

## **Chapter 4 Performance Audit on "Cleanliness and Sanitation in Indian Railways"**

Cleanliness and Sanitation in Indian Railways is a multidisciplinary responsibility and vests with various departments of the Railways viz. Medical, Engineering, Commercial and Mechanical. While the Mechanical Department is responsible for cleanliness and sanitation in coaches, other departments are responsible for maintaining cleanliness within the station premises. Health and Medical departments are responsible for ensuring hygiene of catering services and maintaining quality of drinking water at stations.

This chapter incorporates the audit findings on the follow up action taken by the Indian Railways on the audit observations made in previous Reports on cleanliness and sanitation and on the recommendations made by the Public Accounts Committee (PAC). The study covered the various initiatives taken by the IR during the period 2007-12 to maintain cleanliness and sanitation at stations and in trains. The Performance Audit was carried out with a view to obtaining reasonable assurance whether the commitments made by the Ministry of Railways had actually resulted in improvement of cleaning operations and enhancement in efficiency of handling wastes generated at stations and trains and is intended as a follow-up regarding the action taken by Indian Railways subsequent to the Audit Report No.6 of 2007 on Cleanliness and Sanitation in Indian Railways. For this, audit selected a sample of 212 stations from various categories for a detailed test check.

This chapter contains the audit findings of the above Performance Audit.

**Cleanliness and Sanitation in Indian Railways- A Follow Up Report****Executive Summary**

Indian Railway (IR) covers about 64460 route kilometers through high density urban areas as well as vast rural and forest areas. It provides services to 2.2 crore passengers and operates 11842 passenger trains daily. An effective system for maintenance of cleanliness and sanitation at stations and trains is, therefore, essential for sustained and efficient operation of IR.

A Performance Audit on “Cleanliness and sanitation in IR” was earlier taken up and the results included in the Audit Report No.6 of 2007 (Railways) of Comptroller and Auditor General of India. The deficiencies in maintaining cleanliness at stations and in trains highlighted in the report were also further studied by the PAC. In the light of Audit Findings and evidence tendered before them, the Public Accounts Committee (PAC) in their Eighty Third Report (2008-09) also highlighted the areas of concern in maintaining cleanliness and sanitation on IR.

Following audit observations and recommendations of PAC, IR adopted various measures and laid down comprehensive guidelines on issues responsible for maintain cleanliness at stations and in trains. The actions taken by the IR were, however, not translated into improvement in cleanliness due weaknesses in monitoring mechanism. Detailed action plan for maintaining cleanliness and sanitation at stations and on trains was not formulated at the zonal level.

Mechanised cleaning adopted as per the recommendation of Working Group constituted in September 2012 could not be effectively implemented at all major stations due to inadequate provision of washable aprons or damaged and uneven platform surfaces. Measures like ‘Clean Train Station’ and ‘On Board House Keeping Services’ adopted for ensuring cleanliness and sanitations in trains were also not adequately effective due to deficient planning and inadequate monitoring at the zonal level.

The deficiencies pointed out in the previous Audit Report and the recommendations of the PAC were not addressed completely. Shortcomings in collection and disposal of garbage remained unresolved. The commitment of IR to PAC regarding implementation of green toilets in trains was not fulfilled. Delay in implementation of green toilets had adversely affected maintenance of sanitation and hygiene on trains and station premises.

Improper management of linen and slow progress in setting up of automatic mechanized laundries led to large scale of outsourcing of cleaning of linen and increased passenger dissatisfaction. Remedial measures initiated by the IR to ensure adequate safe drinking water were inadequate. IR also failed in implementing laid down norms for making provision of water taps and maintaining the existing facilities.

**Highlights**

- **Despite assurance rendered to the Public Accounts Committee (PAC), detailed action plan for maintaining cleanliness and sanitation at stations and on trains was not formulated at the zonal level. Frequency of inspections for different categories of stations for monitoring cleanliness by the officers was not clearly defined.**  
(Para-4.9.2 and 4.9.4)
- **Mechanised cleaning could not be effectively implemented at all major stations due to inadequate provision of washable aprons or damaged and uneven platform surfaces. The availability of infrastructure in the field for improving the standard of cleanliness was not commensurate with the policies and guidelines laid down in this regard.**  
(Para 4.9.5.1)
- **The commitment of Indian Railways (IR) to PAC for assessment and implementation of remedial measures to overcome the shortcomings in collection and disposal of garbage remained unfulfilled.**  
(Para 4.9.5.2)
- **There was no significant difference in maintenance of toilets. Filthy condition of existing toilets was observed though the issue was highlighted in the previous Audit Report.**  
(Para 4.9.5.3)
- **The Clean Train Station scheme was not effective in improving en route cleaning of trains due to deficient planning and inadequate monitoring at the zonal level. The deficiencies pointed out in the previous Audit Report were not addressed completely. On Board Housekeeping Service for cleaning of coaches was far from satisfactory.**  
(Para 4.9.6.1 and 4.9.6.2)
- **The commitment of IR to PAC regarding implementation of green toilets in trains was not fulfilled despite extensive trials during the last two decades. Delay in implementation of green toilets had adversely affected maintenance of sanitation and hygiene on trains and at station premises besides posing threat to safety of the rail tracks.**  
(Para 4.9.6.3)
- **Lack of efficient control on monitoring mechanism specified by the Ministry of Railways' guidelines on management of linen were not effectively monitored resulting in frequent supply of unhygienic and poor quality of linen to its passengers. Slow progress in setting up of automatic mechanised laundries led to large scale of outsourcing of cleaning of linen and increased passenger dissatisfaction.**  
(Para 4.9.7.2 and 4.9.7.3)
- **Provision for availability of drinking water was not made as per prescribed norms. Even the existing facilities were poorly maintained. There was shortfall in the periodical testing of water**

**samples though there was an increasing trend in the percentage of unfit samples collected from different stations across zones.**

*(Para 4.9.7.7)*

#### **Gist of recommendations**

- IR needs to frame a time bound action plan and strengthen its monitoring mechanism at the zonal level for effective implementation of its policies and guidelines.
- IR needs to expedite implementation of bio-toilets in coaches to prevent open defecation and maintenance of hygienic surroundings. IR should put in place an effective internal control system for efficient linen management and pest and rodent control.
- IR may expedite the implementation of New Catering Policy 2010 and strengthen monitoring mechanism for effective implementation of the policy and strict compliance of its guidelines/instructions for ensuring provision of safe drinking water.
- IR need to effectively monitor the fulfilment of the various commitments made in the Citizen's Charter through designated benchmarks, quality assurance and quality control etc. at stations and on board.

#### **4.1 Introduction**

IR is the single largest system of public transportation in India covering about 64460 route kilometers through high density urban areas as well as vast rural and forest areas. It provides services to 2.2 crore passengers and operates 11842 passenger trains daily. The sheer quantities of passenger operations put tremendous pressure on the existing infrastructure and calls for an effective system for maintenance of cleanliness and sanitation at stations and in trains. The requisite standards framed by the Government of India are required to be implemented for catering to the high passenger traffic density. This considerably impacts the environment on account of waste generation.

Provision of clean and hygienic surroundings is one of the commitments made by IR in its Citizen Charter. Thus providing adequately clear passenger amenities like drinking water, urinals etc. at stations as well as on board is an integral part of the various cleanliness related activities of the IR as a committed service provider.

Sanitation is indeed a major and critical challenge faced by IR as effective management of disposal of human excreta into the open throughout the length and breadth of the country through its toilets on trains has been one of the main source of environmental pollution.

The Performance Audit contained in Audit Report No. 6 of 2007 (Railways) of Comptroller & Auditor General of India on “Cleanliness and Sanitation in Indian Railways”, highlighted the deficiencies in planning and inadequacy of standards/ norms of cleanliness framed by IR. It further highlighted the inadequate provision of water supply and other infrastructure for providing a

clean and hygienic environment. In the light of Audit Findings and evidence tendered before them, the Public Accounts Committee (PAC) in their Eighty Third Report (2008-09) also highlighted the areas of concern in maintaining cleanliness and sanitation on IR.

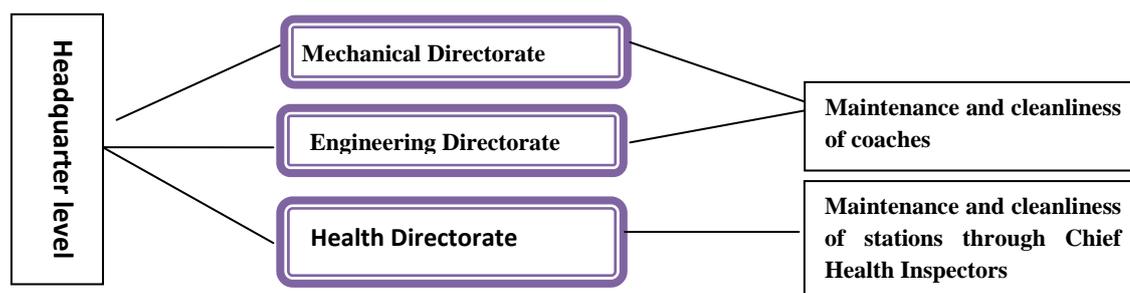
Ministry of Railways (MoR) in their Action Taken Note on the Audit observations and also on the recommendations of PAC, elaborated its Action Plan and commitment to bring improvement in cleanliness at stations and in trains and adopted various measures<sup>24</sup> to improve the level of cleanliness in coaches and at stations.

#### 4.2 Organisational Set-up

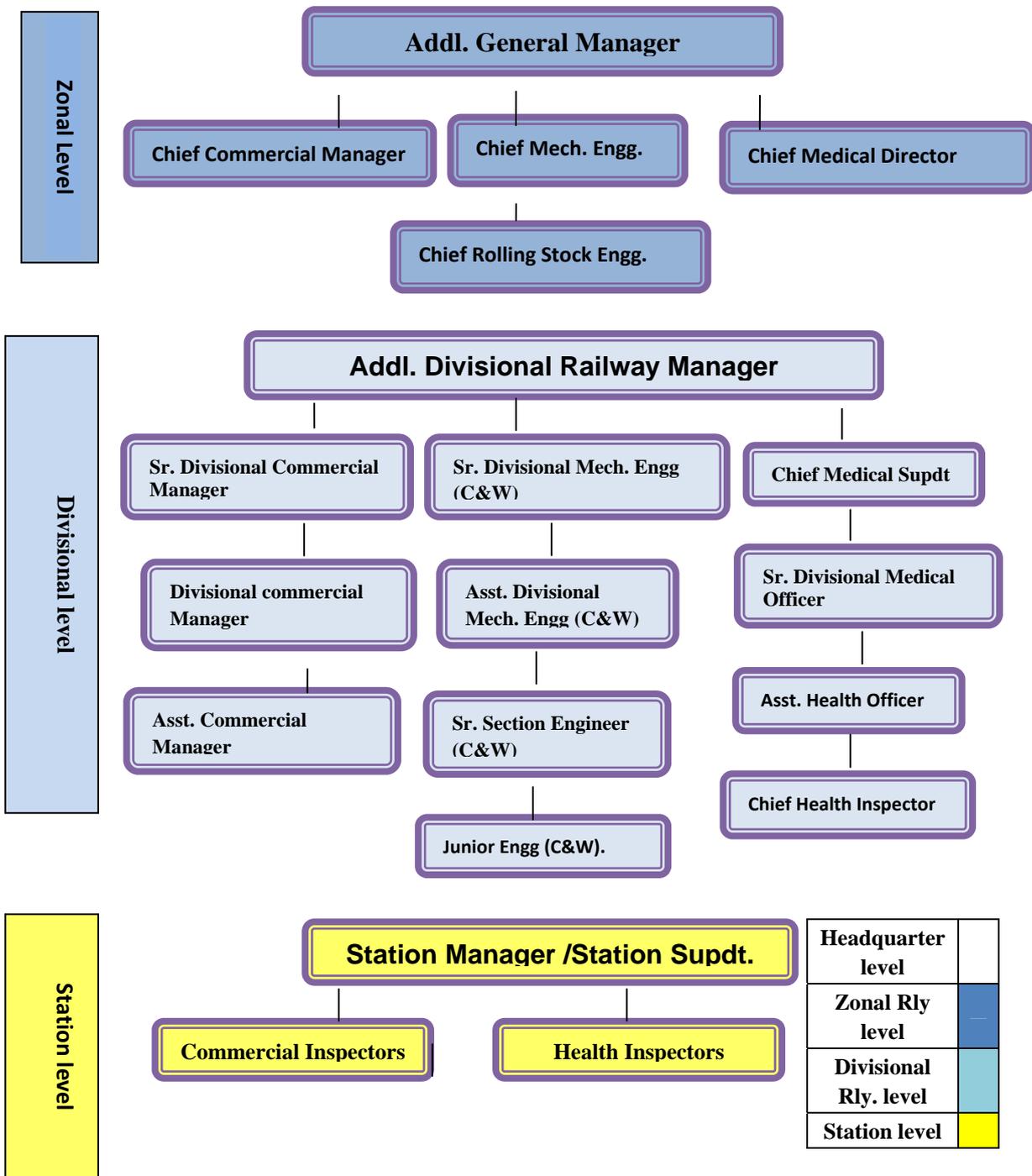
Cleanliness in IR is a multidisciplinary responsibility with various departments of the Railways viz. Medical, Engineering, Commercial and Mechanical. As per Para 903 of Indian Railway Medical Manual Volume - II, all the sanitation work within the station premises shall be under the control of the Commercial Department. The sanitation and cleanliness of coaches is the responsibility of Mechanical Department.

Based on the specific concern of PAC regarding initiatives of Additional Divisional Railway Managers (ADRM) / Additional General Managers (AGM) for maintaining cleanliness and sanitation at the stations and in trains, MoR stated that the AGM at the Zonal Level, ADRM at the Divisional Level and Station Manager/Station Superintendent at the Station level are the nodal officers/supervisors to coordinate with various departments responsible for maintenance of sanitation and cleanliness at stations and on trains

#### ORGANISATIONAL CHART



<sup>24</sup>Include mechanised cleaning, introduction of On Board Housekeeping Scheme, Clean Train Station Scheme, pest control measures, execution of rag picking contracts etc. It has also taken action to try and replace its present toilet system on trains with 'Green toilets'.



**4.3 Audit Objectives**

The Performance Audit was conducted covering the period 2007-12 to assess the efficiency and effectiveness of the follow up action taken by the MoR in maintaining cleanliness and sanitation on IR in compliance of PAC recommendations. The audit objectives were as follows:

- To assess that the initiatives of IR in compliance with the guidelines/instructions issued by the Railway Board (RB) from time to time were adequate, effective and complied with;
- To assess the effectiveness of the action taken by the IR in improving the quality of passenger services and amenities.

#### 4.4 Scope of Audit

The follow up audit was conducted between August 2011 to December 2012 with a view to obtain reasonable assurance about the commitments made by MoR to PAC, which had led to improvement of cleaning operations, efficiency of handling wastes generated at stations and in trains including the actions taken by IR subsequent to the Audit Report No. 6 of 2007(Railways) on Cleanliness and Sanitation in Indian Railways.

The scope of the Performance Audit inter-alia includes-

- Assessment of efficiency in implementation of various guidelines issued from time to time by the RB and the action plan formulated by the Zonal Railways for maintaining cleanliness and sanitation on IR;
- A review of the effectiveness of various initiatives and remedial measures taken by the IR to address recurrence of the deficiencies brought out in the previous audit report and translated into improvement in cleanliness and sanitation on the ground.

#### 4.5 Sources of Audit Criteria

The action taken by the IR with reference to the Audit Observations/Recommendations highlighted in the Audit Report<sup>25</sup> and also the action taken on the recommendations of PAC were adopted as audit criteria. In addition, guidelines as well as instructions issued by the RB subsequent to Audit Report and PAC Report on "Cleanliness and Sanitation on IR" were also taken into consideration to assess the performance of IR in improving cleanliness and sanitation at railway stations and in trains. These guidelines/instructions includes guidelines on cleanliness and sanitation of Railway stations (January 2007), monitoring cleanliness (July 2011), OBHS (October 2007), linen management (December 2009) etc.

#### 4.6 Audit Methodology

Audit methodology, scope, objectives and criteria were explained during the entry conference by the concerned Heads of Departments at the Zonal level as well as with Senior Officers of Railway Board.

Records relating to guidelines/instructions issued by different Directorates of MoR involved in policy formulation and issue of directives to zones for implementation were examined between August 2011 and March 2012 to

<sup>25</sup> Audit Report No. 6 of 2007(Railways) of Comptroller & Auditor General of India

ascertain the initiatives and performance of IR towards improving cleanliness and sanitation at railway stations and in trains. At the Zonal level, Audit verified the compliance of various directives issued by the RB as well as at zonal levels.

Joint inspection at 212 stations and 88 trains was conducted between August 2011 and March 2012 with the Railway officials for real time assessment of the initiatives taken by IR and their performance. Besides, feedback was also obtained from passengers through limited passenger survey conducted at two major stations and in five Mail/Express trains of each zone.

#### 4.7 Sample Selection

Data was collected from various Zonal and Divisional offices of the IR. In all, a sample of 212 stations from various categories<sup>26</sup> were selected (**Annexure XIX**) for detailed test check. The sampling technique adopted is explained below:

Sl No.	Description	Category	Sample Size
1.	Number of stations under different categories selected for audit that included stations, Joint Inspection by audit and Railway authorities.	A1	25 per cent subject to minimum of two stations
		A and B	10 per cent subject to a maximum of five stations, covering at least one station from each divisions, to the extent possible
		C, D and E	two stations from each category
2.	Trains including Joint Inspection	Five Express/ Mail/ Passenger Trains	<ul style="list-style-type: none"> <li>Trains having On Board House Keeping Services (OBHS) Pantry Car</li> <li>Rajdhani /Shatabdi/JanShatabdi/ Ordinary passenger trains</li> <li>Platform return trains</li> </ul>

Feedback from passengers was also obtained through a passenger survey conducted in all zones as per the following sample size:

Passenger feedback	No. of passengers surveyed
At two Major stations dealing with maximum number of passengers per day.	75 passengers in each station.
Five Trains - Rajdhani, Mail and Express trains (including long distance trains), Shatabdi and Jan Shatabdi trains.	AC Passengers – 100 Non-AC Passengers – 250

<sup>26</sup> IR categorize stations on the basis of earnings. This categorization has been followed in the selection of audit sample size as it also broadly reflects the number of passengers using a station.

#### 4.8 Acknowledgement

The audit objectives, scope of study and methodology were discussed with Advisor (Finance) at RB as well as the General Managers and concerned Departmental Heads in the concerned zones by the Principal Directors of Audit. The draft report was issued to the MoR in February 2013. A partial reply of the Ministry was received in March 2013. Audit sincerely acknowledges the valuable inputs provided on various aspects and the cooperation extended by Railways. The audit findings and recommendations were discussed with Advisor (Finance) in an exit conference held in March 2013 at RB. Similar exit conferences were also held by the Principal Directors of Audit in the zones, with concerned zonal authorities. Their views had been incorporated in the report.

#### 4.9 Cleanliness at stations and on trains

During August 2002, IR launched 'Operation Cleanliness' which led to setting up of a Working Group (September 2002) to identify the problem areas and suggest remedial measures. The recommendations of the Working Group inter-alia include development of infrastructure, development of tools and plants/equipments, contracts for mechanized cleaning, aggressive campaign for educating the users etc. IR adopted various measures by synergizing technology, educating users and providing mechanized cleaning process/equipments under schemes like 'On Board House Keeping Service'(OBHS) and 'Clean Train Stations'(CTS) to clean en route passenger coaches as well as during halt at identified stations etc.

##### 4.9.1 Recommendations of PAC and their compliance by the IR

Based on the findings highlighted in the Audit Report No.6 of 2007 (Railways)<sup>27</sup>, PAC examined the issues relating to cleanliness and sanitation on IR. PAC recommended that IR should draw up an action plan with identified milestones for provision of adequate infrastructure namely washable aprons, drains and sewerage system etc. along with conducive platform surfaces for each station duly prioritizing requirements. In their action taken note, MoR stated that an action plan had been devised and the Zonal Railways had been instructed to implement the same. The status update by the MoR on significant issues by way of oral and written evidence incorporated in 83<sup>rd</sup> Report (2008-09) on 'Cleanliness and Sanitation on Indian Railways' are mentioned below:

<sup>27</sup> Performance Audit on "Cleanliness and Sanitation in Indian Railways"

Issues	PAC Queries / Observations	Reply of the Ministry
<b>Plans and Policies</b>	Whether Railways have prepared any road map for addressing the issue of cleanliness in Railway premises. IR should draw up a plan of action with identified milestones for provision of adequate infrastructure namely washable aprons, drains and sewerage system etc. along with conducive platform surfaces for each station duly prioritizing requirements.	An action plan had been devised and the Zonal Railways had been instructed to implement the same.  MoR asserted that the up gradation of passenger amenities, commensurate with increase in passenger traffic at stations including water supply, washable aprons etc. was a continuous process and was being undertaken through Annual Works Programme depending upon the availability of funds and other relative priorities.
<b>Sanitation and up gradation of amenities in Railway Stations</b>	Action taken by the IR for maintaining cleanliness and sanitation on platforms, trains, tracks etc	Comprehensive guidelines had been issued for mechanised cleaning of rakes in coaching depots. The OBHS and CTS schemes initiated to clean passenger coaches during transit as well as during halt at identified stations; initiation of pest and rodent control measures etc.  MoR stated that regular supervision was being carried out to monitor cleanliness through Service Improvement Groups (SIG) operating at supervisory and officer's level. MoR also stated that 593 stations had been selected as 'model stations' and 637 (334 during 2006-07 and 303 during 2007-08) as 'modern stations' for providing upgraded passenger amenities.
<b>Multiplicity of departments involved in maintaining cleanliness</b>	System or mechanism in place for centralized monitoring of cleanliness and sanitation at prescribed standard.	Cleanliness is being reviewed periodically both at the Zonal level and Divisional level by the Additional General Manager and Additional Divisional Railway Manager respectively. Regarding creation of nodal agency, MoR asserted that considering the vastness of the cleaning activities, the works had been distributed among the different Directorates to ensure proper focus on their respective areas and therefore, the need of a nodal agency was not considered desirable.
<b>Policy on waste Management</b>	Why was there no comprehensive waste Management policy in IR?	There is a well defined system of collection of garbage at centralized locations at stations and final disposal to nominated municipal

	What are the deficiencies in the maintenance of cleanliness and management of waste generated at railway stations and in trains?	bins/landfill areas. MoR further stated that the basic problems in the areas of cleanliness are that the infrastructure of cleanliness and logistics has not been in conformity with the increased volume of passenger traffic. MoR also stated that the tools and plants used in upkeep of amenities were still rudimentary.
<b>Green toilet project</b>	How are the Railways going to implement the green toilet project on all the trains?	MoR stated that field trials were being conducted and their performance would be monitored for design validation before considering universal implementation on all IR's coaches.
<b>Urinals and Toilets at stations</b>	Prescribed norms for urinals and toilets at stations.	MoR stated that the norms for providing urinals and toilets for passengers had been fixed with reference to the category of station.
<b>Cleanliness of Trains</b>	Whether there was any specialized institutional mechanism in place to oversee sanitation on running trains.	A comprehensive OBHS scheme had been launched. Their cleaning activities were being monitored through passenger feedback, incognito checks by Railway officials in trains etc.

Working group constituted in September 2002, suggested action plan for improving cleanliness at stations and on trains. The action plan in respect of measures /initiatives to be taken up by the IRs were divided into short term<sup>28</sup>, medium term<sup>29</sup> and long term plans<sup>30</sup>. In November 2002, MoR directed all Zonal Railways to prepare action plan accordingly.

On being highlighted the deficiencies in dealing cleanliness and sanitation issues through Audit Report No. 6 of 2007 (Railways), RB issued of comprehensive guidelines for provision of passenger amenities at stations, OBHS, pest control and linen management.

Subsequently, additional guidelines were issued in June 2009 for cleanliness at Railway stations/premises detailing therein the objective, strategy and action

<sup>28</sup> Short term action plan of time span three months include areas like re-launching of cleanliness drives through contracts, adoption of clean hour concept, delegation of powers, finalization of service contracts of pest control, garbage lifting, pay and use toilets, clean train stations at 15 stations etc.

<sup>29</sup> Medium term action plan of time span one year includes areas such as development of cleanliness standards and codes for service contracts for mechanised cleaning, effluent treatment plants at all A class stations, extension of clean train stations to 50 stations, development of logistics for picking, transporting and disposal of garbage within the station premises etc.

<sup>30</sup> Long term plans of time span three to five years include areas like provision of washable aprons, effluent treatment plants at major stations, provision of incinerators, modification of coaches by providing control discharge toilet in 20000 coaches to cover all Mail/Express trains, automatic coach washing machines at 25 depots etc.

plan<sup>31</sup> required to be adopted for improvement in cleanliness. The objective was to provide a hygienic environment at stations and railway premises by way of development of infrastructure, use of modern technology, clear demarcation of sanitation functions, posting of adequate supervisory staff to oversee cleanliness etc.

In September 2012, Committee of Executive Directors specified the norms and quantum of Minimum Essential Amenities<sup>32</sup>, Recommended Amenities<sup>33</sup> and Desirable Amenities<sup>34</sup>.

On scrutiny of records relating to monitoring of implementation of the revised instructions, audit observed that no action was taken at the Board level to ascertain the status of implementation of its revised instructions on provision of passenger amenities. MoR, however, stated (March 2013) that the Zonal Railways had confirmed the provision of minimum essential amenities at stations. Audit, however, observed deficiencies in adequate number of toilets/urinals, availability of drinking water, disposal of wastes etc.

#### **4.9.2 Standards and Action Plan on cleanliness**

Revised Guidelines issued by RB did not fix any standards for cleanliness; Zonal Railway issued a Joint Procedure Order (JPO) clearly demarcating the areas of responsibility of different departments. In this regard, PAC's recommendation was "there should be daily routine checks of cleanliness activities by the Divisional General manager and inspections at least once in every fortnight". MoR in their Action Taken Note stated that there were frequent checks on the standard of cleanliness at different levels. MoR also stated that a system of scorecard had been introduced for assessment and monitoring of cleaning activities..

Audit observed the following weaknesses in the system:

- (i). Though the Zonal Railways issued JPO defining the responsibilities of different departments, no comprehensive action plan was formulated at the Zonal Level for implementation of the RB's guidelines (December 2006/January 2007). It was further observed that the RB's guidelines had also not insisted for framing of action plan at the Zonal level;
- (ii). No norms or performance indicators for cleanliness activities were prescribed by either by the Zonal Railways or the RB. The standard of

<sup>31</sup> Action plan include development of infrastructure, development of tools and plants and equipments, mechanised cleaning of all major stations, activation of Service Improvement Groups, cleaning and maintaining toilets by private parties, fixation of responsibilities, launching of special cleanliness drives etc.

<sup>32</sup> Minimum Essential Amenities are the amenities to be provided at each category of station (on the basis of projected traffic/earnings) when a station is constructed.

<sup>33</sup> Recommended Amenities are the amenities to be provided at each category of station depending upon the actual passenger traffic dealt at the station.

<sup>34</sup> Desirable Amenities are those amenities which are considered desirable to improve customer satisfaction and interface process at the station.

cleanliness at stations was, however, being assessed through a 10 point scale in SR, SCR, NEFR and ECR zones;

- (iii). Service Improvement Groups (SIG)<sup>35</sup> had been formed and inspections were being conducted both at the Zonal and Divisional level. Frequency of inspections of the SIG was, however, not prescribed; and
- (iv). No norms (frequency) for surprise checks by the supervisory staff had been fixed. There was also no system of surprise checks in SECR,

Despite assurance rendered to the PAC, a detailed Action Plan was prepared by only Central Railway. MoR had not explained (March 2013) the reasons for not formulating detailed action plan by the remaining zones.

#### **4.9.3 Segregation of Responsibility**

The responsibility of maintenance of cleanliness lies with a number of departments viz. Commercial, Medical, Engineering, Mechanical and Operating. For better co-ordination and effective performance of cleaning activities, a unified command structure with well defined accountability is essential.

MoR informed PAC that Additional General Manager at the Zonal Level, ADRM at the Divisional Level and Station Manager/Station Superintendent at station level are the nodal officers/supervisors to coordinate with various departments for maintenance of sanitation and cleanliness. MoR also stated that frequent cleanliness review meetings were being conducted at the Zonal level with the DRMs and concerned Head of Departments to assess the deficiencies/failures to formulate remedial action.

Review of the follow up action taken by the Railways revealed that following audit observations on multidisciplinary approach on cleanliness, Zonal Railways demarcated the areas of responsibility of different departments through a Joint Procedure Order and the Commercial Department was made the nodal agency for coordinating among the various departments for cleanliness supervision.

#### **4.9.4 Monitoring**

In order to monitor improvement in cleanliness at Railway stations, trains and Railway premises, MoR instructed (June 2009) all Zonal Railways to report on weekly basis the improvement of different aspects of cleanliness such as drainage, dustbins, bedrolls etc. Chairman/RB in July 2011, directed all Zonal Railways for taking immediate action to improve the image of Railways in the public eye. He also directed that all initiatives in this regard should be personally monitored at the level of General Managers. The areas of focus which required immediate attention included cleanliness of coaches and stations, garbage collection, pest and rodent control, linen management etc.

<sup>35</sup> SIG generally comprises of heads of Commercial, Mechanical, Engineering and Medical Departments.

The action taken by the Zonal Railways along with the deficiencies were monitored by the RB through a monthly report from the Zonal Railways. Any deficiency on the initiatives in focused areas of cleanliness was referred to the concerned Railways for remedial measures. Thus measures to improve cleanliness were being adequately monitored at the RB level.

At the Zonal level, there is a system of inspection of cleanliness of stations by the officers at different levels<sup>36</sup>. Audit observed that the frequency of inspections for various categories of stations by the different level of officers was not clearly specified. MoR stated (March 2013) that the improvement in cleanliness was being reported on weekly and monthly basis for RB's appraisal. Despite having a system of monitoring, deficiencies were observed in maintenance of existing infrastructure, services rendered through Clean Train Station, linen management, quality of drinking water, waste management etc.

#### 4.9.5 Cleanliness at stations

##### 4.9.5.1 Inadequacy of washable aprons and mechanized cleaning

The pre-requisite for mechanical cleaning are provision of a cement concrete apron (CC apron) on all platform tracks, even surface on platforms and circulating areas which are reasonably smooth for operation of machines. CC aprons are essential to keep the tracks between platforms free from night soil and garbage. Improper maintenance and damaged CC aprons and also uneven platform surfaces cause unhygienic surroundings at stations.



Drain along side the track clogged with garbage  
(Bilaspur/ SECR)

MoR in their Action Taken Note (December 2008) stated that washable aprons were planned to

be provided at all major stations (A and B category) in a phased manner. They also stated that the repair and maintenance of washable aprons were being carried out on need basis. As per the orders issued by the RB, (December 2006) all Zonal railways to adopt mechanized cleaning at all A and B category stations. The implementation of these orders was examined in audit.

Test check by audit in 123 major stations<sup>37</sup> over 17 zones revealed the following:-

- (i). Mechanised means of cleaning were adopted only at 65 stations i.e. only 53 per cent;
- (ii). Out of 568 platforms, only 320 platforms (56 per cent) were provided with CC aprons. The maximum number of platforms without CC

<sup>36</sup> General Managers, Divisional Railway Managers, Service Improvement Groups.

<sup>37</sup> A1, A and B Category

aprons was observed in four zones<sup>38</sup> where the percentage ranged between 60 to 71 per cent.

- (iii). Provision of washable aprons was found inadequate even in major stations of ER (Howrah, Naihati, Maldah, Bandel, Bardhaman and Sealdah) and SR (Ernakulam Town and Guruvayur);
- (iv). At five stations<sup>39</sup> of CR, only one fourth of the area of the platforms could be used for mechanised cleaning. The remaining area was cleaned manually due to uneven surfaces and;
- (v). In SWR damaged platform surfaces were not conducive for mechanical cleaning.

Joint Inspection with the Railway Officials to assess the extent of availability of CC aprons revealed the following:-

- (i). Aprons were in dirty and damaged condition at some of the stations<sup>40</sup> test checked.
- (ii). Covered drains are provided between tracks near the platforms for maintaining clean surroundings within the station premises. Absence of drains or drains clogged with garbage cause impediment in keeping clean washable aprons. Audit observed that in some<sup>41</sup> stations of SECR and SR, there were either no drains between tracks or drains were clogged /uncovered. For example, at Bilaspur station (SECR), the drain alongside the track was clogged with garbage;
- (iii). Improper sanitation due to night soil deposit on damaged aprons or absence of washable aprons (Muri Station/SER, Jaisalmer, Alwar, Bikaner, Nagaur and Jodhpur of NWR, Ernakulam Station/SR, Naihati, Bandel, Barddhaman and Asansol of ER).

Thus, the Railway Administration was not able to effectively implement RB's guidelines (December 2006) for mechanised cleaning at all major stations. There was lack of synchronization between the guidelines/instruction of MoR and availability of infrastructure in the field for their implementation.

#### **4.9.5.2 Waste Management at station**

IR generates a huge quantity of non-biodegradable and bio-degradable wastes<sup>42</sup>. In IR, there is, however, no dedicated waste management cell. PAC recommended - "IR must frame a policy on waste management and lay down a mechanism whereby the quantum of garbage generated at stations can be

<sup>38</sup> NCR, ER, ECR and WR

<sup>39</sup> Pune, Ballarshah, Bhusawal, Sevagram and Igatpuri of CR

<sup>40</sup> (four stations<sup>40</sup> in SWR, PF No. 8 and 9 of Mumbai Central, Pune, LTT, Bhusawal and Ballarshah of CR, Bangalore (PF-7 and 8), VSG (PF1) , UBL (PF 2), Bijapur and Mysore (PF1) of SWR

<sup>41</sup> Bilaspur (SECR), Ariyalur, Ernakulam Town, Guruvayur, Coimbatore North, Tiruvallikeni, Chennai Beach etc

<sup>42</sup> Biodegradable wastes are capable of decomposing by micro organisms such as left over food, paper wastes etc. and non-biodegradable wastes are not decomposed naturally and remain in nature causing pollution to underground soil and water.

assessed realistically so that adequate collection, segregation and disposal facility along with necessary infrastructure could be put in place by the authorities". MoR in their Action Taken Note stated -“the garbage disposal system is already in place on IR”.

Comptroller & Auditor General of India's Audit Report No 21 of 2012-13, (Railways), on “Environment Management in Indian Railways-Stations, Trains and Tracks” had observed that though a garbage disposal system was in place, the same was not effective due to lack of proper monitoring. The report, inter-alia, highlighted that the commitment of MoR for assessment and implementation of remedial measures to overcome the shortcomings in collection and disposal of garbage remained unfulfilled.

In this present audit exercise, the adequacy of dustbins at stations which is the primary garbage collection point within the station premises was examined. Audit observed that despite being pointed out in our previous audit report<sup>43</sup>, MoR had not prescribed any scale for providing dust bins in the stations. However, in September 2012, MoR issued guidelines for making provision of dustbins at a spacing of 50 meter at A1, A and B category stations under Minimum Essential Amenities.

In the absence of any criteria (prior to September 2012) for assessing the adequacy of dustbins at stations, Audit conducted a survey of 2439 passengers at 34 railway stations across 17 zones between August 2011 and March 2012. Audit observed that on an average 42 per cent of passengers opined in favour of adequate number of dust bins except in CR where 54 per cent passengers felt that adequate number of dust bins was not available.

We also conducted a joint inspection with the Railway Officials at 212 stations over 17 zones and observed that dustbins were either without lids or were overflowing (NCR, WR, SECR and NWR).

Thus, inadequacy of dustbins and their poor condition contributed to unhygienic condition at station premises. A survey of 2186 passengers at 34 railway stations across 17 zones indicated that on an average 50 per cent of passengers felt that the cleanliness at stations ‘requires improvement’. This opinion was buttressed by an in house ‘Passenger Satisfaction Survey’ (July 2012) by the Indian Railways Institute of Transport Management, Lucknow over Northern, North Central and North Eastern Railway to assess the standard of cleanliness. The survey of 696 passengers revealed that 39 per cent passengers rated the cleanliness of platforms as ‘Poor’.

#### **4.9.5.3 Toilets at Stations**

Non-availability of required number of toilets and their unusable condition was highlighted in Audit Report No. 6 of 2007 (Railways) of the Comptroller & Auditor General of India on ‘Cleanliness and Sanitation on Indian Railways’. In February 2007, MoR issued comprehensive instructions

<sup>43</sup> Audit Report No 6 of 2006-07, Union Government (Railways), Comptroller & Auditor General of India

specifying the revised norms<sup>44</sup> and quantum of minimum essential amenities at various categories of stations.

Test check in audit at 212 stations over 17 zones of the corrective action taken by the Railway Administration to provide adequate number of toilets at stations and also to maintain their cleanliness revealed that against the prescribed norms for provision of toilets, there was a shortfall of 66 per cent (Annexure XX). If the number of toilets that were not in use is also taken into account, the non-availability of toilets rises to 74 per cent. Further, the toilets were not provided as per norms at 63 stations (29 per cent).

Passenger survey of 2314 passengers at 207 stations over 16 zones<sup>45</sup> revealed that 42 to 65 per cent passengers in seven zones<sup>46</sup> felt that the number of toilets at stations were inadequate. In five zones<sup>47</sup>, 35 to 59 per cent passenger felt that the toilets at stations were very dirty.

Thus, absence of adequate number of toilets and filthy condition of the existing toilets not only deprived the passenger of a vital amenity but also created an unhygienic environment in station premises due to open defecation. MoR stated (March 2013) that toilets were being gradually converted into 'Pay and Use System' for good maintenance.

#### 4.9.6 Cleanliness and Sanitation on Trains

Ensuring cleanliness and sanitation on trains is a major challenge to the IR due to the large number of passengers travelling. This problem is multiplied manifold in long distances trains. IR has introduced a number of schemes to improve the level of cleanliness and sanitation available on trains. The efficiency of implementation of these schemes was examined and the audit findings are discussed below:

##### 4.9.6.1 Clean Train Station

IR launched the 'Clean Train Station' (CTS) Scheme in October 2002 for cleaning the interior of trains (coaches) especially toilets, aisles and vestibules by using state of-the-art equipment and machines. The Scheme was prescribed for limited mechanised cleaning attention by reputed and professional agencies to identified trains during their scheduled stoppages en route at nominated "Clean Train Stations". RB directly monitors the implementation of this scheme. Each Zonal Railway is required to undertake such schemes in their nominated stations<sup>48</sup> as mandatory activity.

<sup>44</sup> As per revised norm, minimum requirement of urinals/toilets were 12/12 (A 1 Category),10/10 (A Category),6/6 (B Category),4/2(C Category),4/4 (D Category) and 1/1 (E Category)

<sup>45</sup> Excluding Metro Railways as there are no public toilets

<sup>46</sup> SECR,WCR,SR,SWR,NEFR,CR and NR

<sup>47</sup> SECR,WCR,SR,MR and NR

<sup>48</sup> Stations required to be covered under CTS are nominated by the RB on the basis of proposal submitted by the Zones

In Audit Report No.6 of 2007(Railways) of Comptroller & Auditor General of India, it was observed that the CTS scheme was largely ineffective due failure in cleaning of all coaches, non-placement of trains on the nominated platforms, inadequate deployment of manpower and machineries and lack of coordination among departments.

PAC also commented<sup>49</sup> that the CTS scheme could not achieve its perceived goals. MoR apprised the PAC that various initiatives were being taken which included cleaning of trains at the originating point with high powered jet machines.

The progress of implementation of CTS and its effectiveness over 16 zones was examined. Our objective was to assess whether the assurance of the MoR had actually translated into an improvement in cleanliness. Our examination revealed the following:

- (i). Out of 30 stations identified under the CTS, it was implemented only in 28 stations (June 2012). Tender for the remaining two stations (Allahabad and Kanpur Central) in NCR were under process. In two stations (Bilaspur/SECR and Asansol/ER), CTS contract was terminated in October 2010 and November 2011 as it overlapped with the OBHS entrusted through separate contracts.
- (ii). In respect of CTS contract at five stations<sup>50</sup>, the currency of the contracts expired between June and October 2012. Since then, neither fresh contract was executed nor was the existing contract extended.
- (iii). Instances of shortfall noticed in five zones during the period 2010-11 are shown below:

Zone	No. of Stations	Name of Stations		No. of trains identified for cleaning under CTS	No. of trains actually cleaned under CTS	Shortfall in per cent
SCR	2	Guntakal	Vijayawada	66	50	24
NWR	1	Jaipur		36	26	27
SR	1	Erode Jn		4579	4048	11
WR	1	Ahmedabad		10350	9197	11
NER	2	Chappra	Gorakhpur	55	34	38

Audit thus observed an average shortfall of about 20 per cent in the number of trains actually cleaned under the CTS.

- iv) The trains cleaned under the CTS were only partially attended. Sleeper class coaches mostly remained unattended. For instance in SR, only 44 per cent of coaches were attended during the period April 2010 to

<sup>49</sup> 83<sup>rd</sup> Report (2008-09) on 'Cleanliness and Sanitation on Indian Railways'

<sup>50</sup> Itarsi Jn./WCR, Hubli Jn./SWR, Jhansi Jn./NCR, Balharshah/CR and Solapur Jn./CR

December 2010. The percentage of coaches which were not cleaned each month was in the range of 45 to 64 per cent. It was further observed that 37 per cent of toilets were not cleaned at Hubli (SWR) during 2010-11.

During joint inspection of trains attended through CTS project, audit observed that vestibules between coaches were littered with untreated food, used plastic plates, tea cups, etc. and thrown out on to the track. Toilets in most of the trains inspected were either choked or dirty. This opinion was buttressed by the 'Passenger Satisfaction Survey' conducted by Indian Railways Institute of Transport Management, Lucknow (July 2012) on the Northern, North Central and North Eastern Railway. The survey of 696 passengers revealed that 45 per cent passengers rated the cleanliness of the toilets as 'poor'. Regarding overall cleanliness in the coaches, 34 per cent passenger opined that the cleanliness in the coaches was 'good' and 28 per cent viewed it as 'poor'.



**Vestibules used for storing garbage**

On being pointed out (June 2012), MoR stated that hundred per cent coverage under CTS was not possible due to change in train schedules, change in nomination of platforms etc. The contention of the MoR was not acceptable as the percentage of trains not cleaned was high and not related to causes like change in train schedules and change in nomination of platforms. Further, MoR could not devise a suitable plan to ensure maximum coverage of trains/coaches within the existing constraints.

Thus, IR had only partially achieved the objective of maintaining cleanliness in trains mainly due to poor planning and inadequate monitoring at the zonal level. The deficiencies pointed out in our earlier report were still persisting, despite remedial action taken by MoR.

#### **4.9.6.2 On-Board Housekeeping Service**

With a view to improve the standard of cleanliness in trains particularly long distance trains, IR introduced 'On Board House Keeping Service' (OBHS) for mechanised cleaning of coach toilets, doorways, aisles and passenger compartments during the run of the trains. In October 2007, RB issued comprehensive guidelines for on-board attention



Human wastes in track covered with lime/bleaching powder at Ernakulam Town, SR

of cleaning of coaches and transferred the function from IRCTC<sup>51</sup> to the Mechanical Department. The guidelines, inter-alia, provided that the total outward/return journey of Mail/Express trains identified under the scheme must not be less than 16 hours. In July 2010, RB extended the scheme to platform return trains which have minimum journey of six hours. RB further emphasized that OBHS should result in perceptible improvement in the standard of cleanliness and hygiene in trains and a system of periodic review of contractors' performance should be put in place.

Scrutiny of records relating to implementation of OBHS in 16 zones<sup>52</sup> revealed the following:

- (i). Out of 554 pair trains identified for implementation of OBHS, tenders for OBHS were finalised for only 350 pair trains (63 per cent). Out of 16 zones, the percentage of non-implementation in five zones (WCR,NR, NWR, NEFR and SR) ranged between 46 to 100 per cent (**Annexure XXI**).
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Howrah Barbil Jan Shatabdi/12021 under OBHS
- (ii). Based on average Passenger Satisfaction Index (PSI) of a train on round trip basis, an amount of ₹ 0.53 crore was recovered as penalty between September 2010 and July 2011 from the contractors responsible for OBHS at Santragachi and Tatanagar station (SER).

Audit conducted a joint inspection with the railway officials in 88 trains over 17 zones to assess the efficiency and effectiveness of OBHS. The following general deficiencies were observed:

- (i). Absence of adequate publicity through public address system in the station at the beginning of the journey about the presence of the Executive Housekeeper for cleaning and sanitation work in the running train;
- (ii). The terms & conditions of OBHS agreement provides for disposal of garbage at notified stations en-route. It was observed that staff did not turn up for collection of garbage at the notified stations;
- (iii). Sleeper class coaches were mostly left unattended and;
- (iv). Lack of adequate supervision by Railway officials in respect of activities of staff involved in OBHS.

<sup>51</sup> IRCTC stands for Indian Railway Catering and Tourism Corporation

<sup>52</sup> Excluding Metro Railways as Metro Trains do not fulfill the criteria for coverage under OBHS

Survey of 3950 passengers conducted by Audit between August 2011 and March 2012 in 88 trains over 16 zones revealed that on an average 41 percent of AC and Non AC passengers were not satisfied with the performance of OBHS and felt that OBHS 'Needs improvement'.

Thus, the pace of implementation of OBHS in identified trains was slow. The performance of OBHS and the desired standard of cleanliness on trains through OBHS could not be achieved due to lack of adequate supervision by Railway officials.

#### **4.9.6.3 Toilets in Trains**

Sanitation generally refers to the provision of facilities for disposal of human wastes. It deals with maintenance of hygienic conditions through services such as collection and disposal of solid and liquid waste. The toilet in trains is one of the biggest source of environmental pollution.

Despite over two decades of field trials, MoR had not been able to finalise a model of toilet suitable to the Indian environment. Audit findings on this issue was highlighted in Audit Report No. 21 of 2012-13 (Railways) of Comptroller & Auditor General of India on 'Environment Management in Indian Railways- Stations, Trains and Tracks'.

#### **4.9.7 Health and Hygiene**

Maintaining a healthy and hygienic environment on sustainable basis to millions of passenger during their journey has remained a challenging task for the IR. Basic hygiene particularly appears to be the biggest concern in the minds of frequent travelers. Basic hygiene here would encompass quality of linen supplied to passengers and effectiveness of pest and rodent control.

IR also provides its passengers with food both at the stations and in its trains through its own caterers, contractors and authorized vendors. To a large extent, the catering on IR has been outsourced to IRCTC. Apart from food court, food plaza and fast food units, IRCTC supply food to passengers through its base kitchens and mobile catering services. IRCTC have their own system in place for monitoring and quality control of food.

##### **4.9.7.1 Previous Report**

Audit Report No.6 of 2007(Railways) of Comptroller & Auditor General of India had highlighted deficient contract management and weak monitoring along with failure to set quality benchmarks for the performance of the contractors which led to compromise in the quality of work done.

MoR in their action taken note stated that instructions had been reiterated to all Zonal Railways to ensure effective pest and rodent control mechanisms in the trains through professional agencies. Regarding linen management, MoR stated that the Zonal Railways had been suitably advised. In January 2010 and December 2010, MoR issued comprehensive guidelines on linen management and pest control respectively.

#### 4.9.7.2 Linen Management

Availability of clean and hygienic linen supplied to passengers on board largely depends upon the quality of washing besides replenishment with new linen on age / condition basis. In December 2009, RB decided to entrust the comprehensive function of linen management on trains including washing, storage, supply and distribution of linen kit in trains etc., hitherto being managed by different departments, to the Mechanical (C and W) Department of the Railways as a single window agency. In zones having no provision for mechanised laundry, washing of linen was entrusted to outside agencies. Further, in January 2010, MoR issued comprehensive guidelines for linen management in condemnation of linen, stock verification etc.

The efficiency in linen management with reference to the instructions issued by MoR was examined. A scrutiny of records revealed the following:

- I. The test check of linens prescribed at different levels by the RB was not being followed in the field offices of the zones as detailed below:
  - (i). No records were being maintained to show the details of test check conducted. Inspection at washing plant is not being conducted in the absence of specific clause in the existing contract, which is valid till November 2012 (Tiruchirappalli /SR);
  - (ii). Shortage in test check<sup>53</sup> by Junior Administrative (JA) grade officer and Assistant /Senior Scale officers (Nanded and Secunderabad/SCR, Pune/CR);
  - (iii). No inspection was done by JA Grade Officer/Assistant Scale Officer/Senior Scale Officer while receiving the washed linen in the depot (Rourkela/SER and ECoR) and;
  - (iv). Quarterly stock verification of the store depot was not being done (NCR).
- II. Penalty amounting to ₹ 66.04 lakh was imposed for not adhering to quality norms (NWR- ₹ 0.39, NR- ₹ 16.15, ER- ₹37.10 and SER- ₹12.34). Washed linen to the extent of 39.21 and 23.16 percent was rejected as it did not meet the quality norms at the supervisory level at LTT<sup>54</sup> and Pune (CR) Stations respectively. Penalty<sup>55</sup> was also imposed on 30 occasions during 2010-11(CR).

A joint inspection was conducted with the Railway Officials in 88 trains over 17 zones to check the quality of linen supplied. The inspections observed the following:

<sup>53</sup> Two percent test check of washed linen in the depot once in every quarter by Junior Administrative grade officer, once in every month by Asst Scale Officer and on every consignment while receiving by the Supervisor.

<sup>54</sup> LTT stands for Lokmanya Tilak Terminus

<sup>55</sup> Quantum of penalty imposed could not be ascertained

- (i). Linen supplied was dirty, torn /tattered and had outlived its prescribed life (SECR, ECoR, SR, ECR and SWR)
- (ii). Tags indicating name of manufacturer, month and year of manufacturing were not available on each pillow cover and hand towel. In absence of tag, it was not possible to ascertain whether the linen supplied was within its prescribed life (NCR<sup>56</sup>, SCR, SECR, ECoR, SWR and WR).

Survey of 1595 passengers conducted by Audit between August 2011 and March 2012 over 15 zones<sup>57</sup> revealed that on an average 43 per cent passengers felt that the general cleanliness of linen 'Requires improvement'; 48 per cent passengers felt that 'sometimes' linen was being supplied in torn or damaged condition.

Matter was brought to the notice of the MoR in June 2012. MoR stated (November 2012) that the linen were being supplied to the passengers as per the specification approved by the Board. Contention of the MoR was not tenable in view of the above deficiencies in linen management.

Thus, the lack of efficient control on monitoring mechanism specified by the MoR resulted in frequent supply of unhygienic and poor quality of service to its passengers. The results of the survey conducted by the Indian Railways Institute of Transport Management in July 2012 in some major stations (A1 and A category) over Northern, North Central and Northeastern Railways support the audit conclusion as it revealed that 45 per cent passengers felt that the quality of linen supplied was 'Poor'.

#### **4.9.7.3 Setting up of automated mechanized laundries**

To improve upon the standard of cleanliness and hygiene in linen being supplied to the passengers in trains, RB issued guidelines (December 2009) to Zonal Railways for setting up of mechanized laundries. Minister for Railways during her Budget speech (2011), proposed to set up 3 mechanized laundries at Nagpur, Chandigarh and Bhopal in addition to the 19 others already commissioned or being set up at various places across all zones.

A review in Audit revealed that out of 54 mechanized laundries<sup>58</sup> proposed to be set up in 16 zones, 15 laundries (27 per cent) have so far been commissioned in eleven zones<sup>59</sup> (May 2012). For seven mechanized laundries in six zones<sup>60</sup>, only contract has been placed and the progress of work was very insignificant. Slow progress in setting up of mechanized laundries was indicative of lack of urgency in its initiatives in improving the standard of cleanliness and hygiene. This, in turn, led to large scale outsourcing of

<sup>56</sup> Kerala express (No. 12625)

<sup>57</sup> Except Metro Railways and Eastern Railways.

<sup>58</sup> Departmental-31, BOOT (Built, Operate, Own and Transfer) Model-18, BOO Model-2 and reconsideration demanded by the concerned zonal railways-3

<sup>59</sup> CR, ER, SR, NEFR, NR, SCR, SER, WR, SECR, WR and ECR

<sup>60</sup> CR, ECR, SECR, WR, SER and SWR

cleaning of linen and in increased passenger dissatisfaction besides compromising health risk.

Thus, the action plan and initiatives of IR for setting up of mechanized laundries to improve the quality of washed linen supplied to passengers was not aligned with its policies and guidelines.

#### **4.9.7.4 Pest Control**

For improving the performance of pest control measures, MoR in their Action Taken Note had stated that the instructions to Zonal Railways had been reiterated to ensure effective pest and rodent control in trains through professional agencies. MoR also stated that the Zonal Railways had been directed to launch special drives and depute officials for incognito checks in trains

In 2010, RB issued comprehensive guidelines/instructions to control the menace of pest and rodents in trains. These instructions specified the frequency of pest control treatment, quality of insecticides to be used etc.

Scrutiny of records relating to pest control measures undertaken by the IR disclosed the following:

- A shortfall in the periodicity of pest control as per norms prescribed was observed in ER, SER, CR, NCR and NWR.
- A penal clause had been included in the contract about the presence of cockroaches and rodents in coaches in ER. During 2010-11 penalties amounting to ₹ 7.66 lakhs was imposed on firms in two divisions<sup>61</sup> and;
- In ECR, though pest control measures were taken in all the selected trains, pesticides and chemicals used were not as per specification approved by the Central Insecticide Board.

During the joint inspection of 88 trains over 17 zones, Cocoons/Cockroaches were observed in AC and Non-AC Coaches of selected trains in six zones<sup>62</sup>.

A passenger survey of about 1600 AC passengers and 4000 Non-AC passengers over 16 zones revealed that on an average 50 percent AC passengers and 47 percent Non-AC passengers felt that the pest control measures 'Needs Improvement'. Further, 24 percent AC passenger and 18 percent Non-AC passengers stated that they had always seen cockroaches/rats etc. in trains.

Matter was brought to the notice of the MoR in June 2012. MoR stated (November 2012) that the pest control treatment were being carried out in all the select trains periodically as per the norms laid down by the Board. Contention of the MoR was not tenable as there were a large number of

<sup>61</sup> Howrah (₹ 6.89 lakh) and Sealdah (₹ 0.77 lakh)

<sup>62</sup> SCR, NCR, SER, SECR, WR and ECoR.

instances of cocoons/cockroaches being observed in AC and Non-AC Coaches of test checked trains in six zones<sup>63</sup>.

Thus, despite highlighting the ineffectiveness of pest control in our earlier Audit Report and issue of comprehensive guidelines, IR has not been able to overcome the menace of pest and rodents.

#### 4.9.7.5 Food Adulteration

In order to ensure standards of hygiene are maintained, the Prevention of Food Adulteration Act, 1954 and Prevention of Food Adulteration Rules, 1955 were passed. These rules direct that inspection of premises as prescribed by the Food (Health) Authority to satisfy himself that the conditions of the licenses are being observed, investigate any complaint and procure and analyse if necessary, samples of food which are being manufactured, stocked or sold or exhibited for sale in contravention of the provisions of the Act. Based on this Act the MoR framed guidelines for ensuring quality control of the food being supplied by them /their contractors to their passengers. The standing quality control (QC) check prescribed<sup>64</sup> by the MoR, provides for regular inspection of all eating places by the Medical Officer and Health Inspectors falling under their jurisdiction, annual medical examination of all Food handlers, collection and analysis of foods samples at Railway Food Analytical laboratories.

The above Acts have been replaced with the enactment and notification of the Food Safety and Standards Act 2006 and Food Safety and Standards Rules 2011 with effect from August 5, 2011. The detailed guidelines regarding sampling and tests to be conducted in Railways under the new Act are yet to be framed. However, the results of the food samples collected at stations and tested as per the provisions laid down in the earlier Acts and also as prescribed by the MoR formed the basis of our observations.

Our study in 212 stations across 17 zones revealed the following deficiencies:

- (i). Testing of food samples as per PFA Act was not done during the period of review in 41 stations (19 per cent) over 11 zones. Even in major stations like Howrah and Sealdah (ER), shortage in sample testing of food under quality control check was noticed during 2006-10;
- (ii). Out of 14763 samples required<sup>65</sup> to be tested under PFA Act, only 7309 samples (49 per cent) were collected and tested. Of them, 337 samples (4 per cent) were found adulterated or sub-standard;
- (iii). Out of 17867 food samples required to be checked as per quality control check as prescribed<sup>66</sup> in the Indian Railway Medical Manual,

<sup>63</sup> SCR,NCR,SER,SECR,NEFR and ECoR

<sup>64</sup> Para- 1010 of the Indian Railway Medical Manual Volume II

<sup>65</sup> Two samples per month per station

<sup>66</sup> At least one/two/four samples should be collected by each Health Inspector

only 15447 samples were tested. On analysis, 868 samples (five per cent) were found sub standard.

Passenger surveys of 3382 Non-AC passengers and 1407 AC passengers conducted by Audit between August 2011 and March 2012 in 88 trains over 17 zones revealed that 29 per cent of Non- AC passengers and 25 per cent AC passengers felt that the quality of food was 'Poor'. Further, 54 percent AC passengers and 50 per cent Non-AC passengers opined that the quality of the food 'Requires Improvement'. This view was buttressed by a similar survey conducted by the Indian Railways Institute of Transport Management in July 2012 at some major stations (A1 and A category) which revealed that 31 per cent passengers felt that the quality of food was 'Poor'.

Thus, though the cases of adulterated or sub-standard food were not significant, there was lack of adequate monitoring in compliance with the statutory provisions including extant provisions of MoR for testing of samples. Despite imposition of penalty for adulterated or sub-standard foods, quality of food supplied had not been improved as expressed by the passengers.

#### **4.9.7.6 Indian Railways Catering Policy 2010**

The main objective of the New Catering Policy 2010 of IR is to provide hygienic, good quality and affordable food to the traveling passengers by adopting best trade and hospitality industry practices. As per this Policy, IR shall progressively take over management of all mobile catering services including base kitchens and mobile catering through departmental catering in a phased manner. On expiry of existing contracts presently being managed by IRCTC, fresh contracts will be awarded by the zonal Railways.

The new catering policy inter-alia provides for quality assurance programme and priority for solid waste management. The policy also emphasized the need of provision of suitable space in Rajdhani and Duronto trains for stacking and service of meals and installation of catering equipments and trolleys. This would eliminate the usage of vestibules and area around the toilets presently being used for this purpose and ensure hygienic services.

PAC in their 83<sup>rd</sup> Report (2008-09) commented on the various complaints regarding lack of hygiene and maintenance of base kitchens. PAC recommended that the issue of separation of garbage into degradable and non-biodegradable should be seriously taken care of. In response, MoR stated that IRCTC had been suitably advised to take corrective measures in this regard.

Review of the status of implementation of the New Catering Policy and improvement on the ground as a result of the assurance of MoR on PAC's observation revealed that the new policy had not been fully implemented in any of the zones and the process of taking over the Catering Services from IRCTC is still in a transition phase. Though some mobile and static units were taken over from IRCTC, they were continued with the same catering contractor with IRCTC.

Joint Inspection with the Railway Officials at 212 stations and in 88 trains over 17 zones to assess the extent of implementation of new catering policy generally revealed the following:

- The standard of cleanliness inside the pantry car including kitchen and store room of the selected trains was very poor;
- The capacity of the dustbins provided in pantry cars was found inadequate. Vestibule area was being utilized for garbage dumping by the catering staff in trains provided with pantry car. Vestibules and the area around the toilets were being used for stacking and making arrangement for distribution of food to passengers leading to unhygienic conditions;
- In NER, waste generated on trains were being thrown on to the tracks by the catering staff just before approach of the terminating station. Railway Administration (NER) stated that the pantry car contractors had been suitably instructed to collect the garbage in dustbins and unload them at the nominated stations.
- In all stations, separate dustbins for segregation of bio-degradable and non-biodegradable waste were not provided in static food stalls;
- In CR, base kitchen at Ballarshah station was found dirty and rats were seen in the kitchen store room. The Railway Administration had not framed any Quality Assurance Programme ;
- In SER, all the mini pantry cars attached with every coach of 12021 Howrah-Barbil Jan Shatabdi Express were in a dilapidated condition. Essential kitchen appliances like Freeze, Hot Case, Electric Switch Board, Water Boiler, Bottle cooler, Geyser and other equipments were not working properly.

Thus, the MoR has not been successful in improving standards of cleanliness and hygiene while catering directly to passengers.

#### **4.9.7.7 Drinking Water**

Inadequacy in drinking water supply at stations was brought out in Audit Report No.6 of 2007 (Railways), Comptroller & Auditor General of India. PAC also observed<sup>67</sup> that the inadequate water supply compounded by dirt and unhygienic surroundings made not only the amenity unfit for use. PAC, therefore, desired that the number of taps be increased expeditiously in a phased manner at all stations throughout the country. Subsequently, in January 2007, RB prescribed a minimum requirement of 12 taps per platform for major stations (category A1, A and B) and six taps per platform for category C and D stations.

<sup>67</sup> 83<sup>rd</sup> Report (2008-09) on 'Cleanliness and Sanitation on Indian Railways'

Test check in Audit in respect of measures adopted by IR for providing adequate and clean drinking water to passengers at Stations revealed the following:

- (i). In two zones (SR and ER), the total number of drinking water taps available at the selected stations were less than the prescribed norms;
- (ii). In six zones (SCR, SER, SECR, ECoR, NEFR and ER<sup>68</sup>) Reverse Osmosis plant as advised (November 2011) by the RB was not provided in any of the stations test checked. Water supplied at stations was treated by manual chlorination process;

Provision of adequate water supply was also checked during Joint Inspection and it revealed the following:

- (i). Though provision for 20 taps had been made in Coimbatore North (A1 category station in SR), no water connection had been provided. Instances of water booths without taps were also found in six out of 14 stations test checked in SR. At Rameswaram and Tiruvallikeni stations (SR), the sinks were found clogged, creating unhygienic condition and making them unusable;
- (ii). In NCR and WR, the only RO plant installed at Kanpur station and Valsad was found out of order.

Further, out of 2468 passenger surveyed by Audit over 17 zones, 42 per cent passengers felt that the tap water might not be safe for drinking and 46 per cent passengers felt that bottled water was safer. In all zones except SER, more than 30 per cent passengers responded that they never used tap water.

Thus, the initiatives and performance of the IR in providing adequate and safe drinking water was not commensurate with the commitments made before the PAC. The norms laid down by the RB were not implemented. Lack of maintenance of even the existing facilities was indicative of ineffectiveness of the system of internal checks put in place.

#### 4.9.7.8 Quality of drinking water

As per extant instructions<sup>69</sup>, Health Inspectors should check the presence of residual chlorine daily at various distribution points<sup>70</sup> randomly and record of the same should be kept. Health Inspectors should also collect water samples for bacteriological examination periodically and send water samples for chemical examination once in six months.

We examined the compliance to the extant instructions in respect of prescribed frequency of bacteriological testing and chemical analysis and their results at 212 stations over 17 zones. The result of the study is detailed in **Annexure XXII**.

<sup>68</sup> In ER, water was treated by both manual and auto chlorination and rapid sand filtration

<sup>69</sup> Para 913 and 914 of Indian Railways Medical Manual Volume II

<sup>70</sup> platforms, refreshment rooms, waiting halls, hospitals, schools and in the Railway colonies (preferably from farthest taps in the distribution systems)

Review of extent of unfit per cent<sup>71</sup> of water samples (**Annexure XXIII**) collected at 212 stations over 17 zones revealed that the maximum instances of unfit samples of water were noticed in respect of residual chlorine. There was also an increasing trend of instances of unfit samples. ECR, SWR and SER recorded the maximum number of cases of unfit samples (exceeding 50 per cent) particularly at two stations – Sagoli/ECR and Goraya/NR where all samples collected during 2010-11 were found unfit. A high percentage of unfit samples were also observed at New Jalpaiguri and Siliguri Junction of NEFR.

MOR stated that efforts were being made to cover all the stations as per the prescribed frequency in respect of bacteriological examination of water being supplied. MOR also stated that there was no shortfall in respect of chemical analysis in terms of Railway Board's policy on chemical analysis of water (April 2001). The contention of the Ministry was not tenable in view of the deficiencies in observing prescribed frequency.

Thus, weakness in monitoring compliance with the extant instructions on the part of both RB and the Railway Administrations resulted in substantial shortfall in the collection of samples for testing. There was an increasing trend in the percentage of unfit samples collected from different stations across zones.

#### **4.10 Conclusion**

On the basis of the recommendations made by the PAC, the MoR had initiated measures to improve the level of cleanliness and sanitation on stations and trains. However these measures were not translated into concrete improvement in the level of cleanliness on both stations and trains. The deficiencies and concerns pointed out in our earlier Audit Reports were only partially addressed. Weak monitoring of the quality of washed linen supplied to the passengers and slow progress in setting up of automated mechanised laundry had not only resulted in large scale outsourcing of washing of linen but also contributed passenger dissatisfaction. Lack of proper monitoring of the implementation of the guidelines/instructions had telling effect on the effectiveness of the pest and rodent control measures initiated by the IR.

Further, IR's efforts in implementing New Catering Policy 2010 in providing hygienic, good quality and affordable food to passengers and improving standards of cleanliness at stations were largely ineffective. Assurance to PAC for segregation of bio-degradable and non-biodegradable wastes was also not fulfilled.

Remedial measures initiated by the IR to ensure adequate safe drinking water were inadequate. IR also failed in implementing laid down norms for making provision of water taps and maintaining the existing facilities. The high rate

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<sup>71</sup>Unfit percent refers to percentage of samples found unfit with reference to the total number samples collected and tested during the year at the selected station.

of unfit water samples was indicative of deficiency in the remedial measures taken by the Railway Administration.

#### **4.11 Recommendations**

- IR needs to frame a time bound action plan at the zonal level for effective implementation of its policies and guidelines.
- IR needs to strengthen its monitoring mechanism especially at the zonal level and ensure strict compliance of guidelines/instructions issued by the RB for achieving an improvement in the levels of cleanliness.
- IR needs to expedite implementation of bio-toilets in coaches to prevent open defecation and maintenance of hygienic surroundings.
- IR to effectively monitor the quality of washed linen supplied to passenger and initiate pest and rodent control mechanism.
- Implementation of New Catering Policy 2010 may be expedited and strengthen supervision/monitoring mechanism for effective implementation of the policy to ensure improvement in the standard of cleanliness and hygiene while catering to rail users.
- IR to strengthen its monitoring mechanism to ensure strict compliance of its guidelines/instructions for ensuring provision of safe drinking water.

IR needs to regularly review and monitor the fulfilment of the various commitments made in the Citizen's Charter as a Service Provider, ensure discharge of its responsibility by the appropriate design and implementation of norms, benchmarks, Quality Assurance and Quality Control.

**(VIJAYA MOORTHY)**

**New Delhi**

**Deputy Comptroller and Auditor General**

**Dated:**

**Countersigned**

**(VINOD RAI)**

**New Delhi**

**Comptroller and Auditor General of India**

**Dated:**