Case Summary

Amreya Cement Company (AMCC)

Company Information:

Contact Person:	Mr. Luis Fernandes
Position:	Managing director
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Sector:	Private
Project Title:	"Installation of fabric bag filter downstream the existing EPs of Raw mill (1, 2) in line (1)"
Type of Project:	Air pollution control.

1. **Basic Information**:

1.1 **Main Products:**

Products	Ton/year
Portland cement	2,409,000
Clinker (Intermediate)	212,8000

1.2 **Raw Materials and Utilities:**

Raw Materials:	
Limestone	1,954,996 t/y
Clay	698,885 t/y
Iron	23,455 t/y
Gypsum	70,802 t/y
Energy:	
Mazout	132000 (t/y)
Electricity:	
National grid	349541570 kw/y
Self generated	-
Water:	
Domestic	125000 m3/y
Cooling (make up water)	225000 m3/y
Fire fighting system	150000 m3/y

1.3 **Project Location**:

El Garbaneyat Borg El Arab City, Alexandria-Egypt, The factory is located in an area, Currently designated as an industrial area.

1.4 **Project Objectives:**

- Reduction of dust emissions (TSP) in raw mills (1, 2) stack of line 1 to comply with the Environmental law 4/1994 and other environmental regulation.

- Emission load before and after implementation the project **based on online monitoring data in EEAA and design parameter for new bag filter** :

Parameters	Before the project (t/y)	After the project (t/y)	Reduction %
Dust	357,4	21,1	94

1.5 **Project Description:**

- After revamping of line1 and operation on July, 2007, the productivity of the line has increased in such a way that the existing EP filters have become inadequate to achieve compliance with the environmental regulations (law4, 1994) for dust emission to atmosphere (limit 300 mg/m3). Since the start up of this line, the company faced many problems due to faulty design mainly the level of dust emission is above the guaranteed figure for operation (100-120 mg/m3).

- The kiln/raw mills are dedusted by two independent EPs , each one formed by two independent electrical fields, after each EP there exists one fan that transports the gas flow to main stack (only one stack)

- AMCC will install a fabric bag filter in series with existing EPs fans in order to achieve lower dust emission by reducing the dust pollution load to at least 94% of the current load and concentration will decrease from 340 mg/m3 to 20 mg/m3

1.6 **Project Components**

Fabric Bag filter and auxiliary equipment	
Mechanical equipment	Compressors,dryers,valves, conveyers
Electrical equipment	Air flow meters, level detectors, solenoid valves
Control devices	Switches, rotating control sensors

1.7 **Project Cost**:

Estimated of total Cost is US$ 6.6 million EPAP II financing US$ 6 million.

No.	Contract	Price
1	(Actual Price of Schuech Contract) Installation of fabric bag filter downstream the existing EPs of Raw mill (1, 2) in line (1)	4,333 M Euro (Actual Cost) Equivalent to 6 M US $
2	Civil Works (Estimated)	0,30 M €
3	Taxes on Schuech Contract	0,14 M €
4	Duties	0,06 M €
5	Electrical Equipment Contract	0,241 M € (Actual Contract)
6	Taxes on Electrical Equipment contract	0,023 M €
7	Electrical installation and automation	0,5 M €
8	Taxes on Electrical installation and automation Contract	0, 057 M €
Total Cost		5,65 M € equivalent to 7,6 M $

1.8 **EPAP II Technical Support**:

EPAP II PMU assisted the company in preparing:

- Tender document.
- The bid evaluation report and procurement procedures.
- Contract between the company & the bidder.

2. **Eligibility Criteria:**

2.1 **Environmental:**

- The project will allow the company to comply with the law regarding dust emissions. Reduction in load will reach 94% and a concentration will decrease from 340 mg/m^3 to 20 mg/m^3

2.2 **Financial aspects:**

- The project costs less than US$ 8 million

3. **Current status of project procedures:**

3.1 **Steering committee approval: Approved**

3.2 **Co-financers approval: N/A**

3.3 **Technical Procedures:**

Technical Document	submitted	Approved	Date
Environmental Assessment	Y	Y	Sep 2008
Compliance Action Plan (CAP)	Y	Y	Sep 2008
Environmental Impact Assessment (EIA)	Y	Y	Aug 2009
Technical Agreement	Y	Y	

3.4 **Implementation Procedures:**

3.4.1 **Procurement Procedures:**

The company follows the company Commercial practice to issue National Competitive Bidding (NCB)(1 stage bidding) for supplying and installation of fabric bag filter downstream the existing EP's of raw mills(1,2) in line (1)

3.4.2 **Status of Implementation:**

Technical Document	submitted	Date	
		Achieved	Planned
Credit worthiness certificate	Y	15-6-2008	
Financial Agreement	Y	1-4-2010	
Bidding document	Y	14-7-2009	
Technical and financial Evaluation	Y	October 2009	Nov 2009
Awarding	Y	19-11-2009	Dec 2009
Contracting	Y	20-1-2010	Dec 2009
Installation and Commissioning	Y	20-12-2011	Jan 2011