



WORK STUDY REPORT  
ON  
REVIEW OF C&W CLEANER STAFF  
WORKING UNDER S.S.E. (C&W)  
AT FD & BSB  
IN MECHANICAL DEPARTMENT  
OF  
LUCKNOW DIVISION  
2019-20

WORK STUDY TEAM

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BY

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DATE OF COMMENCEMENT: 01.08.2019

DATE OF COMPLETION : 05.08.2019

No. 16-CP/21/WS/2019-20

Central Planning Cell  
Northern Railway,  
Headquarters Office,  
Baroda House, New Delhi.

## EXECUTIVE SUMMARY

This study was allotted to Central Planning Cell, HQ Office on the directives of SDGM/NR to identify redundant/unproductive activities with a view to eliminate wasteful expenditure and to improve manpower productivity of C&W Cleaner staff working under SSE/C&W at FD & BSB of Mechanical Department of Lucknow Division.

### STAFF POSITION

The sanctioned and on roll strength of C&W Cleaner staff working under SSE/C&W at FD & BSB of Lucknow Division is as under:-

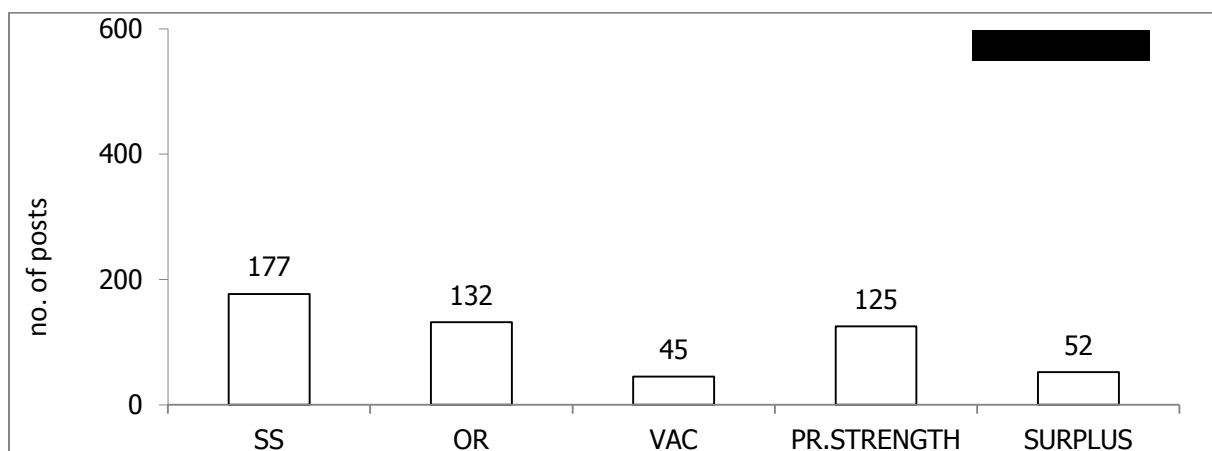
S.N.	C&W Depot	Category	S/S	O/R	Var.
1.	FD	C&W Cleaner	57	43	14
2.	BSB		120	89	31
Total			177	132	45

No. of posts identified as surplus and recommended for surrender: -

Gr. 'C' = Nil posts  
 Gr. 'D' = 52 posts  
 Total = 52 posts

### FINANCIAL IMPLICATIONS

Anticipated recurring savings = ■ 261.73 lakh per annum.  
 Capital saving = Nil  
 Total = ■ 261.73 lakh per annum



# I N D E X

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## SYNOPSIS

Indian Railway is the principal mode of transport in the country. It provides safe, transport at reasonable cost while at the same time maintains financial viability of the system. It carries about 15 million passenger daily on its vide spread over network of 65000 routes kilometers.

With the introduction of modern techniques of working, the closure of piece meal loading and introduction of point to point loading of full rakes long haul loads, introduction of LHB, RCF coaches, mechanized cleaning, change in working pattern i.e., outsourcing in washing and Mechanized cleaning of coaches & OBHS (On Board Hygienic Services) have resulted in eliminating the uneconomical activities. This not only reduces the stress of the workmen but also reduce the workload to some extent.

Keeping in view of above, SDGM/NR has assigned the work study to Central Planning Cell, HQ Office to conduct a review of C&W Cleaner staff working under SSE/C&W at FD & BSB of Lucknow Division, with a view to eliminate the wasteful expenditure.

The team visited the concerned C&W Depots of Lucknow Division and after thorough review of existing workload vis-a-vis sanctioned strength, the team identified 52 posts of C&W cleaner as surplus and recommended for surrender. After implementation of the recommendations made in the report in toto, the administration is likely to achieve a net recurring saving to the tune of **■261.73** lakh per annum.

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## SUMMARY OF RECOMMENDATIONS

Recom No.	Recommendations				Refer para No.	Accepting/ implementing authority.
1	It is proposed that 52 posts of C&W cleaner staff under SSE C&W/FD & BSB at depot of LKO Division under the administrative control of Sr.DME/C&W, identified surplus and recommended for surrender as follows:-				2.6.0	ADRM/ADMIN/ LKO Sr.DME/ C&W/LKO Sr.DPO/LKO
	C&W depot	Category	Grade in ■	No. of posts		
	FD	C&W	5200-20200-1800	19		
	BSB	Cleaner		33		
	Total			52		

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## ACKNOWLEDGEMENT

The work study team is highly grateful to Sh. Amit Shrivastava, ADRM/Admin./LKO, Sh. K.M.Pandey, Sr.DME/C&W/LKO, and Sh. M.B.Singh, Sr.DPO/LKO and other functionaries in providing relevant data/information and giving valuable guidance and cooperation to the team during the conduct of study.

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## 1.0.0 INTRODUCTION

1.1.1 Carriage & Wagon Department is responsible for scheduled maintenance to ensure safe running of the rolling stock and proper cleaning of the coaching stock. After attending the due schedule of rolling stock and coach cleaning work, the maintenance staff ensures the reliability and punctuality of the train. The C&W wing is entrusted the workload of coach cleaning which provide homely and hygienic atmosphere and satisfaction to the Rail users during the spell of their journey.

1.2.0 Due to modernization in every sphere of Railway working, modern coaches and equipments have been introduced to increase the productivity. The series of modernization, automatic equipments like vacuum cleaners, surface cleaner, mopeds, wipers etc. have been introduced in the field of cleaning activities which has resulted in improved quality and standard of cleanliness and minimized time and manpower.

1.3.0 Consequently, SDGM/NR assigned the work study to conduct a review of C&W cleaner staff working in C&W depots FD & BSB of LKO Division with a view to reduce the surplus manpower after adoption of modern techniques. Efforts have been made to reduce the unproductive and obsolete activities and suggest ways and means to improve the technological up-gradation and advancement.

## 1.4.0 TERMS OF REFERENCE:

The following terms of reference have been adopted to conduct the study:-

- i) To review staff strength vis-à-vis existing workload.
- ii) To suggest ways and means to identify redundant/unproductive activities to eliminate wastages expenditure.
- iii) To suggest ways and means to improve the system economically in view of modernization and system development.

## 1.5.0 METHODOLOGY ADOPTED

The following method study and work measurement techniques were adopted:-

- i) Collection of Data and its critical analysis.
- ii) Physical checks, spot observations and work sampling, analytical estimation and yardstick in vogue, if any.
- iii) Held discussions at various levels.

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## 2.0.0 BRIEF DESCRIPTION, STAFF POSITION, WORKLOAD, CRITICAL ANALYSIS, PROPOSED REQUIREMENT OF STAFF & RECOMMENDATIONS.

### 2.1.0 BRIEF DESCRIPTION

The coaching depots were set up to up keep the rolling stock and carry out the various maintenance schedule i.e., primary, secondary maintenance, repairs of enroute passing through trains and examination, sick line attention, cleaning and watering etc. at nominated coaching depots/stations. C&W cleaners are deputed to carry out the cleaning activities like complete interior and exterior cleaning/washing of coaches, internal dry cleaning, watering in coaches, pit cleaning, garbage removal/disposal, depot premises cleaning, escorting of trains, pad locking/unlocking of trains and linen management etc.

2.1.1 There are eight coaching depots over LKO division out of which LKO is the major depot, BSB is medium depot and rest FD, PBH, RBL, JNU are PRGY are minor depots. This study is confined to mechanical C&W cleaner staff, working at C&W Depot, FD & BSB of LKO division.

2.1.2 With the introduction of new technological up-gradations in the sphere of cleanliness, like jet cleaning machines, jet steam cleaner, floor cleaning mops, brush or banister, washing down brush with handle, spray pumps etc. have drastically reduced the working of C&W cleaning staff. This has not only reduces stress and workload of the cleaning staff but also improve the standard of cleanliness. Due to adoption of modern techniques in cleaning activities, a huge expenditure is being incurred which necessitate the review of C&W cleaning staff with a view to eliminate wasteful expenditure.

### 2.2.0 STAFF POSITION

The team collected the detailed staff position of C&W cleaner staff working in coaching depots at FD & BSB from concerned SSE/C&W in-charges which is placed as Annexure No. II in the report and the summarized position is given as under:-

S.N.	SSE C&W Depot	Category	S/S	O/R	Var.
1.	FD	C&W Cleaner	57	43	14
2.	BSB		120	89	31
Total			177	132	45

The above table reveals that the on roll strength is 132 against the sanction strength of 177 and 42 posts are lying vacant.



### 2.3.0 **WORKLOAD**

During the conduct of study, the work study team visited the Coaching depots FD & BSB and collected the workload of the C&W cleaner staff from the depot incharge. The detail workload is analysed and staff is proposed in accordance with yard-stick in vogue vis-à-vis workload.

### 2.4.0. CRITICAL ANALYSIS

During the conduct of study, team collected the data i.e. workload and staff position of concerned depots. The team observed that due to introduction of modernization in the mechanized cleaning and outsourcing in the sphere of cleaning, has decreased the workload of C&W cleaner to great extent.

2.4.1 Since manpower is the biggest component of the expenditure of Indian Railways, rightsizing of manpower to reduce unit costs is an effective way to increase efficiency of Indian Railway.

2.5.3 The one of biggest advantage of outsourcing is cost savings. The lower cost of labour provided by outsourcing is very economical to the system. The carriage cleaner staff falls in unskilled and non safety category. The departmental labour cost much higher than the contractual labour. There are 45 posts of carriage cleaner staff are lying vacant since long.

### 2.5.0 PROPOSED REQUIREMENT OF STAFF:

During the conduct of study, the work study team collected the workload and examined it. The team has consideration yardstick in vogue, deployment of staff, spot observation, change in working pattern and analytical estimation while proposing the requirement of staff. Some cleaning activities have already been carried out through outsourcing which are much economical than the departmental staff. **The work of mechanized cleaning of mail/express coaches based at FD has been outsourced while the outsourcing of mechanized coach cleaning of BSB based depot is under process.** Some trains are running under OBHS (On Broad Hygienic Services) scheme the work study team is of the opinion that this OBHS scheme should be encouraged in railway which will rectify the cleaning complaint on spot. The depot wise proposed requirement of staff is as under:-

Table No 1.

## 2.51. PROPOSED REQUIREMENT OF C&amp;W CLEANER STAFF AT C&amp;W DEPOT FAIZABAD(FD)

Sr No	Activity	Workload (Coaches/Day)	Yardstick (man/coach)	Proposed staff	Remarks
1	Complete washing and cleaning of primary based coaches	31	0.65	-	Out sourced
	Complete washing and cleaning of primary based coaches	20	0.65	13.00	-
2	Complete washing and cleaning of secondary based coaches	0	0.65	0	--
3	Enroute train passing, turn round terminating/ originating trains, inclusive of cleaning and examination at platforms	S/Fast	0	0.26	-
		M/Exp	0	0.23	
		Pass	30	0.18	
4	Sick line attention	-	0.14	-	-
5	Only interior dry cleaning	10	0.45	4.50	-
6	Cleaning of inspection carriages i.e. RA	-	1.76	-	-
7	Watering	60	0.025	1.50	-
8	Pad loading/unlocking	61	0.025	1.52	-
9	Linen management	8	0.22	1.76	
10	Pit line sweeping, drain cleaning, garbage removal and its disposal pest control etc.	--	--	-	-
11	For other work and dak courier etc.	--	--	1	
12	Statistical work		08 for 150 or more coaches	1	
13	Outstation call/line attention	--	--	2	
14	For materials storage/accounting		26 for 150 or more coaches	2	
TOTAL				33.68	say 38 staff
LR@12.5% on 33.68				4.21	
TOTAL				37.89 or	

The above table reveals that the proposed requirement comes to 38 against the sanctioned strength of 57 and 19 C&W cleaners are identified as surplus and recommended for surrender

Table No.2

## 2.51. PROPOSED REQUIREMENT OF C&amp;W CLEANER STAFF AT C&amp;W DEPOT VARANASI(BSB)

Sr No	Activity	Workload (Coaches/ Day)	Yardstick (man/ coach)	Proposed staff	Remarks
1	Complete washing and cleaning of primary based coaches	88	0.65	57.20	-
2	Complete washing and cleaning of secondary based coaches	11	0.65	7.15	--
3	Enroute train passing, turn round terminating/ originating trains, inclusive of cleaning and examination at platforms	S/Fast	22	0.26	Outsourced.
		M/Exp	56	0.23	
		Pass	15	0.18	
4	Sick line attention	-	0.14	-	-
5	Only interior dry cleaning	-	0.45	-	Outsourced
6	Cleaning of inspection carriages i.e. RA	-	1.76	-	-
7	Watering	-	0.025	-	Outsourced.
8	Pad loading/unlocking	117	0.025	2.92	-
9	Linen management	21	0.22	-	Outsourced.
10	Pit line sweeping, drain cleaning, garbage removal and its disposal pest control etc.	--	--	-	-
11	For other work and dak courier etc.	--	--	1	
12	Statistical work		08 for 150 or more coaches	2	
13	Outstation call/line attention	--	--	4	
14	For materials storage/accounting		26 for 150 or more coaches	3	
TOTAL				77.27	
LR@12.5% on 77.27				9.65	
TOTAL				86.92 or	say 87 staff

The above table reveals that the proposed requirement comes to 87 against the sanctioned strength of 120 and 33 C&W cleaners are identified as surplus and recommended for surrender. However the on roll staff is 60 beyond its sanctioned strength which can be utilized in other activities

## 2.6.0 SUMMARY OF EXISING AND PROPOSED STAFF

S.No.	SSE C&W Depot	Sanction strength	Proposed staff	Identified surplus
1	FD	57	38	19
2	BSB	120	87	33
TOTAL		177	125	52

The above table reveals that the proposed requirement of staff comes to 125 against the sanction strength of 177 and accordingly 52 posts of C&W cleaners are identified as surplus and recommended for surrender.

### **RECOMMENDATION NO.1**

It is proposed that 52 posts of C&W cleaner staff under SSE C&W/FD & BSB at depot of LKO Division under the administrative control of Sr.DME/C&W, identified surplus and recommended for surrender as follows:-

C&W depot	Category	Grade in <span style="background-color: black; color: black;"> </span>	No. of posts
FD	C&W Cleaner	5200-20200-1800	19
BSB			33
Total			52

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### 3.00 FINANCIAL IMPLICATIONS

3.1.0 The annual expenditure as per 7<sup>th</sup> CPC on Carriage cleaner staff working under SSE/C&W/FD & BSB in Mechanical Department of LKO division is as under:-

S.No.	Category	Grade Rs.	Monthly value per post (in Rs.)	S/S	Monthly expenditure (in Rs.)	Annual expenditure (in Rs.)
1	C&W Cleaner	5200-20200-1800	41944	177	7424088	89089056.00
Total				177		89089056.00

The above tables reveal that the annual expenditure being incurred on 177 sanctioned posts of carriage cleaner staff working under SSE/C&W/FD and BSB in Mechanical Department of LKO division is Rs. 89089056.00

3.2.0 Proposed strength: The annual expenditure on the proposed strength of Carriage cleaner staff working under SSE/C&W/FD & BSB in Mechanical Department of LKO division is as under:-

S.No.	Category	Grade Rs.	Monthly value per post (in Rs.)	P/S	Monthly expenditure (in Rs.)	Annual expenditure (in Rs.)
1	C&W Cleaner	5200-20200-1800	41944	125	5243000	62916000.00
Total				125		62916000.00

The above table reveals that total annual expenditure on 125 proposed posts of Carriage cleaner staff working under SSE/C&W/FD & BSB in Mechanical Department of LKO division will be reduced to ■62916000.00 instead of ■89089056.00 and net recurring saving of ■26173056.00 per annum will be achieved.

#### 4.0.0 ANTICIPATED RECURRING SAVINGS

S.No.	Category	Grade Rs.	Refer Recom. No.	of surplus posts	Monthly value per posts in ■	Anticipated annual recurring saving ■
1	C&W cleaners	5200- 20200+ 1800	1	52	41944	26173056.00
Total						26173056.00

No. of posts identified as surplus: -

Group 'C'= Nil

Group 'D'= 52 posts

Total = 52 posts

Anticipated recurring saving = ■ 261.73 lakhs per annum

Capital saving = Nil

Total saving = ■ 261.73lakhs per annum

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### WORK STUDY REPORT DETAILED CHART

Department : - Mechanical

Name of study : - Review of C&W Cleaners, working under SSE C&W at FD & BSB of LKO Division.

Activity Centre : - C&W depot, FD & BSB

SN	Sub activity	Brief description of workload	Actual staff deployed	Work study report recommendation	Representative workload
1	Assists in the Mechanized cleaning of coaches of passengers/ Express trains.	Maintenance and washing of primary secondary and terminating base coaches, pit cleaning, watering in passing through trains exterior dry cleaning etc.	S/S= 177 O/R=132 Variation = 45	S/S = 177 Proposed staff =125 Surplus = 52	Cleaning of primary, secondary, terminating base coaches, watering of passing through trains.

LIST OF ANNEXURE

SN	Contents	Anex.No.
1	Statement showing staff position of SSE/C&W/FD &BSB of LKO division.	I
2	Letter of C.P.Cell to initiate the work study No 16-CP/021/WS/19-20 dt.12.07.2019.	II



## Annexure No-I

Category and grade-wise staff position of C&W Cleaner working under SSE C&W FD & BSB of LKO Division.

S.N.	C&W Depot	Category	S/S	O/R	Var.
1.	FD	C&W Cleaner	57	43	14
2.	BSB		120	89	31
Total			177	132	45

### Salient features of the work study

**Name of the Work study:** Review of Carriage cleaner staff working in Mech. C&W/SSE/units at FD & BSB of LKO division.

#### **No. 16-CP/22/WS/19-20**

The study is confined to provide the actual requirement of Carriage cleaner staff in view of the existing workload. The Carriage cleaner staff is unskilled and falls in the non safety category. The departmental labour cost much higher than the contractual labour. The activities of carriage cleaner staff is already outsourced in FD depot for mail/express trains and in BSB depot the outsourcing is under process.

(i)	Total sanctioned of Traffic Khallasi staff	=177
(ii)	On roll strength	=132
(iii)	Vacancy	=45
(iv)	Proposed strength	=125
(v)	Surplus	=52