

## CHAPTER : IV

### Western Coalfields Limited

#### Information Technology Audit of Asset Accounting System

##### *Highlights*

The Asset Accounting System (AAS) in the Western Coalfields Limited (WCL) was not an independent system in itself. Though AAS was only a module forming part of Financial Accounting System (FAS), it was not linked to FAS for data uploading.

**(Para 4.5.1)**

The system allowed for direct data entry in the field of "opening depreciation till date" instead of calculating it by using the date of capitalization and the rate of depreciation. Accordingly, depreciation of Rs.2.47 crore was overcharged. In absence of application logs, it was not possible to trace when and who made the data entry. There were no access controls for making changes in entries in Asset Register or for changing the source code.

**(Para 4.6.1)**

WCL changed the accounting policy towards amortization of Prospecting, Boring and Development (PB&D) expenditure in 2001-02. But the changes were not incorporated in the application with the result that each Area charged this expenditure at a rate that they understood to be correct. This showed that WCL had no established Change Management Protocol, rendering the application vulnerable to misuse.

**(Para 4.7.1)**

At Umrer Area of WCL, PB&D expenditure was being written off in a manner which neither conformed to the old nor to the new policy, due to which, depreciation to the tune of Rs.39.95 lakh was undercharged during the year 2002-03.

**(Para 4.7.2)**

At Nagpur Area of WCL, the application calculated the depreciation such that when an asset was added after 15th of a month, no depreciation was charged. Accordingly, depreciation was undercharged to the extent of Rs.29.17 lakh during three years 2000-01 to 2002-03.

**(Para 4.7.3)**

#### **4.1. Introduction**

**4.1.1** The Western Coalfields Limited, Nagpur (Company) is one of eight subsidiaries of the Coal India Limited (CIL). The Company is engaged in extraction and sale of coal from 80 mines situated in Maharashtra and Madhya Pradesh. As on 31 March 2003, the Company had 10 Areas at various places in these two states.

**4.1.2** The production and sale of coal during the last five years were as follows:

	1998-99	1999-2000	2000-01	2001-02	2002-03
<b>Production (in million tonnes)</b>	31.75	33.86	36.20	37.01	37.82

Sales (Rs. in crore)	2435.72	2600.55	2685.37	3015.84	3199.76
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#### 4.2. Organisational set-up

The Company has a System Department headed by the Chief General Manager (Systems), who is assisted by Chief Managers, Managers and other executives at headquarters and different Areas. The System Department looks after the work of system design and programming, routine Information Technology (IT) operations, data input, database administration, initiation of purchase indents, maintenance of hardware and software and other related matters.

#### 4.3 IT Assets

**4.3.1** The Company procured computers and peripherals on hire basis. Expenditure incurred on hiring of computers and peripherals during the three years ended March 2003 was Rs.1.29 crore, Rs.1.42 crore and Rs.1.50 crore respectively. The Company also owned IT assets valuing Rs. 77.20 lakh as on 31 March 2003.

**4.3.2** The table below indicates the details of the infrastructure available with the Company:

S.No.	Server	Date of installation	Place	Purpose
1	Rise (1)	September 2002	Headquarters	Payroll, Employees information
2	Intel (6)	May to September 2000	Headquarters and five Areas	Sales Accounting
3	Intel (18)	September 1999 to January 2000	Headquarters, six Areas, 10 Regional Stores, Central Store	On line Material Management System and routine

The Company had following application systems in use:

- (i) Payroll System
- (ii) Sales Management System
- (iii) Financial Accounting System
- (iv) On line Material Management System

The operating system available was UNIX with RDBMS<sup>1</sup> ORACLE 7 and 8 and the programming languages in use were PL/SQL, FOXPRO and COBOL.

#### 4.4. Scope of Audit

**4.4.1** For assets accounting, the Company has a computerized Asset Accounting System in COBOL/ORACLE at its headquarters and 10 Areas<sup>2</sup>. An Information Technology audit of the Asset Accounting System was conducted during the month of August 2003 in seven Areas (Chandrapur, Ballarpur, Wani, Pench, Kanhan, Umrer and Nagpur) and the headquarters of the Company.

**4.4.2** The scope of audit was to examine whether the system had been designed to maintain data integrity and to evaluate the reliability and effectiveness of the system.

<sup>1</sup> Relational Data Base Management System

<sup>2</sup> Chandrapur, Ballarpur, Wani, Pench, Kanhan, Umrer, Nagpur, Majri, Wani North and Pathakheda

Further, the operational performance of the system software was checked by feeding dummy data into the system and comparing the output with manually calculated results.

**4.4.3** The findings of Audit are discussed in succeeding paragraphs:

**4.5. *Not linked to Financial Accounting System***

The Asset Accounting System (AAS) was not an independent, self-contained system in itself. Though AAS was only a module forming part of Financial Accounting System (FAS), it was not linked to FAS for data uploading. It had been developed as a stand-alone program except in one Area (Nagpur) which was connected with Local Area Network (LAN), and put to the limited purpose of calculating annual depreciation and printing Asset Register. The transactions relating to assets acquisition, transfer, disposal, etc. were being carried out on batch processing mode. For receipts, issues and transfers, etc. of assets, a journal voucher was prepared which acted as an interface and involved duplication of work. The Ministry stated (January 2005) that the system was being modified to avoid duplication of work.

**4.6. *Deficient access control and absence of audit trail***

**4.6.1** The Company provided depreciation at the rates specified in Schedule XIV of the Companies Act 1956 on straightline method. It was seen that an expenditure of Rs. 8.20 crore was capitalized on 10 June 1997. As per the Company's accounting policy, total depreciation till the year 2002-03 worked out to Rs.2.46 crore at a rate of five per cent per annum whereas the application showed a sum of Rs.4.93 crore as depreciation. Audit analysis revealed that the system allowed for direct data entry in the field of "opening depreciation till date" instead of calculating it by using the date of capitalization and the rate of depreciation. In absence of application logs, it was not possible to trace when and who made this data entry. It was found that there were no access controls for making changes in entries in Asset Register or for changing the source code. There was no system password and the application password was also not kept secret. Thus, depreciation of Rs.2.47 crore was charged in excess and profit and tax liabilities were accordingly understated.

**4.6.2** The Management/Ministry stated (September 2003/January 2005) that it was due to adjustment made with regard to negative assets at the time of transfer of assets from Nagpur Area in 1995. The reply was not relevant in view of the fact that the Umrer Area was separated from Nagpur Area in 1995 and assets under reference were capitalized only in the year 1997-98. The Ministry added that the Company was in the process of removing the deficiencies in respect of access to application programme.

**4.7 *Deficient change management procedures***

**4.7.1** In 2001-02, the Company changed the accounting policy towards amortization of Prospecting, Boring and Development (PB&D) expenditure. But the changes were not incorporated in the application with the result that each Area charged this expenditure at a rate that they understood to be correct and there was no uniformity. Nagpur and Pathakheda Areas of the Company were still following the old policy. This showed that the Company had no established Change Management Protocol, rendering the application vulnerable to misuse.

**4.7.2** Audit also observed that at Umrer Area, the PB&D expenditure was being written off in a manner which neither conformed to the old nor to the new policy. Due to this,

depreciation to the tune of Rs.39.95 lakh was undercharged during the year 2002-03. While accepting the lack of uniformity in amortising PB&D expenditure, the Management stated (September 2004) that all the Areas started implementing the uniform method from the year 2003-04. The Ministry added (January 2005) that a standard Oracle based system was being implemented, which would ensure the uniformity of the computation and procedure.

**4.7.3** If an asset is added/disposed of during the year, the depreciation is provided on monthly pro-rata basis with reference to the month of addition/disposal. At Nagpur Area, the application calculated the depreciation such that when an asset was added in a month on or before 15th day of a month, depreciation for the whole month was charged and if the asset was added after 15th of a month, no depreciation was charged. This resulted in undercharging of depreciation to the extent of Rs.29.17 lakh during three years 2000-01 to 2002-03. The Management stated (August 2003) that at the time of introduction of ORACLE in the year 2000-01, this aspect of accounting was missed inadvertently. The Ministry added (January 2005) that necessary changes have been made in the system and rectification made in the accounts for the year 2003-04.

#### **4.8 Conclusions and Recommendations**

**4.8.1** The Asset Accounting System served the limited purpose of calculation of depreciation and generation of asset register. It was not a complete system in itself and not linked to the Financial Accounting System. It was running in different languages at different units with end-users having unlimited authority to effect changes in module and alter entries in asset register. Further, no built-in checks were developed in the system to ensure data integrity and compliance of accounting principles. This resulted in overcharging and undercharging of depreciation to the extent of Rs.3.16 crore, vitiating the financial statements of the Company.

**4.8.2** There is a need to integrate the Asset Accounting System with Financial Accounting System in all the Areas. The Company also needs to make necessary access controls to avoid unauthorised changes in Assets Register or the source code, and to ensure uniformity in computation.