

EASTERN RAILWAY

WORK STUDY REPORT

ON

REVIEW OF WORKLOAD OF SAFAIWALAS
AT SEALDAH STATION AND SEALDAH COLONIES
UNDER CHI OF MEDICAL DEPARTMENT

(STUDY NO.WSER- 21 / 18-19)

(Submitted on 14.01.19)

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ACKNOWLEDGEMENT

The study team is very much thankful to Medical Director/ BRSH/ SDAH, CMS/ BRSH/ SDAH and ACMS/ H&FW/ BRSH/ SDAH for their valuable guideline to complete the subject work-study report successfully. The study team is thankful to CHI/ SDAH Station and CHI/ SDAH Colony for their heartiest co-operation to furnish data relating to study report

TERMS OF REFERENCE

The subject work-study has been undertaken by the GM's Efficiency Cell of Eastern Railway in financial year 2018-19 under the following terms of reference:-

- (i) Evaluate the quantum of work.
- (ii) Examine the deployment of Safaiwala against workload.
- (iii) Assess the actual requirement in consideration with the Yardstick of sanitation staff under Medical Department.

SUMMARY OF RECOMMENDATION

Sl. No.	Recommendation	Para reference
1	<i>It is recommended that the actual total requirement of safaiwalas at Sealdah station and Sealdah colonies, will be 107 posts which would result in surrender of 10 nos. of vacant posts as against the present total sanctioned strength of 117 posts.</i>	3.8

EXECUTIVE SUMMARY

<i>Study Name & No.:</i>	REVIEW OF WORKLOAD OF SAFAIWALAS AT SEALDAH STATION AND SEALDAH COLONIES UNDER CHI OF MEDICAL DEPARTMENT (Study No.WSER- 21/18-19)
<i>Year of conducting the study:</i>	2018 - 19
<i>Terms of reference:</i>	(i) Evaluate the quantum of existing workload. (ii) Examine the deployment of Safaiwala against workload. (iii) Assess the actual requirement in consideration with the Yardstick of sanitation staff under Medical Department.
<i>Methodology:</i>	<ul style="list-style-type: none"> • Collection of data. • Discussion with officers, CHI/ SDAH Station and CHI/ SDAH Colony. • Study of existing workload and manpower. • Critical analysis of existing workload.
<i>Existing Sanctioned Strength</i>	117
<i>Existing Men on Roll</i>	90
Proposed Surrender	10

Justification
Assess the actual requirement of Safaiwalas under CHI/ SDAH Station and CHI/ SDAH Colony has been done in consideration with the Yardstick of sanitation staff under Medical Department.

CHAPTER-I

1.0 INTRODUCTION:

1.1 **Indian Railways** is an Indian state owned enterprise, owned and operated by the Government of India through the Ministry of Railways. It is one of the world's largest railway networks comprising 115,000 km (71,000 mi) of track over a route of 65,000 km (40,000 mi) and 7,500 stations. Indian Railways is the world's ninth largest commercial or utility employer, by number of employees, with over 1.4 million employees. Indian Railway is not a mere operation. It is an institution. It is an industry. It is a prime mover of India's infrastructure. As of December 2012, it transported over 25 million passengers daily (over 9 billion on an annual basis).

1.2 The main theme of the study is to improve the quality of sanitation work by maximum utilization of Safaiwalas keeping in view the financial achievements.

1.3 Indian Railway is facing tremendous financial crunch after implementation of 6th Pay Commission. Operating ratio is gradually increasing. Though Indian Railway is not a business organization but to survive, it is always essential to make the organization in profit i.e. operating ratio should be less than 1. Performance Efficiency Index shown in the corporate plan published by the Eastern Railway is given below.

2013-14	:	173.32%
2014-15	:	177.27%
2015-16	:	180.75%
2016-17	:	165.25%
2017-18	:	181.15%

1.4 The subject work study has been undertaken to review the quality of sanitary services at Sealdah Station premises and Sealdah Railway colonies under the Medical department keeping in view the financial achievement. This is possible only by maximum utilising of workforce with mechanical devices for cleaning operations. Study team considers the maximum participation of foreign agencies in cleaning and washing process in station premises and adjacent colonies to make it world class.

1.5 Sealdah Station is one of the busiest station in Indian Railway. This station handles both types of load of Suburban trains and as well as long distance Mail/Express Trains, along with prestigious trains like Rajdhani Express. The Chief Health Inspector (CHI)/ SDAH is nominated for the keeping the railway platforms and surroundings neat and clean.

As far as maintaining the cleanliness of five colonies of SDAH, CHI/ BRSH/SDAH is nominated for the said workload.

- 1.6 With the introduction of Mechanical devices for cleaning operation, it is easier now to make the platform and surroundings clean and hygienic. As the subject work study is undertaken to review the existing deployment of Safaiwalas vis-à-vis their workload as a regular manner, it is essential to assess the optimum utilization of Safaiwalas to cater the daily workload. The subject study is also undertaken to review consequent upon the use of Mechanical cleaning devices by which the quality of cleaning has increased drastically along with remarkable financial savings. Keeping the above ideas into consideration, the study team has given their concentration on the existing pattern of working and existing deployment of Safaiwalas according to their work point. The study team has also given full stress on the matter of privatization of cleaning activities of Sealdah Station and adjacent colonies keeping in view the financial achievements and also better quality of cleaning.

CHAPTER-II

2.0 EXISTING SCENARIO:

- 2.1 The existing infrastructure i.e. the organizational set up and the present workload on daily measures including the present pattern of working system at Sealdah Station and Colonies has been reviewed separately and the assessment of manpower has been done accordingly in paragraphs below.
- 2.2 Sealdah Station is one of the important Railway station in Eastern Railway and huge number of Suburban trains as well as long distance Mail/Express Trains arrive/depart from this station. So, it is necessary to maintain the platform and surroundings neat and clean round the clock. CHI/SDAH is the over all In-charge of all sanitation and cleaning activities of Sealdah Station.

The jurisdiction of CHI/Sealdah is Sealdah North, Sealdah Main and Sealdah South including new building, all service buildings at Station and Station approach area. It includes all concourses and subways. The working of sanitation wing of Sealdah Station is to clean all platforms, concourse area, approaches, service buildings and to wash rail tracks, pan strains and platform surfaces. Total On-Roll and Sanctioned Position of CHI at Sealdah Station are tabulated as under:

S. No.	Designation	Pay Level	Staff Strength		
			Sanctioned Strength	On-Roll	Vacancy
1	CHI	Level -7	6	6	0
Total			6	6	0

- 2.3 The present Sanctioned Strength and On-roll position of safaiwalas under CHI/Sealdah Station for catering the workload of cleaning activities at Sealdah Station Complex are given in table below:

S. No.	Designation	Pay Level	Staff Strength		
			Sanctioned Strength	On-Roll	Vacancy
1	Safaiwala	Level - 1	76	54	22
Total			76	54	22

- 2.4 The total working period at Sealdah station is divided into three shifts i.e morning shift (6:00-14:00 hrs), evening shift (14:00-22:00 hrs) and night shift (22:00-6:00 hrs). Among three shifts, morning shift and evening shift has maximum load since maximum trains arrive/depart in between 6:00 hrs. to 22:00 hrs. The Organizational setup and corresponding workload under CHI/SDAH are as under:

2.4.1 **Morning Shift (6:00 hrs to 14:00 hrs):**

The working period of Morning shift is 6:00 hrs to 14:00 hrs. In present system of working, around 18 nos. of Safaiwala are deployed under CHI in this shift. The deployment of Safaiwalas is given below:

S.No.	Work point	No. of Safaiwalas deployed
Ground Floor		18 (approx)
1	Cleaning of Main & new Booking office	
2	Cleaning of South Booking & Luggage office	
3	Cleaning of Cabins	
4	Cleaning of SS office, SM office, Loco office & Toilet	
5	Cleaning of CC TV,RPF office& booth	
6	Cleaning of Inward & out ward parcel & shed	
7	Cleaning of GRPS open area & Diesel road	
8	Cleaning of guard roster, trains clerk, main enquiry & reservation room	
9	Refuse Curt	
First Floor		
10	Cleaning of Dy.SS(com) & corridor	
11	Cleaning of Crew booking Lobby	
Second Floor		
12	Cleaning of Guard driver 's rest rooms	
13	Cleaning of Retiring room & TTE rest room	
14	Cleaning of SS,CIT, Record etc. office	
15	Cleaning of Computer reservation	
16	Cleaning of AHO &CHI Store & office	
17	Cleaning of cobweb of service building	
18	Cleaning of Anti Malaria spray	
19	Cleaning of Pan stains and poster removal (service building)	
20	Cleaning of Dusting	
21	Cleaning of all stair cases & IOW office	
22	Cleaning of Refuse Curt (Rc)	

2.4.2 **Evening Shift (14:00 hrs to 22:00 hrs):**

The working hours of Evening shift are from 14:00 hrs to 22:00 hrs. Around 09 nos. of Safaiwalas are deployed under one Chief Health Inspector in this shift. The deployment of Safaiwalas is tabulated below:

S.No.	Work point	No. of Safaiwalas deployed
Ground Floor		09 (approx)
1	Cleaning of Main & new Booking office	
2	Cleaning of South Booking & Luggage office	
3	Cleaning of SS office, SM office, Loco office & Toilet	
4	Cleaning of CC TV,RPF office& booth	
5	Cleaning of Inward & out ward parcel & shed	
6	Cleaning of guard roster, trains clerk, main enquiry & reservation room	
7	Cleaning of all water booth	
First Floor		
8	Cleaning of Dy.SS(com) & corridor	
9	Cleaning of Crew booking Lobby	
Second Floor		
10	Cleaning of Guard driver 's rest rooms	
11	Cleaning of Computer Reservation	
12	Cleaning of AHO &CHI Store & office	
13	Cleaning of cobweb of service building	
14	Cleaning of Pan stains and poster removal (service building)	
15	Cleaning of all stair cases & IOW office	
16	Cleaning of Refuse Curt (Rc)	

2.4.3 **Night Shift (22:00 hrs to 06:00 hrs)::**

The working hour of Night shift is from 22.00 hrs to 6.00 hrs. Total cleaning work is conducted by Contractual Agencies. Only cleaning of Crew control lobby and north / main / south booking office are catered by departmental staff. Around 2 nos. of Safaiwala are deployed under one Chief Health Inspector in this shift to cater emergency situation along with the said workload.

- 2.5 It is also observed by the study team that Medical Department has outsourced a noticeable percentage of workload of the sanitation work of Sealdah Station to private agencies.

The details of the contractual works of Sealdah Station executed by Medical Department of Sealdah Division along with corresponding Work Schedule are as under:

Details of Contract :	Daily mechanized cleaning of all Tracks within platform area, track drains, PF Surface, concourse, service building, water booths, Foot Over bridge, Circulating area & Taxi stand, Rag picking including removal & disposal of all accumulated garbage at SEALDAH Station area for 730 days.
Agreement No. :	H/San/Agt/ SDAH Str/ MC/RP/G/17 Dtd. 29/11/17
Place of Work :	Sealdah Station complex area.
Contractor Name :	M/s Reliable Facility Services Pvt. Ltd.
Duration of Contract :	08/10/17 to 07/10/19 (730 days)
Agreement Value :	Rs 8,23,05,959.70/- (Rs. Eight crore twenty three lakh five thousand nine hundred fifty nine and seventy paise only)

- 2.6 The present working system and the infrastructure of Sealdah Colonies and has been discussed in details in the paragraphs below.

There are total five colonies and two Health Units under the jurisdiction of CHI/SDAH. The colonies are as under:

- i) Narkeldanga Colony (NKG)
- ii) Moughalbagan Colony (MGB)
- iii) North sealdah Colony.
- iv) Kamardanga Colony (KMD)
- v) Beliaghata Colony (BGA)

- 2.7 Out of 5 colonies, the sanitation of Narkeldanga & Moghulbagan colony has been outsourced and are maintained by the contractual agency. The sanitation activities of North Sealdah colony has also been outsourced, but in June'18, the contract gets terminated. Since then, departmental staff are deployed at Sealdah North Colony to cater the sanitation workload. The new cleaning contract for Sealdah North Colony is under process and is expected to finalize soon.

- 2.7.1 Sanitation and cleaning activities of remaining two colonies i.e Kamardanga Colony & Beliaghata Colony and two health units are presently maintained by CHI/SDAH.

2.8 The latest On-Roll and Sanctioned Position of CHI at Sealdah Colony is tabulated below:

S. No.	Designation	Pay Level	Staff Strength		
			Sanctioned Strength	On-Roll	Vacancy
1	CHI	Level -7	2	2	0
Total			2	2	0

2.9 The present Sanctioned Strength and On-roll position of safaiwalas under CHI/Sealdah Colony for catering the workload of cleaning activities at Sealdah Colonies are given in table below:

S. No.	Designation	Pay Level	Staff Strength		
			Sanctioned Strength	On-Roll	Vacancy
1	Safaiwala	Level - 1	41	36	5
Total			41	36	5

2.10 In general working of safaiwala deployed in SDAH colony as well as Health unit is detailed as under.

- i. Collect, remove and disposal of rubbish from Railway premises and colonies etc.
- ii. Sweeping of roads and other surface area of the Railway premises and colonies and collection of garbages putting these in the dustbins etc.
- iii. Cleaning of drains and carrying out periodic de-silting.
- iv. Undertaking all other activities related to cleaning of colonies and Health Units.
- v. Carrying sanitary stores.
- vi. Carrying out any other duties as ordered by the Health Inspector and other Medical Officers.
- vii. Accumulation of garbages from each Railway building & road and disposal to the schedule dustbin.
- viii. Disposal of dead animals within the jurisdiction of Rly. Yard, office premises under the control of concern H&MI.
- ix. Spraying of DDT or other appropriate insecticide & destruction of larvae at breeding place at colonies and platforms.

- x. Sweeping of roads, ground, floors etc. of the hospital/ health unit.
- xi. Frequent cleaning of floor of the wards with wet cloth and cleaning the Health Unit's doors, Windows, window panes etc.
- xii. Cleaning of bed pans, sputum cups, urinals, commodes and latrines attached to the hospital/ health unit.
- xiii. Supplying of bed pans and urine bottles to the patients, and cleaning them after use.
- xiv. Carrying patients on stretchers in the hospitals/ health units and from station to hospital/ health units and vice versa.

2.11 It is observed during study period that safaiwalas are deployed to cater the existing cleaning work in three colonies only i.e. Kamardanga, Beliaghata and North Sealdah colonies out of five colonies.

The cleaning activities of two colonies i.e NGK & MGB are under contract. Also, the cleaning contract for North Sealdah colony is already under process and likely to finalize soon (*mentioned in para 2.7*).

2.12 The working period of colony safaiwalas under jurisdiction of CHI/SDAH Colony is only morning shift i.e. (6:00-14:00 hrs). The details colony wise deployment of safaiwalas is stated as under:

Sl. No.	Colony	Nos. of Safaiwalas	Remarks
1.	Kamardanga (KMD) Colony	16	Maintained by Departmental Staff
2.	<u>Beliaghata</u> (BGA) Colony	17	
3.	North Sealdah Colony.		The cleaning contract of North Sealdah colony was terminated on June'18. New contract is under process and likely to get finalize soon. At present, dept. safaiwala from KMD and BGA colony is looking after the cleaning workload North Sealdah colony till the contract gets finalized.
4.	Narkeldanga (NKG) Colony	NIL	Cleaning work at NKG & MGB colony are catered by contractual agency
5.	Moughalbagan (MGB) Colony	NIL	
6.	Chokage & Pest Control	3	Catered by Departmental Staff
Total		36	

- 2.13 Each of the Railway Colonies mentioned in para 2.6 have different categories of Railway Quarters like Type-I, Type-II, Type-III & Type-IV. There are concreted roads inside the Rly. Colonies. Besides that, various types of drains, Vats for temporary garbage accumulation, etc. which are to be looked after by the CHI/SDAH Colony with the deployment of Departmental Safaiwalas under him. The cleaning of House drains, sweeping of roads & surroundings, cleaning of latrine blockage & removal of garbage, etc. and of sanitary and cleaning work are to be executed in the above Rly. Colonies.

- 2.13.1 The particulars of Quarters in the Rly. Colonies, in terms of Occupation, Vacant, etc. is tabulated below:

Sl. No.	Location	Type	Total	Occupied	Vacant	Cond.	Percentage of occupation	Percentage of Non-Occupation i.e. either vacant or Condemned/ Dismantled Rly. Quarters
1	Narkeldanga Colony (NKG) + Talpukur road	I	68	53	15	NIL	69% (approx)	31% (approx)
		II	317+2=319	299+2=301	18+00=18	NIL		
		III	57	55	02	NIL		
		IV	37	34	03	04		
2	Moughalbagan Colony (MGB)	I	143	108	35	12		
		II	112	90	22	NIL		
3	North Sealdah Colony.	I	109	59	14	36		
		II	185	183	2	-		
		III	74	67	2	05		
		IV	69	64	05	-		
		V	14	14	-	-		
4	Kamardanga Colony (KMD)	I	258	184	74	NIL		
		II	11	09	02	NIL		
		IV	01	01	00	NIL		
5.	Beliaghata Colony (BGA)	I	487	106	59	322		
		II	27	22	05	NIL		
		IV	01	01	-	NIL		
Total			1972	1351	258	379		

- 2.14 As already mentioned that cleaning / sweeping work at Narkeldanga colony(NKG) & Moughalbagan colony(MGB) are catered by contractual agency. Also, the cleaning contract for North SDAH colony is likely to be finalized soon.

The details of nature & volume of Sanitary & Cleaning Work at surrounding area of Rly. qtrs, road area, House Drains & Stair Cases, etc of Kamardanga colony (KMD) & Beliaghata colony (BGA) presently handled by departmental staff under CHI/SDAH are tabulated as under.

Sl. No.	Nature of Works	Volume of Work at KMD	Volume of Work at BGA	Total Volume of Work i.e. (KMD+BGA) under CHI/SDAH
1.	Cleaning the Surroundings areas of Rly. qtrs.	241206.92 Sq. ft.	259263.27 Sq. ft.	500470.19 Sq. ft.
2.	Sweeping of Colony Roads	31204.00 Sq. ft.	85890.62 Sq. ft.	117094.62 Sq. ft
3.	Cleaning of House & Main Drains	2296.00 Running ft.	5786.90 R.ft.	8082.90 R ft.
4.	Collection & Removal of garbage from Drain.	2296.00 Running ft.	5786.90 R.ft.	8082.90 R ft.
5.	Sweeping of Stair Cases of Multistoried Buildings	32 Stair cases.	37 Stair cases.	69 Stair cases
6.	Collection & removal of garbage from road & surrounding area & deposited in dustbin.	31204.00 Sq. ft.+ 241206.92 Sq. ft. = 272410.92 Sq. ft.	85890.62 Sq. ft.+ 259263.27 Sq. ft = 345153.89 Sq. ft.	617564.81 Sq. ft.

- 2.15 The details of contractual work regarding daily cleaning of Narkeldanga and Mogulbagan colony running under CHI/ SDAH Colony is mentioned underneath:

<i>Details of Contract :</i>	Daily manual cleaning of Narkeldanga & Moghulbagan colony for 730 days except Sundays i.e. 626 working days.
<i>Agreement No. :</i>	H/San/Agt/NKG & MGB Col/17 Dtd. 14/02/18
<i>Place of Work :</i>	Narkeldanga & Moghulbagan colony area.
<i>Contractor Name :</i>	M/s Rabi Construction,105,K.K.Adarsha Pally, Kol -51
<i>Duration of Contract :</i>	18/12/2017 to 17/12/19 (730 days except Sundays i.e 626 working days)
<i>Agreement Value :</i>	Rs /- 99,06,450.00/-

CHAPTER-III

3.0 CRITICAL ANALYSIS

3.1 While reviewing the subject study, the study team has critically examined and analyzed the all possible ways to optimize the Safaiwalas. The study team has given full stress on the following points to improve the quality of cleaning as well as rationalized the deployment of Safaiwalas working under CHI/SDAH.

- (1) Assessment of present workload of Safaiwalas has been done separately for SDAH Station Complex and SDAH Colony area.
- (2) Critically examine the point-wise deployment of Safaiwala against present workload.
- (3) Assessment of actual requirement of Safaiwalas under CHI/SDAH Station and CHI/SDAH Colony has been made in consideration with the Yardstick of sanitation staff under Medical Department vide CMO/E.Rly's letter No. MD. 248/0 dated 12.4.79 (ANNEXURE- I) based on non-mechanical system. Physical observation has also been taken for assessment of man power.
- (4) Scrutinize the possibility of more participation of foreign agencies in the cleaning activities keeping the economical benefits of Railway in mind.

The study team has given full attention on the above points to calculate the revised requirement of Safaiwalas considering the actual workload.

3.2 At first, the assessment for requirement of staff for Sealdah Station Complex has been done. In the analysis, study team has adopted the formula of Yardstick given in Annexure-I to assess the actual requirement of Safaiwalas in their different work points based on the present workload catered by departmental safaiwalas (*tabulated in table para 2.4.1, 2.4.2 & 2.4.3*).

3.3 During analysis of workload in regard to cleaning activities of service building at Sealdah Station Complex presently executed by departmental Safaiwalas, it is observed that, there is no Yardstick for several activities catered by departmental safaiwalas. So, for such activities, study team assesses the requirement of manpower based on physical observations. Both Yardstick and physical observation are taken in to consideration for the assessment of sanitation staff under CHI/SDAH Station. The details analysis is shown as under:

REQUIREMENT OF SAFAIWALA TO CATER EXISTING WORKLOAD OF DEPARTMENTAL SAFAIWALAS OF SEALDAH STATION AS PER YARD STICK AND ASSESSMENT BASED ON PHYSICAL OBSERVATION

Sl. No.	Areas of Working (approx)	Activities	Frequency of cleaning	Total Volume of Work in Sqft	Present Yard Stick	Total Manpower required (Rounding Off)	
1	Cleaning of service bldg. such as motorman rest room, guard rest room, retiring rooms, Cabins, Computer reservation rooms, offices, chambers, booking offices, parcel areas, etc. 45000 Sqft (approx)	Manual Sweeping & Swabing	Shift (06-14) - 2 times Shift (14-22)-2 times Shift (22-06)-1 times	45000 Sqft X 5 times = 225000 Sqft	(a) For sweeping the offices and waiting hall, 25 minutes per safaiwala per 1000 Sqft (19200 Sft in 8 hrs) (b) For swabing - 3.75 minutes per Safaiwala per 1000 Sft (12800 Sft in 8 hrs)	$\frac{225000}{19200} = 11.72$ (12)	18
		Washing	Shift (06-14) - 1 time Shift (14-22)-1 time Shift (22-06)-1 time	45000 Sqft X 3 times = 135000 Sqft	(c)For washing 2nd Class waiting halls, 6 minutes per Safaiwala per 1000 Sft (80000 Sft in 8 hrs)	$\frac{225000}{128000} = 1.76$ (2)	
		Garbage collection & disposal to vat	Shift (06-14) - 2 times Shift (14-22)-2 times	45000 Sqft X 4 = 180000 Sqft	160000 Sqft per Safaiwala in 8 hrs	$\frac{135000}{80000} = 1.69$ (2)	
2	Concourse area of 1st & 2nd floor of North, Main & Old building.	Manual Sweeping.	Shift (6-14)-2 times Shift (14-22)-2 times	-	The study team felt that 6 safaiwalas are required to attend the mentioned job.	(6)	6
		Collection of Rags, Waste Papers, Piece of Plastic, Garbage from above area including dustbin and disposal at vat	Two times daily	-	The study team felt that 2 safaiwalas are sufficient enough to cater the mentioned job.	(2)	2
3	Sweeping of stair-cases of North, Main & Old Buildings	Manual Sweeping	Shift (6-14)-2 times Shift (14-22)-2 times	-	The study team felt that 3 safaiwalas are sufficient enough to cater the mentioned job.	(3)	3
4	Cleaning of Waterbooths North, South, Main 13 Nos.	Washing	Shift (06-14) - 1 time Shift (14-22)-1 time	13 X 2 = 26 Nos Water booths	From assessment based on physical observation, study team concluded that 4 Safaiwalas can cater the mentioned workload of cleaning Waterbooths	(4)	4
5	Cleaning of Cob web and Pan stains North, South, Main	Washing	Twice daily	-	Based on physical observation, study team assess that 3 Safaiwalas can cater the washing work of Cob web & Panstains	(3)	3
6	Sweeping of parcel road	Manual Sweeping.	Shift (06-14) - 2 times	-	Based on the physical observation that 2 safaiwalas are required to attend the mentioned job.	(2)	2
7	Anti Malaria works	-	-	-	Study team felt that a group of 5 Safaiwalas is sufficient to cater the anti malaria works	(5)	5
8	VIP visit, misc. workload, etc	-	-	-	Study team felt that a group of 5 Safaiwalas is sufficient to cater the workload related to misc. activities & VIP visit.	(5)	5
9	Deployment at Night Shift for emergency workload	Manual Sweeping	Shift (22-06)	-	The deployment of 3 safaiwalas at Night Shift to cater emergency cleaning work as asked by the authority.	(3)	3
TOTAL						51	

It can be viewed from the above table that *bare requirement* of Safaiwalas is assessed to 51 for carrying out the cleaning work of service building at Sealdah Station complex. The Actual Requirement of Safaiwalas is calculated as under:

Bare Requirement	51
RG (Rest Giver) as 16.5%	$51 \times 16.66\% = 8.41$ say 9
LR (Leave Reserve) as 12.5%	$(51 + 9) \times 12.5\% = 7.5$ say 8
Actual Requirement	68

So, the **actual requirement** of Safaiwala for existing cleaning work at service building of SDAH station complex has assessed to 68.

- 3.4 Now, in the further paragraphs study team critically analysis the requirement of staff under CHI/SDAH Colony in paragraphs below.

As stated earlier in Existing Scenario that the sanitation work at Narkedanga colony(NKG) & Moughalbagan colony(MGB) are catered by contractual agency. Also, very soon, the cleaning activities of North Sealdah colony will come under contractual system.

Cleaning activities of rest 2 (two) colonies i.e. KMD & BGA are presently catered by departmental safaiwala. Hence, in the paragraphs below, assessment for requirement of safaiwalas for catering cleaning workload of KMD & BGA colonies has been made. The details of surrounding area of Rly. qtrs, road area, House Drains & Stair Cases of KMD & BGA colonies has been considered here for analysis of manpower. The study team has adopted the formula of Yardstick (*Annexure I*) for assessment of actual requirement of Safaiwalas deployed at KMD colony & BGA colony based on the present volume of Sanitary & Cleaning work as mentioned in para 2.14.

- 3.5 The assessment for requirement of safaiwalas for sanitary & cleaning work at KMD & BGA colony under CHI/SDAH Colony is shown below:

Sl. No.	Nature of Activities	Volume of Work	Frequency of service	Present Yardstick (<i>Annexure I</i>)	Total Manpower required (<i>Rounding Off</i>)	
1.	Sweeping of Colony Roads.	117094.62 Sq. ft.	Daily	For sweeping colony roads 70,000 Sqft. of road only- one safaiwala in 8 hourly shift	$\frac{117094.62}{70,000} = 1.67$	2
2.	Cleaning the Surroundings area of Houses and Roads	500470.19 Sq. ft.	Daily	For cleaning the surroundings of houses and road - 60000 Sqft per safaiwala per shift	$\frac{500470.19}{60,000} = 8.34$	9
3.	Cleaning of House & main Drains	8082.90 R/ ft.	Daily	For cleaning small house drain- One Safaiwala will take 7 min. per 100 Rft. (6857 Rft in 8 hr shift)	$\frac{8082.90}{6857} = 1.18$	2
4.	Collection & removal of garbage from drain.	8082.90 R/ ft.	Daily	For removal and disposal of accumulated slit from 100 Rft length of drain a sweeper will take 12.5 min. (3840 Rft in 8 hr shift)	$\frac{8082.90}{3840} = 2.1$	3

5.	Sweeping of Stair Cases of Multistoried Buildings	69 Stair Cases	Daily	For sweeping of one staircases for a 4 storied building a safaiwala will take 28 minutes. (sweeping of 17.14 staircases in 8 hr shift in 4 storied building)	$\frac{69}{17.14} = 4.02$	4
6.	Collection & removal of garbage from road & surrounding area	(500470.19 + 117094.62) = 617564.81 Sq. ft.	Daily	Garbage collected from sweeping of 10000 Sqft of road surroundings can be removed and deposited in dustbins per 30 min. (160000 Sqft in 8 hrs shift)	$\frac{617564.81}{160000} = 3.85$	4
7.	Special Gangs for attending of Blockage of underground drains, Septic Tanks and Sanitary Latrines.			A special gang of 2 Safaiwalas should be formed to attend blockage of underground drains, septic tanks and sanitary latrines	2	2
8.	Dealing of Water Sample & food Sample (Quality Control & PFA), Letter Delivery Work, Health Unit medicines collection from BRSH, Stores collections from HWH & HLR Store Depot & Assistance to NKG & KMD Health units.			Study team felt that 2 Safaiwalas is sufficient to cater the said workload	2	2
9.	Anti-larva & Anti-Insecticidal Spraying Work of House Drains, Rly. Quarters, Service Buildings.			Study team felt that present deployment of 3 Safaiwalas is sufficient to cater the anti malaria works	3	3
10.	Apart from above mentioned workload, it is felt by study team that there should be a gang of 3 Safaiwalas to attend the emergency & misc. work at B R Singh Hospital and the colonies under CHI/SDAH colony during the time of exigency. At present, this gang may be utilized for catering sanitation workload of North Sealdah Colony till finalization of the contract.				3	3
Total →						34

It can be viewed from the above table that **bare requirement** of Safaiwalas is 34 to carry out cleaning work at KMD & BGA colony *(along with North Sealdah Colony)*. The Actual Requirement of Safaiwalas is calculated as under:

Bare Requirement	34
LR (Leave Reserve) as 12.5%	$34 \times 12.5\% = 4.25$ say 5
Actual Requirement	39

So, the **actual requirement** of Departmental Safaiwala at KMD & BGA colony for existing Sanitary & Conservancy work has been assessed as 39 posts.

- 3.6 Summarizing the revised requirement of staff as shown in para 3.3 and 3.5, the posts to be rendered as surplus against the total existing sanctioned strength with the consideration of assessment made in the above paragraphs, may be seen from the following table.

	Sanctioned Strength	Men-On- roll	Total requirement of staff duly revised	Surplus posts
	<i>(from para 2.3 & 2.9)</i>		<i>(from para 3.3 & 3.5)</i>	
Safaiwalas under CHI/SDAH Station	76	54	68	08
Safaiwalas under CHI/SDAH Colony	41	36	39	02
TOTAL	117	90	107	10

- 3.7 It is observed from the above table under para 3.6 that, the total revised requirement of safaiwala to cater the existing departmental workload at Sealdah Station Complex and Sealdah Colonies is calculated as 107. It may be mentioned here that there are total 90 nos. of staff working under CHI/ SDAH station and CHI/ SDAH Colony (*i.e. total MOR = 90*) as against the total sanctioned strength of 117 posts, (*as evident from para 2.3 & 2.9*) which indicates that presently, there is a clear vacancy of $(117 - 90) = 27$ posts in the above units. On scrutiny, it is assessed by the study team that there is a need of filling up 17 vacant posts to tackle the existing workload which has neatly been analysed in the foregoing paragraphs of the Critical Analysis chapter. Hence, $(117 - 107) = 10$ nos. of posts are found to be excess to the present requirement after filling up of 17 vacant posts.

3.8 **Recommendation:** -

It is recommended that the actual total requirement of safaiwala at Sealdah station complex and Sealdah colonies, will be 107 posts which would result in surrender of 10 nos. of vacant posts as against the present total sanctioned strength of 117 posts. The actual total requirement of manpower has been revised by the study team on the basis of assessment & analysis made in the foregoing paragraphs.

CHAPTER-IV**4.0 FINANCIAL APPRAISAL:**

4.1 As per recommendation made in Para 3.8, the total surplus posts works out to **10 posts**.

A statement showing the total annual financial savings on account of surrender of **10** posts is furnished below.

Category & Scale of Pay (Rs.)		Grade Pay (Rs.)	Mean pay (in Rs)	Mean Pay (as per 7th PC) = 2.57 X Mean Pay (as per 6th PC)	D.A (9%) (in Rs)	Total (in Rs)	No. of posts Recommended for Surrender	Monthly savings of total staff (in Rs)	Annual savings. (in lakhs Rs)
(as per 6th Pay Commission)				(as per 7th Pay Commission)					
Safaiwalas	5200-20200/-	1800/-	14500/-	37265/-	3354/-	40619/-	10	4,06,190/-	48.74
TOTAL							10		48.74

Thus, the annual financial savings works out to **Rs. 48.74 lakhs.**