

## Case Summary

### Abu-Zaabal Company for Fertilizers And Chemical Industries

#### Company Information:

Contact Person:	Eng /Moastafa El Gabali		
Position:	Executive Director		
Telephone:	012-7379858	02-44620082	02-44620682
Fax:	02-44621931		
Sector:	Private		
Number of labors:	1600		
Project Title:	Supply, installation and commissioning of two rock phosphates grinding mills		
Type of Project:	Air Pollution & work environment control improvement		

#### 1.Basic Information:

##### 1.1 Main Products

Products	Actual Average Production, t/y
Powdered and granulated Single Super Phosphate (17% P <sub>2</sub> O <sub>5</sub> )	585,000
Granulated Triple Super Phosphate (48% P <sub>2</sub> O <sub>5</sub> )	87,000
Sulfuric acid	300,000 (used in production)
Phosphoric acid (48-50% P <sub>2</sub> O <sub>5</sub> )	41,000 (34,800 used in TSP production)

##### 1.2 Raw Materials&Utilities

Raw materials		Current Consumption, t/y	
Phosphate Ore (24-30% P <sub>2</sub> O <sub>5</sub> )		628,000	
Sulfur		100,000	
Utilities	Usage	Consumption, m3/y	Source
Water	Total	4,500,000	Ismailia Canal
Fuel	Type	Consumption /y	
	Natural gas, m3/y	15,000,000	
Electricity	Source	Consumption, MWh/y	
	Self Generated Electricity	25,000	
	Grid Electricity	25,000	
Products		Actual Average Production, t/y	
Powdered and granulated Single Super Phosphate (17% P <sub>2</sub> O <sub>5</sub> )		585,000	
Granulated Triple Super Phosphate (48% P <sub>2</sub> O <sub>5</sub> )		87,000	
Sulfuric acid		300,000 (used in production)	
Phosphoric acid (48-50% P <sub>2</sub> O <sub>5</sub> )		41,000 (34,800 used in TSP production)	

### 1.3 Project Location:

El Maahd road – Abu Zaabal – Qulubia Governorate

### 1.4 Project Objectives:

- Reduce Work place dust emissions to comply with environmental law.
- Minimize losses in raw Material.
- Increase Process Efficiency.

### 1.5 Project Description:

Abu Zaabal Company has 5 Bradley mills. These mills are nearly 40 years old, the mills are in bad condition causing a huge load of dust pollution. The company needs to replace those 5 mills with 2 new efficient mills in the phosphate grinding plant with the same capacity, including bag filters.

### 1.6 Project Components:

The replacement of Bradley mills by 2 new one will include the following items:

- 2 new mills with a capacity of 30 tons per hour each.
- Feeding System (Automatic)
- 2 Bag Filters
- Electric Instrument

### 1.7 Actual Project Cost:

Total project cost US\$ 4.650 M. EPAP finance is US\$ 4.565 M .

### 1.8 EPAP Technical Support:

EPAP II TA Prepared the Environmental audit and CAP The PMU assisted Abu Zaabal Company in the preparation of bidding Document , final evaluation of offers and contracting.

## 2. Eligibility Criteria

### 2.1 Environmental

- The concentration of Total Suspended Solids (TSP) in workplace next to existing Bradley mills is currently 38 mg/m<sup>3</sup> and is expected to reach less than 10 mg/m<sup>3</sup> which represents the limits set by law 9/2009. As to PM10 concentration, it is expected to decrease from the current value of 36 mg/m<sup>3</sup> to 3 mg/m<sup>3</sup> as per law 4. Assuming pollution load to be directly proportional to concentration, then 73.7 % load reduction will be achieved for TSP and 91.2 % load reduction for PM10.
- The project will reduce raw material losses

### 2.2 Financial:

- Payback period: NA

## **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	Aug 2009
Compliance Action Plan (CAP)	Y	Y	Aug 2009
Environmental Impact Assessment (EIA)	Y	Y	Feb 2009
Technical Agreement	Y	Y	Jan 2009

### 3.4 Implementation Procedures:

#### 3.4.1 Procurement Procedures:

The company followed its commercial practice (acceptable to EPAPII) to issue tender for Supply and Installation of the project equipment

#### 3.4.2 Status of Implementation:

Technical Document	submitted	Date	
		Achieved	Planned
Credit worthiness certificate	Y	Feb 07	
Sub-loan Agreement	Y	14/5/2007	
Bidding document (B.D)	Y	2/5/2007	
Technical and financial Evaluation	Y	6/6/2007	
Awarding and Contracting	Y	19/6/2007	
Installation and Commissioning	Y	Dec 2011	Sep 2011
Monitoring: Q1:	Y	Apr 2012	Dec 2011
Q2:	Y	July 2012	Mar 2012
Q3:	Y	Dec 2012	Jun 2012
Q4:	Y	Mar 2013	Sep 2012