

## Case Summary

### Tora Cement Company "Replacement of Electrostatic Precipitators for Kiln no. 8, By-pass and Gravel Bed Filters"

#### Company Information:

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Sector: Private  
Project Title: "Replacement of Electrostatic Precipitators for Kiln no.8, By-pass  
Gravel Bed Filters"  
Type of Project: Air pollution control

#### 1. Basic Information:

##### 1.1 Main Products:

Cement	2609832 t/y
Clinker (intermediate)	2604326 t/y

##### 1.2 Raw Materials:

Limestone	3620994
Clay	847518
Pyrite	32951
Slag	5867
Gypsum	205152
<b>Utilities</b>	<b>Ton/year</b>
<b>Water</b>	
Domestic	155000
Process	1147000
Other	248000
<b>Fuel</b>	
Natural gas fuel Nm3/year	33443000
Heavy fuel ( Mazot )	249671
<b>Electricity:</b>	
National grid	349541570 kw/y
Self generated	-

### 1.3 **Project Location:**

Tourah plant (I) is located near Helwan in Tourah Nile Cornish road, and the project will be implemented in Torah Plant (II) (Line 8) located at the autostrad road.

### 1.4 **Project Objectives:**

- The following table shows the expected dust load reduction:

Parameter (TSP)	Before the project (tons/year)	After the project (tons/year)	Percent Reduction expected
Raw Mills	737.28	184.3	75 %
By Pass Filter	333.5	74.112	78 %
Gravel Bed Filters	884.7	267.5	70 %

### .5 **Project Description:**

- Replacement of electrostatic precipitator of two mills (1 & 2) stacks with two more Efficient Bag house filters of suitable size (line 8).
- Replacement of electrostatic precipitator of bypass stack with more efficient Bag house filter of suitable size (line 8)
- Control the kiln seal to prevent false air from interfering with proper operation of the filter
- Replacement of the two gravel bed filters A & B with higher technological equipment (line 8)

### .5 **Project Components:**

<b>4 Fabric Bag filters and auxiliary equipment</b>
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#### **1. Equipment designed, supplied, shipped, erected and commissioned:**

1. Raw Mill A Bag Filter
2. Raw Mill A Bag Filter Exhaust Fan including drive
3. Raw Mill B Bag Filter
4. Raw Mill B Bag Filter Exhaust Fan including drive
5. Clinker Cooler Bag Filter
6. Clinker Cooler Bag Filter Exhaust Fan including drive
7. Tube Bench type Heat Exchanger for Clinker Cooler Gases including fans and drives
8. Alkali By-Pass Bag Filter
9. Alkali By-Pass Bag Filter Exhaust Fan including drive
10. Alkali By-Pass Quenching Fan including drive
11. Compressed air station.

#### 2. **Bulk materials:**

Includes mechanical, civil and electrical works

**1.7 Estimated Project Cost:**

Actual cost is US \$ 24 Million which is US \$ 15 Million will finance from EPAP II

**1.8 EPAP II Technical Support:**

EPAP II TA assists the company updating:

- Environmental audit.
- Compliance Action Plan

EPAP II PMU assisted the company in preparing:

- Tender document according to WB standard bidding document (ICB Single Stage Bidding)
- Self monitoring plan.
- Bid evaluation report and procurement procedures
- Technical agreement
- Awarding & Contract

**2. Eligibility Criteria**

**2.1 Environmental:**

- The project will allow the company to comply with environmental law limits regarding dust emissions. Reduction in load will reach 78% and the concentration of exhaust gases will decrease to 50 mg/m<sup>3</sup>

**2.2 Financial:**

- The project costs more than US\$ 8 million
- The payback period of the project is 4 years
- Sub loan agreement has been signed on October 2009

**3 Current status of project procedures**

**3.1 Steering committee approval:           Approved**

**3.2 Co-financers approval:                   (No-Objection)**

**3.3 Technical Procedures:**

Technical Document	submitted	Approved	Date
Environmental Assessment	Y	Y	April 2007
Compliance Action Plan (CAP)	Y		Draft Dec 2007 Revised Mar 2010
Environmental Impact Assessment (EIA)	Y	Y	May 2009
Technical Agreement	Y	Y	10-5-2010

### **3.4 Implementation Procedures:**

#### **3.4.1 Procurement Procedures:**

The company follows World Bank (WB) procurement procedures (ICB) according to EPAP II conditions and procedures (ICB International Competitive Bid) (Single Stage Bidding) for Supplying and Installation of Replacement of Electrostatic Precipitators for Kiln no.8, Bypass and Gravel Bed Filters

#### **3.4.2 Status of Implementation:**

Technical Document	submitted	Date	
		Achieved	Planned
Credit worthiness certificate	Y	Aug 2006	
Sub-loan Agreement	Y	29-12-2009	Oct 2009 drafted
Bidding document	Y	April 2008	
Technical and financial Evaluation	Y	April 2009	
Contract Signed	Y	16-12-2009	Nov 2009
Installation and Commissioning	N	Dec 2011	Jun 2011
Monitoring: Q1:	N		Sep 2011
Q2:	N		
Q3:	N		
Q4:	N		