



**SPECIAL AUDIT REPORT
ON PAKISTAN RAILWAYS
STEEL SHOP MUGHALPURA
AUDIT YEAR 2016-17**

AUDITOR GENERAL OF PAKISTAN

PREFACE

The Auditor General of Pakistan conducts audit in terms of Articles 169 and 170 of the Constitution of the Islamic Republic of Pakistan 1973, read with sections 8 and 12 of the Auditor General's (Functions, Powers and Terms and Conditions of Service) Ordinance 2001. The Special Audit of Pakistan Railways Steel Shop Mughalpura, Lahore was carried out accordingly.

The Directorate General Audit Railways conducted Special Audit of Pakistan Railways Steel Shop, Mughalpura Lahore during audit year 2016-17 for the period 2011-12 to 2015-16 with a view to reporting significant findings to stakeholders. Audit examined the overall functions/activities carried out by the Steel Shop. In addition, Audit also assessed, whether the expenditure was incurred in compliance with applicable laws, rules and regulations in managing the Steel Shop affairs. The Special Audit Report indicates specific actions that, if taken, will help the management realise the objectives of Steel Shop. Most of the observations included in this report have been finalised in the light of discussion with the management. However, DAC meeting was not convened by the PAO despite best efforts.

This Special Audit Report is submitted to the President of Pakistan in pursuance of Article 171 of the Constitution of the Islamic Republic of Pakistan 1973, for causing it to be laid before both houses of Majlis-e-Shoora (Parliament).

Islamabad

Dated:

(Javaid Jehangir)

Auditor General of Pakistan

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ABBREVIATIONS AND ACRONYMS

ACOS	Assistant Controller of Stores
AEN	Assistant Executive Engineer
AO	Accounts Officer
AWM	Assistant Works Manger
C.I.	Cast Iron
CC	Cost Center
CIP	Chief Inspector of Production
DAO	Divisional Accounts Officer
DISCO	Distribution Company
DS	Divisional Superintendent
DSKP	District Store Keeper
EAF	Electric Arc Furnace
FO	Forman
GM	General Manager
HQ	Headquarter
IOW	Inspector of Works
LESCO	Lahore Electric Supply Company
LPS	Late Payment Surcharge
M.Ton	Metric Ton
M/S	Messrs
MGPR	Mughalpura
MOR	Ministry of Railways
MP Note	Material Production Note
PAO	Principal Accounting Officer
PEM	Production Engineer Maintenance
PPRA	Public Procurement Regulatory Authority
PR	Pakistan Railways
PRP	Pakistan Railways Police
PRTs	Piece rate tickets
PWO	Production Work Order

Qty	Quantity
SIP	Senior Inspector of Production
TLA	Temporary Labour Application
WAC	Workshop Accounts Current
WM	Works Manager
WMS	Workshop Manufacturing Suspense
XEN	Executive Engineer

EXECUTIVE SUMMARY

The Directorate General Audit Railways conducted Special Audit of Pakistan Railways Steel Shop Mughalpura, Lahore in April-May 2017 for the period 2011-12 to 2015-16. The main objective of Special Audit was to analyse and check whether working of Steel Shop was useful and beneficial for Pakistan Railways. It was assessed whether expenditure on pay and allowances of employees working in Steel Shop was justified against the output and Steel Shop was carrying out specific jobs in an efficient and economical manner during the last five years with reference to sanctity of expenditure/value for money or otherwise. The audit was conducted in accordance with ISSAIs.

Pakistan Railways Steel Shop Mughalpura Lahore was built in 1937. Main purpose of the Steel Shop was to manufacture components/products required for locomotives, carriages and wagons in an economical and efficient manner. It has three main units i.e. production unit, supporting unit and analysis unit each consisting of different shops such as Furnace Shop, Foundry shop, Rolling Mills, Mill Wright Shop and Laboratory etc.

Key Audit findings

- i. Non-clearance of huge outstanding balance under WMS Account – Rs 1,218.651 million.¹
- ii. Extra expenditure due to abnormal rate of oncost – Rs 416.12 million.²
- iii. Loss on account of extra production cost due to extraordinary delay in completion of work – Rs 215.102 million.³
- iv. Loss due to rejection of manufactured parts/molten metal – Rs 146.787 million.⁴

¹Para 5.3.1

²Para 5.1.4

³Para 5.2.1

⁴Para 5.1.1

- v. Unjustified payment of overtime and piece work profit despite non-completion of targets – Rs 58.276 million.⁵
- vi. Loss due to sub-standard quality of Axle Caps – Rs 53.892 million.⁶
- vii. Loss on account of high production cost as compared to market rates – Rs 18.051 million.⁷

Recommendations

- i. Heavy balances accumulated under head WMS account should be cleared and reduced to the minimum possible extent.
- ii. Cost should be reduced to minimum level by exercising strict controls on overheads.
- iii. Timely completion of work may be ensured to avoid loss on account of extra production cost due to inordinate delay in completion of work.
- iv. Quality may be improved to ensure zero rejection on manufacturing parts.
- v. Overtime and piece work profit should be paid on merit.
- vi. Outdated plant and machinery should be upgraded or replaced with the new technology such as continuous casting plants etc. to avoid substandard production.
- vii. Cost/benefit analysis should be carried out keeping in view the cost of manufactured items at Steel Shop with those available in the market. Items of higher rate should be deleted from the list of shop made items.

⁵Para 5.2.2

⁶Para 5.1.3

⁷Para 5.1.2

1. INTRODUCTION

Pakistan Railways Steel Shop Mughalpura Lahore was built in 1937. Total area of steel shop is 29.93 acres, out of which 2.88 acres is covered. It works under the control of Divisional Superintendent Pakistan Railways Workshop Division, Mughalpura Lahore. There are three main units i.e. Production, Supporting and Analysis which consist of different shops such as Furnace Shop, Foundry shop, Rolling Mills, Millwright shop and Laboratory etc. Total number of plant and machinery installed in Steel Shop are 318, out of which 90 are out of order and 228 were in working condition at the time of audit. Total number of employees working in Steel Shop is 1030.

i. Purpose of Steel Shop

Main purpose of Steel Shop is to maintain the supply chain of qualitative ferromagnetic components/products, by adding value through metallurgical and heat treatment processes to the ferromagnetic scraps. It is the responsibility of Steel Shop to manufacture components/products on demand in respect of locos, carriages and wagons in economical and efficient manner.

ii. Provision of Act/Rule/Regulations under which Steel Shop is working.

Steel Shop is working under the rules/regulations of Pakistan Railways.

iii. Layout of internal control system of Steel Shop

Steel shop is headed by Works Manager who reports directly to the DS/Pakistan Railways Workshop Division, Mughalpura Lahore. Foremen directly supervise the labour engaged in different shops and they report to Assistant Works Manager, Assistant Electrical Engineer and Works Manager Steel Shop. Divisional Accounts Office, Workshop Division, Mughalpura Lahore is maintaining the accounts of Steel Shop. A large number of skilled workers are deployed in the Steel Shop to carry out specific jobs but due to out-dated plant and machinery, mismanagement

and lack of professional approach, per unit cost of manufactured items is very high as compared to alternative manufacturing facilities over a period of time.

2. PURPOSE AND SCOPE OF SPECIAL AUDIT

i. Purpose of Special Audit

The main purpose of special audit was to analyse whether working of Steel Shop was worthwhile and beneficial for Pakistan Railways. It was assessed whether expenditure on pay and allowances of a large number of employees working in Steel Shop was justified and whether Steel Shop was carrying out specific jobs in an efficient and economical manner or otherwise.

ii. Scope of Special Audit

The audit was conducted for the period 2011-12 to 2015-16. The audit was carried out in accordance with the ISSAIs and included such tests and controls as the auditor considered necessary under the circumstances. All relevant locations such as offices/shops of the Steel Shop, DS/Workshop Division, PEM Office, Divisional Accounts office, Workshop Division, Mughalpura Lahore were visited for the purpose of audit.

While conducting audit, special attention was paid to review:

- i. The system of internal controls and compliance with respective authorities.
- ii. The outcome of jobs to provide reasonable assurance regarding achievement of objectives in the category of compliance with applicable laws and regulations.
- iii. The proper classification with respect to accounts head, cost centre.
- iv. The operating system and providing recommendations to improve operating efficiency and internal controls.

- v. The compliance of applicable rules, regulations and policies with regard to entity's activities.
- vi. The utilisation of available resources to provide reasonable assurance that Steel Shop was managing its resources in accordance with applicable laws, regulations, Railways' policies and procedures.

The scope of audit included verification and analysis of expenditure. Expenditure was verified to ensure the completeness, accuracy, relevance, genuineness and proper classification as well as compliance of formalities.

3. METHODOLOGY

- i. Relevant files/record were reviewed.
- ii. Sites/shops were visited within the Steel Shop to check where the work was actually carried out.
- iii. Financial data regarding procurements and payments made to contractors was analysed.
- iv. Discussion with management.

4. TERMS OF REFERENCE FOR AUDIT

Data was analysed to review the following areas:

a) Targets vs achievement

Audit team reviewed the targets of Steel Shop against actual achievement for the last three to five financial years with available resources. All the work orders during the said period were examined by the audit team to review whether those were completed in time and within estimated cost.

b) Quality and effectiveness of production

It was checked whether the assigned works were completed effectively and efficiently. It was also analysed whether manufacturing process of Steel Shop was economical and for this purpose some shop-made items were selected to compare their manufacturing cost with

market rates. Data was also assessed to ascertain the quality of manufactured parts and to identify reasons which caused poor quality of finished items.

c) Efficiency of human resource

Audit team reviewed the record of periodical fixed targets and their achievement to evaluate the efficiency of the workforce. Audit team also examined the expenditure on account of overtime and piece work profits in addition to pay and allowances of staff with reference to achievements of given targets. Data was also analysed to ascertain the expenditure incurred on account of pay and allowances of idle booking of staff and irregular adjustment/deployment of staff.

d) Internal Controls and accounting system

Audit team reviewed store data processing system to ascertain the true picture of store purchased, issued and accounted for in respect of production at steel shop. Audit team also reviewed Workshop Account Current and Workshop Manufacturing Suspense Accounts of Steel Shop to ascertain proper maintenance of accounts of Steel Shop. Data regarding arrival and dispatching of wagons was scrutinised to ascertain the financial loss sustained by Pakistan Railways due to unnecessary detention of wagons.

e) Utilisation of funds provided to Steel Shop

Audit team obtained budget allocations and expenditure statements for the period under review to evaluate the utilisation of funds under applicable rules/policies.

f) Effectiveness in utilisation of assets of Steel Shop

Data regarding plant & machinery installed at Steel Shop was analysed to ascertain the effective, efficient and economic utilisation of machinery in the manufacturing process.

g) Efficiency and Economy of procurement

Data regarding procurements including local purchase cases was analysed to ascertain that procurements were made in effective, efficient

and economic manner and procurement process was transparent. All related locations such as PEM Office, Divisional Accounts Office, were visited to ascertain that procurement procedure adopted was compliant to laid down PPRA Rules and procurement was made as per requirement and no unnecessary purchases were made that may result in blockage of capital.

5. AUDIT FINDINGS AND RECOMMENDATIONS

Special Audit of Pakistan Railways Steel Shop was conducted to ascertain whether it was catering the needs of Pakistan Railways in an effective and economical manner.

The result of Special Audit of Pakistan Railways Steel Shop Mughalpura Lahore in respect of each significant issue was finalized in the form of audit observations as reported in the succeeding paragraphs.

5.1 Poor Quality of products and High Production Cost

It was observed that production cost of manufacturing items at Steel Shop was much higher as compared to that of other shops of Railways and market. It was also noticed that Steel Shop was manufacturing sub-standard products causing heavy financial loss to Railways due to frequent rejection of these items. Instances of the nature are narrated in the following paragraphs.

5.1.1 Loss due to rejection of manufactured parts/molten metal – Rs 146.787 million

Para 1103 of Pakistan Railways Code for Mechanical Department stipulates that most important objective of a costing system in Railway workshops is to ensure that waste is prevented. Para 1132 further provides that the cases of faulty workmanship should be taken up with the Forman responsible.

During special audit, it was noticed that manufactured parts valuing Rs. 100.246 million (**Annex-1**) were rejected by the Senior Inspector of Production due to bad casting, poor quality/under size. Similarly spare parts worth Rs 25.798 million (**Annex-2**) were also rejected by the consumers. Moreover, molten metal costing Rs 20.743

million (**Annex-3**) was rejected by the Incharge Chemist, Steel Shop due to wrong chemical composition during the period from 27.03.2014 to 19.04.2017. This resulted in loss of Rs 146.787 million to PR due to faulty manufacturing.

The matter was taken up with the management in May 2017. The management replied that various factors were contributing to the rejection of material as all the generators of Graphite Electrodes were out of order and electrode system was being operated manually. Besides, non-availability of some material also contributed to manufacturing of substandard material. In case of rejected items by consumers, the management replied that the Steel Shop was not equipped with latest equipment to examine the material as per consumers' requirement. Regarding substandard molten material, management replied that the material rejected by the lab could be used in some other approved class. Hence, the said material was not categorized as rejected. The replies were not acceptable because it was the responsibility of management to make sure production of standard material by ensuring availability of material/functional equipment.

Audit recommends that matter be inquired at an appropriate level for fixing responsibility for manufacturing of substandard material and action be taken against those held responsible.

5.1.2 Loss due to higher production cost – Rs 18.051 million

Para 101 of Pakistan Railways Codes for Store Departments provides that it is the duty of the Controller of Stores to arrange for the supply of material and stores in the most efficient, economical and expeditious manner possible.

During special audit, a sample of 15 items manufactured by Rolling Mills of Steel Shop was selected to compare the cost of these items with the market rates. The comparison revealed that cost of manufacturing these items at Steel shop was higher than the market rates which resulted in loss of Rs 18,051,044 due to higher production cost. (detail in **Annex-4**).

The matter was taken up with the management in May 2017. Management replied that the rates were at the higher side due to inclusion of the overhead charges which were inevitable and could not be avoided. The reply was not acceptable because huge expenditure was charged by Railways on account of idle labour & overhead charges of Steel Shop. Since manufacturing cost was higher as compared to market rates, therefore, it was uneconomical to run the production activities at Steel Shop.

Audit recommends that Cost-Benefit Analysis be carried out and items which are available in the market at low rates be deleted from the list of Shop-made items to avoid further loss on this account. Overhead charges be curtailed by effective utilisation of available resources.

5.1.3 Loss due to sub-standard quality of Axle Caps – Rs 53.892 million

Para 1801 of State Railway General Code provides that Railway servant will be held personally responsible for any loss sustained by Government through negligence on his part.

During special audit, it was noticed that Pakistan Railways Steel Shop completely failed to produce the Axle Caps of desired standard and quality. It was observed that 376 Axle Caps were rejected due to porosity during the period from 2013 to 2017 and 191 traction motor failures occurred due to breakage of Axle Caps because of substandard quality. This resulted in loss of Rs 53.892 million on account of broken & substandard quality of 376 Axle Caps (detail in **Annex-5**).

The matter was taken up with the management in May 2017. Management replied that the rejection of material occurred due to various issues such as scarcity of adjunctive material for production, out dated infrastructure (established since 1937), load shedding of electricity, and extremely low pressure of Sui Gas. The reply was not acceptable because no measures were taken by management to control the losses.

Audit recommends that matter be investigated at appropriate level to fix responsibility for production of substandard material and action be

taken against those held responsible. Quality management controls be strengthened to avoid such heavy rejection.

5.1.4 Extra expenditure due to abnormal rate of oncost – Rs 416.12 million

In terms of Joint Administration and Accounts Procedure Order No. SS-I dated 01.05.1972, the main activities of Steel Shop are similar to those of processing shops like Foundry in Loco Shop. Ancillary units also exist mainly for repair & maintenance of machinery, tools and plant of the processing shops.

During special audit, it was noticed that average oncost (Shop oncost + General oncost) of Steel Shop was 1670% and oncost of Loco Shop was 685%. Thus, oncost of Steel Shop was higher by 985%. In monetary terms, oncost of Steel Shop was higher by Rs 416.125 million during the period from July 2016 to April 2017 as compared to Loco Shop (detail in **Annexes-6A & B**).

The matter was taken up with the management in May 2017. Management replied that the issue of difference on account of oncost between Steel Shop and Loco could not be resolved by the administration of Steel Shop because it was due to the overhead charges at Steel Shop which were inevitable.

Audit recommends that matter be taken up at an appropriate level to fix responsibility for not taking remedial measures and corrective action be taken to bring down the percentage of oncost.

5.2 Inordinate Delay in Completion of Works

During audit it was observed that due to extraordinary delay in completion of work orders, manufacturing cost of parts increased which caused financial loss to Railways. It was also observed that management of Steel Shop failed to achieve the given targets. However, payments of overtime and piece work profit were made even though production of steel shop lagged far behind the targets fixed.

5.2.1 Loss due to escalation in production cost because of delay – Rs 215.102 million

Para 1247 of Pakistan Railways Code for Mechanical Department stipulates that all works should be carried out as rapidly as possible. Para 1248 further provides that all delays in the advice of date of completion by the Mechanical Department should be regularly taken up.

During special audit, it was noticed that production work orders for different items were issued during the year 2008 to 2013 but executed with a delay ranging from 1 to 8 years. This resulted in financial loss of Rs 215.102 million due to escalation in production cost. This also caused delay in the repair/maintenance of rolling stock.

The matter was taken up with the management in May 2017. Management replied that jobs against such work orders were delayed due to outlived infrastructure of Steel Shop, shortage of lining material, load shedding of electricity and extremely low pressure of Sui Gas. Moreover, the shortage of funds in preceding years was also an obstacle to achieve production targets in time. The reply was not acceptable because extraordinary delay ranging from 01 to 08 years was not justifiable.

Audit recommends that responsibility for financial loss and delay in repair/maintenance of rolling stock due to slow execution of work in Steel Shop be fixed and action be taken against those held responsible. Internal controls regarding time and production management be strengthened for timely completion of works to avoid further losses.

5.2.2 Unjustified payment of overtime and piece work profit – Rs 58.276 million

Para 453 of government of Pakistan Railways Code for the Mechanical Department provides that except in very exceptional and urgent cases no overtime should be worked in shops without the prior sanction of the Works Manager which should be obtained by the Foreman by submission of an overtime requisition. Para 612 further provides that the simplest method of making payment by results is that of fixing a rate per piece and paying workmen on the basis of total number of pieces

turned out. If the amount thus earned during a month is more than the amount of wages of the piece worker, the difference is the profit he makes. If, however, the amount of wages were more, the difference is the loss. The outturn of the piece workers should be carefully checked in regard to quality and quantity.

During special audit, it was noticed that actual outturn of Steel Shop was far less than the targets during the year 2013-14 to 2016-17. Conversely, an amount of Rs 45.69 million and Rs 12.58 million was paid to employees on account of overtime and piece work profit respectively. This resulted in unjustified payment of overtime and piece work profit amounting to Rs 58.276 million (detail in **Annexes-7A & B**).

It was worth mentioning here that the matter had already been taken up through Audit Para No. 2.4.33 in the Audit Report for the year 2012-13, however no improvement was made in the performance of Steel Shop and unjustified payment on account of overtime and piece work profit had not been stopped.

The matter was taken up with management in May 2017 and it was replied that the outturn target set for the Steel Shop was fixed when two furnaces were in operation. Meanwhile one of them was declared as condemned but the outturn figures were not revised as per the existing infrastructure. Besides, acute shortage of adjunctive material, out dated infrastructure and load shedding of electricity and low pressure of Sui Gas were obstacles in achieving production targets. The reply was not acceptable because the annual target was fixed keeping in view the available resources and all other factors. Payment of overtime and piece work is not justified when targets were not achieved.

It is recommended that management responsible for making payment of overtime and piece work profit despite poor performance be taken up suitably. Monitoring of Steel Shop be improved to achieve given targets.

5.3 Internal Control System/Accounting System

It was noticed that due to weak internal controls and defects in accounting system, accounts of Steel Shop were not showing the true picture as huge losses were neither reported nor accounted for.

5.3.1 Non-clearance of huge outstanding balance under WMS Account – Rs 1,218.651 million

Rule 1625 (5) of Pakistan Railways Code for Mechanical Department stipulates that balance under Workshop Manufacturing Suspense account should be reviewed monthly to see that there are no inefficient balances and the periodical adjustments in respect of overcharges and undercharges under the oncost, manufacture and repair work orders, are carried out regularly and the outstanding balances are not allowed to accumulate.

During special audit, it was noticed that balance under the WMS account increased by an exorbitant amount of Rs 744.60 million (i.e. from Rs 474.05 million to Rs 1,218.65 million) during the period from January 2012 to February 2017. This showed that more expenditure was incurred than the production.

The matter was taken up with the management in May 2017. Management replied that in the year 2011 Steel Shop was facing financial crises. On the other hand expenditures of Steel Shops were being made on a routine/normal pace which could not be avoided. Resultantly, the debit ratio increased to the highest extent. The reply was tantamount to admittance of audit observation.

Audit recommends that immediate steps be taken for revival of steel shop to increase its production in order to clear huge outstanding balances by rationalizing the deployed staff and reducing the oncost.

5.3.2 Incorrect costing due to non- reporting of molten metal losses in Foundry Accounts – Rs 54.597 million

Para 1311 & 1312 of Pakistan Railways Code for Mechanical Department provides that the foundry Foreman should keep daily log showing full particulars of each draw of molten metal and that percentage

of loss of metal should be worked out and recorded on the monthly wastage statement. Para 1313 further provides that monthly outturn statement should be posted daily by the Foundry from the Daily Log and should be closed at the end of month and sent to Accounts officer.

During special audit, it was noticed that loss of 110,300 kg molten metal amounting to Rs 9,154,900 was not incorporated in the Foundry Accounts during the period from January 2015 to December 2015 (detail in **Annex-8A**). Similarly, loss of 547,500 kg molten metal amounting to Rs 45,442,500 due to furnace jam was also not incorporated in the Daily Log and Monthly Wastage Statement and in Foundry accounts (detail in **Annex-8B**). This resulted in incorrect preparation/ casting of foundry accounts due to non-incorporation of molten metal losses amounting to Rs 54,597,400 (Rs 9,154,900+Rs 45,442,500) in the books of accounts.

The matter was taken up with the management in May 2017. Management replied that it was a conventional practice in Steel Shop that the losses of molten metal were directly sent to the General Stores on Material Return Note. As far as the loss of Rs 45,442,500 was concerned, such losses were unavoidable as there was no alternative source of energy which could help to keep the plant and machinery in functioning condition. The reply was not acceptable because all losses should have been charged to process account in order to arrive at exact value of cost of production.

Audit recommends that responsibility be fixed for not charging the melting losses to foundry account and action be taken against those held responsible. Amount of loss be reported to the Accounts office in order to ascertain the actual cost of production.

5.3.3 Loss of potential earning due to unnecessary detention of wagons – Rs 40.143 million

Para 16.2 of Commercial Manual provides that quicker the turn-round the fewer the vehicles required on completion of the safe & quick transit of loaded wagons by the operating department, it is up to the traffic or commercial staff to arrange for the quick unloading of wagons and their prompt release.

During Special Audit, it was noticed that 566 No. of wagons were unnecessarily detained at steel shop from 2 to 405 days beyond free time. It was worth mentioning here that out of 566 No. of wagons 48 No. wagons were detained since April 2016 and had not been dispatched till date of audit. Audit was of the view, had these wagons been released within free time and dispatched to other stations where needed, an amount of Rs 40.143 million could have been earned on account of freight. The unnecessary detention resulted in loss of Rs 40.143 million to Railways (detail in **Annex-9**).

The matter was taken up with the management in May 2017. Management replied that the movement of wagons depends on the availability of locomotives. Further, C-4 lines coming to the Steel Shop remained blocked. As soon as the same were freed, the empty wagons would be shifted from the Steel Shop. Currently, the movement of the empty wagons was not possible as the Railway track was plucked out due to the construction work undertaken by the provincial government. The reply was not acceptable because it was the responsibility of management to make arrangement for prompt release and dispatch of the wagons to their destinations at the earliest.

Audit recommends that matter be inquired at an appropriate level to fix responsibility for not making arrangement to release and dispatch the wagons where required and action be taken against those held responsible.

5.3.4 Suspected mis-appropriation of manufactured items – Rs 41.993 million

Para 1801 of State Railway General Code provides that Railway servant will be held personally responsible for any loss sustained by Government through negligence on his part.

During special audit, it was noticed that certain items were manufactured in steel shop for officers bungalows and staff quarters and dispatched to the indenters. The Material Production (MP) Notes amounting to Rs 1.503 million (**Annex-18**) were not verified by the indenters. Moreover 426 Axle Caps valuing Rs 40.490 million were

returned back to Steel Shop from WM/Loco Shop for rectification. But the same were not returned to WM/Loco after rectification. In absence of verified copies of MP Notes as well as missing evidence regarding returning of Axle Caps, Audit was of the view that the above items valuing Rs 41.993 million had been misappropriated.

The matter was taken up with the management in May 2017. The management replied that all the MP Notes in CIP/Office were verified with the exceptions of few ones for which efforts were being made to get them verified from the consumers. The reply was not acceptable because in some cases a period of more than three years had been lapsed but MP Notes were not verified. Regarding Axle Caps the management replied that out of 3800 Axle Caps, only 426 were sent back for further rectification by the consumers. But the same were declared as rejected as they could not be rectified and sent back to the consumer due to their receipt on non- returnable gate pass. So, the said material was recycled as it was covered under the allowable rejection limit (10%). The reply was not satisfactory as no documentary evidence regarding whereabouts of 426 rejected Axle Caps was produced to Audit. Moreover, the policy/rules for permissible allowance of rejection up to 10% were not produced to Audit. Further, the percentage of rejection was more than claimed permissible allowance.

Audit recommends that matter be investigated at an appropriate level to fix responsibility for not getting the MP notes verified despite lapse of a considerable period and for misappropriation of 426 rejected Axle Caps.

5.3.5 Irregular/unauthorized execution of work – Rs 6.731 million

Para 1201 (3) read with Para 1202 of Pakistan Railways Code for Mechanical Department stipulates that detailed estimates for works to be undertaken in Railway Workshops for other Railway and Government Departments should be prepared and sent to Workshop Accounts officer for verification who will send two copies duly checked and certified to the authority competent to sanction. Para 1218 further provides that in case of work for other Railway Departments, formal acceptance of the estimate

and estimated cost comprising labour, material, shop oncost, general oncost, freight charges, storage, supervision and proforma oncost should be obtained from the officer ordering the work before the work is put in hand.

During special audit, it was noticed that certain items such as steel gates, grills, doors, basketball court, monkey bars, iron swings etc. were manufactured in steel shop for officers bungalows and staff quarters on the requisition of concerned IOWs without obtaining the estimated cost and preparation of estimates and sanction of competent authority. Material Production (MP) Notes show the worth of such items as Rs 6,731,599 (detail in **Annex-17**). Hence expenditure incurred on manufacturing of these items was irregular and unauthorized.

The matter was taken up with the management in May 2017. Management replied that the administration of Steel Shop accepted only those work orders against which estimated cost had agreed by the party concerned and the same material supplied to the concerned on proper verification of MP Notes. The reply was not acceptable because the work for other Railway departments could not be taken in hand without sanction of estimate by the competent authority and allocation of requisite funds duly verified by the Workshop Accounts Office.

Audit recommends that matter be inquired at an appropriate level to fix responsibility for carrying out the work without sanctioned estimate and allocation of funds and action be taken against those held responsible. Documentary evidence regarding credit of amount raised through MP notes be furnished to Audit.

5.3.6 Loss on account of high production cost due to non-functioning of Cupola Furnace – Rs 19.746 million

Para 1801 of State Railway General Code provides that means should be devised to ensure that every Railway servant realizes fully and clearly that he will be held personally responsible for any loss sustained by Government through negligence on his part. Para 101 of Pakistan Railways Codes for Store Departments further provides that it is the duty

of the controller of stores to arrange for the supply of material and stores in the most efficient, economical and expeditious manner possible.

During Special Audit, it was noticed that annual target of 1440 metric ton was fixed for C.I. Casting in the Foundry Shop. The molten metal used for C.I. Casting was to be produced by Cupola Furnace installed in the Foundry shop to meet the annual target of 1440 metric ton. Due to non- functioning of Cupola Furnace, the molten metal was produced by the Electric Arc Furnace. Rate analysis of molten metal produced by Electric Arc Furnace and Cupola Furnace revealed that cost of molten metal produced by Electric Arc Furnace was higher by Rs 5 per kg as compared to the Coupla Furnace. During the period from January 2012 to April 2017, 3,949.350 metric ton C.I. Casting was done by utilising the molten metal produced by Electric Furnace. This resulted in loss of Rs 19,746,750 ($3949.350 \text{ m.ton} \times 1000 = 3949,350 \text{ kg} \times \text{Rs } 5$) due to high production cost.

The matter was taken up with the management in May 2017. Management replied that Coupla Furnace was not functional due to the non- provision/out of stock hard coke for which time to time requests for its demand had been made to the higher authorities but the material was not provided. On the other hand, manufacturing of all aforesaid items could not be stopped as it would cause total closure of train operations. In order to bring sustenance to the safe train operation, C.I. casting was being taken from the Electric Arc furnace which was quite beneficial on pragmatic basis. The reply was not acceptable because it was responsibility of the management to arrange the required material in order to avoid financial loss due to higher production cost and to produce the parts at economical rate.

Audit recommends that matter be investigated at higher level to fix responsibility for financial loss to Railway due to mismanagement and action be taken against those held responsible. Internal controls regarding inventory management be improved to avoid recurrence.

5.4 Human Resource Management

It was observed that mostly the labour was booked on idle time due to one or other reasons which resulted in huge financial loss on account of payment of wages. Moreover, most of unskilled staff were adjusted against skilled/semi-skilled posts and out of trade Foremen were also deployed against the interest of Railways.

5.4.1 Wasteful expenditure on account of idle labour – Rs 76.51 million

Para 624 of Pakistan Railways Code for Mechanical Department stipulates that time taken up in delays and held ups due to breakdown of service or plant or any other causes, should be booked on idle time and not to the job. All time so booked should be carefully investigated, responsibility for the delay or breakdown located and steps be taken to prevent such waste.

During special audit, it was noticed that one Electric Arc Furnace in the Steel Melting Shop remained closed for 1,115 days (03 years 20 days) during the period from October 2010 to December 2016 due to shortage of vital material and shut down of electricity. The production of Steel Melting Shop during the entire period of more than 06 years was only 10,065 Metric tons against target of 48,000 Metric tons. Further, the labour remained idle for 588,720 labour hours due to shut down of furnace during said period which resulted in wasteful expenditure of Rs 44,154,000 (detail in **Annex-10**).

It was also noticed that Sui gas supply remained suspended due to non-payment of Sui gas bill during the period from 09.03.2012 to 09.10.2012. The Production work was almost held up during the period and labour remained idle for 539,354 hours. Thus due to weak human resource management, Pakistan Railways sustained a loss of Rs 32,361,240 (539,354 hours x Rs 60 standard labour rate applicable during the period involved) on account of wages of idle labour.

This resulted in wasteful expenditure on account of wages of idle labour amounting to Rs 76.51 million due to mismanagement and weak administrative controls.

The matter was taken up with the management in May 2017. Management replied that during the year 2010 shortage of funds created obstacles in the smooth way of production. However, providing the salaries to the Government employees was inevitable and could not be stopped. It was further replied that the Steel Shop submitted the bills to the accounts office timely but shortage of funds resulted in non-payment of bill. The reply was not acceptable because period pointed out by Audit was ranging from October 2010 to December 2016 and not only the year 2010. During a period of 06 years, the closure of furnace for more than 03 years was not justified. Further, the labour remained idle for 539,354 hours during a period of 07 months was also unjustified.

Audit recommends that matter be investigated at appropriate level to fix responsibility for shutdown of furnace for 540,469 days and action be taken against those responsible. Management controls regarding labour and production be strengthened to avoid recurrence.

5.4.2 Avoidable increase in oncost due to booking of staff on idle time – Rs 9.784 million

Para 624 of Pakistan Railways Code for Mechanical Department stipulates that time taken up in delays and held ups due to breakdown of service or plant or any other causes, should be booked on idle time and not to the job. All time so booked should be carefully investigated, responsibility for the delay or breakdown located and steps be taken to prevent such waste.

During special audit, it was noticed that staff of different cost centers were booked on idle time for 130,456 hours during the period from January to December 2016 due to which the oncost of Steel Shop increased by Rs 9,784,200 (detail in **Annex-11**). This depicted that instead of engaging the labour on some jobs they were kept idle.

The matter was taken up with the management in May 2017 but no relevant reply was furnished.

Audit recommends that matter be investigated at appropriate level to fix responsibility for not utilising labour on production jobs and action be taken against those held responsible. Management controls be strengthened to avoid such recurrence.

5.4.3 Recurring loss due to over staffing – Rs 6.177 million

Para 1801 of State Railway General Code further stipulates that means should be devised to ensure that every Railway servant realizes fully and clearly that he will be held personally responsible for any loss sustained by Government through negligence on his part.

During Special Audit, it was noticed that out of two Electric Furnaces installed in the Steel Melting Shop, production of Furnace No. 1 was stopped on 17.10.2004 due to its poor condition and later on it was declared condemned on 26.09.2013. Thirty-three (33) direct workers deployed on Furnace No. 1 were off loaded since its condemnation. Comparison of direct workers deployed revealed that 70 direct workers were working on two furnaces. Whereas, sixty-six (66) direct workers were deployed only on one furnace during the year 2017. This indicates that sanctioned strength of the shop was not revised on condemnation of Furnace No. 1 and almost double numbers of direct workers were deployed on only one furnace. This resulted in recurring loss of Rs 6,177,600 (approx) per annum on account of labour charges due to over staffing (detail in **Annex-12**).

The matter was taken up with the management in May 2017. Management replied that previously, the two furnaces were operated in general shift only but after condemnation of one furnace, the only one furnace was being operated 24 hours and the staff was being adjusted in shifts during the 24 hours. The reply was not acceptable because the old furnace was also working on three shifts as evident from the record and off loaded staff of condemned furnace was adjusted on furnace No. 2 which was presently operational..

Audit recommends that matter be investigated at appropriate level to fix responsibility for recurring loss due to excess deployment of labour and action be taken against those held responsible. Sanctioned strength of Steel Melting Shop be revised to avoid recurring loss.

5.4.4 Unjustified expenditure per month on account of pay and allowances of irregularly adjusted excess staff – Rs 1.885 million

According to Para 5 (a)(i) of minutes of meeting of the Executive Committee of Railway Board held on January 06, 2003, the Divisional Superintendents must ensure that post being operated on temporary basis falls within the sanctioned strength. Para 111 of State Railway Establishment Code further provides that the number of posts sanctioned for each grade in a department shall in no case be exceeded without the sanction of the authority competent to create a post, either permanent or temporary, in the grade.

During Special Audit, it was noticed that 386 No. of TLA staff was regularized as Muawans against the sanctioned strength of only 196 during the years 2012 and 2013. It was also noticed that 314 Muawans were working against sanctioned strength of 196. Furthermore, 131 No. of Muawans out of 314 were irregularly adjusted against skilled/ semi-skilled posts of various cost centres and only 183 were actually working as Muawans. This resulted in irregular/unjustified expenditure on pay and allowances of 131 No. of Muawans adjusted irregularly against skilled/semi-skilled posts amounting to Rs 1,885,227 per month (detail in **Annex-13**).

The matter was taken up with the management in May 2017. Management replied that during the year 2008 to onward, various employees on TLA basis were recruited against different vacant posts. In the following years, all these employees were regularized under the orders of Federal Government. Meanwhile, 114 Muawans were transferred to different units of Workshops Division and remaining were skillfully working against various trades despite being Muawans. The reply was tantamount to admittance of audit observation.

Audit recommends that matter be investigated at appropriate level to fix the responsibility for regularization of TLA staff beyond sanctioned strength and without sanctioned posts. Amount involved and non-sanctioned posts be got regularized/sanctioned by the competent authority. Human resource management be improved to avoid recurrence

5.4.5 Irregular expenditure due to deployment of Loco Shop staff in Steel Shop – Rs 4.153 million

Para 202 of Pakistan Railways Code for Mechanical Department stipulates that the number of staff normally required for each shop should be fixed with reference to the minimum requirements of the shop. Para 203 further stipulates that maximum number of skilled, semi- skilled and unskilled staff that may be deployed in a shop should be fixed by the General Manager. Any variation in the number of staff so fixed will require the sanction of the General Manager.

During Special Audit, it was noticed that 59 skilled/semi-skilled/Muawan employees of Loco Shop Mughalpura were irregularly transferred to Foundry Shop, Pakistan Railways Steel Shop (CC No. 7402) under the verbal orders of WM/AWM Loco Shop. These employees were booked against Production Work orders and oncost standing Work orders in the Foundry Shop but they drew their pay & allowances amounting to Rs 4,153,865 from the budget allocation of WM/Loco shop during the period from 20.01.2017 to 19.04.2017 (detail in **Annex-14A**).

This not only resulted in irregular booking of expenditure on account of pay and allowances but also caused understatement of manufacturing cost of parts manufactured because the staff was booked against Work orders of Steel Shop whereas labour charges were booked against Loco Shop. Moreover, deployment of these staff also resulted in overstaffing under certain categories which was irregular under the rules (detail in **Annex-14B**).

The matter was taken up with the management in May 2017. Management replied that adjunctive material for production in Loco Shop was out of stock. Therefore, the idle staff from Loco Shop was temporarily adjusted in the Steel Shop to meet the increased workload in

Foundry shop. The reply was not acceptable because any variation in number of staff deployed in a shop required the sanction of General Manager whereas Loco Shop staff was deployed in Steel Shop under verbal orders of AWM/WM Loco shop and hence it was irregular. Moreover, the staff was booked against the work orders of Steel Shop whereas they were paid from the budget allocation of Loco shop which was tantamount to improper accounting and costing system.

Audit recommends that responsibility be fixed for irregular deployment of Loco Staff in excess of sanctioned strength without approval of General Manager and wrong booking of expenditure be adjusted to ascertain the factual state of affairs of Accounts. Irregular expenditure be got regularized by the competent authority. Internal controls regarding human resource management and costing system be strengthened to avoid recurrence.

5.5 Utilisation of Government Funds

It was observed that Government funds were not properly utilised which resulted in financial losses, misappropriation, embezzlement, and irregular/unjustified payments on account of pay & allowances.

5.5.1 Blockage of capital due to non-reconciliation of advance payment to LESCO – Rs 48.670 million

In terms of Clause (V) of agreement between Pakistan Railways and DISCO, advance payment will be reconciled with the amount of electricity bills issued by the DISCO at the end of each quarter. Clause-VI further provides that variation in advance payment and claims of DISCO will be adjusted in the next month.

During Special audit, it was noticed that advance payment of Rs 48,670,504 at the rate of Rs 6,083,813 per month was made to LESCO on account of electricity bills during the period from August 2016 to March 2017. But neither any reconciliation of advance payment was made with LESCO nor variation in advance payment and claims of LESCO were adjusted on monthly basis. As a result, an amount ranging from

Rs 538,936 to Rs 8,529,860 remained blocked as balance with LESCO during the said period (detailed in **Annex-15**).

The matter was taken up with the management in May 2017. Management replied that the agreement for advance payment was initiated between DS Lahore Division and CEO/ LESCO. The Workshops Division was not the party at that time. The terms and conditions of the agreement allowed the representatives of DS/Lahore to reconcile the record. However, the administration of Steel Shop was maintaining the record for its own safety to avoid any incongruities. As far as the matter of credit was concerned, it would be finalized in the month of June 2017. The reply was tantamount to admittance of audit observation.

Audit recommends that responsibility for non- reconciliation of advance payment be fixed and variation in the billing amount and advance payment be adjusted on monthly basis to avoid blockage of capital.

5.5.2 Loss on account of Late Payment Surcharge of utility bills – Rs 1.826 million

Para 1801 of State Railway General Code stipulates that means should be devised to ensure that every Railway servant realizes fully and clearly that he will be held personally responsible for any loss sustained by Government through negligence on his part. Further, in terms of clause (iv) of agreement executed between Pakistan Railways and DISCO, no late payment surcharge will be levied in case of advance payment.

During Special Audit, it was noticed that due to delay in payment of Sui gas bills, late payment surcharge amounting to Rs 1,159,494 was paid during the period from February 2011 to February 2017. It was further observed that despite advance payment of Rs 6,083,813 per month on account of electricity charges, late payment surcharge of Rs 666,767 was levied by the LESCO in October and November 2016 which was paid in contravention of the aforesaid agreement.

This resulted in loss of Rs 1,826,260 (Rs 1,159,494 + Rs 666,767) due to negligence on part of management (detail in **Annex-16A & B**)

The matter was taken up with the management in May 2017. Management replied that in the year 2011, lack of funds was an obvious reason in the way of timely submission of utility bills. However, these issues had been resolved in the following years. As far as the advance payment of electricity is concerned the same will be refunded in June 2017. The reply was not acceptable because Audit had pointed out the late payment surcharge in respect of sui gas bills during the period ranging from February 2011 to February 2017 and not only for the year 2011. Moreover, in case of electricity bills, late payment surcharge was paid in spite of monthly advance payment to LESCO which was totally unjustified and against the provision of agreement mentioned *ibid*.

Audit recommends that responsibility for loss on account of late payment surcharge be fixed particularly in case of electricity bills and amount involved if recovered be informed to Audit with documentary evidence for verification.

5.6 Procurement and Contract Management

It was examined from the sample of transactions that unfair, non-transparent and uneconomical procurement process was adopted and irregular/unjustified expenditure was incurred on procurement of substandard material which was of wrong specification.

5.6.1 Unjustified expenditure due to acceptance of substandard material – Rs 20.885 million

Para 350 of Pakistan Railways Code for Store Department stipulates that all articles, whether manufactured in Pakistan or abroad should be subject to inspection before acceptance and articles for which specifications and/or tests have been prescribed by competent authority should be required to conform to specifications and to satisfy the prescribed test or tests which may be carried out during manufacture or before or after dispatch from the supplier's premises.

During Special Audi, it was noticed that 60,890 kg electrode graphite was purchased at a cost of Rs 20,885,270. It was observed that specific resistance and Tensile Strength of supplied material were not got

tested. Further, the apparent density of the material was also not according to specifications. However, the material was declared suitable and payment was made to the contractor. Audit therefore was of the view that unjustified expenditure of Rs 20,885,270 was incurred due to acceptance of material which was not tested for suitability and was also of wrong specification (detail in **Annex-19**).

The matter was taken up with the management in May 2017. Management replied that the central laboratory of Pakistan Railways was not equipped with the gadgets to carry out the specific resistance and tensile strengths of Graphite Electrodes. As far as apparent density is concerned its minimum notation was 1.52 gms/cm³. The more of said notation would be more beneficial for the production of material. Moreover, the said material was serving practical performance's parameters and hence declared as suitable for the use in Steel Shop. The reply was not acceptable because the required tests could be got arranged from UET laboratory. Further, the apparent density of the material was not according to purchase order.

Audit recommends that matter be investigated at an appropriate level to fix responsibility for acceptance of material without required test and of wrong specifications and amount involved be recovered from those held responsible. Internal controls regarding inspection of material be improved to avoid recurrence.

5.6.2 Unjustified expenditure due to acceptance of substandard material – Rs 1.465 million

In terms of Clause 2 of terms & conditions of Purchase Order No. 197-S/1/5696/02-2016 dated 12.04.2016, “the material must confirm to the relevant specification/approved sample and Railway requirements, failing which the same will be rejected and removed at the risk and cost of supplier.

During Special Audit, it was noticed that 496.980 metric ton Silica Sand worth Rs 1,465,594 was supplied by the contractor M/s Irshad Traders, Lahore against ordered quantity of 500 metric ton @ Rs 2,949 per metric ton vide Purchase Order No. 197-S/1/5690/02-2016 dated

12.04.2016. The contractor supplied the quantity in fraction up to 10.08.2016 and material was posted on ledger card No. 85/322 on 05.08.2016 and 10.08.2016.

Audit observed that samples taken from each supply were sent to Pakistan Railways Central laboratory for chemical analysis and sieve test. It was reported by Works Manager/Steel Shop on 19.10.2016 that there was variation in sieve test of supplied material. The contractor was directed vide PEM/W letter dated 25.10.2016 to bring the appropriate grains in the already supplied material or replace the material on emergent basis. Audit observed that contractor vide letter dated 11.11.2016 intimated that all necessary arrangements had been made and sample sent to Pakistan Railways Central laboratory for chemical analysis. The sample was sent on 15.11.2016 by Works Manager Steel Shop which was declared fit by the laboratory.

Audit had the following observations.

- i. How the contractor added the standard grains in already supplied material because no fresh supply of Silica Sand was made to Steel Shop after 10.08.2016 as verified from the record of Inspector Pakistan Railways Police (PRP) Steel Shop.
- ii. As per ledger card, 128.88 metric ton material valuing Rs 380,067 @ Rs 2,949 per metric ton had already been issued to work up to 14.11.2016 whereas the sample was sent for retest on 15.11.2016.
- iii. How the huge quantity of 496.980 metric ton Silica Sand was declared suitable on the basis of only one sample which was sent to Central laboratory on 15.11.2016.

Audit has reasons to believe that unjustified expenditure of Rs 1,465,594 was incurred due to acceptance of substandard material.

Matter was pointed out to the formation in May 2017. Management replied that in the said material, there was a variation in the sieve test. Subsequently, PEM Office was requested to approach the firm concerned for an early replacement of rejected material. The contractor,

however, requested to manage the issue of Sieve as per standard specification with the help of some equipment at his own cost. In response to his request, he was allowed for the same. The contractor did so and the material was piled up on an earmarked area from which a sample was sent to the central lab: for the chemical and Sieve Test. The said sample qualified the standard specification required by the Railways. It is pertinent to mention here that the bill was charged against the material whose mesh was appropriate after the process carried out by the contractor. The remaining quantity was however, rejected and hence was not charged. As far as the matter of issuance of 128.88 M.Ton material without chemical analysis was concerned, it was not so. Before the supply of material by M/S Irshad Traders, the book balance of the same was 250 M.Ton from which the material was issued for use. But the material supplied by the aforesaid contractor was not utilised until and unless it was declared suitable by the laboratory. The reply was not acceptable because it was not understood that how the contractor managed to add the standard grains in the already supplied sand without any fresh supply? This required clarification because no material/person could enter in Railway workshop without gate pass and entry at the main gate of workshop. Moreover, if it was considered correct that contractor managed to do so then the question would arise why 496.980 Metric Ton Sand was accepted on the basis of only one sample which was resent to Central Laboratory on 15.11.2016 on the request of the contractor. Moreover, how the rejected sand was taken on ledger cards on 05.08.2016 & 10.08.2016 which indicated that same was used in the production process.

Audit recommends that responsibility in this regard be fixed. Amount of loss be recovered from those held responsible and disciplinary aspects of the case be also considered under intimation to Audit. Documentary evidence in support of reply be produced to Audit.

5.6.3 Mis-procurement due to unfair, non-transparent and uneconomical procurement processes – Rs 2.186 million

Rule 12 (2) PPRA Rules 2004 stipulates that all procurements over two million rupees should be advertised on the Authority's website as well

as in other print media or newspapers having wide circulation. Rule 4 further provides that procuring agencies shall ensure that procurements are conducted in a fair and transparent manner and procurement process is efficient and economical. Rule 42 (b)(i)(iii) also stipulates that if the cost of object of procurement is below the prescribed limit of one hundred thousand rupees then procurements can be made by obtaining minimum of three quotations.

During Special Audit, it was noticed that procurements worth Rs 2,186,555 were made in piecemeal by processing 25 local purchase cases for repair of overhead cranes during the period of only 04 months from 08.10.2015 to 06.02.2016 (detailed in **Annex-20**). Audit therefore, stated that procurements of items for repair of cranes were split up only to avoid advertisement in print media and approval of higher authority.

It was further observed that amount of Rs 569,980 was drawn against pay orders for procurement of 06 electrical items after obtaining 03 quotations. Out of the total amount only Rs 36,800 was spent on procurement of meager quantities of 03 items. Audit observed that remaining amount of Rs 533,180 (Rs 569,980-Rs 36,800) was spent on procurement of 10 new items with approval of DS/W but in clear violation of PPRA Rules, the procurements of these new items were made without obtaining three quotations from the market. Audit therefore, stated that mis-procurement of Rs 2,186,555 was made due to unfair, non-transparent and uneconomical procurement process adopted by the management of Steel Shop.

The matter was taken up with the management in May 2017. Management replied that the procurement was the need of the hour to keep of the momentum of the production of the Steel Shop. The detail answer of the said Para would be furnished after the detail review of the relevant record. The reply was not acceptable because procurement process was unfair, non-transparent and uneconomical which caused mis-procurement of 2.186 million.

Audit recommends that responsibility for splitting up of purchases be fixed, action against responsible persons be taken under the rules and the amount involved be regularized.

5.7 Overall Assessment

In nutshell, huge balances were accumulating under manufacturing suspense account, production cost had increased exorbitantly due to inordinate delay in completion of work. Manufactured material was rejected due to poor quality and bad workmanship. Besides, extremely inflated average oncost, unjustified payment of overtime and piece work profit was made without achievement of targets. Other issues include wasteful expenditure on idle labour, acceptance of substandard material and mismanagement of human resources. These turned the Steel Shop into a drain on financial resources of Pakistan Railways. Top management needs to pay attention immediately to fix all these problems for turning this sick Steel Shop into a healthy industrial unit of Pakistan Railways.

6. CONCLUSION

Audit concluded that Steel Shop was a huge financial burden on Pakistan Railways due to weak management as well as internal control systems. Steel Shop did not attain its fixed targets during period under review despite payment of overtime & piece work profit and most of the staff remained idle due to break down of outdated machinery etc. Railway was sustaining huge financial loss on account of pay & allowances of idle staff. Moreover, the high rejection ratio was also observed due to deployment of unskilled staff on skilled jobs, procurement of substandard material and non-availability of vital items. In addition, the production cost was also on much higher side even as compared to market rates and main factor of higher production cost was exorbitantly high oncost. The main factors of high oncost were less production, booking of staff on idle time, overstaffing, outdated machinery, ineffective utilisation of staff and high rejection ratio. Due to less production, balance of WMS account was exorbitantly piling up on continuous basis. Furthermore, defects in accounting system were also observed due to which the accuracy of costing system could not be authenticated.

6.1 Key Issues for the future

Outdated plant & machinery should be upgraded to avoid wastage of labour charges, delay in completion of work and increase in oncost. Quality of manufactured parts should be improved to minimize rejection of manufactured parts by ensuring the availability of vital items required in the manufacturing process and deployment of skilled staff at proper place of work and acceptance of material as per standard specification. Cost & benefit analysis should be carried out and items available in the market at cheaper rates should be deleted from the list of shop made items.

6.2 Lessons Identified

Delay in completion of work due to outdated plant & machinery and unavailability of vital items not only caused financial loss on account of extra production cost but also resulted into wastage of labour charges and increase in oncost. There was frequent rejection of manufactured parts due to acceptance of substandard material and utilisation of unskilled staff against skilled posts. Production cost of items manufactured by Steel Shop was also higher as compared to market rates which also resulted in financial loss.

ACKNOWLEDGEMENT

Audit acknowledges the support of Works Manager, Steel Shop, Divisional Superintendent Workshops and Divisional Accounts Officer, Workshops for their cooperation and assistance in providing the necessary information and record.

Annex-1**Detail of loss-Rs.100.246 million due to rejection of manufactured parts. (Para # 5.1.1)**

S. No.	Period	Amount of rejected material (Rs)	Reason for rejection
1	19.01.2015 to 19.12.2015	17,040,444	Bad casting, undersize, Bad hand work, Bad material
2	19.01.2016 to 19.12.2016	58,634,708	
3	19.01.2017 to 19.04.2017	24,570,994	
Total		100,246,146 100.246 (M)	

Annex-2

Detail of loss on account of items rejected by the consumers (Para # 5.1.1)

S. No.	Description	Rejected by	Quantity	Unit	Rate (Rs)	Total Amount (Rs)
1	Axle Caps (DE-3219, DE-3220)	W.M Loco Shop L.No.117-S/27- Prog/S.P II, Dt:27-08-16	44	Nos	95,048	4,182,112
2	Axle Caps (761-Type) for rectification	FO Electric & Diesel Loco Shop, L.No.117-S/7019, Dt 11-05-16	175		95,048	16,633,400
3	M.S Drums	P.E.M/DSM L.No.DSM-R/211/PT-IX, dt:11-04-16	17		38,366	652,222
4	Axle Caps	W.M Loco Shop L.No.494/W (WML), Dt:16-04-16	10		95,048	950,480
5	Housing Adopter	Foreman Machine Shop, CC.No.7411	33		67,225	2,218,425
6	Brake Block V-775	197-ES/Misc, Foundry Shop, CC.No.7402, Dt:31-01-17	400		1,452	580,800
	Brake Block ZBFC		40	1,452	580,800	
Total						25,798,239 25.798 (M)

Detail of loss of molten metal amounting to Rs. 20.743 million due to wrong chemical composition (Para # 5.1.1)

Date of Heat Manufactured	Heat No.	Qty of molten metal		Rate per Kg	Amount of loss (Rs.)	Reason for rejection
		in Tons	in Kgs			
1	2	3	4	5	6 (4x5)	7
27-03-14	T-9621	4.40	4400	83	365200	out of specification
05-05-14	T-9673	4.18	4180	83	346940	out of specification
24-06-14	T-9750	4.40	4400	83	365200	out of specification
23-07-14	T-9789	3.08	3080	83	255640	out of specification
13-08-14	T-9803	4.40	4400	83	365200	out of specification
04-12-14	T-9989	3.52	3520	83	292160	out of specification
19-02-15	R-0067	4.18	4180	83	346940	out of specification
03-03-15	R-0093	4.40	4400	83	365200	out of specification
02-05-15	R-203	4.40	4400	83	365200	out of specification
05-05-15	R-204	4.40	4400	83	365200	out of specification
12-06-15	R-244	4.18	4180	83	346940	out of specification
01-08-15	R-286	3.96	3960	83	328680	out of specification
03-08-15	R-288	3.96	3960	83	328680	out of specification
04-08-15	R-290	2.20	2200	83	182600	out of specification
06-08-15	R-293	4.40	4400	83	365200	out of specification
06-08-15	R-294	4.18	4180	83	346940	out of specification
07-08-15	R-295	4.40	4400	83	365200	out of specification
07-08-15	R-296	3.52	3520	83	292160	out of specification
24-08-15	R-317	4.40	4400	83	365200	out of specification
18-09-15	R-363	3.96	3960	83	328680	out of specification
19-11-15	R-443	3.74	3740	83	310420	out of specification

23-11-15	R-447	4.18	4180	83	346940	out of specification
24-11-15	R-452	4.18	4180	83	346940	out of specification
24-03-16	R-570	4.40	4400	83	365200	out of specification
25-03-16	R-572	4.40	4400	83	365200	out of specification
28-03-16	R-579	2.64	2640	83	219120	out of specification
12-04-16	R-611	4.40	4400	83	365200	out of specification
13-04-16	R-612	4.40	4400	83	365200	out of specification
20-04-16	R-627	4.18	4180	83	346940	out of specification
17-06-16	R-703	4.40	4400	83	365200	out of specification
18-06-16	R-705	4.40	4400	83	365200	out of specification
01-07-16	R-718	4.40	4400	83	365200	out of specification
04-07-16	R-722	4.40	4400	83	365200	out of specification
16-07-16	R-736	4.40	4400	83	365200	out of specification
22-09-16	R-794	4.40	4400	83	365200	out of specification
07-10-16	R-823	4.40	4400	83	365200	out of specification
14-10-16	R-833	3.96	3960	83	328680	out of specification
18-10-16	R-842	4.40	4400	83	365200	out of specification
31-10-16	R-871	4.40	4400	83	365200	out of specification
07-11-16	R-888	2.42	2420	83	200860	out of specification
09-11-16	R-893	1.76	1760	83	146080	out of specification
16-11-16	R-905	2.20	2200	83	182600	out of specification
28-11-16	R-939	2.42	2420	83	200860	out of specification
30-11-16	R-947	3.52	3520	83	292160	out of specification
08-12-16	R-972	4.40	4400	83	365200	out of specification
04-01-17	R-1029	4.40	4400	83	365200	out of specification
13-01-17	R-1049	3.52	3520	83	292160	out of specification
16-01-17	R-1054	2.20	2200	83	182600	out of specification

17-01-17	R-1058	3.74	3740	83	310420	out of specification
30-01-17	R-1100	4.40	4400	83	365200	out of specification
31-01-17	R-1103	4.40	4400	83	365200	out of specification
10-02-17	R-1128	3.08	3080	83	255640	out of specification
10-02-17	R-1129	2.64	2640	83	219120	out of specification
01-03-17	R-1172	4.40	4400	83	365200	out of specification
03-03-17	R-1180	4.40	4400	83	365200	out of specification
16-03-17	R-1205	3.96	3960	83	328680	out of specification
17-03-17	R-1209	2.86	2860	83	237380	out of specification
19-03-17	R-1215	4.40	4400	83	365200	out of specification
19-03-17	R-1216	4.40	4400	83	365200	out of specification
21-03-17	R-1221	3.08	3080	83	255640	out of specification
24-03-17	R-1226	3.52	3520	83	292160	out of specification
29-03-17	R-1241	4.40	4400	83	365200	out of specification
04-04-17	R-1257	4.40	4400	83	365200	out of specification
08-04-17	R-1262	4.40	4400	83	365200	out of specification
Total		249.920	249,920		20,743,360 20.743 (M)	

Annex-4

Statement showing the loss due to higher production cost as compared to market rates (Para # 5.1.2)

S. No.	P.W.O No	Stock Code No.	Description	Supply Qty:	M.P.Note	Date	Standard unit Rate (Rs)	Market Rate (Rs)	Purchase Order No.	Date	Difference of Rate (Rs.)	Amount of Loss (Rs)
1	2	3	4	5	6	7	8	9	10	11	12 (8-9)	13 (12*5)
1	82082560	705,10880	M.S. Square 4" CI-IV	18972	1795593	13.4.16	118	92	ICF/4P/0320-C/16	12.05.2016	26	493,272
2	86052552	705,12560	M.S. Round 7/8" CI-II	5150	1785411	21.9.16	162	135	ICF/4P/0256-D(iii)/14	19.03.2015	27	139,050
3	85112558	705,12590	M.S. Round 1-1/4" CI-II	66826	2339259	4.5.16	157	142	ICF/4P/0256-D(I)/14	16.03.2015	15	1,002,390
4	86032558	705,12610	M.S. Round 1-1/2" CI-II	9356	1785406	2.9.16	147	142	ICF/4P/0256-D/14	24.03.2015	5	46,780
5	85112552	705,12660	M.S. Round 2-1/4" CI-II	47822	1818889	1.3.16	146	142	ICF/4P/0256-D(I)/14	16.03.2015	4	191,288
6	85112560	705,12670	M.S. Round 2-1/2" CI-II	202156	1785408	6.9.16	146	142	ICF/4P/0256-D(I)/14	16.03.2015	4	808,624
7	84092553	705,12750	M.S. Round 1-3/4" CI-III	15144	1818885	12.3.16	145	142	ICF/4P/0256-D/14	24.03.2015	3	45,432
8	86022553	705,12760	M.S. Round 2-1/4" CI-III	2400	1785419	28.9.16	146	142	ICF/4P/0256-D(I)/14	16.03.2015	4	9,600

9	86012552	705,12830	M.S. Round 1-5/8"	CI-IV	24818	2339262	7.5.16	154	142	ICF/4P/0256-D(I)/14	16.03.2015	12	297,816
10	82082558	705,12840	M.S. Round 1-3/4"	CI-IV	214447	2076364	25.5.17	145	142	ICF/4P/0256-D/14	24.03.2015	3	643,341
11	82082556	705,12870	M.S. Round 2-1/4"	CI-IV	239239	2076020	11.11.16	146	142	ICF/4P/0256-D (I)/14	16.03.2015	4	956,956

12	86032555	705,12880	M.S. Round 2-1/2"	CI-IV	39846	2339274	28.6.16	146	142	ICF/4P/0256-D (I)/14	16.03.2015	4	159,384
13	86022552	705,13230	M.S. Square 2-1/2"	CI-II	24818	2076017	28.10.16	126	93	ICF/4P/0320-C/14	12.05.2016	33	818,994
14	82082551	705,13240	M.S. Square 3"	CI-II	110065	2076012	18.10.16	120	81.4	ICF/4P/0363-B/17	29.03.2017	38.6	4,248,509
15	84062554	705,13270	M.S. Square 3"	CI-IV	212166	1734759	15.4.17	120	81.4	ICF/4P/0363-B/17	29.03.2017	38.6	8,189,608
												18,051,044	
												18.051 (M)	

Annex- 5

Detail of loss due to substandard quality of Axle Caps (Para # 5.1.3)

S. No.	Year	Axle Caps rejected due to porosity	Premature failure of traction motors due to broken/cracked Axle Caps
1	2013	108	58
2	2014	88	78
3	2015	81	36
4	2016	99	19
Total		376	191

Calculation of Loss:

Description of items		Quantity	Unit Rate	Loss Rs. in million
a	Axle Caps rejected due to porosity	376		
b	Axle Caps cracked/broken	191		
Total		567	95,04	53,892,216 53.892 (M)

Annex-6A

(a) Calculation of average oncost of Loco Shop per annum (Para # 5.1.4)

S.No	CC No.	Oncost %		
		Labour	Store	Total
1	7000	800	10	810
2	7001	1200	10	1210
3	7002	500	10	510
4	7004	650	10	660
5	7005	550	10	560
6	7006	600	10	610
7	7007	750	10	760
8	7012	550	10	560
9	7013	750	10	760
10	7014	600	10	610
11	7019	650	10	660
12	7024	550	10	560
13	7026	700	10	710
14	7031	600	10	610
Total				9590

Average oncost per annum= 9590/14
685%

(b) Calculation of average oncost of Steel Shop per annum

S.No	CC No.	Oncost %		
		Labour	Store	Total
1	7402	1600	10	1610
2	7403	1800	10	1810
3	7405	1600	10	1610
4	7408	1500	10	1510
5	7411	1800	10	1810
Total				8350

Average oncost per annum= 8350/5
1670%

Annex-6B

Statement showing the detail of extra expenditure due to exorbitant rate of oncost (Para # 5.1.4)

Month	Direct Labour of Steel Shop (Rs)	Average on cost (% age) of steel shop	Amount of shop on cost of steel shop (Rs)	Average on cost %age of Locoshop	Amount of on cost calculated at % age on cost of Loco shop	Difference (Rs)
1	2	3	4	5	6	7 (4-6)
Jul-16	4,543,664	1670	75,879,189	685	31,124,098	44,755,090
Aug-16	3,690,216	1670	61,626,607	685	25,277,980	36,348,628
Sep-16	3,996,464	1670	66,740,949	685	27,375,778	39,365,170
Oct-16	4,030,210	1670	67,304,507	685	27,606,939	39,697,569
Nov-16	4,235,878	1670	70,739,163	685	29,015,764	41,723,398
Dec-16	4,527,141	1670	75,603,255	685	31,010,916	44,592,339
Jan-17	4,635,636	1670	77,415,121	685	31,754,107	45,661,015
Feb-17	4,791,392	1670	80,016,246	685	32,821,035	47,195,211
Mar-17	3,720,102	1670	62,125,703	685	25,482,699	36,643,005
Apr-17	4,075,509	1670	68,061,000	685	27,917,237	40,143,764
Total	42,246,212		705,511,740		289,386,552	416,125,188

Detail of overtime and piece work profit amounting to Rs. 12.583 million during the period Jan-2014 to Dec-2016 (Para # 5.2.2)

Period involved	Overtime paid	Piece work profit	Total
Jan-2014 to Dec-2014	14,232,814	4,458,298	18,691,112
Jan-2015 to Dec-2015	12,972,551	3,793,819	16,766,370
Jan-2016 to Dec-2016	18,487,434	4,331,382	22,818,816
Total	45,692,799	12,583,499	58,276,298

**Statement showing the detail of Target and %age of target achieved during
the period from Jan, 2014 to Dec, 2016 (Para # 5.2.2)**

Description	Yearly Production Target (M.Ton)	Outturn (M.Ton) Year 2014	% of Target	Outturn (M.Ton) Year 2015	% of Target	Outturn (M.Ton) Year 2016	% of Target
FURNACE	8000	2376	29.70	2017	25.21	2421	30.26
FOUNDRY	2000	1418	70.90	974	48.70	969	48.45
ROLLING MILLS	6000	875	14.58	927	15.45	1618	26.97

**STATEMENT SHOWING THE DETAIL OF MELTING LOSSES NOT REPORTED IN FOUNDRY ACCOUNT
CC. NO. 7405 (Para # 5.3.2)**

MONTH	MELTING LOSSES REPORTED (Kg)	MELTING LOSSES NOT REPORTED (Kg)	DIFFERENCE (Kg)	RATE (Rs)	AMOUNT OF DIFFERENCE (Rs)	%AGE OF MELTING LOSSES REPORTED	%AGE OF MELTING LOSSES NOT REPORTED
1	2	3	4 (3-2)	5	6 (4 x 5)	7	8
Jan-15	3685	7185	3500	83	290500	14.92	25
Feb-15	6855	9655	2800	83	232400	5.53	7.62
Mar-15	14310	17510	3200	83	265600	4.24	5.15
Apr-15	16515	25115	8600	83	713800	7.36	10.78
May-15	4095	8795	4700	83	390100	2.93	9.98
Jun-15	8185	14785	6600	83	547800	5.38	9.32
Jul-15	1470	4970	3500	83	290500	2.04	6.58
Aug-15	5760	17560	11800	83	979400	3.07	8.81
Sep-15	7280	12680	5400	83	448200	2.86	4.88
Oct-15	7405	14005	6600	83	547800	5.66	10.2
Nov-15	11015	23215	12200	83	1012600	5.23	10.43
Dec-15	3315	12315	9000	83	747000	1.39	5.18
Jan-16	2101	3201	1100	83	91300	4.27	6.13
Feb-16	4045	6545	2500	83	207500	3.42	5.42
Mar-16	8915	10715	1800	83	149400	3.48	4.15
Apr-16	9782	10882	1100	83	91300	3.46	3.84
May-16	6595	9295	2700	83	224100	3.42	4.76
Jun-16	11550	14450	2900	83	240700	6.3	7.76
Jul-16	9650	11650	2000	83	166000	5.02	5.99
Aug-16	520	0	0	83	0	3.32	3.32
Sep-16	16265	21665	5400	83	448200	5.71	7.74
Oct-16	7535	8435	900	83	74700	2.51	2.81
Nov-16	12965	20365	7400	83	614200	4.12	6.32
Dec-16	14670	19270	4600	83	381800	4.08	5.29
TOTAL	194483	304263	110300		9,154,900		

Annex-8B

Statement showing the detail of Furnace James (Molten Metal) not included in Foundry Accounts of Electric Furnace CC.No.7405 (Para # 5.3.2)

S.No.	Date	M.R Note No.	Qty in Kg	Rate of Scrap@ Rs.21/Kg	Rate of Molten Metal@ Rs.83/Kg	Difference
1	2	3	4	5 (Col 4 x Rs.21)	6 (Col 4 x Rs. 83)	7 (6-5)
1	19-05-10	31736	18400	386400	1527200	1140800
2	01-11-10	3852	21900	459900	1817700	1357800
3	03-12-10	3853	15400	323400	1278200	954800
4	01-11-12	118328	5400	113400	448200	334800
5	28-03-13	34515	9300	195300	771900	576600
6	31-01-14	173083	18400	386400	1527200	1140800
7	13-04-14	173085	21400	449400	1776200	1326800
8	12-08-14	173092	23300	489300	1933900	1444600
9	04-10-14	272503	22400	470400	1859200	1388800
10	24-11-14	272508	31400	659400	2606200	1946800
11	24-11-14	272504	19400	407400	1610200	1202800
12	15-01-15	272511	36400	764400	3021200	2256800
13	15-01-15	272512	24400	512400	2025200	1512800
14	05-03-15	272514	13400	281400	1112200	830800
15	05-03-15	272515	22400	470400	1859200	1388800
16	22-08-15	272521	22700	476700	1884100	1407400
17	22-08-15	272520	22200	466200	1842600	1376400
18	28-11-15	272524	23300	489300	1933900	1444600
19	29-11-15	272525	20400	428400	1693200	1264800
20	06-01-16	28577	28400	596400	2357200	1760800
21	08-01-16	28586	29700	623700	2465100	1841400
22	10-01-16	28589	7800	163800	647400	483600
23	09-03-16	28593	7400	155400	614200	458800
24	26-03-16	28597	8000	168000	664000	496000
25	21-04-16	28596	18400	386400	1527200	1140800
26	12-11-16	108301	42500	892500	3527500	2635000
27	17-12-16	108307	13400	281400	1112200	830800
Total			547,500	11,497,500	45,442,500	33,945,000
					9,154+45,442= 54.597 (M)	

Annex-9**Detail of loss- due to detention of Wagons beyond free time_(Para # 5.3.3)**

Date of Arrival of Wagons	Detention beyond free time (days)	Average earning of wagon per day (Rs)	Loss of freight (Rs.)	No. of wagons detained beyond free time	Remarks
21.02.2012	2332	1481	3,453,692	90	Out of 566 No. of wagons 48 No. wagons were detained since April 2016 and were not dispatched till date of audit
02.01.2013	5080	1481	7,523,480	169	
07.01.2014	5021	1481	7,436,101	130	
03.02.2015	6164	1481	9,128,884	102	
01.01.2016	1559	1481	2,308,879	27	
13.04.2016	6950	1481	10,292,950	48	
Total			40,143,986 40.143 (M)	566	

Statement showing the detail of Wasteful expenditure on account of labour charges of idle labour due to poor management (Para # 5.4.1)

S. No.	Month	Furnace Operated Days	Furnace Closed Days	Total Hours (8 hrs x 66 x No of days)	Total Production (Kg)	Standard labour Rate per hour (Rs)	Total amount of labour charges (Rs)
1	2	3	4	5	6	7	8 (7x5)
1	Oct-10	5	26	13728	22040	75	1,029,600
2	Nov-10	1	29	15312	4000	75	1,148,400
3	Dec-10	4	27	14256	13520	75	1,069,200
4	Jan-11	12	19	10032	49480	75	752,400
5	Feb-11	14	14	7392	71960	75	554,400
6	Mar-11	12	19	10032	56640	75	752,400
7	Apr-11	12	18	9504	57740	75	712,800
8	May-11	8	23	12144	38540	75	910,800
9	Jun-11	7	23	12144	34680	75	910,800
10	Jul-11	1	30	15840	3500	75	1,188,000
11	Aug-11	2	29	15312	11000	75	1,148,400
12	Sep-11	Nil	30	15840	-	75	1,188,000
13	Oct-11	2	29	15312	10000	75	1,148,400
14	Nov-11	9	21	11088	47820	75	831,600
15	Dec-11	13	18	9504	63840	75	712,800
16	Jan-12	13	18	9504	63840	75	712,800
17	Feb-12	7	22	11616	35280	75	871,200
18	Mar-12	7	24	12672	35980	75	950,400
19	Apr-12	8	22	11616	39620	75	871,200
20	May-12	5	26	13728	19560	75	1,029,600
21	Jun-12	1	29	15312	4900	75	1,148,400
22	Jul-12	8	23	12144	39420	75	910,800
23	Aug-12	7	24	12672	34520	75	950,400
24	Sep-12	5	25	13200	20100	75	990,000
25	Oct-12	1	30	15840	5020	75	1,188,000
26	Nov-12	14	16	8448	101020	75	633,600
27	Dec-12	18	13	6864	177500	75	514,800
28	Jan-13	9	22	11616	69420	75	871,200
29	Feb-13	16	12	6336	142080	75	475,200
30	Mar-13	24	7	3696	209000	75	277,200
31	Apr-13	24	6	3168	239780	75	237,600
32	May-13	23	8	4224	142020	75	316,800
33	Jun-13	30	-	0	277310	75	0
34	Jul-13	29	1	528	297660	75	39,600
35	Aug-13	25	6	3168	174740	75	237,600

36	Sep-13	23	7	3696	132520	75	277,200
37	Oct-13	22	9	4752	134080	75	356,400
38	Nov-13	24	6	3168	222920	75	237,600
39	Dec-13	26	4	2112	296120	75	158,400
40	Jan-14	25	6	3168	206640	75	237,600
41	Feb-14	22	6	3168	170080	75	237,600
42	Mar-14	23	8	4224	145060	75	316,800
43	Apr-14	25	5	2640	217050	75	198,000
44	May-14	24	6	3168	209120	75	237,600
45	Jun-14	25	5	2640	210740	75	198,000
46	Jul-14	19	12	6336	167280	75	475,200
47	Aug-14	18	13	6864	13880	75	514,800
48	Sep-14	22	8	4224	175020	75	316,800
49	Oct-14	21	10	5280	211200	75	396,000
50	Nov-14	22	8	4224	260490	75	316,800
51	Dec-14	17	13	6864	263660	75	514,800
52	Jan-15	6	25	13200	22500	75	990,000
53	Feb-15	17	11	5808	191780	75	435,600
54	Mar-15	20	11	5808	290900	75	435,600
55	Apr-15	25	5	2640	197320	75	198,000
56	May-15	20	11	5808	111960	75	435,600
57	Jun-15	24	6	3168	142820	75	237,600
58	Jul-15	15	16	8448	105120	75	633,600
59	Aug-15	21	9	4752	201340	75	356,400
60	Sep-15	17	13	6864	167080	75	514,800
61	Oct-15	18	13	6864	194980	75	514,800
62	Nov-15	21	9	4752	206880	75	356,400
63	Dec-15	16	15	7920	161900	75	594,000
64	Jan-16	4	26	13728	26200	75	1,029,600
65	Feb-16	10	18	9504	114120	75	712,800
66	Mar-16	18	12	6336	247160	75	475,200
67	Apr-16	23	7	3696	272480	75	277,200
68	May-16	20	11	5808	185760	75	435,600
69	Jun-16	22	8	4224	171660	75	316,800
70	Jul-16	19	12	6336	182560	75	475,200
71	Aug-16	2	29	15312	15120	75	1,148,400
72	Sep-16	22	8	4224	268340	75	316,800
73	Oct-16	21	9	4752	291700	75	356,400
74	Nov-16	20	10	5280	301500	75	396,000
75	Dec-16	24	6	3168	344800	75	237,600
Total			1115	588720	10065370		44,154,000 44.154 + 32.361 = 44.154 (M)

Annex-11

**Statement showing the detail of staff booked on idle time during the period from
20.01.2016 to 19.02.2017 (Para # 5.4.2)**

Period	CC No.	No. of staff booked on idle time	Idle Hours	Amount at standard rate of Rs. 75
1	2	3	4	5 (Col 4 x Rs.75)
20.01.1016 to 19.01.2017	7402	259	53,872	4,040,400
27.01.2016 to 24.12.2016	7403	429	39544	2,965,800
02-02-2016 to 29-08-2016	7405	126	18528	1,389,600
20-01-2016 to 19-12-2016	7408	38	7904	592,,800
20-04-2016 to 19-02-2017	7411	51	10608	795,600
Total		903	130,456	9,784,200 9.784 (M)

Annex-12

Statement showing the detail of loss -Rs. 6.177 million on account of labour charges due to overstaffing (Para # 5.4.3)

Total off loaded staff of Furnace No. 01	=	33
Total working hours in a day	=	8
Total working days in a month	=	26
Total working hours of 33 no. of labour in a month	=	33 x 26 x 8 = 6864 Hrs
Labour standard rate per hour	=	Rs. 75
Total labour charges per month (6864 hrs x Rs. 75 per hour)=Rs		514,800
Total labour charges per annum (Rs. 514,800 per month x 12 months)=Rs		6,177,600 6.177 (M)

Statement showing the detail of irregular/unjustified expenditure of Rs. 1.885 million per month on account of pay & allowances due to irregular adjustment of excess staff (Para # 5.4.4)

C.C. No.	Sanctioned Strength	On Roll	Excess/Short	Utilised as skilled/semi skilled/lab attendant	Gross Salary of utilised muawans per month (Rs)
7400	0	0	0	1	15,885
7402	33	73	40	40	597,281
7403	76	68	-8	1	13,149
7404	10	14	4	4	51,166
7405	39	51	12	8	125,610
7406	9	16	7	3	47,341
7407	12	39	27	30	427,690
7408	10	33	23	26	361,832
7411	7	20	13	18	245,273
Total	196	314	118	131	1,885,227 1.885 (M)

**Statement showing the detail of irregular expenditure of
Rs.4.153 million on account of pay & allowances due to
deployment of Loco shop staff in Steel Shop (Para # 5.4.5)**

Period	Amount of Pay & Allowances (Rs.)
20.01.2017 to 19.02.2017	1,482,320
20.02.2017 to 19.03.2017	1,461,167
20.03.2017 to 19.04.2017	1,210,378
Total	4,153,865 4.153 (M)

Statement showing the detail of staff working over and above the sanctioned strength (Para # 5.4.5)

S.No.	Category	Sanctioned Strength	On Roll			Excess
			Permanent	Loco Staff working in Steel shop	Total	
1	SK. Moulder	97	75	25	100	3
2	SK. Fettler	17	16	10	26	9
3	Mistry (Moulder)	4	4	1	5	1
4	Muawan	33	33	20	53	20

**Statement showing the detail of balance with DISCO
(Para # 5.5.1)**

S.No.	Month	Balance amount with WAPDA
1	Aug-16	2,639,046
2	Sep-16	8,529,860
3	Oct-16	3,646,487
4	Nov-16	2,584,472
5	Dec-16	2,870,279
6	Jan-17	1,493,158
7	Feb-17	726,828
8	Mar-17	538,936

**Statement showing the detail of late payment surcharge (LPS)
amounting to Rs. 1.159 million on account of sui gas bills
(Para # 5.5.2)**

S.No.	Billing Month	Amount of Bill (Rs)	Late Payment Surcharge (LPS) (Rs)
1	Feb-11	9,408,830	31,373
2	Apr-12	31,191,738	256,893
3	Oct-12	24,837,640	249,556
4	Nov-12	25,113,300	234,659
5	Mar-13	471,900	24,818
6	Apr-13	9,792,000	79,429
7	May-13	11,530,680	144,423
8	Jun-13	11,597,710	66,028
9	Aug-13	1,722,950	4,683
10	Sep-13	2,714,220	8,474
11	Jan-14	6,050,420	12,714
12	Mar-14	2,358,050	2,199
13	Jul-14	614,520	4,684
14	Aug-14	748,090	301
15	Jan-15	125,920	3,534
16	Aug-16	2,866,880	2,828
17	Sep-16	2,732,230	1,346
18	Feb-17	4,205,680	31,552
Total late payment surcharge			1,159,494

Annex-16B**Statement showing the detail of late payment surcharge amounting to Rs.0.666 million on account of Electricity Bills (Para # 5.5.2)**

S.No.	Month	Customer I.D.	Amount of late payment surcharge (Rs)
1	Nov-16	1001835	325,366
2	Nov-16	1001836	62,526
3	Oct-16	1001835	226,912
4	Oct-16	1001836	51,963
Total			666,767
			1.159 + 0.667 = 1.826 (M)

Statement showing the detail of irregular/unauthorized execution of work worth Rs.6.731 million (Para # 5.3.5)**Jul-14**

DWR/W- Req	Date	P.W.O No	Indentor	Description	Amount	Estimate Sanctioned or NOT		Cost mentioned on P.W.O.		Total Qty	Complete Date
						Yes	No	Yes	No		
2999224	06-02-2014	94063104	Iow/North	Steel Door & Steel Gril different sizes for B. 12/200 J.C MGPR	285144		No		No	02 Nos	14-07-2014
8126195	20-03-2014	94033116	Iow/South	Steel Gate 15'X8' for Railway Police Station Bajaline MGPR	165200		No		No	01 No	18-07-2014
2868912	21-06-2014	94063128	Iow/South	Steel Grill different sizes	139280		No		No	03 Nos	23-07-2014
					589624						
<u>Aug-14</u>											
2999226	04-06-2014	94063106	Iow/North	Steel Door & Steel Grill Different sizes	97680		No		No	04 Nos	04-08-2014

				Q# 8 Block 52 Abdul Waheed Colony							
2999228	04-06-2014	94063105	Iow/North	Steel Door & Steel Grill Different sizes Q#48/8 Abdul Waheed Colony MGPR	41280		No		No	02 Nos	16-08-2014
2868919	08-08-2014	94083105	Iow/South	Manufacturing of L- Type for D-A-O Workshops MGPR	67584		No		No	12 Nos	18-8-2014
					206544						
Sep-14											
2999232	16-07-2014	94073117	Iow/North	Steel Door & Steel Window different size Q# K-3/16 J.C Barrok MGPR	41280		No		No	02 Nos	10-09-2014
2991231	11-06-2014	94063111	Iow/North	Steel Door & Steel Grill different size Q# 265/c Wheatman Road MGPR	157440		No		No	03 Nos	10-09-2014

2999203		94043106	Iow/North	Steel Door 3-1/2"X6-1/2" Q# 21/3-4 Abdul Waheed Colony MGPR	22080		No	No	01 No	10-09-2014
2999229	23-05-2014	94063123	Iow/North	Steel Door with Different Sizes Q# 254/B Wheatman Road MGPR	36240		No	No	02 Nos	23-9-2014
					257040					
Nov-14										
3126049	28-02-2014	94033101	IOW / N / MGPR	Steel Door Q# 37/3 Abdul Waheed Colony MGPR	14820		No	No	01 No	08-11-2014
2999221	24-04-2014	94063124	IOW / N / MGPR	Steel Door Q#296/19 W&W Colony MGPR	21840		No	No	01 No	12-11-2014
2868918	--	94093101	IOW / S / MGPR	Steel Door Q# 159/A Aurangzaib Road MGPR	27160		No	No	02 No	12-11-2014
2868911	18-08-2011	94093120	IOW / S /	Steel Door B#	52261		No	No	05 No	12-11-2014

			MGPR	206/A-I Baber Road MGPR							
3126181	30-04-2014	94043127	IOW / N / MGPR	Steel Door Q# 11/A Mistry Colony MGPR	17973		No		No	01 No	27-11-2014
					134054						
<u>Dec-14</u>											
2999239	16-09-2014	94093123	IOW/S/MG PR	Steel Door for Q# 19/9 Abdul Waheed Colony MGPR	17290		No		No	01 No	01-12-2014
2999225	15-09-2014	94093133	IOW/S/MG PR	Steel Door for Q# 3/20 Mistry Colony MGPR	17290		No		No	01 No	01-12-2014
2999223	02-10-2014	94103106	IOW/N/M GPR	Steel Grill for Q# 265/E Wheatman Road MGPR	63840		No		No	01 No	02-12-2014
2868921	15-10-2014	94103111	IOW/S/MG PR	Steel Gate for B# 207/A Shahjahan Road MGPR	54720		No		No	01 No	02-12-2014
2999222	04-09-2014	94093130	IOW/N/M GPR	Steel Door Frame for Q# 28/17 C.M	22068		No		No	01 No	02-12-2014

				Barraks MGPR							
2999235	06-09-2014	94093107	IOW/N/M GPR	Steel Door for Q# 23/2 J.C Barraks MGPR	21840		No		No	01 No	24-12-2014
2999243	18-11-2014	94113116	IOW/N/M GPR	Steel Grill for Flat# D-2/B Wheatman Road MGPR	104880		No		No	02 Nos	24-12-2014
2772672	10-11-2014	94123102	IOW- III/Lhr	Steel Grill for B# 9/B Mayo Garden LHR	552716		No		No	03 Nos	24-12-2014
					854644						

Jan-15

2999244	09-12-2014	94123107	Iow/North	Steel Doors 3-1/2" X 6-1/2"=2-1/2"X6" for Q# 7/B Mistry Colony MGPR	50640		No		No	1 No	02-01-2015
2990203	13-12-2014	94123115	Iow/North	Steel Door 3'X6-1/2' for Q# 8/15 J.C Barraks MGPR	18720		No		No	1 No	12-01-2015
2990204	24-12-2014	94123120	Iow/North	Steel Door 3'X6-1/2'	37440		No		No	2 Nos	12-01-2015

				for Q# 56/36 Abdul Waheed Colony MGPR							
2990205	09-01-2015	95013113	Iow/North	Lifting Barrier Complete for P.R Girls high School MGPR	552492		No		No	2 Nos	13-01-2015
2868936	05-01-2015	95013114	Iow/North	Steel Door 3-1/2'X6- 1/2' for Q# 8/G Mistry Colony MGPR	21840		No		No	1 No	13-01-2015
2999227	16-12-2014	94123109	Iow/North	Steel Doors 3'X6- 1/2', 2-1/2'X6' for Q# 3/1 Mistry Colony MGPR	47520		No		No	3 Nos	27-01-2015
2769355	28-01-2015	95013139	Iow/II/Lhr	Steel Gate D/leaf 6- 1/2'X14-1/2' for B# 150/B Burt Colony MGPR	156480		No		No	1 No	28-01-2015
					885132						

Feb-15											
2868926	18-12-2014	94123113	Iow/North	Steel Door (8"X5") for Q# 11/6 Mistry Colony MGPR	53760		No		No	1 No	21-02-2015
2886364	29-01-2015	95013141	IOW/II/Lhr	Steel Grills 10/3"X8/4", 10/4"X8/4" for H# 138-F MGPR	329280		No		No	4 Nos	28-02-2015
					383040						
Mar-15											
29990202	06-12-2014	95013116	Iow/North	Steel Grill 7-3/4"X7" Q# 265/B Wheatman Road MGPR	104160		No		No	02 Nos	09-03-2015
2999247	02-12-2014	94123106	Iow/North	Steel Grill 7'X5-3/4", 12"X5-3/4" for Flat# C-14/A Wheatman Road MGPR	104880		No		No	02 Nos	18-03-2015
					209040						
Apr-15											
2868938	05-01-2015	95013115	Iow/South	Steel Gate 7'X6-1/2" Q# 236/A New	43680		No		No	01 No	14-04-2015

				Sample Road MGPR							
2868941	13-02-2015	95023102	Iow/South	Steel Grill B/No 116 Canal Bank Colony MGPR	110000		No		No	01 No	29-4-2015
					153680						
<u>May-15</u>											
2990206	23-01-2015	95013144	Iow/North	Steel Door Different size Q# 4/A Mistry Colony MGPR	87360		No		No	05 Nos	22-05-2015
					87360						
<u>Jul-15</u>											
2506891		95073115	SRP/Lhr/D iv	Iron Berrior	276246		No		No	01 No	11-07-2015
2769358	30-03-2015	95043101	Iow/Hd/Qt y	Steel Grills 9'X13"X7'X3" , Steel Grill Door 4'X6"X7'X3" Director Vigilance Office HD Qtr Lahore	452256		No		No	07 Nos	15-07-2015

					728502							
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Aug-15

2868947		95073123	Iow/South	Steel Grill 7'-9"X6'X8" , Steel Gate 6'-6"X12' for B# 148/A north Road MGPR	172120		No		No	03 Nos	10-08-2015
3026294	17-04-2015	95063115	Iow/North	Steel Grill 12'X5-3/4",7'X5-3/4" for Flat# C-16/D Wheatman Road MGPR	220080		No		No	02 Nos	28-08-2015
					392200						

Sep-15

3068700	14-05-2015	95053106	Iow/I/Lhr	Steel Water Tank 4'X4'X4' for B# 95 Burt Colony LHR	15360		No		No	01 No	03-09-2015
3086958		95083115	Iow/North	Steel Gate with pillar 8'X6-1/2' for Q# 263 Wheatman Road MGPR	49920		No		No	01 No	03-09-2015

2907339	27-02-2015	95033111	Iow/I/Lhr	Steel Gate 16'X7-1/2' for New Diesel Shed Lhr	115200		No		No	01 No	05-09-2015
2868934		95073107	Iow/South	Steel Grill 6'X8"X6'X6" for Block 143/D Wheatman Road MGPR	38362		No		No	01 No	08-09-2015
2737861		95073111	Iow/South	Steel Door 3-1/2'X6-1/2' , Steel Window 3-1/2'X4' Q# 261/B new Sample Road	35280		No		No	02 Nos	08-09-2015
2868928	15-01-2015	95013131	Iow/North	Steel Door 2'X5-1/2' Q# K-7/4 New Military Barrack MGPR	21120		No		No	02 Nos	08-09-2015
3024031	13-05-2015	95053105	Iow/North	Steel Gate 8'X6-1/2' for Q# 83/4 Abdul Waheed Colony MGPR	49920		No		No	01 No	08-09-2015
2737860		95063123	Iow/South	Steel Gate 12'X6-1/2' for B# 128/B Sabir	950280		No		No	01 No	19-09-2015

				Road MGPR							
3086963		95093104	Iow/North	Stee Door 3-1/2'X6-1/2', 2-1/2'X6-1/2' for Q# 7 Block 24	37440		No		No	02 Nos	22-09-2015
					1312882						
<u>Oct-15</u>											
3086960	25-6-2015	95083107	Iow/North	Steel Grill 6'-11",5'-9",11'-9",5'-9" for Flat# C-12/A Wheatman Road MGPR	98900		No		No	2 Nos	06-10-2015
2886356	31-3-2015	95043115	Iow /II	Steel Grill 14'x9"x6' for B# 152/A Burt Colony MGPR	137098		No		No	01 Nos	13-10-2015
					235998						
<u>Nov-15</u>											
3068697		95083170	Iow/II/Lhr	Steel Gate 15'-1"X7' for B# 98/B Burt Colony Lhr	190257		No		No	01 No	24-11-2015
					190257						

Dec-15

2737870		95123104	Iow/South	Iron Jhula for Flat# 90 Shahjahan Road MGPR	34135		No		No	01 No	10-12-2015
2772678		95113119	Iow/III/Lhr	Iron Jhula for B# 7- B Mayo Garden LHR	34135		No		No	01 No	14-12-2015
					68270						
<u>Jan-16</u>											
3086971		95123102	Iow/North	Steel Gate 7"X6-1/2" for Q# 8 Bloch# 15 J.C Barrack MGPR	43332		No		No	01 No	26-01-2016
					43332						
				Grand Total	6,731,599 6.731 (M)						

Detail of misappropriation of manufactured items - Rs.1.503 million due to unverified MP Notes (Para # 5.3.4)

S. No	P.W.O	Indenter	Description	QTY	Unit Rate (Rs)	Total Amount (Rs)	M.P note	Date
1	95073118	IOW/North	Steel Door Size `3*`6-1/2 Bungalow # 4 Steel Shop Colony	2	34,618	69,236	1734905	29.10.2015
2	96033123	IOW/North	Steel Gate with rail post Size: `10 * `6 -1/2 Bungalow # 308/A Shahjahan Road MGPR	1	136,217	136,217	1819129	24.04.2016
3	9612301	IOW/North	Steel Door Size Size: `2-1/2 * `7 Flat C3/F Wheatman Road MGPR	2	32,300	64,600	1796376	06.12.2016
4	96113110	IOW- II	Monkey Bar for H.No. 153/B Burt Colony	1	24,724	24,724	1796379	20.12.2016
5	96113110	IOW- II	Basket Ball Cort for H.No. 153/B Burt Colony	2	74,196	148,392	1732975	01.02.2017
6	97033112	IOW- II	Steel Grill with wicket door Size: `67 * `95 for B.No. 461/B Burt Colony	4	72,908	291,632	1732975	24.03.2017
7	97043108	IOW- III	Repair of old Steel Cage for AC B.No. 30 Mayo Garden	1	7,941	7,941	1385853	22.04.2017
8	94013119	IOW-IV	Steel Fencing 6' x 2' Park of saloon Lahore Cantt	300 ft	2,483	744,900	218819	28.01.2014
9	93123123	FO:ATC	Iron Board Plate 8' x 4'	1	15,000	15,000	2128801	10.01.2014
Total						1,502,642 i.e. 1.503 (M)		

Annex-19

**Statement showing the detail of unjustified expenditure of Rs. 20.885 million due to acceptance of substandard material
(Para # 5.6.1)**

Purchase Order No.	Date	Specification as per Purchase Order	Quantity Supplied (Kg)	Lab Test not Carried out	Result of specification tested by Lab	Unit Rate (Rs.)	Total Amount (Rs.)
10/0014/01-0/2-2013	14.12.2015	(1). Specific Resistance = 0.000157.0hm-CM (0.0004-ohm-inch)	1269	(1) Specific Resistance (2) Tensile Strength	Apparent density (g/cm ³) = 1.57	343	435,267
		(2). Apparent density = 1.52Grms/CM	10463		Apparent density (g/cm ³) = 1.605		3,588,809
		(3). Tensile Strength (i. Length wise 35Kg/CM2(350 PSI) (ii)Cross wise= 25 Kg/CM2 (350 PSI) (iii) Practical Oxidation 480 C (900 F			Apparent density (g/cm ³) = 1.756		16,861,194
		(4) Ash = 0.5% China made	49158				
							20,885,270
			60890				20.885 (M)

Statement showing the detail of mis-procurement of Rs.2.186 million due to unfair, non-transparent and uneconomical procurement process (Para # 5.6.3)

S. No.	P/Order Nos.	Date.	Description.	Amount (Rs)	Administrative approval on
1	801238	<u>21-04-15</u> 3/8/2015	Bronze Welding Electrode	70,200	27.03.2015
2	801259	16-10-15	E type electric sheet	28,125	08.10.2015
3	801260	20-10-15	Magnetic contactor 100 amp	95,000	08.10.2015
4	801261	20-10-15	Magnetic contactor 80 amp	97,500	08.10.2015
5	801287	22-12-15	Magnetic contactor 70 amp	96,800	08.12.2015
6	801288	22-12-15	Contact for crane controller	82,500	08.12.2015
7	801289	22-12-15	Crain push auspicious Taiwan	90,000	08.12.2015
8	801290	1/1/2016	Bronze electrode 4.0 mm	70,200	10.12.2015
9	801297	10/2/2016	Reduction gear box of crane No.62	80,400	25.01.2016
10	801299	10/2/2016	Crane Brake of Crane No.62 & 63	80,000	25.01.2016
11	801300	10/2/2016	Clutch for Crane No.62 & 63	80,000	25..01.2016
12	899502	15-02-16	Reduction Box For Crane No. 62,	70,000	25.01.2016
13	899503	15-02-16	Roller Bearing For Crane No. 62, 63	97,600	25.01.2016
14	899513	19-02-16	Double Rooler bearing	97,600	25.01.2016
15	899514	19-02-16	Double Rooler bearing	97,600	25.01.2016
16	899504	15-02-16	Magnetic Contactor 180 AMPS	92,400	06.02.2016
17	899505	15-02-16	Magnetic Contactor 315 AMPS	96,800	06.02.2016
18	899508	15-02-16	Mccb 03 Pole 300 & 400 AMPS	95,700	06.02.2016
19	899509	15-02-16	Timer MSUS etc	98,150	06.02.2016
20	801286	22-12-15	Push button etc	85,780	08.12.2015
21	801298	10/2/2016	Double Rooler bearing	97,600	25.01.2016
22	899506	15-02-16	Magnetic Contactor 100 AMPS	97,500	06.02.2016
23	899510	18-02-16	Magnetic Contactor 3TF 46 AMPS	93,500	06.02.2016
24	899511	18-02-16	Magnetic Contactor Pak 50 AMPS	96,600	06.02.2016
25	899512	18-02-16	Magnetic Contactor & CT100/5.A	99,000	06.02.2016
				2,186,555	
				2.186 (M)	

