

# Report of the Comptroller and Auditor General of India on Construction of toilets in schools by CPSEs



Union Government (Commercial) Ministry of Power Ministry of Coal Ministry of Petroleum and Natural Gas Report No. 21 of 2019 (Compliance Audit)

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for the year ended 31, March 2018

Union Government (Commercial) Ministry of Power Ministry of Coal Ministry of Petroleum and Natural Gas Report No. 21 of 2019 (Compliance Audit)

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# PREFACE

This Report of the Comptroller and Auditor General of India has been prepared for submission to the President of India under Article 151 of the Constitution of India for being laid before the Parliament. The audit has been conducted in conformity with the Auditing Standards issued by the Comptroller and Auditor General of India.

The Prime Minister of India announced (15 August 2014) that all schools in the country should have separate toilets for boys and girls within a year and called upon the corporate sector to give priority to this national endeavour as part of their Corporate Social Responsibility (CSR). Corporate Sector constructed toilets in government schools with their CSR fund under Swachh Vidyalaya Abhiyan (SVA).

Given the significance of the SVA and its widespread impact, an audit of "Construction of toilets in schools by CPSEs" was taken up. The Report highlights few concerns noticed in implementation of the Abhiyan and also addresses the financial impact.

Audit wishes to acknowledge the cooperation extended by NTPC, PGCIL, NHPC, PFC, REC, ONGC and CIL (including its subsidiaries), Principals/Students of respective schools, Ministry of Power, Ministry of Coal and Ministry of Petroleum & Natural Gas in providing records, information and clarifications in completing the audit.

# **Executive Summary**

# Background

Norms and standards for a school under the Right of Children to Free and Compulsory Education Act 2009 (RTE Act) prescribed separate toilets for boys and girls. There were gaps in achieving this objective due to mainly poor maintenance of toilets, lack of dedicated funds and poor water availability inside toilets. To achieve the objective of separate toilets for boys and girls within a year, Ministry of Human Resources Development (MHRD) launched (1 September 2014) Swachh Vidyalaya Abhiyan (SVA) and sought cooperation of other Ministries to impress upon the Central Public Sector Enterprises (CPSEs) under their administrative control to participate in the project for construction of toilets in government schools.

53 CPSEs participated in this project and constructed 1,40,997 toilets as per MHRD. Ministry of Power (MoP), Ministry of Coal (MoC) and Ministry of Petroleum & Natural Gas (MoPNG) extended significant support through CPSEs under their administrative control. Seven CPSEs of these three Ministries constructed more than 5,000 toilets each and 1,30,703 toilets in total, at a cost of ₹2,162.60 crore. Audit examined the records pertaining to construction of toilets by these seven CPSEs {NTPC, PGCIL, NHPC, PFC, REC, ONGC and CIL (seven subsidiaries)} and also conducted physical survey of a sample of 2,695 toilets across 2048 schools in 15 States.

# Highlights

# **Construction of toilets-Survey results**

# • Non-existing and partially constructed toilets

During the survey of 2,612 toilets reported by CPSEs to have been constructed, 200 toilets were not found constructed in the respective schools and 86 toilets were found to be only partially constructed. The non-existing and partially constructed toilets constituted 11 *per cent* of toilets surveyed.

Out of 1,967 coeducational schools surveyed by Audit, 99 had no functional toilets while 436 had only one functional toilet. The objective of providing separate toilets for boys and girls was not fulfilled in these 535 cases (27 *per cent*).

#### (*Paragraph 2.1 and 3.1.2*)

#### • Toilets constructed, but not in use

Out of 2,326 constructed toilets surveyed, 691 (30 *per cent*) were found not in use mainly due to lack of running water, lack of cleaning arrangements, damages to the toilets and other reasons like use of toilets for other purposes, toilets locked up etc.

#### (Paragraph 2.2.2)

#### • Lack of running water and other facilities

As per SVA, the toilets were to be provided with running water, hand washing facilities and proper/ regular maintenance so as to effectively change the behaviour of beneficiaries. During the survey, 1,679 out of 2,326 constructed toilets (72 *per cent*) were not found to have running water facility inside toilets. Further, hand washing facility was not available in 1,279 out of 2,326 constructed toilets (55 *per cent*). Audit also noticed defective construction of toilets, non-provision of foundation/ramp/staircase and damaged/overflowed leach pit, which led to ineffective use of toilets.

### (Paragraph 2.2.3 to 2.2.8)

### • Maintenance arrangements for toilets

The Administrative Ministries directed the CPSEs to maintain the toilets constructed by them for three to five years and book the annual expenses to their CSR budget. During the survey, Audit noticed that proper maintenance/ sanitation was lacking in 1,812 out of 2,326 toilets. 715 out of 1,812 toilets were not being cleaned. 1,097 toilets were being cleaned twice in a week to once in a month. The norm was for daily cleaning at least once. Thus, 75 *per cent of* selected toilets were not maintained hygienically. Cases of non-provision of soap, bucket, cleaning agents and disinfectants in toilets and inadequate cleanliness of pathway were also noticed.

## (Paragraph 2.2.9)

# Monitoring

# • Inadequacies in identification of schools

The CPSEs were required to conduct the survey in identified schools before starting construction of toilets. PFC and CIL (Subsidiary-SECL) did not conduct the survey while other CPSEs which conducted the survey did not cover all the schools identified by them. As a result, they were not able to construct the required number of toilets and resources were not optimally utilised.

# (Paragraph 3.1.1 and 3.1.2)

#### • **Reporting of completion of toilets**

MoP/ MoC/ ONGC declared construction of 1,30,703 toilets by the selected seven CPSEs on time (i.e. 15 August 2015). However, as per MHRD data and the Swachhta Status Report (2016) of the National Sample Survey Office, under the Ministry of Statistics and Programme Implementation, the CPSEs constructed all the approved toilets as of 1 March 2016 and the number of toilets completed by these seven CPSEs was 1,19,530. Comparison of the two reported figures indicated that the figures for number of toilets completed was overstated by 11,173.

(Paragraph 3.2.1)

# • Completion of toilets constructed by CPSEs

Though the CPSEs reported completion of toilets, completion certificates were not provided to Audit in 60 *per cent* of cases. In the remaining 40 *per cent* where completion certificates were provided, only 33 *per cent* cases had toilets completed within the due date. Audit noticed that the award activity by the seven CPSEs could be completed only by May 2015. Given that construction time of four months was needed, compliance of Government directive to complete all toilets by 15 August 2015

could not have been ensured by the CPSEs. The CPSEs had nevertheless reported completion of all the toilets by 15 August 2015 which was not actually the case.

(Paragraph 3.2.2)

# **Other Issues**

# • Absence of basic amenities in toilets designed by CPSEs

As per the Handbook on SVA, a toilet unit should have one WC and three urinals. The toilets were also required to have hand washing facility. MHRD had asked the CPSEs to ensure running water in the toilet. NHPC, PFC, ONGC and CIL (Subsidiaries-other than CCL) planned for these basic amenities but NTPC, REC, PGCIL and CIL (subsidiary-CCL) did not plan for one or more of these basic amenities, in the toilets.

(Paragraph 4.1)

# Use of prefab structures for building toilets

MoP/ MoC instructed the CPSEs that the toilets constructed under the Project be of either conventional (brick and mortor) or precast (concrete slabs) technology. MoP further directed the CPSEs to ensure that no prefabricated structures be used for constructing toilets. Yet, PFC, REC, NTPC and CIL (Subsidiary-NCL) used pre-fabricated structures in 42 *per cent* of the toilets constructed by them, which involved an extra expenditure of ₹150.46 crore, dilution in durability of toilets and non-compliance with Ministries' direction.

# (Paragraph 4.2)

# • Award of Contracts on nomination basis with higher implementation charges

As per directions of CVC, the award of contracts on nomination basis was to be resorted to only under exceptional circumstances. MoP/MoC also directed (21 November 2014) their CPSEs that the work be awarded following competitive bidding process only. Four CPSEs viz. PFC, PGCIL, ONGC, and CIL (subsidiaries NCL, CCL and SECL) outsourced the Project implementation work, including award of contracts, to other agencies while REC entrusted the work to its wholly owned subsidiary, REC Power Distribution Company Ltd. The appointment of implementing agencies was done on nomination basis which was not in accordance with CVC's directions. Further, the agencies were paid implementation charges at 10 to 15 *per cent* of completion cost which were high as compared to 2.5 to 3 *per cent* paid to State Government Agencies (SGAs). This involved an extra expenditure of ₹49.30 crore.

# (Paragraph 4.3 and 4.3.1)

# Recommendations

- The Ministries may look into the issue of non-existing/ incomplete toilets, which were claimed as constructed. The misreporting regarding timely completion of toilets and discrepancies in figures of completed toilets may also be examined to ensure availability of required toilets.
- The CPSEs/Ministries may address absence of basic amenities in the toilets like running water, hand wash facility, urinals, drainage of waste water, etc.

- The CPSEs/Ministries may sort out the issue of regular maintenance of toilets to ensure their sustained usability.
- During execution of such projects, monitoring may be done through Geo tagged photos.
- Since Audit survey covered 2 *per cent* of total toilets, the CPSEs are advised to review/survey the remaining 98 *per cent* toilets and take appropriate action for rectification of deficiencies.

# Chapter-I Introduction

# 1.1 Background

Norms and standards for a school under the Right of Children to Free and Compulsory Education Act, 2009 (RTE Act) prescribed separate toilets for boys and girls. These facilities were also envisaged in Central Government Programmes such as Sarva Shiksha Abhiyan (SSA) and Rashtriya Madhyamik Shiksha Abhiyan (RMSA), launched in 2001 and 2009, respectively. However, there were gaps in achieving this objective due to poor maintenance of toilets, lack of dedicated funds, poor water availability inside toilets, etc. As per data of September 2013 available with Ministry of Human Resource Development (MHRD), out of 10,94,470 schools, 1,03,000 girls schools and 64,500 boys schools did not have toilets and the number of schools with dysfunctional toilets was 1,80,261.

The Prime Minister of India announced (15 August 2014) that all schools in the country should have separate toilets for boys and girls within a year and called upon the corporate sector to give priority to this national endeavor as part of their Corporate Social Responsibility (CSR). To achieve this objective, MHRD launched (1 September 2014) Swachh Vidyalaya Abhiyan (SVA) and sought cooperation of other Ministries to impress upon the Central Public Sector Enterprises (CPSEs) under their administrative control to participate in the project for construction of toilets in government schools.

# **1.2** Mandate of SVA and role of CPSEs under the Project

The CPSEs participated in the project for construction of toilets in Government schools by deploying funds from their CSR budget. As per the Handbook on SVA brought out by MHRD, the essential elements of Swachh Vidyalaya include separate toilets for boys and girls, with preferably one toilet unit {one toilet (water closet) plus three urinals} for every 40 students. After discussions between MHRD, Ministries and CPSEs, it was decided (November 2014) that the CPSEs would construct at least one functional toilet each for girls and boys, with running water facility in each Government school within one year.

The CPSEs were asked by MHRD/ Administrative Ministries to select the schools, where they intended to participate in the construction of toilets, from a database of government schools/toilets maintained by MHRD as of 30 September 2013. The CPSEs were required (September-October 2014) to visit the schools selected by them to assess the requirement of toilets and submit the updated data to MHRD/ Administrative Ministries. The CPSEs had the option, if they chose, to provide improvements in the toilet design. The CPSEs were required to ensure that sufficient CSR fund was made available and were also asked to maintain the toilets constructed by them for three to five years, using their CSR budget. 53 CPSEs participated in this project and constructed 1,40,997 toilets<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> As per MHRD and the Swachhta Status Report (2016) of the National Sample Survey Office, under the Ministry of Statistics and Programme Implementation

Ministry of Power (MoP), Ministry of Coal (MoC) and Ministry of Petroleum & Natural Gas (MoPNG) extended significant support through CPSEs under their administrative control. Seven CPSEs of these three Ministries constructed more than 5,000 toilets each and 1,30,703 toilets in total, at a cost of ₹2,162.60 crore, as per MoP/ MoC/ONGC data, as detailed in Table 1.

SI No.	Name of the CPSE	Administrative Ministry of the	Toilets constructed	Total cost	Average Cost per Toilet *					
110.		CPSE	(Number)	(₹ in crore)	(₹)					
(1)	(2)	(3)	(4)	(5)	(6)=5/4*					
(1)	(2)	(3)	(4)	(3)	1,00,00,000					
1	Coal India Ltd (seven subsidiaries)	MoC	54,012 <sup>2</sup>	1,191.54	2,20,606					
2	NTPC Ltd	MoP	29,441	3,37.81	1,14,741					
3	REC Ltd	MoP	12,379	1,51.92	1,22,724					
4	Power Grid Corporation of India Ltd	MoP	9,983	65.14	65,251					
5	PFC Ltd	MoP	9,383	197.59	2,10,583					
6	Oil and Natural Gas Corporation Ltd	MoPNG	7,958	105.37	1,32,408					
7	NHPC Ltd	MoP	7,547	113.23	1,50,033					
	Total 1,30,703 2,162.60									
* Toilet type and designs adopted by the CPSEs were different.										

Table 1Particulars of toilets constructed by CPSEs under MoP, MoC and MoPNG

# 1.3 Audit Objective

The objectives of this compliance audit were to assess:

- efficiency in implementation of project by selected CPSEs,
- effectiveness of the project in attaining its goal.

# 1.4 Scope of Audit

Audit conducted field survey of selected toilets to assess availability, quality and usability of the constructed toilets.

Audit also examined (i) the procedure adopted by the CPSEs for implementing the project (ii) compliance of directions from Cabinet Secretariat, MHRD, MoP/MoC and MoPNG (iii) compliance of guidelines of Central Vigilance Commission (CVC) and internal guidelines of CPSEs (iv) award of contract to implementing agencies and award of construction work (v) monitoring of work progress and (vi) post construction arrangement for maintenance of toilets.

# 1.5 Audit Sample

Toilets were selected through multi stage sampling method. At first stage, out of 53 CPSEs, seven CPSEs which constructed more than 5,000 toilets each were selected for audit. At the

<sup>2</sup> South Eastern Coalfields Ltd (SECL):11,570 toilets, Central Coalfields Ltd (CCL):11850 toilets, Mahanadi Coalfields Ltd (MCL):10,404 toilets, Bharat Cocking Coal Ltd (BCCL):5,785 toilets, Northern Coalfields Ltd (NCL):5,635 toilets, Eastern Coalfields Ltd (ECL):3,375 toilets and Western Coalfields Ltd (WCL):5,393 toilets

second stage, States/ Districts were selected where the selected CPSEs had constructed maximum/higher number of toilets and geographical spread. Toilets were selected from the selected States/Districts, through random sampling method using IDEA<sup>3</sup> software.

By using above sampling method, Audit drew a sample of 2,695 toilets (2 *per cent*) in 2048 schools located in 15 States (*Annexure-I*) out of the total 1,34,228 toilets<sup>4</sup> in 80,753 schools in 24 States.

The seven CPSEs awarded contracts valuing ₹2,162.60 crore, out of which contracts valuing ₹1,335.38 crore (62 *per cent*) were selected for Audit.

# 1.6 Audit Methodology

Audit examined the relevant records in the Corporate Office and the concerned units of the seven CPSEs. Audit process involved collection of data, review of records of Corporate Office and units of the CPSEs, discussions with Management and issue of draft Audit Report to CPSEs and the Administrative Ministries for their comments. The present report contains the audit findings along with the comments expressed by the CPSEs/Administrative Ministries. In respect of CIL (all subsidiaries) and NHPC, the concerned Administrative Ministries have not furnished their response despite reminders and hence the observations have been finalised based on the replies received from these CPSEs.

# 1.7 Audit Criteria

The performance of the CPSEs was assessed on the following criteria:

- Directions of MHRD, MoP/MoC<sup>5</sup> and MoPNG
- Handbook on SVA brought out by MHRD
- Memorandum of Understanding between CPSEs and implementing agencies
- Terms and conditions of contracts for construction work
- Schedule of Rates of respective State Governments for civil works
- Guidelines of CVC and DPE
- Internal policy/ guidelines of the CPSEs

# 1.8 Audit Findings

Audit findings are discussed in the following Chapters:

Chapter II: Construction of Toilets - Survey resultsChapter III: MonitoringChapter IV: Other Issues

Chapter V: Conclusion and recommendations

<sup>&</sup>lt;sup>3</sup> IDEA: Interactive Data Extraction and Analysis

<sup>&</sup>lt;sup>4</sup> MoP/ MoC launched a web portal 'vidyutindia.in', which was maintained by NTPC for online tracking of construction of toilets by CPSEs under their administrative control. The web portal showed a total of 1,26,270 toilets identified by six CPSEs (other than ONGC) for construction. ONGC provided to Audit a list of 7,958 constructed toilets. Thus, total number of toilets were 1,34,228 (i.e., 1,26,270 plus 7,958)

<sup>&</sup>lt;sup>5</sup> MoP/ MoC=Ministry of Coal was under additional charge of the Minister of Power

# 1.9 Acknowledgement

Audit acknowledges the co-operation extended by the Management of PFC Limited, REC Limited, Power Grid Corporation of India Limited (PGCIL), NTPC Limited, NHPC Limited, Oil and Natural Gas Corporation Limited (ONGC) and Coal India Limited (CIL) and its seven<sup>6</sup> subsidiaries in facilitating the conduct of this audit. Audit also acknowledges the co-operation extended by the Management and students of different schools during the visits of audit teams.

<sup>&</sup>lt;sup>6</sup> South Eastern Coalfields Ltd (SECL), Central Coalfields Ltd (CCL), Mahanadi Coalfields Ltd (MCL), Northern Coalfields Ltd (NCL), Bharat Coking Coal Ltd (BCCL), Eastern Coalfields Ltd (ECL) and Western Coalfields Ltd (WCL)

# Chapter-II Construction of Toilets - Survey results

Success of any project is reflected by the achievement of expected outcome. Apart from checking the records pertaining to planning and execution of a work, beneficiary survey is an effective tool for assessment of the actual outcome of a project. Therefore, with a view to assessing the availability, quality and effective usability of toilets, constructed by the selected seven CPSEs, Audit conducted (between September 2017 and January 2018) a beneficiary survey of 2,695 toilets which were selected as sample. For this purpose, Audit designed a questionnaire containing the information in respect of enrolment, number of toilets-existing/constructed, availability of running water, maintenance arrangement and other aspects in usability of toilets for purpose of verification of construction and effective use of toilets.

During the survey, Audit personnel visited the selected 2,048 schools with the representatives of CPSE concerned and collected the relevant data/information as per the questionnaire with the support of Principal/ Head Master of each school. Geo-tagged photographs of the toilets were taken and the teachers/students were interviewed during the survey.

Since Audit survey covered two *per cent* of the total toilets, the CPSEs are advised to conduct their own review/ survey of the remaining 98 *per cent* toilets and take appropriate action for rectification of deficiencies.

From the data/ information collected during survey, various deficiencies/shortcomings were noticed by audit which are discussed below:

# 2.1 Non-existing and partially constructed toilets

Out of 2,695 toilets in the audit sample, the CPSEs did not construct 83 toilets, though these toilets were identified by them for construction. In respect of remaining 2,612 toilets which were reported by the CPSEs to have been constructed, 200 toilets were not found constructed in the respective schools and 86 toilets were found to be only partially constructed when the audit survey was conducted. Details in this regard are mentioned in Table 2.

(Figures denote number of toilets)									
CPSEs	Toilets surveyed	Toilets not constructed		Total		Total		States	
	by Audit	Non- existing toilets	Partially constructed toilets	Number Per cent					
CIL *	1,119	88	66	154	14	Odisha (102), Madhya Pradesh (12), Chhattisgarh (5) and Jharkhand (35)			
NTPC	564	91	4	95	17	Bihar (79), West Bengal (10), Haryana (4), and Madhya Pradesh (2)			
REC	254	14	5	19	7	Bihar (10),Uttar Pradesh (8) and Telangana (1)			
NHPC	144	1	-	1	1	Madhya Pradesh (1)			
PFC	184	1	7	8	4	Andhra Pradesh (8)			
PGCIL	188	1	-	1	1	Bihar (1)			
ONGC	159	4	4	8	5	Andhra Pradesh (4) andOdisha (4)			
Total	2,612	200	86	286	11				

 Table 2

 CPSEs-wise details of non-existing and partially constructed toilets

\*including subsidiaries other than ECL

07 September 2017, 14:07:06, P S NAVIN CHAURA (9631203103), 07 September 2017, 14:07:22 P S NAVIN CHAURA (9631203103) or Stimmen arton CI J. Lazdion カトデ 12 210 21 6781 INT.P.C दे मनाया 5 90 -nn 1 17 anot 21 on الوقاليو. الوقاليو 251 100 -. John SIMO 3520 Conti नत -91 21101 for 1281 DIK moron Anone MZ min 10/ 255 an 57 C 42 1. TTT 2991) MI 100 Das 341 111 please elaborate. Opinion/comments/su ggestion of the Principal/teaching staff on the effectiveness of the said toilet constructed under the scheme (the 1211 neted ne sch signed cipal/teact inder the scheme ache n/comme

It is pertinent to mention that:

- The non-existing and partially constructed toilets constituted 11 *per cent* of toilets in the audit sample, which were shown on record as completed.
- In all the above cases, Principals/ Head Master of the concerned schools have confirmed the audit team's finding (given statement/ signed the audit questionnaire) that these toilets were not constructed/ only partially constructed in their schools.
- In all the above cases, photos of completion/ handing over of toilets were uploaded in the web portal<sup>7</sup> or shown in the list of constructed toilets provided to Audit by these CPSEs<sup>8</sup>.
- In respect of 79<sup>9</sup> out of the above 286 non-existing/ partially completed toilets, payment vouchers/ utilization certificates (UCs) were provided to Audit by the CPSEs.
- Out of 286 non-existing/ partially completed toilets, 92 were constructed by CPSEs on their own through private implementation agencies while 194 were constructed by State Government Agencies (SGAs).

<sup>&</sup>lt;sup>7</sup> NTPC maintained a web portal 'vidyutindia.co.in' to track construction of toilets being built by CPSEs under MoP and MoC

<sup>&</sup>lt;sup>8</sup> List of constructed toilets in respect of ONGC, NHPC, CIL (subsidiaries CCL and MCL)

<sup>&</sup>lt;sup>9</sup> 17 toilets constructed by CPSEs through their implementing agencies and 62 toilets constructed through the SGAs

MoP/ PGCIL, REC & PFC and MoPNG/ ONGC stated (August 2018 to August 2019) in respect of 36 non existing/ partially constructed toilets that the implementing agencies/SGAs have since been asked to confirm the status of toilets/refund the amount.

MoP/ NTPC in its reply for 95 non existing/ partially constructed toilets stated (26 March 2019) that for 36 toilets the UCs and payment vouchers were available; 31 toilets were not claimed by them to have been constructed and for balance 28 toilets the matter was being looked into.

CIL subsidiaries in their reply (for 135 toilets) stated that payment was not released for 42 toilets (CCL) and construction was in progress in 52 toilets (MCL). CIL stated that 25 toilets (CCL-14; BCCL-11) were constructed and billing had been done. CIL further clarified that in respect of 11 toilets (NCL), the concerned SGA refunded the amount subsequently since the toilets were constructed under other Schemes (Sarva Shiksha Abhiyan), while in respect of 5 toilets (SECL), the toilets were built at other schools.

Replies of NHPC and CIL (subsidiaries WCL, BCCL and CCL) (14 November 2018/21 January 2019) in respect of remaining 20<sup>10</sup> non-existing/partially constructed toilets were silent.

The replies indicate that the CPSEs did not ensure the effectiveness of construction of toilets which resulted in release of payment in respect of non-existing /partially constructed toilets and misreporting of the toilets as complete. Replies of NTPC (for 31 toilets) and CIL (subsidiary CCL for 42 toilets) that they have not claimed completion of these toilets, are to be seen in light of the fact that completion/handing over of all these toilets were duly reported on the web portal of MoP. Further, in respect of 36 toilets, though NTPC has stated that they had the UCs/ payment vouchers, these toilets were not found when the audit teams visited the schools.

# **Corroborative Evidence**

- ONGC conducted (December 2015 to April 2016) a survey of 5,594 out of 7,958 toilets through an agency i.e. Midstream Marketing and Research Pvt. Ltd which reported that 274 toilets (5 *per cent*) were not constructed and 236<sup>11</sup> toilets (4 *per cent*) were dysfunctional. But ONGC did not take any follow-up action on the report. ONGC replied (February 2018) that they had appointed M/s Auroville Foundation for verifying the toilets which were offloaded to SGAs and requested State Governments to confirm the position, which was awaited.
- In Alirajpur (Madhya Pradesh), the SGA submitted UCs for 777 toilets in November 2015 but refunded the amount after two years (November 2017) stating that only 222 toilets were constructed.

<sup>&</sup>lt;sup>10</sup> Non existing toilets-8 (NHPC-01 and BCCL-07), Partially constructed-12 (WCL-01, BCCL-08 and CCL-03)

<sup>&</sup>lt;sup>11</sup> 35 toilets in Assam, 88 in Bihar, 6 in Meghalaya, 102 in Odisha and 05 in West Bengal

# 2.2 Status of constructed toilets

The Handbook on SVA highlighted that having a clean school enables every child to become an agent of change for improving sanitation/hygiene practices in their family and within their community.

Audit examined the effectiveness of 2,326 toilets (2,695 toilets in the audit sample minus 369 non-existing/partially constructed toilets) constructed in 1,788 schools. The results are discussed below:

# 2.2.1 Grading of toilets based on maintenance/sanitation

With a view to assessing the CPSEs' contribution in construction and maintenance of toilets, Audit graded the toilets in the audit sample adopting criteria along the lines of similar criteria fixed under Swachh Vidyalaya Puraskar<sup>12</sup> (2017-18). Each toilet was assigned a score with star rating<sup>13</sup> on the basis of particulars collected/ feedback obtained during survey of 2,326 selected toilets. Details in this regard are given in Table 3.

[Figures denote Number of Toilets (Percentage of Toile							
Star Rating	5 Star/	4 Star/	3 Star/	2 Star/	1 Star/	Total	
Name of CPSEs	Excellent	Very Good	Good but scope for Improvement	Needs Improvement	Needs Considerable Improvement		
CIL	73 (8)	264 (27)	416 (43)	137 (14)	75 (8)	965	
NHPC	9(6)	17 (12)	88 (62)	22 (15)	7 (5)	143	
NTPC	-	-	182 (39)	161 (34)	126 (27)	469	
ONGC	29 (19)	53(35)	47 (31)	8 (5)	14 (9)	151	
PFC	51 (29)	66 (38)	47 (27)	12 (7)	-	176	
PGCIL	-	2 (1)	34 (18)	38 (20)	113 (60)	187	
REC	1 (0)	7 (3)	83 (35)	40 (17)	104 (45)	235	
Grand Total	163 (7)	409 (18)	897 (38)	418 (18)	439 (19)	2326	

# Table 3 Grading of Toilets in the Audit Sample [Figures denote Number of Toilets (Percentage of Toilets)]

<sup>&</sup>lt;sup>12</sup> Swachh Vidyalaya Puraskar is given by MHRD to recognize, inspire and celebrate excellence in sanitation and hygiene practice in schools. The criteria adopted for the rating of toilets by audit are: (i) Toilet design and technology (28 marks); (ii) Water facilities (22 marks); (iii) Hand wash facility (20 marks); (iv) Operation and maintenance (25 marks) and (v) Behavioral changes (toilets put to use) (5 marks)

Excellent/ 5-star rating (90 to 100 marks); Very Good/4 star rating (75 to 89 marks); Good but there is scope for improvement/ 3-star (51 to 74 marks); Needs improvement/ 2-star (35 to 50 marks); Needs considerable improvement/ 1-star (below 35 per cent)

It can be seen from Table 3 that only 25 per cent of toilets got five/four-star rating while 75 per cent toilets got 3 star or below rating. Audit noted that in some districts mainly in Odisha Andhra Pradesh. and Chhattisgarh, State Governments provided running water and maintenance facilities in the school for toilets constructed by CPSEs which resulted in proper maintenance of such toilets and scored grade 4 or 5. Audit is of the opinion that CPSEs should consider MoUs with State/ signing District Education Departments for providing running water facility to the toilets and



maintaining them. CPSEs should provide necessary funds for maintenance and closely monitor the outcome of such maintenance.

MoPNG/ ONGC agreed (6 August 2019) with the grading while the remaining six CPSEs did not offer their comments. MoPNG/ ONGC also agreed to provide funds for maintenance of the toilets constructed by them for effective use.

The deficiencies/shortcomings noticed in the toilets have been discussed in the subsequent paras.

# 2.2.2 Toilets constructed, but not in use

Out of 2326 constructed toilets, 691 toilets (30 per cent)were not found in use mainly due to:

- Lack of running water as well as lack of cleaning arrangements and damages to toilets (114 toilets)
- Damages to toilets as well as lack of cleaning arrangements (128 toilets)
- Lack of running water as well as cleaning arrangements (73 toilets)
- Damages to toilets as well as lack of running water (28 toilets)
- Lack of only cleaning arrangements (123 toilets)
- Only Damages to toilets (80 toilets)
- Lack of only running water facility (44 toilets)
- Other reasons like use of toilet for other purposes, toilets locked up, school closed etc. (101 toilets)



The CPSE-wise State- wise details of the toilets not put to use is given in Annexure II.



MoP/ PGCIL and REC, MoP/ NTPC, NHPC and CIL (subsidiaries MCL, NCL and SECL) stated (August 2018 to March 2019) that maintenance of toilets could be taken up by the school authorities as they were the actual beneficiaries of the scheme. MoPNG/ ONGC and CIL (subsidiaries WCL and BCCL) stated (7 September 2018/ 21 January 2019) that they are coordinating the matter with school/ State authorities. PFC and CIL (subsidiary CCL) replies (27 June 2018/ 21 January 2019) are silent on this issue. CIL (subsidiary ECL) has not replied.

The replies indicate that the CPSEs did not adhere to the directions of Administrative Ministries regarding maintenance of toilets for three to five years, as discussed in Para 2.2.9.

#### 2.2.3 Lack of running water facility

MHRD directed (19 November 2014) that, "the policy of SVA was to ensure that no school will be without a toilet with running water facility". The guidelines of SVA had also highlighted that running water facility was not provided in 73.06 *per cent* of the toilets constructed till 2013-14 under other schemes, which led to their dysfunctionality/ un-usability. As such, running water facility inside toilets was an essential amenity for success of the toilet construction project undertaken by CPSEs under SVA. The guidelines of Swachh Bharat Mission-Gramin of 2014 also require water inside toilets.



The status of water facility in the 2,326 constructed toilets in the audit sample is given below:

- No water in schools 449 toilets (19 per cent)
- Water in schools from hand pump, but not inside toilets -1,230 toilets (53 per cent)
- Running water available inside toilets 647 toilets (28 per cent).

Hence in 1,679 (449+1230) out of 2,326 constructed toilets (72 *per cent*), running water facility inside the toilets was not available.

Four CPSEs (NTPC, REC, PGCIL and CIL have not envisaged provision of running water facility inside the toilets at the design stage i.e. in respect of 1,856 (80 *per cent*) out of 2,326 toilets in the audit sample.

Audit noticed during survey that out of 1,856 toilets, no running water facilities was available in 1,461 toilets (79 *per cent*). Further, in respect of remaining 470 toilets in the audit sample, where the CPSEs had planned (ONGC, PFC and NHPC) for the running water facility inside the toilets, 218 toilets (46 *per cent*)<sup>14</sup> still did not have running water.

MoP (PGCIL, NTPC and REC) and CIL stated (August 2018 to April 2019) that they had implemented the design approved by the competent authority.

MoP/ PFC stated (15 July 2019) that water connection in toilets constructed in Rajasthan had since been sanctioned (30 June 2017) and work completed. However, utilisation certificates and relevant photographs are yet to be received. Reply of NHPC is silent on this issue. MoPNG/ ONGC replied (6 August 2019) that they had since directed the implementing agency to rectify the defects noticed by Audit.

Considering that running water in toilets was one of the basic aims of the project, remedial action in the above cases, including those where the CPSEs have not made provision for running water at the design stage, is imperative.

# 2.2.4 Hand washing facility in the toilets

Handbook on SVA highlighted that hand washing after using the toilet is critical for maintaining hygiene. NTPC, PGCIL and REC did not plan for hand washing facility while designing the toilets. The same was also not found during survey of 830 toilets selected in sample of these CPSEs. NHPC, ONGC, PFC and CIL included hand washing facility in the toilets at the design stage, but hand washing facility was not found during audit survey in 449 toilets (31 *per cent*) out of 1,435 toilets constructed by these four CPSEs. In total, wash basin/hand wash facility was not available in 1,279 (55 *per cent*) out of 2,326 toilets surveyed by Audit.

The replies of the CPSEs are given below:

- MoP/ PGCIL stated (14 August 2018) that hand wash facility was not considered since running water was not envisaged in their design. MoP/REC stated (5 February 2019) that wash basin was not provided since drainage system for waste water of wash basin was not envisaged in the design. MoP/ NTPC stated (26 March 2019) that the design of toilet was finalized after discussion with MoP. CIL (subsidiary BCCL) stated that (23 August 2018) wash basin was not part of MoUs with implementing agencies.
- PFC (27 June 2018) stated that in few schools, wash basin was not provided due to small size of the toilets. NHPC and MoPNG/ ONGC (13 November 2018/ 6 August 2019) stated that wash basin was provided only for new toilets, not in repaired ones.

<sup>&</sup>lt;sup>14</sup> ONGC - 64 out of 151 (42 per cent); PFC - 58 out of 176 (33 per cent); NHPC - 96 out of 143 (67 per cent)

- CIL (subsidiaries SECL, NCL, WCL and CCL) stated (21 January 2019) that the toilets were handed over to schools with wash basin and that the wash basins might have been damaged subsequently.
- CIL (subsidiary MCL) stated (10 January 2019) that the implementing agencies/ SGAs had since been instructed to submit the status report, for the rectifications required, if any.

Above replies confirm that hand washing facility was either not planned by the CPSEs or did not materialize despite having been planned, thus adversely impacting hygiene.

# 2.2.5 Temporary/Movable Toilets

Out of 2,326 constructed toilets surveyed by audit, 27 toilets were temporary/ moveable toilets (1 *per cent*) constructed by three CPSEs (i.e. five toilets by NHPC in Madhya Pradesh, 16 toilets by NTPC and six toilets by PGCIL in Bihar) though these were not allowed.

Further, 23 toilets (85 *per cent*) out of 27 toilets remained unused due to damage, non-construction of leach pit, theft, etc.

NHPC replied (July 2019) that the **December 2017**, **15**:39:42, temorary/movebale toilets were constructed in remote areas to achieve the timelines.

MoP/ PGCIL replied (14 August 2018) that they had entrusted 120 toilets in Purnea District (Bihar) to M/s ABB who constructed widely prevalent temperory toilets at their own cost.

NTPC replied (30 November 2018) that they would install additional prefab toilets in the concerned schools. Reply of MoP (26 March 2019) on NTPC is silent on this issue.

The fact remains that the construction of temperory toilets was not prescribed by MHRD and also found unused during the Audit survey.

#### 2.2.6 Defective construction of toilets

Out of 256 toilets pertaining to REC in the audit sample, 20 toilets were constructed through M/s VKAC in Ballia District of Uttar Pradesh. These toilets were so small (shorter by 19 *per cent* of area in the approved drawings) that it was difficult to enter the toilets because the doors would hit the tap when opened (photo alongside). Further, water tank provided inside the toilets had persistent leakages. WCs/floor



MS Dantola Daskachin22 December 2017, 15:39:42 tiles were not installed properly in 16 of these toilets, leading to water logging and resultant unhygienic condition of the toilets.

MoP/REC replied (5 February 2019) that the defects pointed out by Audit would be rectified.

# 2.2.7 Non-provision of foundation/ ramp/ staircase/ roof

780 out of 2326 toilets in the sample were constructed using prefab technology. Notwithstanding that usage of prefab technology for construction of toilets was not permitted by MoP/ MoC/ MoPNG, the following shortcomings were also noticed in the prefab toilets during the audit survey:

• All the 190 prefab toilets constructed by NTPC in the audit sample, were without permanent foundation and hence faced the risk of getting toppled during high winds.



- 95 toilets out of 145 prefab toilets constructed by REC selected in the sample did not have ramp facility though it was planned at the design stage, rendering the use of toilets difficult for differently abled students. Similar was the case with the 190 toilets constructed by NTPC which did not envisage ramp facility at the design stage.
- The edges of roof of 93 toilets out of 145 prefab toilets constructed by REC selected in the sample were not covered with PPGI ridge (pre-painted galvanized iron i.e. a strip which caps the ridge of the roof), envisaged in the design stage. This might have adverse impact on the life of toilet roofs.



Roof required to be constructed

**Roof actually constructed** 

MoP/ NTPC replied (26 March 2019) that they had finalized the design of the toilets after discussion with MoP. Documents regarding the discussions were, however, not provided to Audit. REC did not provide their comments.

#### 2.2.8 Overflowing/damaged leach pit

As per handbook on SVA prepared by MHRD, a toilet unit should consist of one leach pit (single pit) which is sufficient for the requirement of six months to one year. Ministry of Rural Development, Department of Drinking Water Supply (MDWS), on other hand, in their norms have included twin pit<sup>15</sup> system for water closet.

Major disadvantage of the single pit design adopted by MHRD under SVA is its



operational unsustainability. After the pit is filled, it cannot be emptied as it contains fresh as well semi degraded excreta. As mechanical devices are normally not readily available, the only option left with school authorities is to have scavengers manually clean such pits.

Under the twin pit design suggested by MDWS pits are used alternately. Capacity of each pit is normally for 3 years. This system, therefore, bypasses thorny issue of caste as owners deal with manure, not excreta. Non – adoption of the twin pit design by the SVA implemented in schools by MHRD means that usability of toilets is short tenured, i.e. maximum six months to one year and unsustainable.



Audit survey of selected toilets revealed that the leach pits were overflowing or pipes connecting the WCs and urinals to leach/soak pits were uncovered on ground or damaged in 367<sup>16</sup> (16 *per cent*) out of 2,326 constructed toilets in the audit sample.

PFC, NHPC, CIL (subsidiaries MCL, NCL and SECL) and MoP/ REC replied (June 2018 to February 2019) that State Education Authority/School Management Committee should maintain the toilets.

MoP/ NTPC replied (26 March 2019) that the defects might have occurred post defect liability period.

MoP/ PGCIL, MoPNG/ ONGC and CIL (subsidiary WCL) replied (August 2018 to January 2019) that they were engaging an agency for remedial actions.

<sup>&</sup>lt;sup>15</sup> Under the twin-pit system, two pits are dug with honeycombed walls and earthen floors which allow liquid to percolate into the surrounding soil. When one pit is filled and closed off, waste flow is transferred to the second pit, allowing waste in the first pit to be converted into manure after a year or two. Two years after blocking of the first pit, its contents turn into solid, odour free manure, suitable for use in agriculture and horticulture purposes. After the second pit is filled, it is similarly blocked and the first pit is put in use again. Thus, alternate use of both the pits continues

 $<sup>^{16}</sup>$  367 = CIL-168, NTPC-82, REC-34, ONGC-28, PGCIL-24, NHPC-23 and PFC-8 toilets

CIL (subsidiary CCL) replied (21 January 2019) that this was part of maintenance work which was deleted from the scope of implementing agency due to lack of funds. CIL (subsidiary BCCL) replied (21 January 2019) that maintenance was yet to be taken up. CIL (subsidiary ECL) did not provide their comments on this issue.

The replies are not tenable as MoP/ MoC had advised (27 October 2014) the CPSEs to provide for maintenance of the toilets for three to five years. Handbook on SVA had also highlighted that inadequate maintenance was one of the main reasons for toilets built under other schemes becoming dysfunctional/unusable. Thus, lack of onus of maintenance of toilets by CPSEs, resulted in non-usability of toilets.

# 2.2.9 Maintenance arrangements for toilets

MoPNG and MoP/ MoC advised (16 September and 27 October 2014) the CPSEs to maintain the toilets constructed by them for three to five years through CSR budget. MoP reiterated (18 July 2016) the need for maintenance of the toilets by the CPSEs and advised them to give the funds directly to Village Education Committee for sanitation of toilets, under intimation to MoP and review the status of toilets after six months.

Audit found that three CPSEs (NTPC for conventional toilets, REC and CIL subsidiaries BCCL, CCL, ECL and SECL) incorporated the maintenance clause in the MoUs/contracts, but REC withdrew the maintenance clause subsequently, due to poor maintenance by contractors. NTPC for prefab toilets, PFC, PGCIL, NHPC, ONGC, and CIL (subsidiaries MCL, NCL and WCL) neither included the clause for maintenance in the MoUs/ contracts nor provided funds to the School management.



During survey of selected toilets, Audit noticed that one of the main reasons for the toilets not being in use was lack of maintenance/ cleaning arrangements, as discussed below:

# (i) Frequency of cleaning

As per MHRD norms under SVA, the toilets were required to be cleaned at least once daily. Audit noticed that proper maintenance/ sanitation was lacking in 1,812 toilets out of 2,326 toilets. Audit also noticed that 715 toilets out of 1,812 toilets were found un-cleaned and for the balance 1,097 toilets the frequency of cleaning was from twice in a week to once in a month, which was not as per norms. Therefore, 75 *per cent of* selected toilets were not maintained hygienically. These toilets included 438 toilets which were not in use (refer Para 2.2.2). CPSEs wise status of cleanliness is given in Chart No 1.



Audit noticed that the toilets were not being maintained by schools due to fund constraints as neither CPSEs nor State Governments had provided adequate funds to the schools for undertaking maintenance/ sanitation in toilets. The School Authorities/ SMCs/ Principals were willing to maintain the toilets subject to availability of adequate funds (₹5,000 p.a. approx.) for sanitation of toilets.

(ii) Non-provision of soap, cleaning agents and disinfectants in toilets: As per SVA norms, toilet blocks should be provided with facilities like soap, bucket, toilet cleaning brush, disinfectants, and other cleaning material. During survey, Audit noticed that there was no provision of soap and disinfectants or cleaning agents in 863 toilets (37 *per cent*).

(iii) Inadequate cleanliness of pathway: For safety of students, there is a need of clean pathway towards toilets. Audit noticed that pathways to toilets in respect of 426 toilets (18 *per cent*) were not cleaned.

MoP/ PGCIL stated (14 August 2018) that the proposal for maintenance came from Uttar Pradesh only, which was under consideration.



NHPC, CIL (subsidiaries NCL, MCL, SECL, WCL) and MoP/ NTPC replied (18 November 2018, 21 January 2019 and 26 March 2019 respectively) that they were not mandated to maintain the toilets. CIL (subsidiary BCCL) replied (21 January 2019) that maintenance was yet to be taken up while CIL (subsidiary WCL) replied (21 January 2019) that Secretary (Coal) had asked (10 August 2017) all the CMDs to put in efforts to involve the local administration for the maintenance of toilets in schools beyond their command area. Accordingly, they asked all the district authorities, where WCL has constructed toilets, to take action on maintenance. CIL (subsidiary CCL) replied (21 January 2019) that the maintenance work was deleted from the scope of implementing agency due to lack of funds. CIL (subsidiary ECL) did not provide comments on the issue.

MoP/ REC stated (5 February 2019) that they were willing to fund the maintenance cost through CSR budget and comprehensive execution plan has not yet been received from MHRD. ONGC stated (7 September 2018) that they had since approved the funding of

₹1,000 per annum/ per toilet for maintenance. Further, MoPNG stated (6 August 2019) that the instructions to carry out three years' maintenance was issued (22 September 2014) by them as decided in the meeting taken by the Secretary.

The replies are to be viewed against the fact that NTPC, REC and CIL-subsidiaries BCCL, CCL, ECL and SECL had incorporated the maintenance clause in the contracts which is contradictory to their stand that maintenance was not in their mandate. The CPSEs were advised by Ministries to provide initial support for maintenance (for three to five years) after which the schools could take care of the facilities through grants available with them, but this was not provided by the CPSEs.

Beneficiary survey conducted by Audit revealed inadequacies and deficiencies in the output of the project, as evident from instances of non-existence of the toilets and also of partial construction thereof. Even in respect of toilets actually constructed, it was noticed that in more than 75 *per cent* of cases in the audit sample, the toilets were not in active use for various reasons including non designing of toilets as per norms of MHRD, lack of running water, lack of maintenance/ cleaning facilities due to non funding for cleaness and improper monitoring of maintenance due to lack of onus of toilets which need improvement.

# Chapter-III Monitoring

Effective monitoring of the project during execution is an essential requirement to ensure that the objectives of the project are achieved effectively and efficiently and the work is executed as planned with the intended quality, quantity and timeliness.

In order to analyze the reasons behind the shortcomings noticed during survey (as discussed in previous Chapter 2), Audit examined the monitoring mechanism in place and adherence thereto by the Administrative Ministries/ CPSEs during execution of the project.

# **3.1** Monitoring at planning Stage

MoP/ MoC and MoPNG directed (26 September 2014 and 27 October 2014 respectively) that the construction programme should be monitored closely by the CPSEs to achieve the target of constructing the toilets by 15 August 2015. The CPSEs were required (September-October 2014) to visit the schools selected by them to assess the requirement of toilets' and had the option to provide improvements in the toilet size and design as provided by MHRD as per the enrolment and the local conditions.

In this connection, MoP/ MoC launched a web portal 'vidyutindia.in', in addition to MHRD portal, for online tracking of construction of toilets by CPSEs through uploading the survey report along with the relevant photographs, handing over/completion certificates, photographs of constructed toilets under their administrative control whereas MoPNG did not create any separate portal and used MHRD portal, instead.

Audit observed the following shortcomings in monitoring at the time of construction of toilets:

# 3.1.1 Inadequacy in identification of schools

MHRD hosted on its website, the State-wise list of schools with number of toilet(s) available and status of their functionality as of 30 September 2013. This database was created by MHRD from the feedback provided by State Government authorities. Since status of toilets may have changed over a period of time, the CPSEs were advised by Administrative Ministries (October/December 2014) to undertake surveys to assess the requirement of toilets. Audit found that PFC and CIL (subsidiary SECL) did not conduct any survey and utilised the MHRD list itself. Other CPSEs conducted the survey but did not cover all the schools identified by them for construction<sup>17</sup>.

MoPNG/ ONGC and MoP/ REC stated that (7 September 2018 and 5 February 2019) they considered the requirements as per MHRD data base. MoP/ PGCIL stated (14 August 2018) that though survey was conducted for all the schools, all the survey reports were not generated due to paucity of time. NHPC stated (13 November 2018) that survey data for 2091

ONGC conducted survey of 1,773 schools out of 5,452 schools (33 per cent); REC surveyed 546 schools (8 per cent) out of 6,820 schools, NHPC surveyed 3,204 schools (60 per cent) out of 5,295 schools, PGCIL surveyed 1,620 schools (38 per cent) out of 4243 schools and CIL (other than SECL) surveyed 21,073 schools (59 per cent) out of 35,459 schools; NTPC provided only sample survey reports

schools were not readily available. CIL (subsidiary SECL) stated (21 January 2019) that due to paucity of time they obtained relaxation for conducting the survey.

The lack of survey resulted in non-optimum utilisation of resources as evident from the following two cases, which were noticed during the course of audit:

(i) PFC selected 8,100 schools in Andhra Pradesh and appointed (February 2015) Hindustan Prefab Limited (HPL) as the implementing agency for construction of toilets. The concerned State agency viz. Project Director of Andhra Pradesh Sarva Siksha Abhiyan (APSSA) informed (23 May 2015) that 2,036 toilets selected by PFC were not required to be constructed as two functional toilets i.e., one each for boys and girls were already available in these schools. Accordingly, PFC advised (29 May 2015) HPL that construction work of only those toilets should be completed where the construction work had already begun. PFC requested (2 June 2015) APSSA not to delete such 675 toilets from their allocation list.

PFC also constructed 367 toilets through State agencies which were not required to be constructed by PFC under SVA. Thus, PFC incurred an expenditure on 1,042 toilets of ₹23.48 crore that were not required to be constructed under the SVA. Out of 2,036 toilets checked in audit, we also noticed during field survey that there was shortfall of toilets against the requirement. As such, limited resources available was not optimally utilised.

PFC stated (11 January/ 27 June 2018) that since the data were provided by MHRD and State governments, they felt that State agencies would be in a better position to assess the requirement of toilets and hence did not conduct the survey.

Reply is to be viewed against the fact that the CPSEs were alerted about the possibility of MHRD data having undergone change. Had PFC conducted the survey, it would have identified the needy schools in the initial stage itself and the limited resources available would have been optimally utilised.

(ii) CIL (subsidiary MCL) conducted the survey of 8,654 toilets (82 *per cent*) out of the 10,546 toilets selected by them for construction. However, MCL constructed 865 toilets which were not required as per the survey and did not construct 590 toilets identified during the survey.

CIL (subsidiary MCL) stated (21 January 2019) that survey work was conducted due to urgency shown by government for early tendering, award and completion of work. Survey teams had, therefore, to be drawn from various disciplines viz. HR, Finance, Mining, Personnel and Environment etc. as well as Civil Department concerned which created problems in finding the real requirements of the schools.

The reply indicates that there were inadequacies in the process adopted by MCL for assessing actual requirement of schools.

Thus in both the cases, lack of monitoring by CPSEs as well as the administrative ministries/MHRD resulted into incomplete pre-identification surveys which meant that the resources earmarked for the purpose of SVA could not be utilised optimally and desired output and outcome of SVA were to that extent adversely impacted.

# 3.1.2 Improper assessment of required toilets

As per the guidelines of SVA, each school should have one toilet unit for every 40 girls and boys and each toilet unit should have one Water Closet (WC) and three urinals.

On a query of CPSEs about norms to be adopted to assess the number of toilets required in schools, MHRD clarified (12 November 2014) that they should ensure at least one toilet unit each for boys and girls in each school and that the circular on number of toilets to be constructed in schools enrolling 80 or more boys and girls would be clarified later. There was no further communication or clarification on this critical issue.

This, coupled with the fact that the database of available functional toilets in the schools had not been updated meant that (refer Para 3.1.1), the CPSEs/Ministries could not adequately assess/monitor the number of toilets required as per enrolments. As a result, CPSEs could not fully adhere to the directions of MHRD regarding construction of at least one toilet unit each for boys and girls in each school.

During the audit survey of 1,967 coeducational<sup>18</sup> schools out of 2,048 schools, Audit noticed that:

- 99 coeducational schools did not have any functional toilet.
- 436 coeducational schools had only one toilet.

As such, in 535 (99 + 436) coeducational (27 per cent) schools, the selected CPSEs did not construct the required toilets. Hence the objective of providing separate toilets for boys and girls was not fulfilled in these schools.

# **3.2** Monitoring at Construction Stage

MoP/ MoP&NG/ MoC, directed (26 September 2014 and 27 October 2014 respectively) CPSEs to submit weekly report regarding progress of construction of toilets and to clearly bring out slippages from targets/ dead line. MoP/ MoC further directed (30 October 2014) that daily progress report was to be submitted to them on the progress of construction of toilets and preferably the relevant geo tagged photos were to be uploaded on the website of MHRD/ administrative ministries/CPSEs web site.

Selected CPSEs except NHPC did not provide the weekly/daily progress reports/site visit reports and status of progress uploaded on MHRD, MoP and their respective web sites.

MoP/ MoC directed (24 June 2015) that, data maintained by MHRD on SVA needs to be reconciled by 27 June 2015. It also advised the CPSEs to get in touch with the State Government as well as MHRD to facilitate completion of reconciliation work at MHRD during 25 to 27 June 2015. They further directed that in order to ensure timely construction of toilets where work has not been started till date, the concerned CPSEs should either commit to construct the toilets by 10 July 2015 or immediately transfer the construction work and the required funds to the SGAs in consultation with concerned State Government. The Cabinet

<sup>&</sup>lt;sup>18</sup> These schools have been considered as coeducational on the basis of enrolment of both boys and girls in the schools

Secretary directed (13 July 2015) the CPSEs to complete the toilets being constructed by them before 3 August 2015 and also monitor the work offloaded to SGAs. On 7 August 2015, the Cabinet Secretary again directed the CPSEs to complete the work by 10 August 2015.

All the selected CPSEs constructed a part of toilets by themselves and offloaded the balance work to SGAs with funds, as per details given in Table 4:

SI. No.	CPSE	Total constructed toilets	Toilets construct by thems	-	Toilets offloaded to SGAs		
		(number)	(number)	(per cent )	(number)	(per cent)	
1	PFC	9,383	4,947	53	4,436	47	
2	REC	12,379	7,096	57	5,283	43	
3	PGCIL	9,983	8,453	85	1,530	15	
4	NTPC	29,441	25,713	87	3,728	13	
5	NHPC	7,547	6,655	88	892	12	
6	ONGC	7,958	5,335	67	2,623	33	
7	CIL	54,012	26,537	49	27,475	51	
Total		1,30,703	84,736	65	45,967	35	

 Table 4

 Break-up of number of toilets constructed by CPSEs on their own and offloaded to SGAs

Source: Information provided by concerned CPSEs

Audit observed the following shortcomings in respect of reporting of construction of toilets:

# **3.2.1** Reporting of completion of toilets

MoP/ MoC declared (3 November 2015) that the six selected CPSEs under them had completed all the 1,22,745 toilets, identified by them, successfully and timely. ONGC also declared that they had completed all the 7,958 toilets taken up by them for construction by 10 August 2015. As such, MoP/ MoC/ ONGC declared construction of 1,30,703 toilets by the selected seven CPSEs on time (i.e. 15 August 2015).

As per MHRD data and the Swachhta Status Report (2016) of the National Sample Survey Office, under the Ministry of Statistics and Programme Implementation, the CPSEs constructed all the approved toilets as of 1 March 2016 and the number of toilets completed by the seven CPSEs was 1,19,530.

Comparison of the two reported figures indicated that the figures tallied only in the case of ONGC and for the remaining six CPSEs, MoP/ MoC figures for number of toilets completed was higher by 11,173 toilets.

PFC, NHPC and MoP/ REC stated (January 2018 to February 2019) that the data on the websites of MoP and MHRD were maintained by different agencies and they had no control over the information uploaded on these websites. PGCIL stated (23 April 2018) that the matter had been taken up with MHRD in April 2018. MoP/ NTPC stated (26 March 2019) that subsequent to the launch of MHRD web site, data in MoP portal was not updated and caused discrepancy. Reply of MoP (15 July 2019) on PFC is silent on this issue.

The reply is to be viewed against the fact that information on these websites were uploaded by the concerned CPSEs in compliance of MoP directions but there is an issue regarding mismatching of the data. This has also resulted in incorrect reporting of progress of work as discussed in Para 2.1.

# 3.2.2 Completion of toilets constructed by CPSEs on their own

Though the CPSEs reported completion of toilets, Audit found that, in case of toilets constructed by the CPSEs themselves, the completion certificates were not available in a majority of the cases. Review of certificates which were available revealed that the date of completion/handing over of toilets<sup>19</sup> was much later than the target date of 15 August 2015 as per particulars given in Table 5.

							(Figures	denote n	umbers of toilets
Toilet Completion period	REC	PFC	PGCIL	NHPC	NTPC	ONGC	CIL	Total	Percentage*
Completion certificate /data made available to audit	6802	4747	3506	2792	-	4,522	11362	33,731	40
- Completion Up to 15 August 2015	143	1,333	1,643	2,072	-	1,589	4,402	11,182	33
- Completion after 15 August 2015 till 03 November 2015	895	2,786	1,566	531	-	2,152	4,196	12,126	36
- Completion after 03 November 2015	5,764	628	297	189	-	781	2,764	10,423	31
Certificates/data not made available to audit till January 2019)	294	200	4,947	3,863	25,713	813	15,175	51,005	60
Total toilets	7,096	4,947	8,453	6,655	25,713	5,335	26,537	84,736	

 Table 5

 Particulars regarding completion of toilets constructed by CPSEs on their own

\*40 *per cent* and 60 *per cent* are with reference to total toilets; remaining percentages are with reference to total number of toilets for which completion certificates were provided to audit.

It can be seen from the above that completion certificates were not provided to Audit in the case of 60 *per cent* of toilets. In the remaining 40 *per cent* cases where completion certificates were provided to Audit, completion of toilets within the due date could be achieved only in 33 *per cent* cases.

<sup>&</sup>lt;sup>19</sup> Handing over date is generally one/two days after completion date

Further, Audit noticed that PFC, REC and ONGC had finalized the MoUs with implementing agencies during January 2015 -March 2015. Thereafter these agencies called for bids for awarding contracts to other agencies for construction of toilets. The award activity by the seven CPSEs itself took time up to May 2015. Since construction time of four months was provided, compliance of Government directive to complete all toilets by 15 August 2015 could not be Chart No. 2: Completion of toilets constructed by CPSEs on their own



ensured by the CPSEs. The CPSEs nevertheless reported completion of all the toilets by 15 August 2015 though this was not actually so.

MoP/PGCIL and REC replied (14 August 2018 and 5 February 2019) that all the toilets were physically completed/functional before 15 August 2015; however, the school authorities accepted handing over of the toilets only after rectification of all shortcomings observed by them. NHPC replied (13 November 2018) that the remaining handing over certificates shall be submitted to Audit in due course of time, for which efforts were being made. CIL replied (January 2019) (subsidiaries MCL, WCL, NCL and CCL) that regular monitoring of the project was carried out by their teams. Reply of CIL (subsidiaries BCCL, SECL and ECL) is silent on this issue. MoP/ NTPC replied (26 March 2019) that they had completed all toilets by 15 August 2015. MoP/ PFC replied (15 July 2019) that the toilets were technically completed within the target date. MoPNG/ ONGC replied (6 August 2019) that they lacked prior experience in these kind of projects and had put in special efforts to monitor the progress.

Above replies are to be viewed against the fact that though the CPSEs declared completion of toilets, the completion/handing over certificates provided to Audit were found issued after the target date, in most of the cases. Moreover, completion/ handing over certificates were not made available to audit in 60 *per cent* cases.

#### 3.2.3 Completion of toilets offloaded to SGAs

The seven CPSEs offloaded 45,967 toilets to SGAs in  $16^{20}$  States from 1 July 2015 onwards and disbursed ₹575.67 crore to them for construction of toilets. MoP/ MoC and MoPNG declared that the seven CPSEs completed construction of all the toilets (i.e. including those transferred to SGAs) by 15 August 2015. But this claim was not on the basis of completion report and utilization certificate (UCs), required to be submitted by the SGAs.

<sup>&</sup>lt;sup>20</sup> Uttar Pradesh, Punjab, Madhya Pradesh, Rajasthan, Telangana, Bihar, Andhra Pradesh, Assam, Odisha, Meghalaya, Goa, Arunachal Pradesh, West Bengal, Jharkhand, Himachal Pradesh and Chhattisgarh

Audit noticed that the SGAs furnished (*Annexure III*) UCs for only ₹ 447.38 crore (78 *per cent*) and did not submit the UCs for the balance ₹ 128.29 crore (22 *per cent*) for 11586 toilets even after three years (till January 2019) from the target date. In the case of remaining 34,381 toilets, the date of UCs was from 6 October 2015 to 26 March 2018.

There were discrepancies in the UCs and a sample case is given below:

For construction of 777 toilets in Alirajpur district, Madhya Pradesh (GoMP), CIL-(subsidiary NCL) disbursed ₹4.13 crore to the concerned SGA Rajya Shiksha Kendra, Alirajpur. Having provided UCs for the entire amount by 30 November 2015, the SGA, after lapse of two years, refunded (13 November 2017) ₹3.25 crore stating that only 222 toilets were actually constructed instead of 777 toilets reported earlier. CIL (subsidiary NCL) replied (23 August 2018) that they were not given the list of 222 toilets by SGA to verify the claim of GoMP.

The Administrative Ministries/CPSEs replied (August 2018 to March 2019) that they were pursuing the SGAs for the remaining UCs and requesting them to refund the unused fund.

This suggests that the data on completion of toilets is not entirely reliable.

Thus, inadequacies in identification of schools and required number of toilets, feedback mechanism, monitoring of progress and reporting collectively led to mismatch in the number of toilets reported as completed vis a vis actual completion of toilets.

## **3.3** Monitoring of maintenance of toilets

In order to ensure the quality and durability of assets through proper maintenance, there was a need to frame the guidelines for maintenance of toilets for a minimum period of three years to five years after completion of toilets with funding for operating of toilets. The MoUs signed by CPSEs with the State/ District Education Department stated that the onus of the maintenance of toilets would lie with latter and funding for maintenance and running water arrangement would be provided by CPSEs.

After reviewing the status of toilets constructed in the government schools, MoP/ MoC suggested (18.07.2016) that CPSEs may give the funds directly to Village Education Committee for maintenance of toilets and review it after six months. Further, MoP/ MoC desired (06.07.2017) audit of maintenance of the toilets constructed under SVA be pursued every month and key findings of such audit be shared by 10<sup>th</sup> of the succeeding month. Audit noticed that the selected CPSEs had not taken any effective steps in this regards. The Administrative Ministries had also not taken any steps to ensure that CPSEs complied with the directions.

In view of fact that 78 *per cent of* selected toilets were not maintained hygienically as discussed in the para 2.2.9(i), clearly this inaction appeared to have had serious repercussion.

#### 3.4 Feedback Mechanism

The DPE guidelines, require for the CPSEs to get an impact assessment study done of their CSR activity/projects through external agencies.

None of the selected CPSEs, except CIL (subsidiaries MCL, SECL) (March 2017, 2018) and NHPC (September/ October 2017), conducted such impact assessment study/beneficiary
survey. CIL (subsidiaries MCL, SECL) and NHPC conducted the beneficiary survey for a limited number of toilets. The survey reports highlighted the water and maintenance issues.

MoPNG/ ONGC, MoC/ CIL (subsidiaries NCL, BCCL and WCL) MoP/ PGCIL, MoP/ NTPC, PFC and REC assured (August 2018 to March 2019) during audit that the impact assessment would be undertaken by them. Replies of CIL (subsidiaries CCL and ECL) were silent on this issue.

## Chapter-IV Other Issues

Apart from carrying out beneficiary survey of the toilets in the audit sample and examining the records relating to monitoring, Audit also examined planning process carried out by the CPSEs for designs and technology used for construction of toilets vis-à-vis SVA guidelines and award and execution of work by the\_seven CPSEs.

Deficiencies noticed in these areas are brought out in the following paras:

#### 4.1 Absence of basic amenities in toilets designed by CPSEs

MHRD had conveyed (19 November 2014) to the CPSEs that the toilets should have running water. As per the Handbook on SVA, a toilet unit should have one WC and three urinals. The toilets were also required to have hand washing facility. Audit found that NHPC, PFC and ONGC provided these basic amenities in their toilet designs, but the other four CPSEs did not provide one or more of these amenities in their design of 42,475 toilets, as indicated in Table 6.

 Table 6

 CPSE-wise details of non-provision of basic amenities in toilets<sup>21</sup>

 ('X' denotes facility not provided; '✓' denotes facility provided)

Basic amenity	NTPC	REC	PGCIL	CIL		
Running <sup>22</sup> Water inside toilets	Х	Х	Х	Х		
Hand wash facility <sup>23</sup>	Х	X	Х	✓		
Urinals	Х	Х	Out of eight designs adopted, urinal was not provided in four designs	Out of eight designs adopted by CCL, urinals were not provided in two designs		

Lack of these amenities in toilets constructed by these four CPSEs was confirmed during survey of toilets undertaken by audit, as discussed in Para 2.2.3 and 2.2.4.

Among reasons for non-availability of running water facility inside the toilets, Audit found that:

• NTPC and REC provided for water tanks on the floor of the toilets which had to be filled up with water manually, as there was no connection provided to a water source.

<sup>&</sup>lt;sup>21</sup> As per Memorandum of Understanding for the construction of toilets between CPSEs and Implementing agencies

<sup>&</sup>lt;sup>22</sup> Water tank/water source connected to toilet with pipeline

<sup>&</sup>lt;sup>23</sup> Either a wash basin or handwashing basin with tap (s) along with drainage

• PGCIL provided water tank and pressure hand pumps for filling the water tank (situated outside the toilet) but water pipeline between the toilet and the water tank was not provided. Further, in 345 schools the hand pumps were also not provided<sup>24</sup>.

MoP/ NTPC replied (26 March 2019) that they had finalized the design for construction of toilets based on design given on MHRD website and modified after discussion with MoP. REC replied (5 February 2019) that they adopted NTPC's design and added that providing of water connection in toilets was beyond the scope of work assigned to them.

MoP/ PGCIL replied (14 August, 2018) that installation of piped water supply and wash basins were not considered a sustainable solution due to risk of theft and pilferage. PGCIL added that they were assessing the status of toilets, for remedial measures. Regarding the non-provision of urinals, PGCIL replied (23 April 2018) that they had constructed WCs in lieu of urinals for the girls' toilets.

CIL (subsidiary CCL) replied (21 January 2019) that the designs of the toilets were approved by their competent authorities.

The replies indicate that the CPSEs did not appreciate the importance of providing running water in the toilets constructed by them. Lack of running water was one of the main reasons for rendering the toilets built under earlier schemes unusable/dysfunctional. The toilets built under this project by the four CPSEs also faced the same problem.

NTPC, stated that their design was approved by the Ministry/MHRD, but could not provide documents in support of the same. Ministry of Power also did not provide the details while furnishing its reply (26 March 2019) to Audit.

Thus the minimum facilities were scaled down by the four CPSEs, though flexibility was allowed to them for improvement in the toilet design.

## 4.2 Use of prefab structures for building toilets

MoP/ MoC instructed (27 October 2014) the CPSEs that the toilets to be constructed under the project would be either of conventional<sup>25</sup> (brick and mortar) or precast<sup>26</sup> (concrete slabs) technology. MoP further directed the CPSEs to ensure that no prefabricated structures were used for constructing toilets, as prefab technology offered lower strength and useful life, compared to conventional technology. Prefab technology involves higher cost, but helps in quick construction of civil structures due to use of already manufactured components in construction.

<sup>&</sup>lt;sup>24</sup> As per PGCIL's own survey of 446 schools conducted during 2017

<sup>&</sup>lt;sup>25</sup> Conventional Technology: It is normal brick-and-mortar method generally used for construction. This technology is cost effective and addresses issues of sustainability and quality

<sup>&</sup>lt;sup>26</sup> Precast Technology: Under precast technology, concrete is cast in reusable molds, then cured in a controlled environment, to be transported to the construction site and lifted into place. It provides quickly built civil structure, cost effective for higher quantity of units, and addresses issues of sustainability and quality

(i) CIL (subsidiaries other than NCL), ONGC and NHPC adhered to the above mentioned directions of the Ministry, while PFC and CIL (subsidiary NCL) planned for the prefabricated structures for a part of their identified toilets.



Conventional Technology

Prefab Technology

NTPC, PGCIL and REC initially planned for conventional technology, but later asked the respective implementing agencies to use prefab structures for achieving the timelines. The CPSE-wise comparative cost of toilets constructed by use of prefab technology and

The CPSE-wise comparative cost of toilets constructed by use of prefab technology and conventional technology is given in Table 7.

Name of CPSE*	Total toilets constructed Numbers	Prefab toilets constructed Numbers (per cent )	Contract award value* of conventional toilet ₹ in lakh	Contract award value* of prefab toilet ₹ in lakh	Extra cost** per prefab toilet ₹	Total extra cost ₹ in crore
PFC	9,383	4,947 (53)	1.40	2.28	88,000	43.53
REC	12,379	5,257 (42)	0.96	1.71	75,000	39.43
NTPC	29,441	9,010 (31)	1.20	1.55	35,000	31.54
CIL (Sub-NCL)	5,635	4,553 (81)	2.09	2.88	79,000	35.96
Total	56,838	23,767 (42)				150.46

Table 7Details of higher cost involved in Prefab Toilets

\*Weighted average of award values have been used. Difference in contract value among CPSEs, within the same technology, is due to the difference in the design of toilets.

\*\*Based on comparable design/drawings of the two technologies in terms of amenities of the toilets. Note: PGCIL's cost for conventional toilets, comparable with prefab design, was not available, hence not included in this table.

Above mentioned four CPSEs constructed 31 to 81 *per cent* of their toilets using prefab structures and incurred higher cost of ₹150.46 crore as compared to conventional technology.

CIL (subsidiary NCL)/ NTPC and MoP (REC/ PFC) replied (January 2019 to July 2019) that the prefab technology was preferred to achieve the target within the given timeframe.

The decision to use prefab structures was in total disregard of Ministry's instructions and compromised the strength and life of toilets. Moreover, the CPSEs did not meet the timelines for completion of toilets (refer Para 3.2.2) despite adopting prefab technology to save time.

(ii) PGCIL constructed 8,453 prefab toilets through implementing agencies out of which 255 toilets were temporary/movable. MHRD requested PGCIL that the temporary toilets may be replaced with permanent toilets by 10 September 2015 but this was not complied with.

MoP/PGCIL stated (14 August 2018) that it entrusted provision of 120 toilets in Purnea District to M/s. ABB which constructed temperory toilets at its own cost. For the remaining 135 toilets, since the schools did not confirm the locations, the toilets were made temperory/movable.

Reply is to be viewed against the fact that the temperory toilets were accounted for in PGCIL's account and such type of toilets were not permitted by MHRD. Further, the same were not replaced with permanent structures as directed by MHRD.

## 4.3 Award of contract to implementing agency on nomination basis

As per directions (5 July 2007) of CVC, the award of contracts on nomination basis was to be resorted to only under exceptional<sup>27</sup> circumstances. MoP/ MoC also directed (21 November 2014) the CPSEs that the work should be awarded following competitive bidding process only.

Audit noticed that out of the seven CPSEs, NTPC handled the work of award of contracts for construction of toilets and monitoring of execution of the contracts on its own while NHPC entrusted the work to respective School Management Committees. Four CPSEs viz. PFC, PGCIL, ONGC, and CIL (subsidiaries NCL, CCL and SECL) outsourced the Project implementation work, including award of contracts for construction of toilets, to other agencies. PFC, PGCIL and CIL engaged PSUs and ONGC engaged Sulabh International as the implementation agency on nomination basis. REC entrusted the work to its wholly owned subsidiary REC Power Distribution Company Ltd (RECPDCL). The award of contracts to implementing agencies on nomination basis was not in accordance with CVC's directions.

The CPSEs stated that award of contracts to implementing agency on nomination basis became necessary due to strict timelines (CIL SECL, REC), lack of expertise in handling civil construction and infrastructure projects (PFC), inadequate manpower (PGCIL) and provisions of CSR policy (REC and ONGC). The CPSEs further stated that the implementing agencies awarded the work to constructing agencies through competitive bidding.

The reply needs to be seen in the light of the fact that award of the work to implementing agencies was in violation of the CVC and Ministries guidelines. Further, this had cost implications (refer Para 4.3.1) and had failed to achieve completion of work within the timelines (Para 3.2.2).

## 4.3.1 Implementation charges paid to nominated agencies

Besides construction of toilets through nominated agencies, the CPSEs offloaded 45,967 toilets (35 *per cent*) out of the total 1,30,703 constructed toilets to SGAs. This was because

<sup>&</sup>lt;sup>27</sup> such as natural calamities and emergencies or where there were no bids to repeated tenders or where only one supplier has been licensed (proprietary item) for the supply

the construction work did not progress well and MoP/ MoC directed (24 June 2015) the CPSEs to transfer the work to concerned SGAs.

The implementation charges paid by the CPSEs to SGAs ranged between 2.5 to 3 *per cent* of cost of construction while the implementing agencies appointed on nomination basis were paid 8.5 *per cent* to 15 *per cent* of cost of construction as implementation charges. Extra cost incurred due to payment of higher implementation charges is tabulated in Table 8.

SI. No.	Name of CPSE	Implementing Agencies	Charges paid to implementing agencies appointed on nomination basis (per cent ) (₹ in crore		Charges worked out @ 3 per cent as paid to SGAs (₹ in crore)	Extra cost (₹ in crore)
1	CIL (CCL,	NBCC (India) Limited,	8.5, 10	33.26	11.02	22.24
-	NCL)	Hindustan Prefab Limited (HPL)	, 10	22.20	11.02	
2	PFC	HPL, IRCON ISL <sup>28</sup>	10	11.18	3.35	7.83
3	REC	RECPDCL	10	11.59	3.48	8.11
4	PGCIL	HPL, IRCON ISL, GVT <sup>29</sup>	10	3.80	1.15	2.65
5	ONGC	Sulabh International	15	10.59	2.12	8.47
		Total	70.42	21.12	49.30	

 Table 8

 Higher Implementation charges paid to implementing agencies appointed on nomination basis

Higher rate of implementation charges allowed to implementing agencies, as compared to SGAs, involved extra cost of ₹49.30 crore.

CIL (subsidiary NCL) replied (23 August 2018) that they engaged HPL on nomination basis to save time. CIL (subsidiary CCL) replied (21 January 2019) that the work was awarded to NBCC on nomination basis after receiving the proposal from HPL and NBCC.

MoP/ PGCIL/ PFC replied (14 August, 2018 and 15 July 2019) that SGAs had local network to implement the project at lower cost, but high logistic costs were involved in case of other agencies. PFC further added that implementation charges paid by them are comparable with rest of CPSEs and hence are not on higher side.

MoP/ REC replied (5 February 2019) that the charges paid to RECPDCL were in line with market trend.

MoPNG/ ONGC replied (6 August 2019) that the rates charged by their implementation agency was lowest in comparison to any other organisation for similar scope of works and location.

Reply is to be viewed against the fact that SGA charged much less as implementation charges. Decision of implementation charges should have been taken on the rates prevailing in the market instead of following the proposal of implementing agencies.

## 4.4 Cost estimation

The implementing agencies appointed by CPSEs prepared cost estimates to establish benchmarks for bid evaluation and to assess reasonableness of contract values obtained

<sup>&</sup>lt;sup>28</sup> IRCON Infrastructure & Services Limited

<sup>&</sup>lt;sup>29</sup> Gramin Vikas Trust

through bidding. As per MHRD's guidelines, the cost estimates were to be prepared based on Schedule of Rates (SoR) of concerned State for each item of work. Audit found that:

(i) All the selected CPSEs, except NHPC, prepared the cost estimates by applying Delhi Schedule of Rates (Delhi SoR)<sup>30</sup> while the SGAs were paid based on State SoR.

Audit re-worked the cost estimates by adopting State SoR instead of DSR, in respect of toilets built in five<sup>31</sup> states by five CPSEs. It was seen that the cost estimates prepared by the CPSEs {PFC, REC, ONGC, and CIL (MCL and WCL)} by adopting DSR, were higher by ₹47.55 crore (*Annexure IV*).

PFC replied (11 January 2018) that they did not have expertise in civil work and hence considered the cost estimates submitted by their implementing agencies. Reply of MoP is silent on this issue.

CIL (subsidiaries WCL and MCL) replied (23 August 2018) that they adopted their prevailing tendering practices.

MoP/ REC replied (5 February 2019) that they adopted Delhi SoR, as provided by NTPC.

MoPNG/ ONGC replied (6 August 2019) that they had tried to avoid procedural delays in planning stage by choosing uniform rates over State SoRs.

Audit is of the opinion that as the toilets were built using material and labour generally sourced within the State, adoption of State SoR would have been more relevant and cost effective.

- (ii) CCL offloaded (25 July 2015) 272 toilets to Jharkhand Government at an estimated rate of ₹1.36 lakh per new toilet which was completed as per the UC dated 01.06.2016. However, earlier, the work for construction of 1271 toilets having identical design with similar facilities was awarded (20 January 2015) to NBCC Ltd at ₹1.65 lakh each. Comparison of the two costs indicate that the toilets awarded to NBCC Ltd was executed at a higher cost of ₹3.68 crore {(₹1.65 lakh ₹1.36 lakh) x 1271 toilets}. Thus the two CPSEs incurred more cost in respect of those toilets constructed by them through implementing agencies as compared to toilets constructed by SGAs.
- (iii) HPL, the implementing agency of PGCIL, Patna awarded the work of construction of toilets to Rubicon Inspection System Pvt. Ltd who, in turn, outsourced the entire work to various local contractors. The rates paid to the sub-contractor were less by 18 to 20 *per cent* indicating that higher margins (₹8.34 crore) were retained by the main contractor.

PGCIL/ MoP replied (14 August, 2018) that the main contractor engaged local labour supply gangs which was not the same as outsourcing of work on back to back basis.

 <sup>&</sup>lt;sup>30</sup> Delhi Schedule of Rates (DSR), published by Central Public Works Department from time to time, gives unit rates for various items of material and labour, based on prevailing technology and market rates
 <sup>31</sup> Arwagehal Pradesh Andhra Pradesh, Bihar Madhya Pradesh and Odisha

<sup>&</sup>lt;sup>31</sup> Arunachal Pradesh, Andhra Pradesh, Bihar, Madhya Pradesh and Odisha

Reply is to be viewed against the fact that work was transferred to the sub-contractors including the supply of material and labour.

## 4.5 Deficiencies at the time of execution

Audit examined various aspects of execution of work such as tendering process, eligibility and performance of the contractors, timely completion of work, adherence to terms and conditions of contract etc.

Audit observed the following:

## 4.5.1 Eligibility for award of work

RECPDCL awarded (15 January, 2015) construction of 1,971 toilets at a cost of ₹29.27 crore to M/s V K Aggarwal & Co (VKAC). Later, at the time of seeking ex-post facto approval (22 January 2015) of Board <sup>32</sup>, management noted that VKAC did not fulfil the criteria of previous experience. Board of Directors of RECPDCL, however, decided to award the work to VKAC in a phased manner by awarding 1,009 toilets in the first lot (Ballia I and II) and balance 962 toilets (Ballia III and IV) in the second lot subject to performance of work under Phase-I.

Against the above, VKAC could complete only 261 toilets. It could construct another 251 toilets only up to plinth level. RECPDCL handed over the pending work to other contractors and asked them to use prefab structures to expedite the work. Use of prefab structures involved extra cost of ₹5.61 crore for 748 toilets (1,009 minus 261) and were also in violation of Ministry's directions. REC/RECPDCL also waived the risk & cost clause<sup>33</sup> of contract with VKAC.

MoP/ REC replied (5 February 2019) that in order to achieve the assigned target in time, the balance toilets were awarded to prefab agencies and the risk & cost clause was waived.

The fact remains that placing the order on VKAC, despite being aware that they did not fulfill the eligibility criteria, was not a prudent decision.

## 4.5.2 Absence of penalty clause for delay in execution of contracts

As per CVC guidelines, there should be punitive clauses, such as penalty/ liquidated damages (LD)<sup>34</sup> and purchase at risk/cost<sup>35</sup> for delayed/non-supplies. Internal Manuals of CPSEs also require that these standard clauses are included in the contracts. Audit found that there was no punitive clause for delay in work in the MoUs executed by CPSEs with implementing agencies. The contracts awarded for construction work however provided for both the punitive clauses.

<sup>&</sup>lt;sup>32</sup> As per delegation of powers, Board approval is required for contracts of value exceeding ₹20 crore as such ex-post facto approval was taken

<sup>&</sup>lt;sup>33</sup> As per this clause, in case of abnormal delays or non-fulfilment of terms and conditions of the contract, the Company may cancel the letter of award in full or part thereof, and may also make the purchase of such material from elsewhere / alternative source at the risk and cost of the contractor

<sup>&</sup>lt;sup>34</sup> If a contractor fails to deliver goods/services within stipulated time, he shall pay to owner LD @ 0.5 per cent of contract price for each week of delay or part there of subject to maximum of 5/10 per cent

<sup>&</sup>lt;sup>35</sup> In case of delay/non-supplies, the owner can get the work done through other sources and recover the extra cost incurred in the process, if any, from the defaulting contractor

Audit noticed that no penalty/ LD clause was included in the MoUs executed with the implementing agencies to enable the management to recover LD/price reduction in cases of delay in execution of contracts. Resultantly, an amount of ₹12.57 crore could not be recovered from the implementing agencies by three CPSEs as depicted in Table 9.

CPSEs*	Implementing Agency	Toilets constructed and data provided	Actual cost of total toilets	Number o comple		Delay period	LD as per norms
		(Number)	(₹ in crore)	On time	With delay	Months	(₹ crore)
PFC	HPL, IRCON ISL	4745	155.06	1,331	3414	Up to six months	1.89
REC	RECPDCL	6802	184.37	143	6,659	More than six months	9.51
ONGC	Sulabh International	4,496	84.5	1,598	2,898	Up to 21 months	1.17
	Total	16,043	423.93	3,072	12,971		12.57
* Necessar	* Necessary data was not provided by NTPC, PGCIL, NHPC and CIL						

Table 9
Detail on liquidated damages for three CPSEs

Above table shows that, out of 16,043 toilets constructed by the three CPSEs through agencies (other than SGAs) for which data was provided, only 3,072 toilets (19 *per cent*) were completed in time, and 12,971 toilets (81 *per cent*) were completed with delays.

Further, REC had exempted (10 July 2015) the recovery of LD from all the contractors if they could complete the balance work by 15 August 2015. But, REC finally released full payments without deducting LD even though only 137 toilets (1.30 *per cent*), out of the allotted 10,989 toilets, were completed on time.

MoPNG/ ONGC replied (7 September, 2018) that LD clause was adopted mainly for time bound commercial activities and, in this case, no loss occurred to them due to the delays.

MoP/ REC stated (05 February 2019) that the basic motive at that point of time was to complete the toilets within target timeline and to avoid litigation. Accordingly, in view of the urgency of the project and to motivate the agencies to complete and handover all toilets within given timeline, LD or any other penalty was considered for waiver on satisfactory completion on case to case basis.

MoP/ PFC replied (15 July, 2019) that toilets were technically completed by 8 August 2015 and time extensions were granted for handing over activity and other documentations.

Fact remains that the deterrent mechanism was absent, to the undue benefit of contractors, even though most of the toilets were not completed in time.

## 4.6 Weakness in Internal Control

Internal Control System means all the policies and procedures (internal controls) adopted by the management of an entity to assist in achieving management's objective of ensuring, as far as practicable, the orderly and efficient conduct of its business, including adherence to management policies, the safeguarding of assets, the prevention and detection of fraud and error, the accuracy and completeness of the records.

During review of payments to the contractors by CIL (subsidiary CCL) and PGCIL, Audit noticed certain inadequacies as discussed in Para No. 4.6.1 and 4.6.2.

## 4.6.1 Advance for maintenance of toilets

CIL (subsidiary CCL) entered (20 January 2015) into a MoU with NBCC (India) Limited to implement the project for construction of 11,589 toilets in four<sup>36</sup> States. The total estimated cost of was ₹324.50 crore, ₹196.56 crore for construction and ₹127.94 crore for four years' maintenance after expiry of one-year warranty. As per the relevant clause in the MoU, CCL released (March 2015) a sum of ₹32.45 crore to NBCC towards 10 *per cent* advance, for mobilization of resources by the contractor. This included advance of ₹12.79 crore on the maintenance portion of the contract. As the four years' maintenance was to start only after completion of toilets and expiry of one-year warranty, the release of advance for maintenance was premature. Further, NBCC did not start the four years' maintenance, even after two years of scheduled date (16 August 2016) as per the contract.

CIL (subsidiary CCL) replied (21 January 2019) that interest on the un-used advance was passed on by NBCC to them. Regarding maintenance not being started, CCL stated that they had not received instructions from CIL on the maintenance of toilets.

The reply is to be viewed against the fact that maintenance of toilets has not started yet, though advance was released in the beginning itself which highlighted the lack of monitoring on the part of CPSE.

## **4.6.2** Release of final payment to implementing agencies

As per the MoUs entered into (26 November 2014) by PGCIL with implementing agencies, the payment of last 10 *per cent* of the contract value was to be released only after receiving monthly progress reports from the contractors, audit certificates on expenses incurred and final comprehensive completion report. The final comprehensive completion report was to provide the details of beneficiary schools and students along with photographs. But PGCIL released the last 10 *per cent* (₹4.17 crore) payment without this report.

PGCIL/ MoP replied (14 August 2018) that the final payment was released based on submission of handing over certificates, audited accounts and verification of the bills.

The fact remains that the MoU clause was not adhered to. Though PGCIL stated that handing over certificates were furnished by the agencies, these certificates were not produced to Audit for 4,947 out of 9,983 toilets (50 *per cent*) (*refer Table- 5 under Para 3.2.2*).

Thus, release of final payments to the implementing agencies without obtaining the final comprehensive completion report highlighted the lapse on the part of monitoring by the CPSE.

<sup>&</sup>lt;sup>36</sup> Jharkhand, Odisha, Chhattisgarh and Uttar Pradesh

## **Chapter-V**

## **Conclusion and Recommendation**

#### 5.1 Conclusion

Government of India has been taking measures to provide separate toilets for girls and boys in government schools through various schemes but there were gaps in achieving this objective due to poor maintenance of toilets, lack of dedicated funds, poor water availability inside toilets etc. MHRD launched SVA in September 2014 with focus on improving sanitation facilities in schools with contribution from Government owned entities in the corporate sector. CPSEs participated in SVA by deploying funds from their CSR budget. Their mandate was to construct at least one functional toilet each for girls and boys in every Government school within one year i.e. by 15 August 2015. 53 CPSEs participated in this Project and constructed 1,40,997 toilets as per MHRD.

Audit examined construction of toilets by seven CPSEs viz PFC Limited, REC Limited, PGCIL, NTPC Limited, NHPC Limited, ONGC and CIL with its seven subsidiaries (under MoP, MoC and MoPNG) which constructed more than 5,000 toilets each and 1,30,703 toilets in total, at a cost of ₹2,162.60 crore. Field survey of 2,695 toilets, selected through multi stage statistical sampling was also carried out, to assess availability and usability of the toilets.

During the survey, 200 toilets were not found in the respective schools and 86 toilets were found to be only partially constructed (11 *per cent* of sample). Out of these, payment vouchers/ UCs were produced to Audit in respect of 79 toilets, indicating irregularities.

Audit graded the toilets based on criteria similar to that adopted by Government for Swachh Vidyalaya Puraskar and found that only 25 *per cent* of toilets in the audit sample got five/ four-star rating while 75 *per cent* toilets got three-star or below rating, indicating need for improvement.

The survey also revealed that 30 *per cent* of toilets which were constructed were not in use due to reasons such as lack of running water, cleaning arrangements, damages to toilets etc. Around 72 *per cent* of toilets in the sample did not have running water, though it was a key facility insisted upon while entrusting the work to the CPSEs. There were inadequacies in providing other amenities such as hand washing facility, ramp/ staircase etc. Defective construction of toilets, provision of temporary/ moveable toilets (instead of permanent structures) and damaged/ overflowing leach pit were also noticed during the survey.

The CPSEs were required to maintain the toilets constructed by them for three to five years but only three CPSEs (NTPC for conventional toilets, REC and CIL subsidiaries BCCL, CCL, ECL and SECL) incorporated the maintenance clause in the MoUs/ contracts but later withdrew these clauses. PFC, PGCIL, NHPC, ONGC and CIL (subsidiaries MCL, NCL and WCL), NTPC for prefab toilets, neither included any clause for maintenance in the MoUs/contracts nor provided funds to the school management. Lack of maintenance arrangements was one of the main reasons for the toilets not being used. The survey further revealed that out of 1,967 coeducational schools in the audit sample, there was no functional toilet in 99 schools and in 436 coeducational schools there was only one toilet. Thus the CPSEs did not fulfil their mandate of providing at least one functional toilet each for boys and girls in these schools.

The CPSEs were required to conduct the survey in the identified schools before starting the construction of toilets. But PFC and CIL (subsidiary SECL) did not conduct the survey while the other CPSEs which conducted the survey did not cover all the schools identified by them which resulted in non- optimum utilization of resources.

The seven CPSEs constructed 65 *per cent of* toilets on their own and offloaded the remaining 35 *per cent* to SGAs, as the work was lagging behind. The award activity by the CPSEs itself took time up to May 2015. Since construction time of four months was needed, compliance of Government directive to complete all toilets by 15 August 2015 could not be ensured by the CPSEs. Yet, the CPSEs declared that all the toilets were completed in time, though only 33 *per cent* out of 40 *per cent* of toilets for which completion certificates were provided to audit, were completed by due date. Mis-reporting is evident from discrepancy in data of completed toilets as per MHRD and MoP/ MoC figures. Further, completion certificates were not provided to Audit in 60 *per cent* cases for toilets constructed by CPSEs on their own and for toilets constructed through SGAs, UCs were not available in 22 *per cent* cases.

MHRD prescribed standard design of toilets, but allowed flexibility to the CPSEs in designing the toilets for improvement. Four CPSEs (NTPC, PGCIL, REC and CIL) did not provide basic amenities such as running water, hand washing facility and urinals, at the design stage itself. This affected functionality/usability of the toilets. Further, the CPSEs (NTPC, PGCIL, PFC, REC and CIL) constructed about 40 *per cent* of their toilets by using prefab technology, though the administrative ministries and MHRD specifically barred them from using prefab structures in toilets. Prefab toilets have lower strength and life, besides involving higher cost of ₹150.46 crore. Also, extra cost of ₹49.30 crore was incurred due to payment of implementation charges at higher rate to implementing agencies, which were appointed on nomination basis in violation of CVC guidelines.

## 5.2 Recommendation

- The Ministries may look into the issue of non-existing/ incomplete toilets, which were claimed as constructed. The misreporting regarding timely completion of toilets and discrepancies in figures of completed toilets may also be examined to ensure availability of required toilets.
- The CPSEs/Ministries may address absence of basic amenities in the toilets like running water, hand wash facility, urinals, drainage of waste water, etc.
- The CPSEs/Ministries may sort out the issue of regular maintenance of toilets to ensure their sustained usability.

- During execution of such projects, monitoring may be done through Geo tagged photos.
- Since Audit survey covered 2 *per cent* of total toilets, the CPSEs are advised to review/survey the remaining 98 *per cent* toilets and take appropriate action for rectification of deficiencies.

New Delhi Dated : 27 December 2019

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(VENKATESH MOHAN) Deputy Comptroller and Auditor General (Commercial)

Countersigned

New Delhi Dated : 27 December 2019

(RAJIV MEHRISHI) Comptroller and Auditor General of India

# Annexures

Annexure- I
(Referred to in Para no 1.5 of Chapter I)
CPSE-wise and State-wise details of sample selected for survey

(Number of Toil												
SI. No.	State	Total Districts where these CPSEs constructed toilets	Toilets Identify for construction	Districts Selected in Sample	Total Sample	PFC	REC	PGCIL	NTPC	NHPC	ONGC	CIL
1	Andhra	15	10,588	3	213	160					53	
I	Pradesh			5		100						
2	Assam	16	5,859	4	165			99		26	40	
3	Bihar	36	24,013	7	379		53	50	276			
4	Gujarat	6	431	5	19				19			
5	Haryana	4	420	4	21				21			
6	Madhya Pradesh	35	20,745	23	475		39	5	112	75		244
7	Odisha	29	27,768	13	524						66	458
8	Punjab	2	138	1	3		3					
9	Rajasthan	13	2,288	10	61	24	9		28			
10	Telangana	7	2,408	1	54		54					
11	Uttar Pradesh	7	3,701	4	137		98	35	4			
12	Uttarakhand	4	791	3	44				1	43		
13	West Bengal	9	9,361	2	250				154			96
14	Chhattisgarh	20	9,495	4	195							195
15	Jharkhand	25	13,026	7	155							155
16	Goa	2	38									
17	Tripura	6	261									
18	Tamil Nadu	6	94									
19	Manipur	1	35									
20	Kerala	1	10									
21	Himachal Pradesh	4	145									
22	Jammu and Kashmir	5	485									
23	Arunachal Pradesh	5	355									
24	Meghalaya	6	1,773									
	ND TOTAL	263	1,34,228	89	2,695	184	256	189	615	144	159	1,148

Nan	Name of CPSEs Name of State			<b>CPSEs</b> v	wise no of	Toilets	not in Use			Toilets
Nai			NHPC	NTPC	ONGC	PFC	PGCIL	REC	Total	Not in Use ( per cent)
	Andhra Pradesh				1	21			22	11
	Assam		2		13		41		56	34
	Bihar			96			22	27	145	56
	Chhattisgarh	40							40	21
	Gujrat			5					5	26
State	Haryana			4					4	24
Wise	Jharkhand	40							40	33
Toilets Not in	Madhya Pradesh	94	22	11			3	11	141	31
Use	Odisha	82			13				95	24
	Rajasthan			15		3		4	22	36
	Telangana							1	1	2
	Uttar Pradesh						14	64	78	60
	Uttarakhand		2						2	5
	West Bengal	10		30					40	18
Total		266	26	161	27	24	80	107	691	30
Toilets (in <i>per</i> )	Not in Use <i>cent</i> )	28	18	34	18	14	43	46	30	

## Annexure-II (*Referred to in Para no 2.2.2 of Chapter II*) CPSE-wise and State-wise details of Toilets Not in Use

## Annexure-III

## *(Referred to in Para no 3.2.3 of Chapter III)* Details of State-wise Utilization Certificates received by CPSEs from SGAs

State	Fund transferred to SGAs (₹ in crore)	Date of transfer of fund	Number of toilets offloaded to SGAs	Number of toilets for	Date of receipt of UCs	Amount of UCs received (₹ in	Number of toilets for	Amount for which UCs Not
				which UCs received		crore)	which UCs not received	received (₹ in crore)
Uttar Pradesh	2.52	2 to 31 July 2015	335	335	15-Dec-15	2.52	-	-
Punjab	0.93	2-Jul-15	80	80	6-Oct-15	0.93	-	-
Madhya Pradesh	124.68	30 April 2015 to 5 Jan 2016	9929	8,741	23 Sep 2015 to 3 Mar 2018	100.65	1,188	24.03
Rajasthan	11.68	1 to 24 July 2015	956	848	2 Dec 2015 to 21 June 2016	7.5	108	4.18
Telangana	9.23	3-Jul-15	473	473	24-Nov-15	9.23	-	-
Bihar	45.46	13 to 30 July 2015	6998	4,963	16 Dec 2015 to 20 Sep 2016	44.37	2,029	1.09
Andhra Pradesh	75.32	30 June to 31 July 2015	4179	3,434	11 Feb 2016 to 11 Sep 2017	62.64	745	12.68
Assam	6.63	13 to 21 July 2015	473	379	28-Mar-16	5.01	94	1.62
Odisha	156.24	6 May to 13 Oct 2015	9949	4,186	26-Mar-18	105.74	5,763	50.5
Meghalaya	12.92	22 May to 13 July 2015	1773	1,773	24-Oct-16	12.92	-	-
Goa	0.05	10 to 15 July 2015	24	24	12-Apr-16	0.03	-	0.02
West Bengal	33.84	11 Mar 2015 to25-03- 2017	2007	1,971	9-Jan-17	33.58	36	0.26
Jharkhand	58.61	5 May to 25 July 2015	5760	3,991	29 Mar to 1 June 2016	28.12	1,769	30.49
Chhattisgarh	37.17	5 Jan to 24 Nov 2015	2987	2,987	Not furnished	32.83	-	4.34
Arunachal Pradesh	0.31	-	31	31	-	0.31		-
Himachal Pradesh	0.08	-	13	13	-	0.08	-	-
Total	575.67		45,967	34,235		447.38	11,732	128.29

## Annexure-IV (*Referred to in Para no 4.4 of Chapter IV*) Details of difference in cost estimation between Delhi SoR and State SoR)

						(₹ in lakh)
Name of CPSEs	Selected States	Number of Toilets constructed by using Delhi SoR	Cost estimates per toilet based on Delhi SoR	Cost estimates per toilet based on State SoR	Difference per toilet in cost estimate	Total Difference
		1	2	3	4 = (2-3)	5 = (1x4)
PFC	Andhra Pradesh	4,422	2.28	1.96	0.32	1415.04
REC	Conventional					
	Bihar	261	1.26	0.97	0.29	75.69
	Madhya Pradesh	729	1.26	1.09	0.17	123.93
	Prefab					
	Bihar	2,854	1.92	1.62	0.30	856.20
	Madhya Pradesh	63	1.92	1.67	0.25	15.75
ONGC	Bihar	258	2.10	1.97	0.13	33.54
	Assam	928	1.96	1.92	0.04	37.12
MCL	Odisha	5,908	1.94	1.58	0.36	2,126.88
WCL	Madhya Pradesh	711	1.44	1.34	0.10	71.10
						4755.25 ( <b>₹ 47.55 crore</b> )

# GLOSSARY OF TECHNICAL TERMS

SI. No.	Term	Description
1	Competitive Bidding Process	A transparent procurement method in which bids from competing contractors, suppliers, or vendors are invited by openly advertising the scope, specifications, and terms and conditions of the proposed contract as well as the criteria by which the bids will be evaluated.
2	Conventional Technology	It is normal brick-and-mortar method generally used for construction. This technology is cost effective and addresses issues of sustainability and quality.
3	Drainage	A drainage system is an arrangement to move liquids away from where they are not required for disposal in an appropriate location.
4	Geo-tagged photographs	A geo-tagged photograph is a photograph which is associated with a geographical location by geo-tagging.
5	Impact Assessment study	Impact assessment study includes the process of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions.
6	Implementation charges	Implementing charges entail implementation of the projects from concept to commissioning, ensuring competitiveness on the basic guidelines of cost, quality & time.
7	Leach pit	A leach pit is a deeper, larger hole filled with rock for disposing of wastewater in a smaller footprint.
8	Memorandum of understanding	A MoU is a nonbinding agreement between two or more parties outlining the terms and details of an understanding, including each parties' requirements and responsibilities. A MoU is often the first stage in the formation a formal contract.
9	Mobilization Advance	The mobilization/initial advance is normally given to mobilize the resources for execution of work.
10	Nomination basis	Nomination basis means award of contract to single tender.

11	Plinth level	A plinth is the base or platform upon which a column or. structure rests
12	PPGI Ridge	A strip rounded on top, with pre-painted galvanized iron which caps the ridge of a roof.
13	Precast Technology	Under precast technology, concrete is cast in reusable molds, and then cured in a controlled environment, to be transported to the construction site and lifted into place. It provides quickly built civil structure, cost effective for higher quantity of units, and addresses issues of sustainability and quality.
14	Prefab Technology	Prefab technology involves use of factory-manufactured components in construction. Some commonly used prefab materials are Polyurethane Foam Panel (PUF), Wood Panels, Fiber Glass Reinforced Gypsum Panels (GFRG), Fiber Reinforced Aerated Cement Sandwich etc.
15	Questionnaire	A Questionnaire is a structured form, either written or printed, consists of a formalized set of questions designed to collect information on some subject or subjects from one or more respondents.
16	Risk & Cost clause	As per this clause, in case of abnormal delays or non- fulfillment of terms and conditions of the contract, the Company may cancel the letter of award in full or part thereof, and may also make the purchase of such material from elsewhere / alternative source at the risk and cost of the contractor.
17	Schedule of Rates (SoR)	SoR is published by Central/State Public Works Department from time to time, which gives unit rates for various items of material and labour, based on prevailing technology and market rates.
18	Statistical Sampling Method	It is the process of choosing a representative sample from a target population and collecting data from that sample in order to understand something about the population as a whole.
19	Swachh Vidyalaya Abhiyan	The Ministry of Human Resource Department has launched Swachh Vidyalaya Programme under Swachh Bharat Mission with an objective to provide separate toilets for boys and girls in all government schools within one year.

20	Swachh Vidyalaya Puraskar	Swachh Vidyalaya Puraskar is given by MHRD to recognize, inspire and celebrate excellence in sanitation and hygiene practice in schools.
21	Swachhta Status Report	A task force was constituted in the Ministry of Statistics and Programme Implementation with members from the concerned central Ministries/Departments to finalize the framework for monitoring the progress made under the Swachh Bharat Mission, develop methodology where survey is required and to decide the structure of the Swachhta Status Report
22	Temporary/ Movable toilets	A temporary or moveable toilet is a toilet that may easily be moved around. A moveable toilet is not connected to a hole in the ground (like a pit latrine), nor to a septic tank, nor is it plumbed into a municipal system leading to a sewage treatment plant; it can, by definition, be picked up and moved.
23	Water Closet	A water closet is a ceramic sanitary ware product which is used as toilet. This kind of toilets are more hygiene and easy to clean.

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Sl. No.	Acronyms	Stands for	
1	APSSA	Andhra Pradesh Sarva Siksha Abhiyan	
2	BCCL	Bharat Cocking Coal Limited	
3	CCL	Central Coalfields Limited	
4	CIL	Coal India Limited	
5	CPSEs	Central Public Sector Enterprises	
6	CSR	Corporate Social Responsibility	
7	CVC	Central Vigilance Commission	
8	DPE	Department of Public Enterprises	
9	DSR	Delhi Schedule of Rates	
10	ECL	Eastern Coalfields Limited	
11	GoMP	Government of Madhya Pradesh	
12	GVT	Gramin Vikas Trust	
13	HPL	Hindustan Prefab Limited	
14	IEC	Information, Education and Communication	
15	IRCON ISL	IRCON Infrastructure & Services Limited	
16	MCL	Mahanadi Coalfields Limited	
17	MHRD	Ministry of Human Resource Development	
18	MoC	Ministry of Coal	
19	MoP	Ministry of Power	
20	MoPNG	Ministry of Petroleum and Natural Gas	
21	MoU	Memorandum of Understanding	
22	NBCC	National Buildings Construction Corporation	
23	NCL	Northern Coalfields Limited	
24	ONGC	Oil & Natural Gas Corporation	
25	PGCIL	Power Grid Corporation of India Limited	
26	RECPDCL	REC Power Distribution Company Limited	
27	RMSA	Rashtriya Madhyamik Shiksha Abhiyan	
28	RTE Act	Right to Education Act	
29	SECL	South Eastern Coalfield Limited	
30	SGAs	State Government Agencies	
31	SoR	Schedule of Rates	
32	SSA	Sarva Shiksha Abhiyan	
33	SVA	Swachh Vidyalaya Abhiyan	
34	UCs	Utilisation Certificates	
35	VKAC	M/s. V.K. Aggarwal & Co.	
36	WC	Water Closet	
37	WCL	Western Coalfields Limited	

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