Cabinet of Ministers

Egyptian Environmental Affairs Agency

Egyptian Pollution Abatement Project (PMU)

رئاسة مجلس الوزراء جهاز شئون البيئة وحدة تنفيذ مشروع التحكم في التلوث الصناعي

Case Summary (2)

Amreya Cement Company (AMCC)

Company Information:

Contact Person: Mr. Luis Fernandes
Position: Managing director

Telephone: 03/4195600 - 03/4195620

Fax: 03/4195628

Sector: Private

Project Title: "Upgrading of the dedusting bag filters with air jet cleaning system

at -packing & clinker transport - area in line 1 & 2"

Type of Project: Work place 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:**

- Enhance work place environment
- Reduction of dust emission to comply with the Environmental Law 4/1994

| | Sub-Project Name | TSP before [t/y] | TSP after [t/y] | TSP reduction [t/y] |
|-------|--------------------------|------------------|-----------------|---------------------|
| 1 | Packing machine | 200 | 40 | 160 |
| 2 | Clinker transport | 32 | 13 | 19 |
| 3 | Clinker transport indoor | 32 | 13 | 19 |
| 4 | Gypsum feeding | 38 | 26 | 13 |
| 5 | Homo silos | 160 | 32 | 128 |
| 6 | Crushers | 19 | 19 | 0 |
| 7 | RM feeding | 3 | 1 | 2 |
| 8 | Kiln feed | 64 | 13 | 51 |
| Total | | | | 392 |

1.5 **Project Description:**

- Existing set of bag filters operate with low efficiency and required frequent maintenance. The levels of fugitive dust in the packing area and clinker transport system always exceed the environmental law limit for work environment, regarding to the measurements have been done in these areas June 2008, for packing (TSP 10-12 mg/m3 PM10 3-4 mg/m3) & and for clinker transport system (28 mg/m3 for TSP and 8 mg/m3 for PM10), so by adding new bag filters will be enhanced and will comply with environmental law limits for the work environment.
- Use of Air Jet cleaning system instead of shaker system for bag filters cleaning does no need to put a chamber out of service

1.6 **Project Components**

The project will use Air Jet cleaning system instead of shaker system for Bag Filters of AMCC- Line I & II for the following bag filters:

- 5 Bag filters for the packing machines
- 8 Bag Filters for clinker transport & CM additives

1.7 **Project Cost**:

Estimated Cost is US\$ 1,936 million EPAP II will be financing US\$ 1,76 million.

1.8 **EPAP II Technical Support**:

EPAP II TA hired international consultant to prepare:

• Environmental Assessment (EA) Part II

EPAP II PMU assisted the company in preparing:

- Procurement procedures.
- Contract between the company & the bidder.

2 Eligibility Criteria:

2.1 **Environmental:**

- Filtering area is increased by around 40%.
- Reduction in dust emission.
- Less maintenance required.

The implementation of this project has direct environmental benefits as the upgrading of these bag filters will reduce dust emission mainly emitted in the workplace and to ambient air. The decrease in pollution load is expected to be 60-70% of the present situation and dust level will comply with the Egyptian environmental law

2.5 Financial aspects:

• The project costs less than US\$ 8 million

3 <u>Current status of project procedures</u>:

3.1 Steering committee approval: N/A

3.2 Co-financers approval: N/A

3.3 **Technical Procedures:**

| Technical Document | submitted | Approved | Date |
|---------------------------------|-----------|----------|---------|
| | | | |
| Environmental Assessment | Y | Y | |
| Compliance Action Plan (CAP) | Y | N | Sep2009 |
| Environmental Impact Assessment | NA | NA | |
| (EIA) | | | |
| 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) for Upgrading of the dedusting bag filters –packing & clinker transport –in line $1\ \&\ 2$

3.4.2 Status of Implementation:

| Technical Document | Culturitted | Date | |
|-------------------------------|-------------|-----------|----------|
| | Submitted | Achieved | Planned |
| Credit worthiness certificate | Y | 15-6-2008 | |
| Sub-loan Agreement | Y | | Aug 2010 |
| Bidding document (opening) | Y | 10-6-2010 | May 2010 |

| Technical and financial Evaluation | Y | 8-8-2010 | July 2010 |
|------------------------------------|---|----------|-----------|
| Signing Contract | Y | | Aug 2010 |
| Installation and Commissioning | Y | | Feb 2011 |
| Monitoring: | | | |
| Q1: | | | |
| Q2: | | | |
| Q3: | | | |
| Q4: | | | |