

Case Summary

Abu-Zaabal Company for Fertilizers and Chemical Industries

Company Information:

Contact Person: Eng /Moastafa El Gabali
 Position: General Manager
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 Sector: Private
 Number of labors: 1600
 Project Title: Revamping of Neuman mills.
 Type of Project: Air Pollution & work environment Improvement

1. Basic Information:

1.1 Main Products

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

1.2 Raw Materials&Utilities

Raw materials		Current Consumption, t/y	
Phosphate Ore (24-30% P ₂ O ₅)		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 ₂ O ₅)		585,000	
Granulated Triple Super Phosphate (48% P ₂ O ₅)		87,000	
Sulfuric acid		300,000 (used in production)	
Phosphoric acid (48-50% P ₂ O ₅)		41,000 (34,800 used in TSP production)	

1.3 Project Location:

El Maahd road – Abu Zaabal – Qulubia Governorate

1.4 Project Objectives:

- Reduce dust emissions.
- Improve working environment.
- Reduce losses in raw material.
- Increasing process efficiency.

1.5 Project Description:

Abu Zaabal Fertilizer & Chemical Co. need to revamp its existing Neuman mills which are part of Triple super Phosphate plant through EPAP II. The revamping of the mills will drastically minimize dust emissions at the plant to standard acceptable dust levels and bring productivity to original design value. A distributed control system (DCS) will be used to monitor production and emissions standards.

1.6 Project Components:

The Revamping of The mills will be Throw one supplier that includes replace or rehabilitate the following items:

- 1) Roll Feeder
- 2) Classifier
- 3) Grinding Table
- 4) Mill Liner
- 5) Gear box
- 6) Bag Filters

1.7 Project Cost:

Total project cost for rehabilitation of Neuman mills MUS\$ 2.71 of which MUS\$ 2.135 are financed from EPAPII

1.8 EPAP Technical Support:

EPAP II TA Prepared the Environmental audit and CAP, PMU assisted Abu Zaabal Company in tendering procedures and contracting.

2. Eligibility Criteria:

2.1 Environmental

- The concentration of Total Suspended Solids (TSP) in workplace next to existing Neuman mills is currently 30 mg/m³ and is expected to reach less than 10 mg/m³ which represents the limits set by law 9/2009. As to PM10 concentration, it is expected to decrease from the current value of 12 mg/m³ to 3 mg/m³ as per law 4. Assuming pollution load to be directly proportional to concentration, then 66.6 % load reduction will be achieved for TSP and 75 % load reduction for PM10. Raw material losses are estimated to be 9685 t/y which represents the load reduction achieved by project.
- The project will also reduce the losses in raw materials.

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 used EPAPII proposed model for two stage bidding 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	11 /6/2008	
Technical and financial Evaluation	Y	5/7/2008	
Awarding and Contracting	Y	15/7/2008	
Installation and Commissioning	N	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