



**Performance Audit Report  
Upgradation and Enhancement of Reverse  
Osmosis (Water Desalination) Plant at  
Mithi&Islamkot Town District Tharpakar  
Audit Year 2017-18**

**AUDITOR-GENERAL OF PAKISTAN**



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## **PREFACE**

The Auditor-General conducts audits subject to Articles 169 and 170 of the Constitution of the Islamic Republic of Pakistan 1973, read with sections 8 and 12 of the Auditor- General's (Functions, Powers and Terms and Conditions of Service) Ordinance 2001. The audit of Upgradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi&Islamkot Town District Tharpakar was carried out accordingly.

The Directorate General Audit Sindh Karachi conducted audit of the Upgradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi&Islamkot Town District Tharpakar during April-June, 2018 for the period February, 2013 to June, 2018 with a view to reporting significant findings to stakeholders. Audit examined the economy, efficiency, and effectiveness aspects of the Upgradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi&Islamkot Town District Tharpakar. In addition, Audit also assessed, on test check basis whether the management complied with applicable laws, rules, and regulations in managing the Upgradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi&Islamkot Town District Tharpakar. The Audit Report indicates specific actions that, if taken, will help the management realize the objectives of the Upgradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi&Islamkot Town District Tharpakar. Most of the observations included in this report have been finalized in the light of discussions in the exit conference meeting.

The Audit Report is submitted to the Governor Sindh in pursuance of the Article 171 of the Constitution of the Islamic Republic of Pakistan 1973, for causing it to be laid before the Provincial Assembly of Sindh.

Dated

**(Javaid Jehangir)**  
Auditor-General of Pakistan



## **ABBREVIATIONS AND ACRONYMS**

BOQ	Bill of Quantity
C&ED	Coal & Energy Department
DAC	Department Account Committee
DG	Diesel Generator
FY	Financial Year
HESCO	Hyderabad Electric Supply Company
INTOSA	International Organization of Supreme Audit Institution
KVA	Kilo Volt Ampere
MGD	Million Gallon Per Day
O&M	Operation & Maintenance
PC-I	Planning Commission Proforma-I
PDWP	Provincial Development Working Party
PHED	Public Health Engineering Department
POL	Petrol Oil & Lubricant
RA	Running Account
RO	Reverse Osmosis
SCA	Sindh Coal Authority
SFR	Sindh Financial Rules
SPPRA	Sindh Public Procurement Regulatory Authority
USGPD	United States Gallon Per Day
WAPDA	Water and Power Development Authority



## **EXECUTIVE SUMMARY**

Director General Audit Sindh conducted an audit of Upgradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi&Islamkot Town District Tharpakar from April to June, 2018. The main objective of the audit was to assess whether project was managed with due regard to economy, efficiency and effectiveness, to review Project performance against the intended objectives, to review compliance with applicable rules, regulations and procedures. The audit was conducted in accordance with the INTOSAI Auditing Standards.

The project “Upgradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi&Islamkot Town District Tharpakar” seeks to establish permanent and long term water supply system by adopting self-reliance RO Desalination Technology to convert high brackish/saline underground water into safe drinking water for semi-arid zone/desert or for calamity affected areas, where growth in social-economic sector is badly affected due to scarcity of water. The objective of this scheme is to provide the basic element of growth i.e. eco-friendly solutions of potable water supply scheme to the inhabitants of Tharpakar District where water is saline, un-potable as to provide clean potable water to the inhabitants to develop their quality skills and health in order to contribute their maximum efforts for economic growth and to work in the progressive development schemes designed by Coal & Energy Development Department to exploit the coal resources of the region.

### **Key audit Findings:**

- i. Execution of scheme beyond the domain.
- ii. Non-availability of technically trained staff for operation & maintenance of plant.
- iii. Non-compliance of SPPRA Rules.
- iv. Recoveries of overpayment and undue payment.
- v. Absence of control with regards to monitoring and evaluation RO Plant.
- vi. Non-compliance of Sindh Environmental Protection Act, 2014.

**Recommendations:**

- i. Audit findings indicate the need for adherence to the regulatory framework besides instituting and strengthening internal controls to utilize the funds in a manner in line with the principles of economy, efficiency, transparency to achieve the intended purpose.
- ii. Availability of technically trained staff for operation & maintenance of plant.
- iii. Procurements be made in accordance with SPPRA Rules.
- iv. Proper deductions of government taxes/dues and its subsequent remittances in government account.
- v. Proper monitoring and evaluation in order to ensure proper execution and achievement of intended objectives.
- vi. Compliance of Sindh Environmental Protection Act, 2014.

# 1. INTRODUCTION

Water is a fundamental human need. Each person on Earth requires at least 20 to 50 liters of clean, safe water a day for drinking, cooking, and simply keeping themselves clean. Polluted water isn't just dirty it's deadly. The United Nations considers universal access to clean water a basic human right, and an essential step towards improving living standards worldwide. Water-poor communities are typically/ economically poor as well, their residents trapped in an ongoing cycle of poverty.

Reverse osmosis process is widely used to remove salts from seawater, ground water or brackish water. The key to the successful operation of a reverse osmosis plant is the establishment of an appropriate pre treatment system for the feed water conditioning and continual monitoring of water processed through different components and its onsite testing.

Tharparkar district, popularly known as Thar, is the largest desert of Pakistan. It is located in the south-east of Sindh and its population is nearly 1.2 million. Water shortage is a major problem of the area as the limited groundwater is the only source of water for the people of the district. The groundwater that people here consume is saline to brackish, and has a high concentration of various salts and minerals, which are dangerous for human, as well as livestock health.

Sindh is blessed with vast coal reserves of 175 billion tons of lignite coal within a compact area of 9100 square kilometer of Thar region. The GOS has been endeavouring to develop Thar Coal Field for mining and power generation as it is going to provide energy to the country. As a part of its strategy to develop Thar Coal Fields and improve the socio-economic conditions of locals, various development projects have been launched including installation of RO Water Desalination Plants to provide safe drinking water to the inhabitants and for the workers of the companies investing in Thar for mining and power projects. The GOS had initiated the setting up of RO Plants at 29 sites in Thar, for water supply to Coal Mines and in Areas that were to be developed for communities supposed to be dislodged due to coal mining.

The project "Upgradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi&Islamkot Town District Tharpakar" was established as permanent and long term water supply system by adopting self-reliance RO Desalination Technology to convert high brackish/saline underground water into safe drinking water for semi-arid zone/desert or for calamity affected areas, where growth in social-economic sector is badly affected due to scarcity of water. The objective of this scheme was to provide

the basic element of growth i.e. eco-friendly solutions of potable water supply scheme to the inhabitants of Tharparkar District where water is saline, un-potable as to provide clean potable water to the inhabitants to develop their quality skills and health in order to contribute their maximum efforts for economic growth and to work in the progressive development schemes designed by Coal & Energy Development Department to exploit the coal resources of the region.

### Year-wise financial phasing

(Rupees in million)

	Item	Year-I (2012-13)			Year-II (2013-14)			Total		
		Local	FEC	Total	Local	FEC	Total	Local	FEC	Total
A.	Capital	200.00	-	200.00	30.516	-	30.516	230.516	-	230.516
B.	Revenue	600.00	-	600.00	104.304	-	104.304	704.304	-	704.304
	<b>Total</b>	<b>800.00</b>	<b>-</b>	<b>800.00</b>	<b>134.820</b>	<b>-</b>	<b>134.820</b>	<b>934.820</b>	<b>-</b>	<b>934.820</b>

## **2. AUDIT OBJECTIVES**

### **2.1 The major objectives of the audit were to:**

- i. Review project's performance against intended objectives;
- ii. Assess whether project was managed with due regard to economy, efficiency, and effectiveness;
- iii. Review compliance with applicable rules, regulations and procedures.

## **3. AUDIT SCOPE AND METHODOLOGY**

**3.1** The basic purpose of RO plant scheme was to provide eco-friendly solutions of potable water supply to the inhabitants of District Mithi to meet their basic need of clean drinking water. The period for implementation of the scheme was from March 2013 to June 2014 (16 months). The total cost of the scheme was Rs934.820 million with the segregation of capital component of Rs230.516 million and revenue component of Rs704.304 million. The performance audit included review of project document and record covering operations and activities to assess whether project was managed with due regard to economy, efficiency, and effectiveness.

**3.2** Audit was carried out through understanding the business process with respect to functions, control structure, risk areas by determining project significance and identification of key control. Thus helped auditor in:

- i. Understanding the project management and operations;
- ii. Developing audit objective;
- iii. Performing special audit procedures to assess efficiency, economy and effectiveness;
- iv. Evaluating results; and
- v. Reporting.

## **4. AUDIT FINDINGS AND RECOMMENDATIONS**

### **4.1 Organization and Management**

#### **4.1.1 Un-justified execution of scheme beyond the domain of the authority**

According to the Article-4 of the Sindh Coal Authority Act, 1993 “Functions of Authority: The Authority shall

(a) accelerate the pace of activities relating to coal development and shall be specifically responsible for planning, promoting, organizing, under-taking appropriate projects in this behalf and implementing programmes for exploration, development, exploitation, mining, processing and utilization of coal;

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that the RO Plant was established without the approval of Board of the authority. In addition establishment of RO plant was beyond the domain of Sindh Coal Authority.

Audit was of view that inception and execution of scheme beyond the domain without having infrastructure and trained human resource in the related work may result in ineffective and inefficient functioning of the project activities.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends that measures be taken to ensure effective and efficient functioning of the project activities.

**(O.M # 01)**

#### **4.1.2 Training of Client staff by Contractor was not conducted**

According to the contract agreement Article-15 Project Deliverable and Reports. Training of Staff: The Contractor will undertake the comprehensive training of Client’s nominated personnel for technical training in order to operate and maintain RO Plants. The SCA has rights to visit the training center of the contractor or to other

facilities such as laboratory, research department etc. to ensure the ability of technical support on ground by the Contractor.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that staff of the Sindh Coal Authority was not trained by contractor.

Non-availability of technical staff may result in to ineffective and inefficient functioning of the RO Plant operation and maintenance activities.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends that measures be taken to ensure effective and efficient functioning of the RO Plant operation and maintenance activities.

**(O.M # 02)**

#### **4.1.3 Non-production of record**

Section 14 (2) and (3) of the Auditor-General’s (Functions, Powers and Terms and Conditions of Service) Ordinance, 2001 provide as under:

- (2) The officer incharge of any office or department shall afford all facilities and provide record for audit inspection and comply with requests for information in as complete a form as possible and with reasonable expedition.
- (3) Any person or authority hindering the auditorial functions of the Auditor-General regarding inspection of accounts shall be subject to disciplinary action under Efficiency and Discipline Rules.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, following auditable record was not produced to audit.

- i. Survey & Feasibility reports
- ii. Complete tender file

- iii. Detail of release of Funds
- iv. Copy of work order issued to Contractor(s)
  - v. Cash Book
  - vi. Bank Statement
- vii. Progress Reports
- viii. Monitoring Reports
  - ix. Detail of Security deposit collected and its refunds
  - x. SCA's Approvals, Reviews and Inspection reports
  - xi. Record with regard to project deliverable submitted by the bidder
  - xii. Work completion report and commissioning of the RO Plants

The lapse indicates improper oversight on record keeping by the management, as a result various related aspects of the project could not be scrutinized.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends that record be produced to audit.

(O.M # 03)

## **4.2 Financial Management**

### **4.2.1 Undue favour to contractor due to refund of bid security – Rs18.000 million**

As per Rule 37(1) of SPPRA 2010, Bid Security “The procuring agency shall require the bidders to furnish a bid security not below one percent and not exceeding five percent of the bid price, which shall remain valid for a period of 28 days beyond the validity period for bids, in order to provide the procuring agency reasonable time to act, if the security is to be called;”. Further as per Rule 37(1) of SPPR 2010, “Bid security shall be released to the unsuccessful bidders once the contract has been signed with the successful bidder or the validity period has expired.”

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that an amount of Rs18.000 million was obtained vide pay orders No.

SCP070760 on 24th September 2013 on account of security deposit / bid security from the successful contractor, the work order was issued dated 23rd October 2013, but the security deposit was refunded after obtaining performance security in the form of bond from insurance company dated 8<sup>th</sup> November 2014 before commencement of work, instead of retaining the same till the completion of work. Thus undue financial benefit was extended to the contractor, in violation of above rule.

The lapse indicates improper weak management and absence of internal control.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends strengthening of internal control to ensure compliance of related Rules.

(O.M # 04)

#### **4.2.2 Irregular Performance Security through insurance company – Rs74.561 million**

As per Rule 39(1) of SPPRA 2010, Performance Security “Procuring Agency shall, in all procurement of goods, works and services, carried out through open competitive bidding, require security in the form of pay order or demand draft or bank guarantee, an amount sufficient to protect the procuring agency in case of breach of contract by the contractor or supplier or consultant, provided that the amount shall not be more than 10% of contract price.”

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that Performance Security Bond of Rs74.561 million was received from contractor through insurance company (EFU General Insurance Ltd) instead of demand draft or bank guarantee, in violation of above rule.

In addition the validity expired on 22.10.2014 whereas work was undertaken after expiry date but neither the Performance Security Bond was renewed nor fresh one was obtained from contractor.

The lapse indicates improper watch by the management and absence of internal control.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends strengthening of internal control to ensure compliance of related Rules.

**(O.M # 05)**

#### **4.2.3 Irregular advance payment of RO Plant Mithi – Rs365.950 million**

According to the contract agreement Clause 6.1.1 Contractor will prepare and submit bills on completion of Activity identified in BOQ, Contractor may issue running bills on completion of more than one activity in any running Bills.

As per Rule 220(c) of Sind Financial Rules in respect of works costing Rs2.5 million or above the contractor may be allowed by the authority competent to accept tender, a mobilization advance to be paid up to 10% of the tendered amount subject to the following conditions:

- (i) The contractor shall before obtaining the advance furnish a guarantee in Form 20-A.
- (ii) The contractor shall pay interest @ 10% per annum on the advance.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that payment claim of Rs365.950 million for R.O Plant 2 MGD capacity for Mithi City was submitted on letter head by contractor dated. 15-01.2014, the payment against the same was made under revenue component vide cheque No.294918 dated. 21.01.2014 and cheque No.094918 dated 24.02.2014.

At the other hand work order of development work of construction of RO Plant Mithi building was issue to the contractor dated 24.04.2013. The work was completed upto 8<sup>th</sup> R.A bill between 19.12.2014 to 18.03.2015 as per the date of pay order of security deposit submitted with 7<sup>th</sup> and 8<sup>th</sup> R.A bill respectively, as the measurement books against the work was maintained without recording date of entry.

In the light of above mention fact audit was of view that advance payment of Rs365.950 million was made, as payment was made before installation and obtaining completion report thereof. In addition the RO Plant building work was completed

between 19.12.2014 to 18.03.2015, therefore installation of RO Plant could not be possible upto the said date and it will take around 30 days to be installed after possession/completion of RO Plant building. Thus undue favor was extended to contractor with regard to retention of advance payment from February-2014 till completion of installation of RO Plant around end of February 2015.

In addition if the mobilization advance @ 10% per annum was allowed as per Rule 220(c) of Sind Financial Rules, there would be a recovery of Rs36.595 million against the advance payment, which resulted a loss to government.

Thus internal control for effective financial management was not observed. The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends strengthening of internal control to ensure compliance of related Rules.

**(O.M # 06)**

#### **4.2.4 Irregular payment without obtaining of data, record and final reports of tubewells – Rs99.760 million**

According to the contract agreement Clause 5.1.7.7 Data, Record And Final Reports: “The Bidder shall keep accurate record of drilling history indicating lithological log of each borehole including description of all materials encountered and their location in the borehole. The fact that SCA Representative or his representative may be present and keeping a separate record shall not relieve the Bidder from his responsibility. All records and data shall be kept by the bidder on forms approved by the SCA Representative. The Bidder shall deliver to the SCA Representative the original of all records and all such records shall become the property of the SCA. Final report should be submitted according to the deliverables mentioned in this section and must have photographs showing activities of each Tubewell.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that payment of Rs99.760 million under revenue component was made to

contractor on account of installation of 18 Nos. of new tube wells with submersible pump (10 for Mithi and 08 for Islamkot), without obtaining proper running account bill. In addition completion certificate for payment and final report with photographs showing activities of each tubewell was not available on office record. Further during field visit five tubewell were found non-functional without submersible pump since day first at R.O Plant Islamkot Town.

(Amount in Rupees)

S.No.	Description	Claim Date	Qty	Unit Price	Amount
1	Drilling & Construction of Tubewells	11-02-2014	13	3,792,250	49,299,250
2	Submersible Pumping Units	14-02-2014	18	1,750,000	31,500,000
3	Drilling & Construction of Tubewells	18-04-2014	5	3,792,250	18,961,250
<b>Total</b>					<b>99,760,500</b>

Thus internal control for effective financial management was not observed. The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends strengthening of internal control to ensure compliance of related Rules.

(O.M # 07)

#### 4.2.5 Overpayment to Contractor – Rs33.333 million

According to Para-6 of PC-I of the scheme “Up-Gradation & Enhancement of Reverse Osmosis (Water Desalination) Plants at Mithi City &Islamkot Town District Tharparkar” Description, justification and technical parameters: “RO desalination specifically designed based on detailed study of hydrogeology to convert brackish water from deep underground source into sweet purified drinking water at optimal cost of Rs0.16 paisa per gallon (inclusive of Rs0.04 per gallon being cost of electricity and POL for prime/standby generators)”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that RO plant of 2 million gallon per day and 1.5 million gallon per day

capacity was installed at Mithi and Islamkot District Tharparkar respectively along with 18Nos. of new tube wells with submersible pump (10 for Mithi and 08 for Islamkot).

As per the advance claim vide reference No. O&M(2016/1/Thar/Badin, 2016-17 dated 04-07-2016 of the contractor submitted for payment of Rs73,277,582 on account of operation & maintenance for the period from July 2016 to June -2017 of RO Plant at 50% of RO Plant Capacity i.e (1,000,000 Gallon per day of RO Plant Mithi and 750,000 Gallon per day of RO Plant Islamkot). The payment against the same was allowed as detailed below:

Site Name	July 2016 to June -2017	Total	Gallon	Amount	July 2016 to June -2017	Total	POL	Amount	G.Total Amount
	Gallons	Gallons	Rate		POL	Liter	Rate		
2MGD- Misri shah Plant at Mithi City	365 days x 1000000 Gallons per day	365,000,000	0.10	36,500,000	365 days x 160 litre per day	58,400	91	5,314,400	<b>41,872,891</b>
1.5MGD - Islamkot Plant at Islamkot Town	365 days x 750000 Gallons per day	273,750,000	0.10	27,375,000	365 days x 120 litre per day	43,800	91	3,985,800	<b>31,404,691</b>
<b>Total</b>									<b>73,277,582</b>

At the other hand as per data of production of RO Plants obtained from operation & maintenance claim of the contractor based on actual production vide reference No. O&M(2016/Mihti/2015-18/01 dated 24-05-2018. As per audit the claim for the period July 2016 to June-2017 come to Rs39,944,654 according to the O&M rate provided in PC-I as detail below. Thus an amount of Rs33,332,988 (Rs73,277,582 - Rs39,944,654) was paid in excess to contractor which is required to be recovered as detailed below:

Month	2MGD-RO Plant Mithi	1.5MGD – RO Plant Islamkot	Total
July	13,479,000	2,834,200	16,313,200
August	8,577,000	3,141,300	11,718,300
September	7,894,000	6,367,930	14,261,930
October	11,191,000	3,403,700	14,594,700
November	10,752,000	6,309,300	17,061,300
December	14,640,000	8,021,100	22,661,100
January	20,447,652	8,021,100	28,468,752
February	28,045,883	5,929,900	33,975,783
March	21,178,162	5,692,000	26,870,162
April	15,828,367	5,651,600	21,479,967

Month	2MGD-RO Plant Mithi	1.5MGD – RO Plant Islamkot	Total
May	12,845,605	8,043,100	20,888,705
June	13,612,687	7,747,500	21,360,187
<b>Total Qty in Gallon</b>	178,491,356	71,162,730	<b>249,654,086</b>
Rate Per Gallon	0.16	0.16	<b>0.16</b>
<b>Amount</b>	28,558,617	11,386,037	<b>39,944,654</b>

In addition payment of operation & maintenance of RO Plants for the period from January 2017 to June -2017 was reclaimed by the contractor vide reference No. SCA-O&M/002 dated 12-12-2017 and reference No. SCA-O&M/003 dated 12-12-2017 for Rs18,365,226 the same was verified for payment by Sindh Coal Authority Vide letter No.SCA-23/SID/2017-18 dated 06-02-2018, which is required to be stopped to avoid double payment.

The lapse indicates improper oversight and absence of the administrative internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends strengthening of internal control and recovery of overpayment.

**(O.M # 08)**

#### **4.2.6 Un-justified verification of fuel charges – Rs4.815 million**

According to Para-6 of PC-I of the scheme “Up-Gradation & Enhancement of Reverse Osmosis (Water Desalination) Plants at Mithi City &Islamkot Town District Tharparkar” Description, justification and technical parameters: “RO desalination specifically designed based on detailed study of hydrogeology to convert brackish water from deep underground source into sweet purified drinking water at optimal cost of Rs0.16 paisa per gallon (inclusive of Rs0.04 per gallon being cost of electricity and POL for prime/standby generators)”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was

observed that contractor's claim for the payment of operation & maintenance of RO Plants was submitted for verification vide reference No. O&M/Mithi/2015-18/01 dated 24-05-2018 in which payment of Rs27,049,405 including Rs4,815,330 on account of Fuel Charges/POL for the period December 2017 to April 2018 was claimed as detailed below, the same was verified for payment by Sindh Coal Authority.

Audit was of view that payment of Rs4,815,330 on account Fuel Charges/POL was not admissible as O&M cost calculated @ Rs0.16 per Gallon which also cover fuel charges as well, which is required to be stopped to avoid undue payment

Month	2MGD-RO Plant Mithi	1.5MGD – RO Plant Islamkot	Total
December 2017	27,280,079	7,264,200	34,544,279
January 2018	23,958,783	7,316,400	31,275,183
February 2018	17,755,801	6,038,300	23,794,101
March 2018	21,670,575	8,670,500	30,341,075
April 2018	10,128,130	8,880,200	19,008,330
<b>Total Qty in Gallon</b>	100,793,368	38,169,600	<b>138,962,968</b>
Rate Per Gallon	0.16	0.16	<b>0.16</b>
<b>Amount</b>	16,126,939	6,107,136	<b>22,234,075</b>

Month	2MGD-RO Plant Mithi	1.5MGD – RO Plant Islamkot	Total
<b>POL in Rs</b>			
December 2017	667,500	200,250	867,750
January 2018	759,150	227,745	986,895
February 2018	759,150	227,745	986,895
March 2018	759,150	227,745	986,895
April 2018	759,150	227,745	986,895
<b>Total</b>	3,704,100	1,111,230	<b>4,815,330</b>
<b>G.Total</b>			<b>27,049,405</b>

The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends that internal control may be strengthened to avoid undue payment to contractor.

#### 4.2.7 Non-production of Income tax Treasury Challan – Rs8.095 million

According to Section 14(b) of the Auditor General’s (Functions, Powers and Terms and Conditions of Service) Ordinance, 2001 “The officials shall afford all facilities and provide record for Audit and comply with request for information in as complete a form as possible and with all reasonable expeditions”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that an amount of Rs22.280 million was deducted on account of Income Tax while making payment to contractor under revenue and capital component of the scheme and deposited in government account as per statement provided by the department, but the treasury challan with regards to remittance of the same into government account was not produced to audit.

S.No.	Cheque. No	Cheque. Date	Paid to	Amount
1	094997	02.04.2014	Inland Revenue Officer	2,957,955
2	110693	04.06.2014	Inland Revenue Officer	1,137,675
3	151386	12.06.2015	Inland Revenue Officer	4,000,000
<b>Sub-Total (Revenue Component)</b>				<b>8,095,630</b>
4	078690	12.06.2013	Inland Revenue Officer	3,060,402
5	084946	06.11.2013	Inland Revenue Officer	2,627,285
6	085000	06.01.2013	Inland Revenue Officer	2,638,216
7	110692	04.06.2014	Inland Revenue Officer	2,815,702
8	124345	18.11.2014	Inland Revenue Officer	1,941,342
9	135837	09.02.2015	Inland Revenue Officer	308,627
10	145068	22.05.2015	Inland Revenue Officer	412,348
11	151302	01.06.2015	Inland Revenue Officer	382,015
<b>Sub-Total (Capital Component)</b>				<b>14,185,937</b>
<b>G-Total</b>				<b>22,281,567</b>

The lapse indicates improper watch and record keeping by the management, as a result remittance into government account could not be verified.

The matter was reported to the management in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends that treasury challan along with cheques and bank statement be produced to audit for verification.

**(O.M # 10&11)**

#### **4.2.8 Un-justified payment of electrification expenditure through contractor instead of authority itself – Rs4.331 million**

According to PC-I, Provision of Rs3,000,000 was given for Electrification / Installation of transformers etc. through HESCO WAPDA.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that payment of Rs3.000 million was made to HESCO for Electrification of RO Plant at Islamkot Town.

In addition payment of Rs4.331 million was also made to HESCO and M/s Abdul Wahab Enterprises on account of electricity connection and Transformer of 750 KVA for RO Plant Mithi by M/s Pak Oasis Industries (Pvt.) Limited, Karachi instead of paying the same by the SCA itself. As a result excess expenditure of Rs4.331 million was incurred without obtaining additional funds and creating liability of Rs4.331 million. Thus internal control for effective financial management was not observed.

<b>Paid To</b>	<b>Particulars</b>	<b>Cheque No. &amp; Date</b>	<b>Amount</b>
M/s. HESCO Hyderabad.	Capital Cost	18408160/26.12.2014	848,240
M/s. HESCO Hyderabad.	Security Deposit	18408159/26.12.2014	1,564,500
M/s. Abdul Wahab Enterprises	Transformer 750 KVA	18408161/26.12.2014	1,918,400
<b>Total</b>			<b>4,331,140</b>

The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends strengthening of internal control with regards to effective financial management.

**(O.M # 12)**

#### **4.2.9 Undue payment against already installed tube well – Rs5.542 million**

According to Para 40-B Appendix 18-A (1) SFR volume-I “Means should be advised to ensure that every Government officer should realize fully and clearly that he will be held personally responsible for any loss sustained by Government through fraud or negligence on his part and that he will be also be held personally responsible for any loss arising from fraud or negligence on the part of any other Government officer to the extent to which it may be shown that he contributed to the loss by his own action or culpable negligence”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that RO plant of 1.5 million gallon per day capacity was installed at Islamkot along with 8 Nos. of new tube wells with submersible pump. An amount of Rs44.338 million was paid on account of 8 Nos. of new tube wells with submersible pump.

It is pertinent to mention that R.O plant of 75000 gallon per day capacity was already exist at Islamkot which was decided to be upgraded and enhanced to RO plant of 1.5 million gallon per day capacity and existing RO Plant will be replace and installed somewhere else, but the same was remains at its existing place and already install tube well of this RO Plant was being utilized by upgraded and enhanced RO plant of 1.5 million gallon per day capacity.

Audit is of view that undue payment of Rs5.542 million (Rs3.792 million for tube well and Rs1.750 million for submersible pump) was made for one tube well and one submersible pump which was required to be recovered as the already install tube well of this RO Plant was utilized by upgraded and enhanced RO plant of 1.5 million gallon per day capacity.

The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends strengthening of internal control and recovery of undue payment made to contractor.

#### **4.2.10 Non-recovery / Less deduction of income tax - Rs0.901 million**

According to Section 153 of income tax ordinance 2001 “Every prescribed person making a payment in full or part including a payment by way of advance to a resident person or permanent establishment in Pakistan of a non-resident person.

- (a) for the sale of goods;
- (b) for the rendering of or providing of services;
- (c) on the execution of a contract, other than a contract for the sale of goods or the rendering of or providing of services, shall, at the time of making the payment, deduct tax from the gross amount payable at the rate specified in Division III of Part III of the First Schedule.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that expenditure of Rs99.924 million was incurred against civil work under capital component of scheme, but income tax of Rs5.817 million was deducted (income tax was deducted after subtraction of security deposit instead of gross amount of the contractor bill) instead of due income tax of Rs6.237 million, as a result an amount of Rs0.420 million was less deducted.

In addition, expenditure of Rs83.878 million was incurred against civil work under capital component of scheme, but income tax of Rs4.971 million was deducted (income tax was deducted @ 6% and less than 6% of the amount of the contractor bill) instead of due income tax @ 6.5% of Rs5.452 million, as a result an amount of Rs0.481 million was less deducted, in violation of above Rule(**Annex-1**).

The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends strengthening of internal control and recovery of amount under audit observation.

(O.M # 14&15)

#### **4.2.11 Non-verification of security deposit withheld against civil work - Rs7.683 million**

According to Clause-1 of the Contract Agreement, “the security deposit lodged by a contractor (in cash or recovered in installment from his bills) shall be refunded to him after the expiry of three months from the date on which work is completed.”

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that civil work of Rs226.821 million was executed under capital component of scheme against which security deposit of Rs7.683 million was withheld, but the whereabouts of the collected security deposit was not produced. In addition payment voucher along with work completion report not produced in case the same have been paid to the contractor(**Annex-2**).

The lapse indicates improper watch and record keeping by the management, as a resulted retention of security deposit and subsequent payment if any could not be verified.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends related record be produced to audit for verification.

(O.M # 16)

#### **4.2.12 Excess payment on account of capital component of scheme - Rs1.938 million**

According to Para 40-B Appendix 18-A (1) SFR volume-I “Means should be advised to ensure that every Government officer should realize fully and clearly that he will be held personally responsible for any loss sustained by Government through fraud or negligence on his part and that he will be also be held personally responsible

for any loss arising from fraud or negligence on the part of any other Government officer to the extent to which it may be shown that he contributed to the loss by his own action or culpable negligence”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that excess payment under capital component of scheme of Rs1.938 million was made against the execution of various items of works, due to wrong calculation and allowing excess rate, as a result government sustained a financial loss of Rs1.938 million the same was required to be recovered from the concerned(**Annex-3**).

The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends that internal control may be strengthened and recovery of amount may be made under intimation to audit.

(O.M # 17)

#### **4.2.13 Doubtful reduction of executed work and non-recovery of premium - Rs0.488 million**

According to Para 40-B Appendix 18-A (1) SFR volume-I “Means should be advised to ensure that every Government officer should realize fully and clearly that he will be held personally responsible for any loss sustained by Government through fraud or negligence on his part and that he will be also be held personally responsible for any loss arising from fraud or negligence on the part of any other Government officer to the extent to which it may be shown that he contributed to the loss by his own action or culpable negligence”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that payment under capital component of scheme of Rs5.670 million was

allowed against the execution of various items of works along with admissible premium, at the other hand in next subsequent running account bill the same quantity of work executed was reduced to nil / zero in most of the cases and amount of Rs3.539 million of the same quantity of work executed was reduced as well without reducing the amount of premium paid.As a result government sustained financial loss of Rs0.488 million due to non-recovery of premium allowed which was required to be recovered from the concerned(**Annex-4**).

In addition audit is of view that the above mentioned payment against the quantity of execution of various items of works and its subsequent reduction stand doubtful as the nature of works once executed could not be nullify. Further audit apprehend that advance payment was made to contractor without execution of work, at the other hand the said work was included in BOQ / duly approved work estimate was not executed as well.

The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends strengthening of internal control and recovery of amount under audit observation.

**(O.M # 18)**

#### **4.2.14 Non- maintenance of Cash Book – Rs943.282 million**

As per Treasury Rule 77(i) “Every officer receiving money on behalf of the Government should maintain a cash book in Form T. R. 4”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that an expenditure of Rs943.282 million was incurred under revenue and capital component of the scheme but proper cashbook was not maintained.

Thus internal control for effective financial management was not observed. The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends strengthening of internal control to ensure compliance of related Rules.

**(O.M # 19)**

### **4.3 Procurement and Contract Management**

#### **4.3.1 Un-justified / Irrational Installation of RO Plant – Rs745.611 million**

According to the contract agreement Clause 1.0 Introduction Paragraph-7 “The Bidder should ensure that appropriate surface and subsurface infrastructure is provided so that the completed holed is charge water by Pump. No Completion Certificate for payment will be issued if the bore discharge lesser then 50000 USGPD”.

According to the contract agreement Clause-7 Submersible Pump Installation Clause-7.1.3 Discharge “Any discharge below the approved quantity of 100,000 USGPD (approved after 24 hours Long Pumping Test) is not allowed”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that RO plant of 2 million gallon per day capacity and 1.5 million gallon per

day capacity was installed at Mithi and Islamkot District Tharparkar respectively along with 18Nos. of new tube wells with submersible pump (10 for Mithi and 08 for Islamkot) costing Rs745.611 million.

Audit is of view that:

- a. If discharge of 50000 USGPD per borehole is acceptable then availability of bore water of 18 tube well comes to (18 Tube well x 50,000 gallon per day) 900,000 gallon per day, further it is pertinent to mentioned that during filtration process of RO Plant 50% of bore water / feed water is converted into rejected water and 50% of bore water / feed water is converted into purified water for usage, as a result 450,000 gallon per day could be purified. Therefore the installation of RO plants with the capacity of 3.5 million gallon per day for purification of 0.450 million gallon per day which is 12.86% or RO Plant Capacity was unjustified / irrational.
- b. If discharge of 100,000 USGPD per submersible pump (approved after 24 hours Long Pumping Test) is acceptable then availability of bore water of 18 tube well comes to (18 Tube well x 100,000 gallon per day) 1,800,000 gallon per day, further it is pertinent to mentioned that during filtration process of RO Plant 50% of bore water / feed water is converted into rejected water and 50% of bore water / feed water is converted into purified water for usage, as a result 900,000 gallon per day could be purified. Therefore the installation of RO plants with the capacity of 3.5 million gallon per day for purification of 0.9 million gallon per day which is 25.71% or RO plant capacity was unjustified / irrational.
- c. As per PC-I the daily water requirement of Mithi was 600,000 Gallon and daily water requirement of Islamkot was 630,000 gallon, total water requirement for both Mithi and Islamkot comes to 1,230,000 gallon per day. Therefore the installation of RO plants with the capacity of 3.5 million gallon per day against requirement of 1.230 million gallon per day which is 35.14% of RO Plant Capacity was unjustified / irrational.
- d. In addition as per data of production of RO Plants obtained from operation & maintenance claim of the contractor vide reference No. O&M(2016/Mihti/2015-18/01 dated 24-05-2018, it was observed that RO Plant Mithi was running on 19% to 31% of its capacity and RO Plant Islamkot was running on 13% to 17% of its capacity from January 2015 to April 2018. Cumulatively both the plants was functioning on 17% to 25% of its capacity.

The lapse indicates improper planning which resulted ineffective and inefficient functioning of RO plants.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends that proper planning procedure be installed to ensure effective and efficient execution of project and its operation and maintenance.

**(O.M # 20)**

#### **4.3.2 Non-conducting of pre-shipment and post-shipment inspection**

According to Annexure-II Part-C, PC-I of Up-Gradation & Enhancement of Reverse Osmosis (Water Desalination) Plants at Mithi City &Islamkot Town District Tharparkar provision for pre-shipment inspection was provided as “Pre-Shipment Inspection:- Prior to shipment inspection for conformity with design/technical specification of the contract at manufacturing facilities”.

According to Annexure-II Part-C, PC-I of Up-Gradation & Enhancement of Reverse Osmosis (Water Desalination) Plants at Mithi City &Islamkot Town District Tharparkar provision for Post Shipment Inspection was provided as “Post Shipment Inspection:- On arrival at port, post shipment inspection to check the seal and container numbers”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that RO plants of Rs636.850 million was purchased under revenue component of the scheme, but pre-shipment inspection (Prior to shipment inspection for conformity with design/technical specification of the contract at manufacturing facilities) and post-shipment inspection (On arrival at port, post shipment inspection to check the seal and container numbers) was not conducted by technical committee as the report in this regard was not available on record.

Thus internal control for effective procurement was breached. The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends strengthening of internal control to ensure compliance of related Rules.

**(O.M # 21, 22)**

### **4.3.3 Non-procurement of Diesel Generators**

According to Annexure-II Part-C, PC-I of Up-Gradation & Enhancement of Reverse Osmosis (Water Desalination) Plants at Mithi City &Islamkot Town District Tharparkar provision for purchase of two 500 KVA imported Diesel Generator sets was provided as “Expenditure on purchase of soundless Diesel Generator with complete electrical / mechanical / installation and one year free repair and maintenance including supply of fan belt, filters, oil and lubricants, batteries and replacement of all electrical and mechanical spares (Free delivery at site) with comprehensive operational insurance”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was informed / observed that procurement of Diesel Generator sets were not made as neither the contractor submit the claim against the same nor the payment to contractor was made by the SCA on account of purchase of Diesel Generator. However during field visit Diesel Generator were found at site which were arrange by contractor their self.

The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends strengthening of internal control to ensure compliance of procurement plan.

**(O.M # 23)**

#### **4.3.4 Irregular constitution of procurement committee**

As per Rule 7 of SPPRA 2010, “Constitution of a Procurement Committee - The procuring agency shall, with approval of its Head of the Department, constitute as many procuring committees, as it deems fit, each comprising odd number of persons and headed by a gazetted officer not below the rank of BS-18, or if not available, the officer of the highest grade, and shall ensure that at least one third of the members of a procurement committee are from the agencies or departments other than the procuring agency.”

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that civil work of Rs240.278 million was executed under capital component of scheme through tender, but it was not ensure that at least one third of the members of a procurement committee are from the agencies or departments other than the procuring agency while constituting procurement committee.

Thus internal control for effective procurement was breached. The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends strengthening of internal control to ensure compliance of procurement Rules.

**(O.M # 24)**

#### **4.4 Construction and Works**

##### **4.4.1 Time over run of project completion**

According to the contract agreement Article-14 Project Schedule Article-14.1 “A maximum period of 09 months is allowed to execute the project field activities. Contractor will deploy necessary resources for on time completion”. Article-14.2 “Three month are allowed for conduct of lab work and complete all testing requirement”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that financial phasing of PC-I was financial year 2012-13 and 2013-14 while implementation period was March-2013 to June-2014, but the project was not completed within the stipulated time and gone upto June 2015.

The lapse indicates improper watch and absence of the internal controls with regards to effective execution of project.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends strengthening of internal control to ensure timely completion of project.

**(O.M # 25)**

#### **4.4.2 Cost overrun of Project due to non-revision of PC-I – Rs59.404 million**

According to PC-I of development scheme “Up-Gradation & Enhancement of Reverse Osmosis (Water Desalination) Plants at Mithi City &Islamkot Town District Tharparkar” the estimated cost of the scheme was Rs934.820 million. According to Para 532 of Public Works Department Manual Volume-I “A revised estimate must be submitted when a sanctioned estimate is likely to be exceeded by more than 5% either from the rate being found insufficient or from any cause whatever”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that the estimated cost of the scheme was Rs934.820 million which was

increased upto Rs994.224 million, as a result project cost was increase by Rs59.404 million which is 6.35% of the estimated cost.

The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends strengthening of internal control and justification of delay.  
(O.M # 26)

#### **4.4.3 Non-production of commissioning report of RO Plant**

According to the contract agreement Article-15 Project Deliverable and Reports. Installation & Commissioning of Submersible Pump: Pump specification and its setting depth for production. Installation & Commissioning of RO Plant / DG sets: The Contractor bid shall include the cost of complete installation and successful commissioning to the entire satisfaction of the Client. The commissioning will be certified by the Client in writing.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that RO plant of 2 million gallon per day and 1.5 million gallon per day was installed at Mithi and Islamkot District Tharparkar respectively by Sindh Coal Authority, but installation and commissioning reports of the same duly certified by Sindh Coal Authority was not produced to audit / not available on record.

The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends strengthening of internal control to ensure effective management of construction and works.

**(O.M # 27)**

#### **4.4.4 Un-due delay in obtaining of electricity connection**

According Letter No.SCA-23(02 RO)96/2015-16 Dated 16-03-2016 of Sindh Coal Authority to Chief Engineer (P&E) HESCO Hyderabad “No electricity connection was made to RO Plant Mithi and Islamkot”

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that financial phasing of PC-I was financial year 2012-13 and 2013-14 while implementation period was March-2013 to June-2014. Further it was informed that RO plant at Mithi was completed in December 2014 and RO plant at Islamkot was completed in June 2015, however installation and commissioning reports of the same duly certified by Sindh Coal Authority was not available on record. However electricity connection could not be obtained till the March 2016 as per above mentioned latter. Audit is of view that due to non-availability of HESCO electricity connection efficient functioning of RO Plant at its optimal level could not be ensured.

The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends strengthening of internal control to ensure effective management of construction and works.

**(O.M # 28)**

#### **4.4.5 Un-authorize payment due to excess execution of item of work - Rs12.645 million**

According to Clause 38 of Contract Agreement “Quantities shown in the tender are approximate and no claim shall be entertained for quantities of work executed being 30% more or less than those entered in the tender or estimate”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that payment of Rs12.645 million under capital component was allowed to the contractor on account of excess execution of item of work more than the 30% of the estimate, in violation of above Rule(**Annex-5**).

The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends inquiry of excess payment of work besides fixing responsibility for incurring expenditure against quantities of item of work beyond 30% of estimate.

(O.M # 29)

#### **4.4.6 Irregular expenditure against extra items of work not included in BOQ / duly approved work estimate – Rs2.390 million**

According to Para 40-B Appendix 18-A (1) SFR volume-I “Means should be advised to ensure that every Government officer should realize fully and clearly that he will be held personally responsible for any loss sustained by Government through fraud or negligence on his part and that he will be also be held personally responsible for any loss arising from fraud or negligence on the part of any other Government officer to the extent to which it may be shown that he contributed to the loss by his own action or culpable negligence”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that civil work under capital component of scheme of Rs1.223 million was

executed against extra items of work, similarly civil work (Part-C Generator Room) of Rs1.167 million was executed which were not included in BOQ / duly approved work estimate(**Annex-6**).

The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit requires inquiry into the matter besides fixing responsibility for incurring expenditure against extra items of work not included in BOQ / duly approved work estimate.

**(O.M # 30&31)**

#### **4.4.7 Non-execution of various items of works - Rs2.028 million**

According to Para 40-B Appendix 18-A (1) SFR volume-I “Means should be advised to ensure that every Government officer should realize fully and clearly that he will be held personally responsible for any loss sustained by Government through fraud or negligence on his part and that he will be also be held personally responsible for any loss arising from fraud or negligence on the part of any other Government officer to the extent to which it may be shown that he contributed to the loss by his own action or culpable negligence”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that various civil work under capital component of scheme was awarded to contractor, but works against various items of Rs2.028 million was not executed which were included in BOQ / duly approved work estimate(**Annex-7**).

The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit requires inquiry into the matter besides fixing responsibility for non-execution of works which were included in BOQ / duly approved work estimate.

(O.M # 32)

#### **4.4.8 Irregular payment without rectification of defects – Rs13.704 million**

According to Para 40-B Appendix 18-A (1) SFR volume-I “Means should be advised to ensure that every Government officer should realize fully and clearly that he will be held personally responsible for any loss sustained by Government through fraud or negligence on his part and that he will be also be held personally responsible for any loss arising from fraud or negligence on the part of any other Government officer to the extent to which it may be shown that he contributed to the loss by his own action or culpable negligence”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that payment of Rs13.704 million was allowed under capital component of scheme against the execution of various items of works on reduced rate without recording of any written reasons, as a result audit is of view that either the work executed was below the specification or defective(**Annex-8**).

The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit requires inquiry into the matter besides fixing responsibility for incurring expenditure against the execution of various items of works on reduced rate without recording of any written reasons.

(O.M # 33)

#### **4.4.9 Misappropriation of funds– Rs14.000 million**

Section 14 (2) and (3) of the Auditor-General's (Functions, Powers and Terms and Conditions of Service) Ordinance, 2001 provide as under:

- (2) The officer incharge of any office or department shall afford all facilities and provide record for audit inspection and comply with requests for information in as complete a form as possible and with reasonable expedition.
- (3) Any person or authority hindering the auditorial functions of the Auditor-General regarding inspection of accounts shall be subject to disciplinary action under Efficiency and Discipline Rules.

During the performance audit of Reverse Osmosis Plant under development scheme "Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar" audit year 2017-18, it was observed that as per expenditure statement under capital component of scheme an amount of Rs240.278 million was spent, but as per audit calculation against various works under capital component of scheme as per PC-I comes to Rs226.278 million. Thus there was a difference of Rs14.000 million(**Annex-9**).

The payment of Rs14.000 million was made to incharge Sindh Coal Authority Mithi vide Cheque No.16001 dated 15-06-2015 under Capital Component of scheme, but the detail record / whereabouts of the same amount was not produced. In addition the payment was made from the capital component of the scheme beyond the provision of PC-I.

The lapse indicates improper watch and absence of the internal controls, further audit apprehend that amount might be misappropriated or utilized for the purpose other than purpose for which the funds were provided.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit requires inquiry into the matter besides fixing responsibility on person(s) at fault.

(O.M # 34)

#### **4.4.10 Irregular payment against differential cost of cement without having any notification / order from the competent authority - Rs2.301 million**

According to Para 40-B Appendix 18-A (1) SFR volume-I “Means should be advised to ensure that every Government officer should realize fully and clearly that he will be held personally responsible for any loss sustained by Government through fraud or negligence on his part and that he will be also be held personally responsible for any loss arising from fraud or negligence on the part of any other Government officer to the extent to which it may be shown that he contributed to the loss by his own action or culpable negligence”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that civil work was executed under capital component of scheme against which an amount of Rs2.301 million was paid on account of difference of amount of cement, but notification /order in this regard was not available in support of the contractor bill(**Annex-10**).

The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit requires inquiry into the matter besides fixing responsibility for incurring expenditure without having notification /order.

**(O.M # 35)**

#### **4.4.11 Improper maintenance of measurements books**

According to Rule for taking measurements and keeping measurements books (k) “The measurement should be marked running or final as the case may be and series of running account should be marked clearly at the top. Each set of measurement should be signed and dated by the officer by whom it is actually made and the signature of the contractor obtained in token of acceptance by him of the recorded measurements. This signature of the clerk who checks the calculation should also be affixed. Measurement should be recorded in English as far as possible. When they are recorded

in Vernacular, they should be translated into English over the signature of Sub-Divisional Officer”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that various works as per PC-I under capital component of scheme were executed, but measurement books against each work was maintained without recording date of entry, in addition each set of measurement was neither signed nor dated by the officer by whom it was actually made. Thus actual phasing of work could not be ascertained by audit.

The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit requires inquiry into the matter besides fixing responsibility for improper maintenance of measurements books.

**(O.M # 36)**

## **4.5 Asset Management**

### **4.5.1 Non-obtaining of comprehensive insurance of RO Plants**

According to Annexure-II Part-C, PC-I of the scheme “Up-Gradation & Enhancement of Reverse Osmosis (Water Desalination) Plants at Mithi City &Islamkot Town District Tharparkar” provision for Comprehensive Insurance was provided as “Comprehensive Insurance:- Transit as well as warehouse to warehouse insurance / during storage at designated site of delivery / storage till commissioning and O&M period”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination)

Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that RO plants of Rs636.850 million was purchased under revenue component of the scheme, but comprehensive insurance of the same was not obtained.

The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit requires inquiry into the matter besides fixing responsibility for not obtaining Comprehensive Insurance.

**(O.M # 37)**

#### **4.5.2 Possession of RO Plant not taken over after expiry of Contract**

According to the contract agreement Article-15 Project Deliverable and Reports. Operation & Maintenance: The Contractor would not charge for Operation & Maintenance of the Submersible Pumps / Reverse Osmosis Plant / Diesel Generator Sets for 1<sup>st</sup> year after successful commissioning of RO Plant and provide supplies and services free of cost.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was informed that RO plant at Mithi was completed in December 2014 and RO plant at Islamkot was completed in June 2015, however installation and commissioning reports of the same duly certified by Sindh Coal Authority was not available on record. In addition after subsequent one year of free operation & maintenance, the RO Plants was required to be taken over by Sindh Coal Authority, but physically RO Plants are still in possession of M/s Pak Oasis Industries (PVT.) Ltd, neither the RO Plants were taken over by Sindh Coal Authority till the close of audit nor the new operation & maintenance contract was made.

The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit requires inquiry into the matter besides fixing responsibility for not taking over the possession of RO Plants.

**(O.M # 38)**

## **4.6 Monitoring and Evaluation**

### **4.6.1 Execution of installation of RO Plant without monitoring of field work activities**

According to the contract agreement Article-2.12 Progress Report and Meeting: Progress meetings will be held either at Client's or Contractor's office to monitor, at the option of Client, progress of the work, on monthly basis.

During the performance audit of Reverse Osmosis Plant under development scheme "Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar" audit year 2017-18, it was observed that payment of Rs699.500 was made to contractor under revenue component of the scheme without having / recording monitoring of field work activities, in violation of above Rules.

The lapse indicates lack of professional commitment to the objectives of the project and absence of the internal controls with regard to effective monitoring and evaluation.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit requires inquiry into the matter besides fixing responsibility at person at fault.

**(O.M # 39)**

#### **4.6.2 Non-obtaining of third party laboratory test report for raw feed water to plant and production water from Plant**

According to the contract agreement Article-15 Project Deliverable and Reports. Monthly Water Analysis Report: During the period of contract, the O&M Contract shall be responsible to carry out monthly water quality test from recognized Laboratory for Raw Feed Water to plant and production water from Plant. The Laboratory for such kind of tests is mutually selected by both parties.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that third party monthly water quality test from recognized laboratory for raw feed water to plant and production water from Plant was not obtained.

The lapse indicates lack of professional commitment to the objectives of the project and absence of the internal controls with regard to effective monitoring and evaluation.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit requires inquiry into the matter besides fixing responsibility at person at fault.

**(O.M # 40)**

#### **4.6.3 Misleading / doubtful reporting of RO Plant Production**

According to Para 40-B Appendix 18-A (1) SFR volume-I “Means should be advised to ensure that every Government officer should realize fully and clearly that he will be held personally responsible for any loss sustained by Government through fraud or negligence on his part and that he will be also be held personally responsible for any loss arising from fraud or negligence on the part of any other Government officer to the extent to which it may be shown that he contributed to the loss by his own action or culpable negligence”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was informed that RO plant at Islamkot was completed in June 2015, however as per data of production of RO Plants obtained from operation & maintenance claim of the contractor vide reference No. O&M(2016/Mihti/2015-18/01 dated 24-05-2018, it was observed that RO Plant Islamkot was running from January 2015 to April 2018. Audit is of view that reporting of RO Plant Islamkot production from January 2015 to June 2015 was misleading / doubtful.

The lapse indicates lack of professional commitment to the objectives of the Project and absence of the internal controls with regard to effective monitoring and evaluation.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit requires inquiry into the matter besides fixing responsibility at person at fault.

(O.M # 41)

#### **4.6.4 Verification of O&M claim on account of wrong reporting of RO Plant Production**

According to Para 40-B Appendix 18-A (1) SFR volume-I “Means should be advised to ensure that every Government officer should realize fully and clearly that he will be held personally responsible for any loss sustained by Government through fraud or negligence on his part and that he will be also be held personally responsible for any loss arising from fraud or negligence on the part of any other Government officer to the extent to which it may be shown that he contributed to the loss by his own action or culpable negligence”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was informed that meters were installed to record quantity of production water from R.O

Plant in December 2017. During field visit meter reading was obtained upto June-2018 and as per the reading total quantity of production water upto June-2018 comes to 25,968,900 gallon.

At the other hand as per data of production of RO Plants obtained from operation & maintenance claim of the contractor vide reference No. O&M(2016/Mihti/2015-18/01 dated 24-05-2018, it was revealed that total quantity of 104,418,689 gallon production water from January 2018 to April 2018 was claimed @ of Rs0.16 per gallon, the same was verified for payment by Sindh Coal Authority, which is required to be stopped to avoid undue payment.

Audit is of view that reporting of production water of RO Plant by contractor was extravagant and payment claim against the same was undue as there was a huge difference (104,418,689 - 25,968,900 = 78,449,789) of quantity of production between quantity reported by contractor and quantity of production water as per reading of installed meters.

Description	Meter-1 Reading Upto June-18	Meter-2 Reading Upto June-18	Total Qty in CM	Rate to invert Cubic Meter into Gallon	Total Qty in Gallon As per Audit	Contractor Claim upto Jan-April-18	Difference	Rate	Amount
	Qty in Cubic Meter				Qty in Gallon			Rs	Rs
RO Plant Miithi	38,841	49,835	88,676	264.172	23,425,716	73,513,289	50,087,573	0.16	8,014,012
RO Plant Islamkot	4,867	4,760	9,627	264.172	2,543,184	30,905,400	28,362,216	0.16	4,537,955
	<b>Total</b>				<b>25,968,900</b>	<b>104,418,689</b>	<b>78,449,789</b>		<b>12,551,966</b>

The lapse indicates lack of professional commitment to the objectives of the project and absence of the internal controls with regard to effective monitoring and evaluation.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit requires inquiry into the matter besides fixing responsibility at person at fault.

**(O.M # 42)**

#### **4.6.5 Improper functioning of RO Plant**

According to Para 40-B Appendix 18-A (1) SFR volume-I “Means should be advised to ensure that every Government officer should realize fully and clearly that

he will be held personally responsible for any loss sustained by Government through fraud or negligence on his part and that he will be also be held personally responsible for any loss arising from fraud or negligence on the part of any other Government officer to the extent to which it may be shown that he contributed to the loss by his own action or culpable negligence”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that RO plant of 2 million gallon per day and 1.5 million gallon per day capacity was installed at Mithi and Islamkot District Tharparkar respectively along with 18 Nos. of new tube wells with submersible pump (10 for Mithi and 08 for Islamkot), However during field visit only 6 tube wells with submersible pump at RO Plant Mithi and 3 tube wells with submersible pump at RO Plant Islamkot was found functional.

The lapse indicates lack of professional commitment to the objectives of the project and absence of the internal controls with regard to effective monitoring and evaluation.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit requires inquiry into the matter besides fixing responsibility at person at fault.

**(O.M # 43)**

## **4.7 Environment**

### **4.7.1 Execution of installation of RO Plant without obtaining approval of environmental impact assessment**

As per Section 17(1) of Sindh Environmental Protection Act, 2014, “No proponent of a project shall commence construction or operation unless he has filed with the Agency an initial environmental examination or environmental impact assessment, and has obtained from the Agency approval in respect thereof”.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that RO plant of 2 million gallon per day and 1.5 million gallon per day capacity was installed at Mithi and Islamkot District Tharparkar respectively along with 18 Nos. of new tube wells with submersible pump (10 for Mithi and 08 for Islamkot), but approval of initial environmental examination or environmental impact assessment was not obtained from the Sindh Environmental Protection Agency, in violation of above rule.

The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends strengthening of internal control to ensure compliance of related Rules.

**(O.M # 44)**

### **4.7.2 Non-compliance of Sindh Environmental Protection Act, 2014**

As per Section 11(2) of Sindh Environmental Protection Act, 2014, “All persons, in industrial or commercial or other operations, shall ensure compliance with the Environmental Quality Standards for ambient air, drinking water, noise or any other Standards established under section 6(1)(g)(i); shall maintain monitoring records for such compliances; shall make available these records to the authorized person for

inspection; and shall report or communicate the record to the Agency as required under any directions issued, notified or required under any rules and regulations.

During the performance audit of Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” audit year 2017-18, it was observed that RO plant of 2 million gallon per day and 1.5 million gallon per day capacity was installed at Mithi and Islamkot District Tharparkar respectively along with 18 Nos. of new tube wells with submersible pump (10 for Mithi and 08 for Islamkot), but neither the monitoring record of rejected water and product water of RO Plant was available on record nor the monitoring and analysis of the same was carried out from the laboratory certified by Sindh Environmental Protection Agency, in violation of above rule. In addition, while during field visit rejected water of RO Plant Islamkot was discharged in open area.

The lapse indicates improper watch and absence of the internal controls.

The matter was reported to the department in August 2018, but no reply was received.

Despite written requests vide letters dated 30-08-2018, 04-12-2018 and 21-02-2019, DAC meeting was not convened by the PAO till finalization of this report.

Audit recommends strengthening of internal control to ensure compliance of related Rules.

**(O.M # 45)**

#### **4.8 Sustainability**

During performance audit it was informed to audit by the department that RO plant at Mithi was completed in December 2014 and RO plant at Islamkot was completed in June 2015, however installation and commissioning reports of the same duly certified by Sindh Coal Authority was not available on record. In addition after completion / commissioning of RO Plant contractor was also liable for one year free operation & maintenance of RO plant as per contract agreement but, after expiry of contract agreement RO plants are still (up to close of audit i.e June, 2018) in possession of and operated & maintained by M/s Pak Oasis Industries (PVT.) Ltd. It is pertinent to mentioned that liable payment on account of operation & maintenance cost of RO

Plant was still unpaid to contractor and most of the tube well were found non-functional during field visit.

In addition, as per contract agreement contractor was liable to provide comprehensive, advance training to SCA nominated technical staff at site for operation of plant, maintenance, service of equipment, periodically replacement of cartridge and spares etc, but Sindh Coal Authority failed to avail the opportunity. As a result the department is not capable and in position to operate and maintained the RO plants due to non-availability of technically trained staff. In view of given scenario the sustainability of the RO plants are questionable and required war footing measures.

#### **4.9 Overall Assessment**

- i. Relevance:** Although the project is not included in five year plan but it is in line with government's sectoral policies.
- ii. Efficacy:** The main aim of project was to provide clean potable water to the inhabitants of the region which was done to some extent by the executing agency.
- iii. Efficiency:** The project was cost overruns by Rs59.404 million and time overruns by 12 month.
- iv. Economy:** The execution of civil work of the project was not found in line with BOQs in some instances, on revenue component of project pre-shipment and post-shipment inspection of the RO plant was not done.
- v. Effectiveness:** RO plants were not functioning at its optimal capacity.
- vi. Compliance with Rules:** Compliance with rules and regulations was made except the deviations as pointed out in this report.

#### **vii. Performance Rating of Project**

- a. Unsatisfactory

#### **viii. Risk Rating of Project**

- a. Substantial

## **5. CONCLUSION**

We have completed our performance audit of the Reverse Osmosis Plant under development scheme “Up gradation and Enhancement of Reverse Osmosis (Water Desalination) Plant at Mithi City and Islamkot Town District Tharparkar” for the audit year 2017-18. In planning and performing our audit, we considered internal controls and other issues in order to determine various auditing procedures for the purpose of expressing our opinion.

During audit we pointed out certain observations regarding execution of scheme beyond the domain, Non-availability of technically trained staff for operation & maintenance of plant, Non-compliance of SPPRA Rules, Irregularities in payments to contractor, Recoveries of overpayment and undue payment, Less deduction of income tax, Un-justified verification of contractor’s payment claim, Non-production of record, Non-compliance with set procurement procedure, Time overrun and cost overrun, Irregularities in execution of civil works, Non-obtaining of comprehensive insurance of RO Plant, Possession of RO Plant not taken over after expiry of contract, Absence of control with regards to monitoring and evaluation RO Plant, Non-compliance with Sindh Environmental Protection Act, 2014.

Audit findings indicate the need for adherence to the regulatory framework besides instituting and strengthening internal controls in order to avoid irregularities and to utilize the funds in a manner in line with the principles of economy, efficiency, transparency to achieve the intended purpose.

### **5.1 Key issue for the future:**

- Non-availability of technically trained staff.
- Ineffective monitoring of O&M of RO Plant.
- Deduction of income tax.

### **5.2 Recommendations**

- Training and development of technically trained staff.
- Effective monitoring of O&M of RO Plant.
- Amount of income tax be recovered.
- Internal controls may be strengthened to increase the performance and efficiency of the project as end users/beneficiaries can get the most of the project.

## **ACKNOWLEDGEMENT**

We wish to express our appreciation to the Management and staff of Sindh Coal Authority for the assistance and cooperation extended to the auditors during this assignment.

(Annex-1)

S.No.	Work order No. & Dt:	Name of Work	Name of Contractor	Bill No.	Cheque No. & Date	Bill Amount	Income Tax Rate	Income Tax Due	Income Tax Deducted	Diff of I.T
1	No.SCA/23(i)/P.E.TP W/272 dt:24.04.2013	Construction of under-ground water tank including pipe fitting for R.O. Plant Scheme at Mithi.	M/s. Hareh & Co.	1st R.A.	178605 Dt:3.6.2013	17459034	6%	1047542	1016116	31426
				2nd R.A.	84904 Dt:26.9.2013	14553279	6.50%	945963	816517	129446
						<b>Total</b>				
2	No.SCA/23(i)/P.E.TP W/271 dt:24.04.2013	Construction of R.O. Plant Room, Guard Room, Compound Wall & Lavatroy including external and internal development for R.O. Plant Scheme at Mithi.	M/s. Hareh & Co.	1st R.A.	178605 Dt:3.6.2013	3629636	6%	217778	217778	0
				2nd R.A.	84904 Dt:26.9.2013	18634895	6.50%	1211268	1078213	133055
						<b>Total</b>				<b>133055</b>
3	No.SCA/23(i)/PE/TW/274 dt:24.04.2013	Construction of R.O. Plant Room at Islamkot.	M/s. Hotchand Bhuromal	1st R.A.	078604 Dt:03.6.2013	15526986	6%	931619	931619	0
				2nd R.A.	084903 Dt:26.9.2013	6517428	6.50%	423633	352204	71429
						<b>Total</b>				<b>71429</b>
4	No.SCA/23(i)/PE/TW/272 dt:24.04.2013	Renovation of Old RO Plant, Converted into Generator Room, Compound Wall & Lavatory i/c External & Internal Development for R.O Plant Scheme at Islamkot.	M/s. Hotchand Bhuromal	1st R.A.	084903 Dt:26.9.2013	3342021	6.50%	217231	194506	22725
				2nd R.A.	084972 Dt:06.12.2013	2152871	6.50%	139937	129172	10765
						<b>Total</b>				<b>33490</b>
5	No.SCA/23(i)/PE/TW/271 dt:24.04.2013	Construction of Under Ground Water Tank & Reject Water Tank including pipe fitting for R.O. Plant Scheme at Islamkot.	M/s. Hotchand Bhuromal	1st R.A.	078604 Dt:03.6.2013	14914811	6%	894889	894889	0
				2nd R.A.	084903 Dt:26.9.2013	3193196	6.50%	207558	185844	21714
						<b>Total</b>				<b>21714</b>
<b>Sub.Total (Less deduction of income tax due to I.T was deducted after subtraction of security deposit)</b>						<b>99,924,157</b>		<b>6,237,418</b>	<b>5,816,858</b>	<b>420,560</b>

S.No	Work order No. & Dt:	Name of Work	Name of Contractor	Bill No.	Cheque No. & Date	Bill Amount	Income Tax Rate	Income Tax Due	Income Tax Deducted	Diff of I.T
1	No.SCA/23(i)/P.E.TPW /272 dt:24.04.2013	Construction of under-ground water tank including pipe fitting for R.O. Plant Scheme at Mithi.	M/s. Haresh & Co.	3rd R.A	084973 Dt:6.12.2013	17,058,406	6.50%	1,108,796	1,023,504	85,292
				4th R.A.	094988 Dt:23.03.2014	15,367,899	6.50%	998,913	922,074	76,839
					<b>Total:-</b>	<b>32,426,305</b>		<b>2,107,710</b>	<b>1,945,578</b>	<b>162,132</b>
2	No.SCA/23(i)/P.E.TPW /271 dt:24.04.2013	Construction of R.O. Plant Room, Guard Room, Compound Wall & Lavatroy including external and internal development for R.O. Plant Scheme at Mithi.	M/s. Haresh & Co.	3rd R.A	084973 Dt:6.12.2013	14,401,437	6.50%	936,093	857,553	78,540
				4th R.A.	084973 Dt:6.12.2013	5,243,511	6.50%	340,828	314,611	26,217
				5th R.A.	094988 Dt:23.03.2014	17,007,277	6.50%	1,105,473	1,020,436	85,037
					<b>Total:-</b>	<b>36,652,225</b>		<b>2,382,395</b>	<b>2,192,600</b>	<b>189,795</b>
3	No.SCA/23(i)/PE/TW/274 dt:24.04.2013	Construction of R.O. Plant Room at Islamkot.	M/s. Hotchand Bhuromal	3rd R.A	084972 Dt:06.12.2013	3,444,933	6.50%	223,921	178,747	45,174
				4th R.A.	084987 Dt:28.3.2014	5,099,638	6.50%	331,476	305,978	25,498
					<b>Total:-</b>	<b>8,544,571</b>		<b>555,397</b>	<b>484,725</b>	<b>70,672</b>
4	No.SCA/23(i)/PE/TW/271 dt:24.04.2013	Construction of Under Ground Water Tank & Reject Water Tank including pipe fitting for R.O. Plant Scheme at Islamkot.	M/s. Hotchand Bhuromal	3rd R.A	084972 Dt:06.12.2013	2,691,262	6.50%	174,932	134,629	40,303
				4th R.A.	084987 Dt:28.3.2014	3,564,158	6.50%	231,670	213,849	17,821
					<b>Total:-</b>	<b>6,255,420</b>		<b>406,602</b>	<b>348,478</b>	<b>58,124</b>
<b>Sub.Total (Less deduction of income tax due to I.T was deducted less than due income tax @ 6.5%)</b>						<b>83,878,521</b>	<b>-</b>	<b>5,452,104</b>	<b>4,971,381</b>	<b>480,723</b>
									<b>G-Total</b>	<b>901,283</b>

(Annex-2)

S.No	Work order No. & Dt:	Name of Work	Name of Contractor	Bill No.	Bill Amount	Security Deposite Deducted @ 3%
1	No.SCA/23(i)/P.E.TP W/272 dt:24.04.2013	Construction of under-ground water tank including pipe fitting for R.O. Plant Scheme at Mithi.	M/s. Haresh & Co.	1st R.A.	17,459,034	523,771
				2nd R.A.	13,608,623	420,885
				3rd R.A.	17,058,406	483,413
				4th R.A.	15,367,899	461,037
				5th R.A.	6,731,402	202,000
				6th R.A.	3,246,246	97,400
				<b>Total:-</b>	<b>73,471,610</b>	<b>2,188,506</b>
2	No.SCA/23(i)/P.E.TP W/271 dt:24.04.2013	Construction of R.O. Plant Room, Guard Room, Compound Wall & Lavatroy including external and internal development for R.O. Plant Scheme at Mithi.	M/s. Haresh & Co.	1st R.A.	3,520,747	108,889
				2nd R.A.	17,970,226	555,780
				3rd R.A.	14,401,437	412,103
				4th R.A.	5,243,511	157,306
				5th R.A.	17,007,277	510,218
				6th R.A.	14,619,129	438,580
				7th R.A.	4,115,033	123,450
				8th R.A.	2,251,718	67,652
<b>Total:-</b>	<b>79,129,078</b>	<b>2,373,978</b>				
3	No.SCA/23(i)/PE/TW/ 274 dt:24.04.2013	Construction of R.O. Plant Room at Islamkot.	M/s. Hotchand Bhuromal	1st R.A.	15,526,986	465,810
				2nd R.A.	5,870,070	181,549
				3rd R.A.	3,444,933	84,154
				4th R.A.	5,099,638	152,989
				5th R.A.	5,436,388	164,643
				6th R.A.	1,099,309	33,000
<b>Total:-</b>	<b>36,477,324</b>	<b>1,082,145</b>				
4	No.SCA/23(i)/PE/TW/ 272 dt:24.04.2013	Renovation of Old RO Plant, Converted into Generator Room, Compound Wall & Lavatory i/c External & Internal Development for R.O Plant Scheme at Islamkot.	M/s. Hotchand Bhuromal	1st R.A.	3,241,760	1,006,261
				2nd R.A.	2,152,871	61,579
				3rd R.A.	3,434,720	103,050
				4th R.A.	5,093,538	152,807
				<b>Total:-</b>	<b>13,922,889</b>	<b>1,323,697</b>
5	No.SCA/23(i)/PE/TW/ 271 dt:24.04.2013	Construction of Under Ground Water Tank & Reject Water Tank including pipe fitting for R.O. Plant Scheme at Islamkot.	M/s. Hotchand Bhuromal	1st R.A.	14,467,367	447444
				2nd R.A.	3,097,400	95796
				3rd R.A.	2,691,262	64641
				4th R.A.	3,564,158	106925
				<b>Total:-</b>	<b>23,820,187</b>	<b>714806</b>
				<b>Grand Total:-</b>	<b>226,821,088</b>	<b>7,683,132</b>

(Annex-3)

Work order No. & Dt:	Bill No.	Name of Work	Name of Contractor	Item of Work	Execute Qty	Rate	Unit	Actual Amount	Amount Paid	Excess Paid	Remarks
No.SCA 23(I)/E.E-II/271 Dt:24-04-2013	8th R.A.	Construction of R.O. Plant Room, Guard Room, Compound Wall & Lavatroy including external and internal development for R.O. Plant Scheme at Mithi.	M/s. Haresh & Co.	<b>PART-A</b> (S.No.16) Preparing the surface for painting with matt finish.	3447	3,444.38	%Sft	118,728	1,187,278	1,068,550	Due to wrong calculation
				<b>PART-A</b> (S.No.20) Providing and fixing caligraphy work on tiles	96.5	2,150.00	%Sft	2,075	207,475	205,400	Due to wrong calculation
									Sub-total:-	1,273,950	
									Add:11.60%	147,778	
									<b>Total:-</b>	<b>1,421,728</b>	
No.SCA/23(i)/PE/TW/272 dt:24.04.2013	4th R.A.	Renovation of Old RO Plant, Converted into Generator Room, Compound Wall & Lavatory i/c External & Internal Development for R.O Plant Scheme at Islamkot.	M/s. Hotchand Bhuromal	<b>PART-C</b> Providing and laying Hala or pattern tiles.	1042	1,079.65	%Sft	11,250	495,591	484,341	Due to allowing Rate at Rs.47651.57 %sft instead of Rs.1079.65 %sft
									Add:6.60%	31,967	
									<b>Total:-</b>	<b>516,308</b>	
									<b>G-Total</b>	<b>1,938,036</b>	

(Annex-4)

S.No.	Work order No. & Dt:	Name of Work	Name of Contractor	Item of Work	Bill No.	Execute Qty	Rate	Unit	Amount	Rate of Premium	Amount of Premium	Amount Paid				
1	No.SCA 23(i)/E.E-II/271 Dt:24-04-2013	Construction of R.O. Plant Room, Guard Room, Compound Wall & Lavatroy including external and internal development for R.O. Plant Scheme at Mithi. do	M/s. Haresh & Co. do	<b>PART-A</b> (S.No.14) Providing and fixing bitumen felt paper of 60 lbs.... do	6th R.A.	22583	54.7	P.Sft	1235290	11.60%	<b>143294</b>	1378584				
					7th R.A.	0	54.7	P.Sft	0	0	-1235290					
											<b>143294</b>					
					do	do	do	<b>PART-B</b> (S.No.13) Providing and fixing bitumen felt paper of 60 lbs.... do	7th R.A.	1024	54.7	P.Sft	56013	11.60%	<b>6898</b>	62911
									8th R.A.	0	54.7	P.Sft	0	0	-56013	
													<b>6898</b>			
					do	do	do	<b>PART-C</b> (S.No.15) Providing and fixing bitumen felt paper of 60 lbs.... do	7th R.A.	331	54.7	P.Sft	18106	11.60%	<b>2100</b>	20206
									8th R.A.	0	54.7	P.Sft	0	0	-18106	
														<b>2,100</b>		
					do	do	do	<b>PART-E</b> (S.No.10) Manufacturing , Supplying and fixing black steel m.s. pipe..... do	7th R.A.	1000	2458.8	P.Rft	2,458,810	11.60%	285,222	2,744,032
8th R.A.	428	2458.8	P.Rft	1,052,371					11.60%	<b>122,075</b>	(1,052,371)					
									<b>122,075</b>							
2	No.SCA/23(i)/P.E.TP W/272 dt:24.04.2013	Construction of underground water tank including pipe fitting for R.O. Plant Scheme at Mithi. do	M/s. Haresh & Co. do	PART-C (S.No.7) Cement pointing flush upto 20" height 1:2 do	5th R.A.	15188	1151.3	%Sft	174862.48	18.10%	31650	206512.48				
					6th R.A.	9752	1151.3	%Sft	112277	18.10%	<b>20322</b>	-112277				
										<b>20322</b>						
3	No.SCA/23(i)/P.E.TP W/274 dt:24.04.2013	Construction of R.O. Plant Room at Islamkot. do	M/s. Hotchand Bhuromal do	<b>PART-A</b> (S.No.15) Providing and fixing bitumen felt paper of 60 lbs.... do	5th R.A.	21304	50	Sft	1065200	18.15%	<b>193334</b>	1258534				
					6th R.A.	Nil	50	Sft	Nil	0	-1065200					
										<b>193334</b>						
				Amount of items of work with premium allowed							<b>5,670,779</b>					
				Amount of items of work reduced without premium							<b>(3,539,257)</b>					
				Amount of premium not reduced							<b>488,023</b>					

(Annex-5)																
Work order No. & Dt:	Name of Work	Name of Contractor	Bill No.	Item of Work	Execute Qty	Qty. in BOQ	Excess Qty.	Less Admissible 30%	Excess Qty more than 30%	Rate	Unit	Amount				
No.SCA/23(i)/P.E.TP W/272 dt:24.04.2013	Construction of under-ground water tank including pipe fitting for R.O. Plant Scheme at Mithi.	M/s. Haresh & Co.	6th R.A	<b>PART-C</b> Cement Concrete Brick or stone Ballast 1 1/2" to 2" gauge, ration 1:4:8 ratio 6" thick in foundation.	9328.8	4304.33	5024.47	1291.30	3733.17	9416.28	%sft	351,526				
				Crused Ruble Masonry including hammer dressing in cement sand moter 1:4.	9168	387	8781	116.10	8664.90	26475	%sft	2,294,032				
				Coursed Ruble Masonry including hammer dressing in cement sand moter 1:4.	4954	1467	3487	440.10	3046.90	27034.98	%sft	823,729				
				Stone pitching hand paked with surface levelled.....	25996.5	6842.16	19154.34	2052.65	17101.69	7708.47	%Cft	1,318,279				
				Providing and laying 1" plain 1:2:4	2871	1032	1839	309.60	1529.40	4411.82	%sft	67,474				
												Sub-Total:-	4,855,040			
													Add:18.10%	878,762		
													Total:-	<b>5,733,802</b>		
No.SCA/23(i)/P.E.TP W/271 dt:24.04.2013	Construction of R.O. Plant Room, Guard Room, Compound Wall & Lavatroy including external and internal development for R.O. Plant Scheme at Mithi.	M/s. Haresh & Co.	8th R.A.	<b>PART-A</b> Pacca brick in foundation and plinth in cement snd mortar Ratio 1:6	13049.6	2914.33	10135.26	874.30	9260.96	11948	%cft	1,106,500				
				<b>PART-E</b> (Sr.No.3) Course rubble masonry and hammering, dressing.	13080	5382.75	7697.25	1614.83	6082.43	11948.36	%cft	726,750				
															Sub-Total:-	1,833,250
															Add:11.60%	212,657
																Total:-
No.SCA/23(i)/PE/TW/ 274 dt:24.04.2013	Construction of R.O. Plant Room at Islamkot.	M/s. Hotchand Bhuromal	6th R.A	<b>PART-A</b> (Sr.No.8) Pucca B/Work in Ground Floor....	5030	3562.16	1467.84	1068.65	399.19	13227.41	%Sft	52,803				
														Add:18.15%	9,584	
															Total:-	<b>62,386</b>
No.SCA/23(i)/PE/TW/ 271 dt:24.04.2013	Construction of Under Ground Water Tank & Reject Water Tank including pipe fitting for R.O. Plant Scheme at Islamkot.	M/s. Hotchand Bhuromal	4th R.A.	<b>PART-C</b> (S.No.2) Excacavation for tank & reseuor in sody.	160800	42135	118665	12640.50	106024.50	3150	%0Cft	333,977				
				(S.No.4) Crush Rubble masonry i/c hammor 1:4	2023	387	1636	116.10	1519.90	26475	%Cft	402,394				
															Sub-Total:-	736,371
															Add:22.25%	179,541
																Total:-
No.SCA/23(i)/PE/TW/ 272 dt:24.04.2013	Renovation of Old RO Plant, Converted into Generator Room, Compound Wall & Lavatory i/c External & Internal Development for R.O Plant Scheme at Islamkot.	M/s. Hotchand Bhuromal	4th R.A.	<b>PART-C</b> Cement Concrete brick or stone ballast 1:4:8	19868	8635.73	11232.27	2590.72	8641.55	9416.28	%Cft	813,713				
				Pacca brick work in foundation and plinth.	2115	313.58	1801.42	94.07	1707.35	11948.36	%Cft	204,000				
				Providing and fixing paving blocks flooring.	25004	10761	14243.03	3228.29	11014.74	210	P.Sft	2,313,095				
				Providing and fixing paving blocks flooring.	8335	5380	2955	1614.00	1341.00	230	P.Sft	308,430				
				<b>PART-D</b> Providing and lying Hala pattern tiles.	1042	790	252	237.00	15.00	47651.56	%Sft	7,148				
															Sub-Total:-	3,646,385
															Add:6.60%	240,661
																Total:-
												<b>G-Total</b>	<b>12,645,054</b>			

(Annex-6)

S.No	Work order No. & Dt:	Bill No.	Name of Work	Name of Contractor	Item of Work	Execute Qty	Rate	Unit	Amount
1	No.SCA/23(i)/P.E.TP W/271 dt:24.04.2013	8th R.A.	Construction of R.O. Plant Room, Guard Room, Compound Wall & Lavatroy including external and internal development for R.O. Plant Scheme at Mithi.	M/s. Haresh & Co.	<u>PART-A</u> (S.No.20) Providing and fixing caligraphy work on tiles	96.50	2150.00	%Sft	207,475
					<u>PART-F</u> Sr.No.10 Cement Plaster 1:6 upto 20' height 1/2" thick.	6,449.00	2206.60	%Sft	142,304
					<u>PART-F</u> Sr.No.11Cement Plaster 1:4 upto 20' height 3/8" thick.	6,449.00	2197.52	%Sft	141,718
								sub-total:-	491,497
								Add:11.60%	57,014
								<b>Total:-</b>	<b>548,511</b>
2	No.SCA/23(i)/P.E.TP W/272 dt:24.04.2013	6th R.A.	Construction of under-ground water tank including pipe fitting for R.O. Plant Scheme at Mithi.	M/s. Haresh & Co.	<u>PART-A</u> (S.No.6) Filling watering and remaining with surplus earth....	52,199.00	1512.50	%0Cft	78,951
					<u>PART-A</u> (S.No.7) Filling watering and remaining with new earth....	77,992.00	3630.00	%0Cft	283,111
								sub-total:-	362,062
								Add:18.10%	65,533
								<b>Total:-</b>	<b>427,595</b>
3	No.SCA/23(i)/PE/TW/ 271 dt:24.04.2013	4th R.A.	Construction of Under Ground Water Tank & Reject Water Tank including pipe fitting for R.O. Plant Scheme at Islamkot.	M/s. Hotchand Bhuromal	PART-A Sr.No.7 Providing Eension Jali 9" wide	738.00	86.00	P.Rft	63,468
					Sr.No.8 P/F C.I foot step aoo: design.	22.00	103.00	P.Rft	2,266
					Sr.No.10 P/F C.I ventilator	8.00	4870.00	Each	38,960
					Sr.No.11 P/F C.I. Main Hole Cover.	14.00	6985.00	P.Cft	97,790
								Sub-total:	202,484
							Add:22.25%	45,053	
							<b>Total:-</b>	<b>247,537</b>	
<b>Sub-Total (Expenditure against extra items of work)</b>									<b>1,223,643</b>

S.No.	Work order No. & Dt:	Bill No.	Name of Work	Name of Contractor	Item of Work	Execute Qty	Rate	Unit	Amount
1	No.SCA/23(i)/PE/TW/274 dt:24.04.2013	6th R.A	Construction of R.O. Plant Room at Islamkot.	M/s. Hotchand Bhuromal	<b>PART-C Generator Room</b> Excavation of found:bldg....	716.00	2722.50	%0cft	1,949
					C.C. Brick or stone ballast 1:4:8...	212.00	9416.28	%cft	19,963
					Fab. of Mild Steel reinforce....	61.07	5001.70	Cwt	305,464
					R.C.C.1:2:4 roof slab Beams	1,074.00	337.00	P.sft	361,938
					Pucca B/Work in foundation....	177.00	11948.36	%sft	21,149
					F/Watering reaining earth with surplus	630.00	1512.50	%0cft	953
					Pucca B/Work in Ground Floor	351.00	13227.41	%sft	46,428
					S/Fixing Steel Grated Door....	126.00	180.50	P.sft	22,743
					P/f Z-Section window (NSI)..	105.00	726.72	P.sft	76,306
					Cement Plaster 1/2" thick 1:6...	126.00	90.15	P.sft	11,354
					Cement Plaster 3/8" thick 1:4...	1,411.00	2206.60	%sft	31,135
					P/Fixing Colour Create to wall....	691.00	2197.52	%sft	15,185
					Khapril (Mangrea) Tile....	892.00	6319.50	%sft	56,370
						523.00	3645.65	%sft	19,067
								Sub-total:	990,002
								Add:18.5%	177,625
					<b>Sub-Total (Expenditure against extra civil work (Part-C Generator Room))</b>				<b>1,167,627</b>
								<b>G-Total</b>	<b>2,391,270</b>

(Annex-7)

S.No	Work order No. & Dt:	Name of Work	Name of Contractor	BOQ PART	S.NO.	Item of Work	Quantity	Unit	Rate	Amount
1	No.SCA/23(i)/P.E.TP W/271 dt:24.04.2013	Construction of R.O. Plant Room, Guard Room, Compound Wall & Lavatroy including external and internal development for R.O. Plant Scheme at Mithi.	M/s. Haresh & Co.	PART-A	19	P/F 8" dia 8ft long architectural hollow false pre-cast column.....	4.00	Each	5000	20,000
				PART-B	20	P/L HALA or pattern tile glazed 6" x6"x1/4" on floor or wall facing....	30.00	%Sft	34520.31	10,356
				PART-C	13	Making and fixing steel grated doors with 1/16 thick sheeting.....	24.50	P.Sft	726.72	17,805
				PART-C	17	Preparing the surface and painting with weather coat .....	120.00	%Sft	2567.95	3,082
				PART-D	14	S/F of steel window "Z" section 3/4" x 3/4" x 1/8" partly fixed.....	3.00	P.Sft	90.15	270
				PART-D	17	Preparing the surface and painting with weather coat .....	51.00	%Sft	2567.95	1,310
				PART-F	14	Excavation for pipe lines in trenches and pits in sandy soils.....	10,400.00	%0Cft	3750	39,000
				PART-F	15	Refilling the excavated stuff in trenches 6" thick layer.....	9,360.00	%0Cft	2760	25,834
				PART-F	16	Construction manhole or inspection chamber for the required dia.....	5.00	Each	14748	73,740
				PART-G	4(b)	Providing G.I.Pipes (b) 3/4" dia pipe	150.00	Rft	95.79	14,369
				PART-G	8	S/F wash basin mixture.....	1.00	Each	2882	2,882
				PART-G	12	P/F full way gun metal valves.....	2.00	Each	2024.43	4,049
				PART-H	7	P/F surface type 3 pin.....	7	Each	162	1,134
				PART-H	8	P/F B.C. brass centre button holder..	29	Each	70	2,030
				PART-H	16	P/F DP i/c change over switch.....	1	No	7612	7,612
				PART-H	22(a)	P/F of Plastic Board 10' x 4'	10	No	586	5,850
				PART-H	22(b)	P/F of Plastic Board 6' x 4'	6	No	390	2,340
									Sub-Total:-	231,662
									Add: 11.60%	26,873
									<b>Total:-</b>	<b>258,535</b>

S.No	Work order No. & Dt:	Name of Work	Name of Contractor	BOQ PART	S.NO.	Item of Work	Quantity	Unit	Rate	Amount			
2	No.SCA/23(i)/PE/TW/274 dt:24.04.2013	Renovation of Old RO Plant, Converted into Generator Room, Compound Wall & Lavatory i/c External & Internal Development for R.O Plant Scheme at Islamkot.	M/s. Hotchand Bhuromal	PART-B	11	Providing and fixing colour create to wa	291.5	%Sft	6319.5	18,421			
				PART-B	15	Painting new surfaces @ .....	35	%Sft	2117.41	741			
				PART-B	17	Preparing the surface and painting...	51	%Sft	2567.95	1,310			
				PART-C	9	Manufacturing, Supplying & fixing black	400	P.Rft	2458.81	983,524			
				PART-C	10	Excavation for pipe lines in trenches an	6400	%OCft	3750	24,000			
				PART-C	11	Refiling the excavated stuff in trenches	5760	%OCft	2760	15,898			
				PART-C	12	Construction manhole or inspection ch	3	Each	14748	44,244			
				PART-C	13	P/F M.S. flange made of MS Plate...	6	Each	2952	17,712			
				PART-C	14	Fixing of slulce valves with 2 cast iron.	3	Each	3821	11,463			
				PART-C	15	Jointing C.I./M.S flanged pipes....	6	Each	2239	13,434			
				PART-D	1	Reinforcement concrete work including	225	P.Cft	337	75,825			
				PART-D	2	Fabrication of mild steel reinforcement	9.04	P.Cwt	5001.7	45,216			
				PART-D	3	Preparing the surface and painting...	2418	%Sft	2499.76	60,444			
				PART-D	4	Painting old surfaces, doors & windows	699	%Sft	1662.21	11,619			
				PART-D	5	Painting guard bars, gates.....	739	%Sft	977.4	7,223			
				PART-D	6	Preparing the surface and painting...	2365.5	%Sft	2118.33	50,109			
				PART-D	7	Pro viding and fixing bitumen felt paper	790	P.Sft.	54.7	43,213			
				PART-E	4(b)	P/F G.I.Pipes 3/4"	150	Rft	95.79	14,369			
												Sub-Total:-	1,438,764
												Add: 6.60%	94,958
												<b>Total:-</b>	<b>1,533,723</b>
3	No.SCA/23(i)/PE/TW/274 dt:24.04.2013	Construction of R.O. Plant Room at Islamkot.	M/s. Hotchand Bhuromal	PART-A	16	Painting New Surfaces@ ....	480.00	%Sft	2,116.41	10,159			
				PART-A	19	P/F 8" dia 8ft long architectural hollow false pre-cast column.....	4.00	Each	5,000.00	20,000			
				PART-A	21	P/L HALA or pattern tile glazed 6" x 6" x 1/4" on floor....	75.00	%Sft	34,520.31	25,890			

S.No	Work order No. & Dt:	Name of Work	Name of Contractor	BOQ PART	S.NO.	Item of Work	Quantity	Unit	Rate	Amount
				PART-B	5	Providing & fixing one way S.P. 5 amps flush type switch....	56.00	Each	54.00	3,024
				PART-B	6	Providing & fixing two way S.P. 5 amps flush type switch....	9.00	Each	83.00	747
				PART-B	7	P/F surface type 3 pin.....	4.00	Each	162.00	648
				PART-B	8	P/F B.C. brass centre swivelling type button holder	28.00	Each	70.00	1,960
				PART-B	9	P/F bakelite ceiling rose with two terminals..	14.00	Each	72.00	1,008
				PART-B	12	P/F energy saver superior quality...	17.00	Each	520.00	8,840
				PART-B	13	P/F Watts tube light complete with..	10.00	Each	650.00	6,500
				PART-B	17	P/F ammeters size 96/96 mm ....	1.00	No	1,054.00	2,054
				PART-B	18	P/F voltmeter size 96/96 mm...	1.00	No	999.00	999
				PART-B	19	P/F indicators lamps red, yellow & Green as required...	1.00	No	780.00	780
				PART-B	20	Supplying stand fan of 24" sweep of goods quality...	1.00	No	6,500.00	6,500
				PART-B	21	S/F capsules lights...	15.00	No	390.00	5,850
				PART-B	22(A)	P/F plastic board size 10' x 4'	6.00	No	585.00	3,510
				PART-B	22(B)	P/F plastic board size 6' x 4'	5.00	No	390.00	1,950
									Sub-Total:-	44,370
									Add: 18.15%	18,226
									<b>Total:-</b>	<b>118,645</b>
<b>4</b>	No.SCA/23(i)/PE/TW/271 dt:24.04.2013	Construction of Under Ground Water Tank & Reject Water Tank including pipe fitting for R.O. Plant Scheme at Islamabad.	M/s. Hotchand Bhuromal	PART-C	15	Excavation for pipe lines in trenches and pits is sandy soil..	6,000.00	%0Cft	3750	22,500
				PART-C	16	Refilling the excavated stuff in trenches 6" thick layer..	5,400.00	%0Cft	2760	14,904
				PART-C	17	Construction manhole or inspection chamber for the required dia....	4.00	Each	14748	58,992
									Sub-Total:-	96,396
									Add: 22.25%	21,448
									<b>Total:-</b>	<b>117,844</b>
									<b>G-Total</b>	<b>2,028,746</b>

(Annex-8)

S.No.	Work order No. & Dt:	Bill No.	Name of Work	Name of Contractor	Item of Work	Execute Qty	Actual Rate B.O.Q.	Reduced Rate Allowed	Unit	Amount
1	No.SCA/23(i)/P.E.TPW /271 dt:24.04.2013	8th R.A.	Construction of R.O. Plant Room, Guard Room, Compound Wall & Lavatroy including external and internal development for R.O. Plant Scheme at Mithi.	M/s. Hareh & Co.	<b>PART-F</b> Sr.No.14 Manufacturing Supply and Fixing black steel ms pipe	1,000	3,395.74	2,459	P.Rft	2,458,810
					Sr.No.15 Providing and fixing M.S. pipe	10	4,125.00	2,952	Each	29,520
					Sr. No.16 Providing and fixing Sluce valve with....	5	5,288.00	3,821	Each	19,105
					Sr. No.17 Jointing C.I. 7 M.S. pipe and special....	10	3,370.00	2,239	Each	22,390
					Sr.No.3 Course rubble masonary and hammering, dressing.	13,080	27,034.80	11,948	%Sft	1,562,845
									Sub-Total:-	4,092,670
									Add: 11.60%	474,750
				<b>Total:-</b>	<b>4,567,420</b>					
2	No.SCA/23(i)/PE/TW/ 272 dt:24.04.2013	4th R.A.	Renovation of Old RO Plant, Converted into Generator Room, Compound Wall & Lavatory i/c External & Internal Development for R.O Plant Scheme at Islamkot.	M/s. Hotchand Bhuromal	<b>PART-C</b> Sr.No.5 Providing and fixing paving blocks flooring.	25,004	223.97	210	%0Cft	5,250,840
					Sr.No.6 Providing and fixing paving blocks flooring.	8,335	248.17	230	P.Sft	1,917,050
					Sr.No.7 Manufacturing supplying block steel M.S. Pipe..	400	2,458.81	2,400	P.Sft	960,000
									Sub-Total:-	8,127,890
									Add: 6.60%	536,441
									<b>Total:-</b>	<b>8,664,331</b>
3	No.SCA/23(i)/P.E.TPW /274 dt:24.04.2013	6th R.A	Construction of R.O. Plant Room at Islamkot.	M/s. Hotchand Bhuromal	PART-B S.No.3 P/L main or Sub Main wire 3-7/029	400	294.00	280	P.Meter	112,000
					S.No.4 P/L main or Sub Main wire 3-7/044..	250	468.00	350	P.Meter	87,500
					S.No.15 P/F main sub main PVC copper Cond...	400	608.00	500	P.Meter	200,000
									Sub-Total:-	399,500
									Add: 18.15%	75,509
									<b>Total:-</b>	<b>472,009</b>
									<b>G-Total</b>	<b>13,703,759</b>

(Annex-9)

Work order No. & Dt:	Name of Work	Name of Contractor	Bill No.	Bill Amount	Cheque No.	Cheque Date.
No.SCA/23(i)/P.E.TPW/272 dt:24.04.2013	Construction of under-ground water tank including pipe fitting for R.O. Plant Scheme at Mithi.	M/s. Hareh & Co.	1st R.A.	16,935,263	*078605	3.6.2013
			2nd R.A.	13,608,623	*084904	26.9.2013
			3rd R.A.	17,058,406	*084973	6.12.2013
			4th R.A.	15,367,899	*084938	23.3.2014
			5th R.A.	6,731,402	124307	10.10.2014
			6th R.A.	3,246,246	145001	7.4.2015
			<b>Total:-</b>	<b>72,947,839</b>		
No.SCA/23(i)/P.E.TPW/271 dt:24.04.2013	Construction of R.O. Plant Room, Guard Room, Compound Wall & Lavatroy including external and internal development for R.O. Plant Scheme at Mithi.	M/s. Hareh & Co.	1st R.A.	3,520,747	*078605	3.6.2013
			2nd R.A.	17,970,226	*084904	26.9.2013
			3rd R.A.	14,401,437	*084973	6.12.2013
			4th R.A.	5,243,511	*084973	6.12.2013
			5th R.A.	17,007,277	*094988	23.3.2014
			6th R.A.	14,619,129	124306	10.10.2014
			7th R.A.	4,115,033	124377	26.12.2013
			8th R.A.	2,251,718	145002	7.4.2015
<b>Total:-</b>	<b>79,129,078</b>					
No.SCA/23(i)/PE/TW/274 dt:24.04.2013	Construction of R.O. Plant Room at Islamkot.	M/s. Hotchand Bhuromal	1st R.A.	15,061,177	*078604	3.6.2013
			2nd R.A.	5,870,070	*084903	26.9.2013
			3rd R.A.	3,444,933	*084972	6.12.2013
			4th R.A.	5,099,638	*094987	23.3.2014
			5th R.A.	5,436,388	110659	27.5.2014
			6th R.A.	1,099,309	124305	10.10.2014
<b>Total:-</b>	<b>36,011,515</b>					
No.SCA/23(i)/PE/TW/272 dt:24.04.2013	Renovation of Old RO Plant, Converted into Generator Room, Compound Wall & Lavatory i/c External & Internal Development for R.O Plant Scheme at Islamkot.	M/s. Hotchand Bhuromal	1st R.A.	3,241,760	*084903	26.9.2013
			2nd R.A.	2,152,871	*084972	6.12.2013
			3rd R.A.	3,434,720	124305	10.10.2014
			4th R.A.	5,093,538	145078	26.5.2015
			<b>Total:-</b>	<b>13,922,889</b>		
No.SCA/23(i)/PE/TW/271 dt:24.04.2013	Construction of Under Ground Water Tank & Reject Water Tank including pipe fitting for R.O. Plant Scheme at Islamkot.	M/s. Hotchand Bhuromal	1st R.A.	14,467,367	*048604	3.6.2013
			2nd R.A.	3,097,400	*084903	29.6.2013
			3rd R.A.	2,691,262	*084972	6.12.2013
			4th R.A.	3,564,158	*094987	23.3.2014
			<b>Total:-</b>	<b>23,820,187</b>		
	Mr. Hassan Ally Memon		15,236	78618	06.06.2013	
	Director Information		88,443	94993	02.04.2014	
	Mr. Ali Akbar Abro		42,698	110628	09.05.2014	
	3rd Party Monitoring Charges		300,000	135819	04.02.2015	
	<b>Workout by Audit</b>	<b>G-Total</b>	<b>226,277,885</b>			
	<b>Total Capital Exp as per Department Statement</b>		<b>240,277,885</b>			
	Difference		14,000,000			
	<b>Paid to Incharge SCA Mithi</b>		<b>14,000,000</b>	160001	15.06.2015	

(Annex-10)

S.No.	Work order No. & Dt:	Name of Work	Name of Contractor	Bill No.	Item	Quantity	Rate Difference Cost	Unit	Amount
1	No.SCA/23(i)/P.E.TPW /272 dt:24.04.2013	Construction of under-ground water tank including pipe fitting for R.O. Plant Scheme at Mithi.	M/s. Haresh & Co.	Up to 6th R.A Bill	Cement	19,615	40.00	Per Bag	784,610
2	No.SCA/23(i)/P.E.TPW /271 dt:24.04.2013	Construction of R.O. Plant Room, Guard Room, Compound Wall & Lavatroy including external and internal development for R.O. Plant Scheme at Mithi.	M/s. Haresh & Co.	Up to 8th R.A Bill	Cement	19,010	40.00	Per Bag	760,418
3	No.SCA/23(i)/PE/TW/ 274 dt:24.04.2013	Construction of R.O. Plant Room at Islamkot.	M/s. Hotchand Bhuromal	Up to 6th R.A Bill	Cement	9,911	40.00	Per Bag	396,460
4	No.SCA/23(i)/PE/TW/ 272 dt:24.04.2013	Renovation of Old RO Plant, Converted into Generator Room, Compound Wall & Lavatory i/c External & Internal Development for R.O Plant Scheme at Islamkot.	M/s. Hotchand Bhuromal	Up to 4th R.A Bill	Cement	2,382	40.00	Per Bag	95,285
5	No.SCA/23(i)/PE/TW/ 271 dt:24.04.2013	Construction of Under Ground Water Tank & Reject Water Tank including pipe fitting for R.O. Plant Scheme at Islamkot.	M/s. Hotchand Bhuromal	Up to 4th R.A Bill	Cement	6,617	40.00	Per Bag	264,690
								<b>Total</b>	<b>2,301,462</b>