attendance, staff strength, stock-outs, status of lab equipments, etc. These returns were not sent

to the Central Store who was responsible for procurement of drugs and awarding maintenance contracts for lab equipments in dispensaries. Thus the store was not aware about stock-outs of essential drugs and status of lab equipments for which AMCs was to be awarded. As a result there were stockouts of essential drugs in each of 25 selected dispensaries and non-functional equipments in 13 dispensaries.

DHS had incurred an expenditure of Rs. 98.35 lakh in March 2006 for computerization of 38 wings (non-hospital component) including CPA and Central Store. Audit noted that CPA and the Central store could not operationalise any module till September 2008 though developed by the firm in June 2006. The Central Store intimated Audit that software provided in June 2005 was not as per their requirement and therefore could not be used for the purposes intended.

3.1.8 Conclusion

Performance audit of procurement of drugs and medical equipment and its impact on delivery of health services in Delhi revealed that due to lack of documented procurement procedures and instructions, ad-hoc systems and practices were adopted by the department. Failure of indenting units to assess the actual requirements resulted in stock outs of essential life saving drugs inspite of having sufficient budget for their procurements. Inspite of having a centralized system of procurement of equipments, there was no efforts made to standardize equipments and monitor performance of firms after finalisation of A/Ts.

No system has been put in place for monitoring quality of drugs being supplied to hospitals/ institutes and dispensaries. Testing of CPA drugs and surgical items were carried out in a routine manner and there was no tracking of supplies at CPA and the Central Store level to ensure that testing of all batches was carried out. Further, distribution of drugs before conducting quality testing of drugs and further delay in circulating reports about failed tests to the end users put lives of patients at risk. The department further failed to initiate action against erring suppliers and placed orders with same suppliers/ manufacturers. No Management Information System, either manually or in computerized environment was devised at department, DHS, CPA and Central Store level for planning and managing procurements and supplies.

It infers that despite creating all the infrastructure by the department to assist in providing health care services to nearly 1.70 crore population of Delhi, the object based on equality and health care for the under-privileged sought to be attained through Delhi Health Policy was defeated.

3.1.9 Recommendations

- In order to ensure operationalisation of good procurement practices, it is necessary that department, CPA, the Central Store, EPC and all indenting hospitals/ institutes prepare detailed guidelines and procedures including wherever applicable standardised forms. Such documentation would also facilitate transparency in the process.
- Procurement needs of all indenting hospitals/ institutes should be properly planned, consolidated and coordinated after properly assessing requirements in order to take advantage of bulk purchase discounts and to avoid stock out of essential and life saving drugs.
- The department needs to standardize clauses in standard bidding documents and agreements to ensure compliance with the Drug and Cosmetics Act, 1940 and ensure that drugs failing quality testing should be confiscated and destroyed as stipulated under the Act and Rules.
- Management Information System should be strengthened at all levels for tracking status of supplies, monitoring suppliers, monitoring installation of equipments within prescribed time schedule and for ensuring compliance with terms and conditions of agreements. A copy of full rate contract of all hospitals may be displayed on the department's website for ensuring procurement of drugs economically.
- CPA and all indenting units need to maintain a database of delayed supplies and need to ensure compliance with terms and conditions of agreements. All suppliers should be made responsible for providing status of supplies made against supply orders placed by CPA and indenting units for keeping track of status of supplies. Further MRP printed supplies without markings of not for sale should not be accepted.
- In order to make system transparent, hospitals and dispensaries might consider displaying availability of drugs and surgical items on the electronic board/ board on daily basis for convenience of patients.

Municipal Services

3.2 Performance Audit on Improvement and Strengthening of Urban Roads by the Municipal Corporation of Delhi

Delhi's population has increased from 94.21 lakh during 1991 to 162 lakh in 2006. The growth of population has also seen an alarming growth of vehicular traffic. The number of vehicles has increased from 2.14 lakh in the year 1971-72 to 52.32 lakh in the year 2006-07 (a 24 times increase). The total road network of Delhi has risen from 8,380 kms in 1971-72 to 30,923 kms in 2006-07 (a 3.7 times increase). This imbalance has resulted in heavy traffic congestion causing hardships to the commuters. The problem is aggravated by badly maintained roads. Maintenance and construction of new roads is thus a high priority area for urban re-generation. It is for such reasons we conducted a performance review on the strengthening and maintenance of roads.

Highlights

Information on the year of last construction of a road was not being maintained by the divisional offices in the prescribed proforma. Testcheck of divisional records revealed that the MCD had not even maintained relevant initial records (asset registers) containing this information.

(Paragraph 3.2.6.1)

Schemes were not being executed in their totality. Schemes' components relating to improvement of drainage systems were being left out causing premature deterioration of the roads. Schemes like footpaths, side berms and street lights necessary for the safety of commuters and pedestrians were not implemented.

(*Paragraph 3.2.7.1(a*))

Due to delay in award of works ranging from 3 to over 12 months, there was cost escalation up to Rs 12.07 crore in respect of 83 contracts analysed in audit.

(*Paragraph 3.2.7.1(b*))

Large numbers of works were lying incomplete even after the stipulated date of completion. It was, however, seen that contactors had already been paid substantial amounts (87 per cent) of the total contractual amount in respect of works, which were still incomplete.

(*Paragraph 3.2.7.1(d*))

Quality checks were not being carried out to the desired extent. Out of a total of 160 works required to be tested by the QCC/Chief Engineer/ third party, only 85 works (53%) were actually checked.

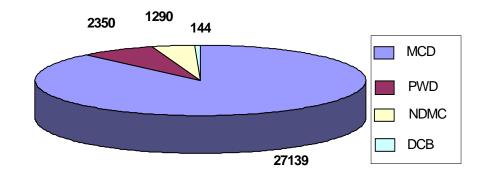
(*Paragraph 3.2.8.1(a*))

Our analysis of the roads that had suffered the maximum damage during the recent monsoon showed that MCD had accepted sub-standard roads although CRRI inspections had thrown up defects in most of the works. They were neither rectified by the contractors nor were compensations recovered.

(*Paragraph 3.2.8.1(b*))

3.2.1 Introduction

Delhi has a total road network of 30,923 kms. (as on March 2007). The MCD, PWD, NDMC and DCB^{*} are primarily responsible for development and maintenance of the roads in their areas as shown in the chart below:



KMs of Roads maintained by various authorities

It would be seen that 88 *per cent* of the road network of Delhi is under the purview of the MCD. MCD receives grants from the Government of the National Capital Territory of Delhi (Delhi Government) for development of the urban roads.

A performance audit on the improvement and strengthening of urban roads under the transport sector for the period 2003-2004 to 2007-08 was carried out to examine whether the road works were executed economically and

^{*} Delhi Cantonment Board

efficiently and whether the specified quality of works was ensured in order to benefit the commuters of Delhi.

3.2.2 Organization set up

The department of Urban Development of the Delhi Government is the administrative department and releases funds to the MCD for the execution of the schemes. The Engineering department is headed by one Engineer-in-Chief, five Chief Engineers (Civil) and two Chief Engineers (Electrical). To look after works in 12 zones, each zone has one Superintending Engineer and two Executive Engineers (Maintenance). There are one/two Executive Engineers, to look after major projects of each zone. Each Executive Engineer is assisted by Assistant Engineers and Junior Engineers.

3.2.3 Audit objectives

The audit objectives were to ascertain whether:

- planning for implementation of various schemes was effective and based on reliable data;
- funds were utilized for the intended purposes;
- works were executed economically;
- contracts were implemented efficiently and effectively; and
- quality of works was ensured.

3.2.4 Audit criteria

The audit criteria used in the performance audit included the following:

- availability of definite reliable data regarding roads for planning;
- specifications contained in MORT&H¹⁹/CPWD Manual regarding construction of roads and MCD conditions of contract; and
- mechanism for quality assurance in MCD

3.2.5 Audit scope and methodology

The performance audit conducted during April to September 2008, covered the period from 2003-04 to 2007-08. During the audit, records of 12 out of 22 offices from 6 out of 12 zones of MCD were test-checked. The audit methodology included checking of related records maintained by the planning and monitoring cell and quality control cell. Selected road works were also physically inspected by the audit team along with the officials of the MCD.

¹⁹ Ministry of Road Transport and Highways

Further, public satisfaction with regard to road maintenance was also ascertained by issuing questionnaires to randomly selected residents' welfare associations (RWAs).

An entry conference to discuss the audit objectives and gain agreement on the audit criteria was held in June 2008. The exit conference to obtain the MCD's viewpoint on the audit conclusions and recommendations was held in January 2009. The replies and views of MCD on the audit observations have been incorporated in the report at appropriate places.

3.2.6 Audit findings

3.2.6.1 Planning

It was essential for MCD to plan and prioritize their works in a cost effective manner after conducting periodic surveys to identify stressed out road stretches that required immediate attention. This would enable MCD to draw up maintenance strategies for its road network. Audit observed that MCD did not conduct any survey and maintain any record to watch the stretches that needed maintenance.

To avoid expenditure on works during defect liability period of the contractor it is mandatory on the part of the divisional offices to mention the year of last construction of the road in the prescribed proforma. We appraised 301 cases in 10 divisions and found that the said information was available in 204 cases (68 *per cent*). Test-check, however, revealed that the MCD had not maintained even the relevant initial records (asset registers) which should contain this information regarding period of last construction of the said roads. Therefore the correctness of the information available also could not be verified by Audit.

The schemes were being proposed for the approval of the Lieutenant Governor on the basis of recommendations from area councilors and MLAs and inputs received from experienced field staff. Roads were therefore improved on an adhoc basis without taking a holistic view of the situation.

On being pointed out in Audit, the MCD issued a circular dated 22 September 2008 making the Executive Engineer-Quality Control responsible for preparing a consolidated data base to scrutinize/monitor all projects/works containing warranty clauses for a specified period in view of the financial implications as well as to monitor the deviations in execution of the proposals. Further, digitized maps would be prepared for all major projects and submitted to the Executive Engineer-Quality Control for future reference.

3.2.6.1(a)Inadequate funding for road schemes

We observed that the MCD, which maintained 88 *per cent* of Delhi's road network, received very meager allocations from the Government compared to the PWD which maintained only 7.6 *per cent* of the road network of Delhi. During 2003-04 to 2007-08, the approved outlay for PWD per km of road maintained by it was 15 to 43 times higher than that of MCD (Appendix-3.14). In the absence of relevant database on its road network, the MCD could not have even put up a considered case for increased allocations to the Government of Delhi. The MCD accepted the facts (January 2009).

3.2.6.1(b)Improper utilization of funds

The Delhi Government released grants to MCD under the transport sector for construction and maintenance of urban roads. Year-wise position of funds received and expenditure incurred by MCD during 2003-04 to 2007-08 was as under:

		(Rs. in crore)	
Year	(Urban Roads)		
	Receipt	Expenditure	
2003-04	95.00	89.52	
2004-05	105.48	105.39	
2005-06	115.00	96.94	
2006-07	109.50	100.09	
2007-08	99.41	99.03	
Total	524.39	490.97	

As seen from the table the MCD on an average was in receipt of grants of about 105 crore annually. It was however observed in audit that they got approved from the L.G., more schemes than what could be implemented from the available funds. The L.G. had approved schemes worth Rs. 207.26 crore annually during April 2002 to March 2008 for the 11 zones of MCD. This gave the MCD considerable scope to use their discretion in the implementation of schemes, to pick and choose some and neglect the others as discussed in paragraph 3.1.6.2(a).

The MCD stated (January 2009) that the schemes were got approved from the L.G. as per provision in the five year plan as a whole and on a number of occasions the year wise outlay was curtailed at the time of releasing of grants to MCD. The reply is not correct because scrutiny of revised estimates for the period revealed that the MCD had in fact received more funds than they had asked for.

3.2.6.1(c)Diversion of funds and unauthorized expenditure

As pointed out earlier in para 3.2.6.1 (a) the allocation of funds for roads was very meager. Even such meager allocations were being diverted for works other than roads. We found that Rs. 1.66 crore provided under the plan head "urban roads" was diverted by the 10 offices test-checked, for other administrative works like purchase of vehicles, computers, hiring of vehicles and construction of office building. The MCD replied that this expenditure was a part of the contingent expenditure, which was permitted. The reply is not acceptable because the sanctions issued by the Delhi Government do not allow for any contingent expenditure. We also noticed an unauthorized expenditure of Rs. 1.59 crore by five offices on five works (Appendix-3.15), which were not covered under the schemes administratively approved by L.G. under the said plan head.

3.2.6.1(d) Non-utilisation of Road Restoration charges collected from other agencies

Public utilities like Delhi Jal Board, MTNL, BSNL, NDPL and DDA often require roads to be dug up for laying cables, pipe lines etc. MCD makes an estimate of the funds required to restore the roads to their usual conditions. These funds are deposited by the utilities with the MCD before the latter grants the agencies permission for road cutting. MCD had received an amount of Rs. 211 crore during 2003-08 as road restoration charges. Scrutiny of records of MCD headquarters for the period from April 2005 to December 2007 revealed that in 600 out of 2515 cases (24 *per cent*) of road cuttings permitted, the road restoration charges of Rs. 35.31 crore as of April 2008 were not used for roads restoration purposes. MCD intimated that the remaining balance was Rs. 26.72 crore as on January 2009. Thus, even though the allocations were low, they could not be fully used, as also the funds received from these agencies.

Moreover the concerned divisions did not maintain any watch registers to keep a watch over permissions granted to other agencies for road cutting and subsequent road restoration. There was also no information on whether money collected for road restoration purposes was actually used for restoring the concerned roads only. During the scrutiny of records it was found that division No.XXIII had granted road cutting permission in 18 cases after collecting the road restoration charges of Rs. 1.61 crore from the utility agencies during February 2005 to September 2007. As the amount was lying unutilized in MCD accounts, the division was asked whether these roads were restored. The Executive Engineer in reply stated (June 2008) that the roads cuts were since restored but the source of funds used was not known. Other divisions (Division No.VII & MRZ-I) failed to furnish any reply in the absence of any watch registers.

The MCD stated (January 2009) that road restoration charges have not been fully utilized due to technical reasons and site conditions. The reply of MCD cannot be accepted, as it was not substantiated from the relevant watch/control registers, which as already stated were not maintained.

3.2.7.1 Implementation of schemes and contract management

As per the procedure adopted by the MCD, the urban road schemes are prepared by the concerned divisions. They are examined by the technical committees and then are forwarded to the L.G. for administrative approval. Thereafter, the schemes are placed before the Standing Committee²⁰ for expenditure sanction. Notices Inviting Tenders (NITs) are floated and thereafter works are awarded to the lowest tenderer. The L.G. had approved 257 schemes for Rs. 1243.55 crore during April 2002 to March 2008 for the 11 zones of MCD. Test-check of related records in respect of 157 schemes in six zones revealed various problems in the implementation of schemes, which are discussed, in the ensuing paragraphs.

3.2.7.1(a) Schemes and scheme components not taken up

Audit observed that 14 schemes worth Rs. 30.08 crore were not taken up out of the 157 schemes test-checked as of August 2008 even after 6 months to 100 months of their approval.

Schemes that were approved had several components such as drainage, footpaths, strengthening of roads etc. We, however, found that schemes were not being executed in their totality. The MCD had used their discretion to implement few of the components leaving out others. Out of 734 components of 143 schemes worth Rs. 236.25 crore, 403 components (55 *per cent*) worth Rs. 63.77 crore were not executed as of September 2008.

Name of Zone	Strength -ening of carriage- way	Improvement of drainage system	Footpath, berms, central verge	Provision for light	Horticulture	Sign board, central line, improvement of intersection	Total
Rohini	10	1	8	25	30	38	112
South	3	1	4	16	21	23	68
West	9	3	15	10	15	53	105
Central	1	5	7	1	3	23	40
Karol Bagh	4	-	11	-	10	21	46
Najafgarh	1	-	3	3	4	21	32
Total	28	10	48	55	83	179	403

Zone-wise details of unexecuted components are tabulated below:

Although the norms for maintenance of roads require that before strengthening of a road through dense carpeting, availability of a functional drainage system must be ensured to avoid water logging and premature

²⁰ Sanctions expenditure more than 25 lakh

deterioration of the road, the same was not done. We noticed that in 10 schemes though provisions for improvement of drains along with strengthening of carriageways had been made, the drain works were not executed at all. An expenditure of Rs. 9.62 crore was incurred on strengthening of the carriageways alone. In 10 other cases, the drainage systems were improved after a delay of four to 34 months after completion of strengthening of the carriageways.

Similarly, non-execution of works of footpaths/side berms and streetlights was causing inconvenience to the commuters. Discretion in implementing only parts of approved schemes was vitiating the whole process of formulation and approval and did not contribute to holistic solutions.

The MCD stated (January 2009) that the schemes were kept on hold in view of the forthcoming Commonwealth Games, 2010. The reply is not acceptable as the schemes approved as early as in 2002-03 and up to 2006-07 had not been executed.

3.2.7.1(b) Delay in award of works

Municipal Corporation of Delhi did not fix any time frame for the award of works after their administrative approval from the L.G. We observed that there were inordinate delays in award of works even after the administrative approval. An analysis of 268 contracts showed significant delays as tabulated below:

No. of works	Delay ranging from
14	3 to 6 months
57	7 to 9 months
34	10 to12 months
163	Exceeding 12 months

Audit analysis revealed that the tenders in respect of 60 works were called for after a delay of more than 12 months from the date of administrative approval. As such MCD took more than 12 months in getting the expenditure sanctioned. In 186 works there were delays from 3 months to more than 12 months in finalization of tenders after issue of NIT/receipt of tenders although CPWD Manual stipulated that works were to be awarded within 45 days of the receipt of tenders.

There was cost escalation of Rs. 12.07 crore in respect of 83 contracts due to delay in award of works apart from delay in the accrual of benefits to the public. While furnishing the reasons for delays the Corporation stated (January 2009) that as per the practice in MCD works costing more than Rs. 25 lakh were required to be placed before the Standing Committee after the concurrence of Finance Department. Works could be awarded only after the confirmation of minutes of the Committee and on a number of occasions the Committee meetings could not be convened on account of various reasons. This resulted in delays in award of works after receipt of tenders. However, it had been decided that henceforth expenditure sanctions should precede administrative sanctions to reduce the delays. The fact however remains that there were undue delays in award of works.

3.2.7.1(c) MCD adopting higher specifications than necessary

The manual mandates road works to be executed as per MORT&H/CPWD specifications. We noticed that MCD had incurred extra expenditure of Rs. 87 lakh in respect of 29 works as estimates prepared by them were not as per MORT&H specifications. Had MCD followed the specifications, they could have taken up longer stretches of their roads for strengthening.

(i) Extra expenditure on account of double avoidable tack coat

MORT&H specification 504.5 required that the work of bituminous macadam (BM) should be covered with a wearing course of asphaltic concrete within 48 hours. Audit scrutiny revealed that in ten out of 12 offices test checked inflated estimates were prepared taking into account the provision for two tack coats – one for laying BM and another for laying wearing course. As a result an amount of Rs. 26.25 lakh on 15 works was incurred as extra expenditure. It seems that the estimates were prepared on the assumption that the contractors would not be providing the wearing course within the specified period of 48 hours and accordingly, it was an exercise for the benefit of contractors.

The MCD stated (January 2009) that it is purely a technical matter and after detailed discussion with the Ministry of Surface and Transport the provision of double tack coat was being allowed. The officials of MCD agreed to provide a copy of the proceedings. However, no details have so far been provided to Audit by the MCD.

(ii) Over-payment due to excess quantity of bituminous macadam / asphaltic concrete

MORT&H specifications lay down the quantity of BM/AC required to be used for levelling course of 50 mm thickness and wearing course of AC having 40 mm thickness²¹.

We noticed in eight out of 12 offices test-checked in respect of 14 works that the contractors were overpaid by an amount of Rs. 60.64 lakh on account of an excess quantity of 4561.65 MT of BM/AC laid (required 46536.44 MT, laid 51098.09 MT). This was even after allowing 10 *per cent* weightage for undulations etc. In reply the MCD stated (January 2009) that the thickness was laid as per the actual profile of the road as per the site conditions. The reply cannot be accepted as the estimates prepared had taken into account the actual site condition and then had provided 10 *per cent* over and above for undulation etc.

3.2.7.1(d) Incomplete works

Time allowed for execution of works or the extended time in accordance with the conditions shall be the essence of the contract. In cases where contractors failed to act upon the extensions granted by the Engineer-in-Charge, recovery of compensation upto 10 *per cent* of the tendered value was to be made.

Audit scrutiny revealed that 59 works costing Rs. 34.90 crore (details in Appendix-3.16), taken up during 2003-04 to 2007-08, which were to be completed during the period June 2003 to July 2008 remained incomplete as of September 2008 even after delays of three to 63 months as shown in the following table:

Sl. No.	No. of works	Period of delay (in months)
1	21	3-12
2	13	13-24
3	6	25-36
4	4	37-48
5	15	More than 48

The contractors had neither submitted completion certificates nor submitted final bills though they had already drawn Rs. 30.37 crore through running bills, which constituted 87 *per cent* of the total contractual amount of these works. Penalty of Rs. 3.45 crore to be levied on the contractors for failure to complete the works in time as stipulated in the agreement was also not

²¹ Area of the surface X thickness X density of mix

enforced. In the absence of hindrance registers, the reasons of delays in completion of the works could not be ascertained.

The MCD did not furnish any reasons for the delays in the execution of works. They stated (January 2009) that a special monitoring cell had now been created to review the progress of works and with the introduction of e-governance the monitoring was expected to be more effective and progress would be reviewed from time to time. On non-maintenance of hindrance registers, the MCD assured in the exit conference that the instruction in this regard would be reiterated.

3.2.7.1(e) Acceptance of sub-standard works

The manual mandates that during the progress of works itself the defects/deficiencies in the items of work should be noted and the EEs were required to issue notices to the contractors to either rectify the defects or even get the works dismantled and redone if necessary. Acceptance of works below specifications and payment on reduced rates was to be resorted to, under exceptional circumstances, only for those items where it was structurally impossible to get the works from the contractors instead of insisting on execution of works as per specifications.

• In a work awarded for strengthening of a road, the very component that was necessary for strengthening i.e., asphaltic concrete was not executed. Scrutiny of the records of Project II West Zone revealed that the work of widening / improving / strengthening of roads connecting Road No. 32 Mayapuri and from Clock Tower to Jail Road in Hari Nagar was awarded at the contractual amount of Rs. 66.83 lakh in January 2004, with a provision to lay wearing course by asphaltic concrete. However the layer of wearing course i.e. asphaltic concrete was not executed at all till date, which resulted in poor quality of work. Further, the Central Road Research Institute (CRRI), which carried out, the third party check in January 2005 found the layer of BM executed to be below specification.

The MCD stated (January 2009) that the contractor had applied seal coat immediately on the freshly laid BM. The reply is not acceptable as there was no documentary evidence, such as entries in the measurement books, and purchase vouchers etc. available with the executing agency.

• (ii) In five works costing Rs. 9. 79 lakh executed during November 2006 to February 2007 in South Project division, no provision for wearing course over the BM layer had been made in the estimates making the work inherently not durable. Thus the roads were not strengthened even

after taking up the works under the scheme of improving and strengthening of roads.

While clarifying the position the MCD stated (January 2009) that out of 5 works asphaltic concrete was laid on two roads through separate work order dated 29.October 2007 and the seal coat was laid by the contactor on BM layers in the remaining three cases. The reply of the department was not sustainable because the AC was stated to have been laid on the 2 works after 8 months and the layers of BM were not protected by any seal coat in the meantime. The records relating to laying of seal coats in the remaining 3 works were not available in the concerned office visited by Audit. The MCD also did not furnish any documentary evidence in support of their reply. In one work costing Rs. 4.45 lakh of providing RMC²² on berms from Kamal cinema to A I/305 falling under South Project, the thickness of RMC was found below specifications and also the curing period was not observed. Quality Control Cell recommended recovery against the contractor in May 2006. We found that even after a lapse of two years the defective work had not been rectified and the recovery had also not been made.

The MCD stated (January 2009) that an amount of Rs. 25000/- had been recovered from the contractor on 2 January 2009.

3.2.8.1 Quality assurance mechanism in MCD

The MCD has a quality assurance mechanism that seeks to ensure that the technical specifications as per MORT&H standards were being complied with in the construction of roads. The checks were to be carried out at different stages as the works progress so that process control at various stages was possible. Field engineers of the MCD were responsible for ensuring proper quality of work as per approved specifications. The independent quality assurance set up consists of checks by the quality control cell/chief engineer and third party checks.

²² Ready mix concrete

^{*} The Assistant Engineer lifts the samples of material of the road works during their execution and sends them to the municipal lab for quality check. This sampling is mandatory for all works. The quality control cell of MCD and Chief Engineer are responsible for checking all works ranging from Rs. 5 lakh to 25 lakh. These samples are tested in designated labs. The recommendations of the quality control cell are forwarded to the EE/Superintendent Engineer concerned for remedial action.

Works above Rs. 25 lakh are scrutinized by a third party i.e. IIT Delhi, CRRI, Delhi and National Council Cement and Building Material (NCCB) Ballabh Garh.

3.2.8.1(a) Shortfall in quantity of checks to be conducted and implementation of recommendations

We scrutinized the records of the quality control cell and eight out of 11 offices test-checked to ascertain the implementation of the aforesaid mechanism. The results are tabulated in the following table:

Name of Division	Total No. of works required to be tested either by third party or quality control cell/Chief Engineer		Works actually tested		Shortfall	
	Quality control cell/Chief Engineer	Third party	Quality control cell/Chief Engineer	Third Party	Quality control cell (%)	Third party (%)
South project	22	33	8	20	14 (64)	13 (39)
Central project II	1	8	Nil	8	1 (100)	Nil
Rohini project I	15	24	8	12	7 (47)	12 (50)
West project I	4	18	1	10	3 (75)	8 (44)
Division VII	2	5	Nil	1	2 (100)	4 (80)
Division XXIII	5	Nil	2	Nil	3 (60)	Nil
Division Karol	12	8	4	8	8 (67)	Nil
Bagh Project						
Division No. 6	3	Nil	3	Nil	Nil	Nil
Total	64	96	26	59	38 (59)	37 (39)

As seen from the above table, out of a total of 160 works required to be tested, only 85 works (53%) were picked up for quality check. Further, although the Quality Cell had issued orders calling for rectification in respect of the 26 works checked by them, Audit did not find any record of action taken on the recommendations by the concerned EEs, reducing the whole exercise to a farce.

3.2.8.1(b) Non-rectification of roads found sub-standard by CRRI and poor maintenance led to their deterioration during the monsoon

With the advent of rains during June/July 2008 all the news papers in Delhi carried prominent stories of the conditions of roads. The rains had severely damaged the roads, which had adversely affected their riding quality. Following the furor in the newspapers, 42 roads were identified by MCD as damaged (within warranty period) following a survey. We carried out a detailed scrutiny of the quality checks in respect of 20 roads. The results are tabulated in Appendix-3.17.

Audit found that in the case of 11 roads (55 *per cent*) constructed during 2003-04 to 2007-08 at a cost of Rs. 17.93 crore, the samples taken by the third party were found to be below specifications. MCD had not ensured rectification of defects during the warranty period of the agreements. Substandard works were accepted by the MCD after recovering a penalty of Rs. 12.18 lakh in respect of 5 works constructed at a cost of Rs. 3.18 crore. In

respect of six roads where the department had lifted samples, the samples were found to be below specifications. In all these cases, the executing agencies had failed to take rectificatory action. We also found five cases where the samples lifted by the department were reported as acceptable but those of the third party were found to be below specifications. In case of four roads the department had not conducted its mandatory sample checking. In respect of two roads the third party sample check was also not conducted.

The EE stated (September 2008) that the deterioration of roads was because of improper drainage system and water logging. The Commissioner of MCD while furnishing the reasons to the General Body of the MCD on 30 September 2008 stated that the roads were damaged due to road cutting by user agencies, clogging of drains by household waste and encroachment of roads by the public.

However, the fact remains that it was for the MCD to get the roads repaired from the road restoration charges collected from the user agencies, to ensure periodic desilting of drains and to protect its property from encroachments, which they had failed to do. Further, as the third party had declared 50 *per cent* works to be below specifications, the deterioration of roads can be attributed to the acceptance of sub-standard works from the contractors by the MCD. By resorting to recovery of insignificant penalties from the contractors the MCD had failed to hold them responsible for the quality of works executed by them.

3.2.8.1(c) Maintenance of assets by MCD

Officials of audit along with the officials of the MCD conducted a joint physical inspection of completed urban road works²³ constructed by the latter under the transport sector to ascertain the state of maintenance of these works. The inspection conducted revealed that five out of 15 works (33 *per cent*) inspected were in a poor state for periods ranging from 1 to 5 years from the time of their construction (Appendix-3.18).

From the appendix it is seen that after incurring an expenditure of Rs. 4.95 crore on various road works, the intended benefits to the public in the form of smooth flow of traffic and reduced travel time and better space and safe passage for pedestrians were not achieved. The MCD had neither maintained the roads on their own nor ensured their maintenance by the contractors during the warranty period.

²³ Randomly selected works in respect of 12 offices test-checked.

In reply the MCD provided us with the details of the assets, which had been repaired at the instance of Audit. The actions in this regard have been included in the related appendix.

3.2.8.1(d)Public perception regarding condition of roads in Delhi

To gauge the public perception of the state of roads by means of a survey, we obtained a list of Resident Welfare Associations (RWAs) from the Government of NCT of Delhi maintained under the *Bhagidari* scheme. A detailed questionnaire[•] was sent to 304 randomly selected RWAs out of a total of 1111 RWAs. Out of 304 RWAs' contacted (selected randomly), responses was received from 90 RWAs from different zones of MCD (South: 15, South West: 9, North West: 17, West: 27, Central: 11, Area not mentioned: 4). Seven RWAs did not comment. The responses of RWAs are tabulated below:

Audit questions	RWAs' responses		
Condition of roads	77 per cent RWAs stated that the		
	condition of roads was bad in their		
	colonies.		
Periodicity of repair	71 per cent respondents stated that the		
	roads were not repaired for last five		
	years		
Quality Satisfaction	86 per cent were not satisfied with the		
	quality of the roads		
Extent of Satisfaction	81 per cent respondents were satisfied		
	upto 40 per cent		

The responses received from RWAs indicated high levels of dissatisfaction with the condition of the roads.

3.2.9 Conclusion

It can be stated that the MCD did not prepare a comprehensive plan based on reliable data derived from surveys for the improvement and strengthening of roads within their jurisdiction. More schemes were got approved than could be implemented from the available funds leaving considerable scope for use of discretion by the executing offices which led to important components of works being neglected contributing to premature deterioration of the works. While on the one hand they were suffering from paucity of funds, MCD was showing huge savings under road restoration charges, besides wasting money in uneconomical implementation of works in contravention of MORT&H specifications.

[•] The questions sought information on the conditions of roads, periodicity of repair by MCD, road quality satisfaction and extent of satisfaction.

The MCD could also not enforce the contract conditions necessary to safeguard public interest and ensure completion of works taken up. It could also not ensure the quality of works executed. By resorting to acceptance of sub-standard works instead of insisting on rectification of works, the MCD had promoted a system that did not ensure execution of works of standard quality.

The MCD was also unable to ensure maintenance of assets created by the contractors during the defect liability period (warranty) period of the contracts. It was unable to maintain assets within its purview also. Thus the MCD was not geared towards achieving its mission of providing better quality roads to the commuters of Delhi.

Recommendations

- The MCD should prepare and maintain a database of roads. The database should record the repairs/strengthening that was carried out earlier and the traffic density to work out the maintenance and repair due.
- The MCD should ensure that funds provided by the Delhi Government for urban road schemes are used for the said purposes only.
- The MCD should ensure economy in execution of works by preparing estimates based on MORT&H specifications.
- The MCD should strictly enforce the provisions of the CPWD manual and the conditions of contracts to ensure that the contractors keep the work sites clean in public interest.
- The MCD should strictly enforce the time frame specified in the contracts for the completion of works undertaken. The MCD should review the progress of works each month with all concerned disciplines including the contractors to identify the factors affecting the progress of works and take remedial measures.
- The MCD should not accept works below specifications. Sub-standard works should be got rectified and if necessary are to be got redone.
- The MCD should not allow assets created to prematurely deteriorate or remain unutilized due to poor maintenance.