

Cabinet of Ministers

Egyptian Environmental Affairs Agency

Egyptian Pollution Abatement

Project(EPAPII)

رئاسة مجلس الوزراء

جهاز شئون البيئة

مشروع مكافحة التلوث (المرحلة الثانية)

Case Summary

Suez Cement Group Helwan Cement Company

Company Information:

Contact Person: Eng.Mohamed Ayman
Position: Corporate Environment Manager
Telephone: 2522 2029
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Email: m.aymen@suezcem.com
Sector: Private
Project Title: Replacement/upgrading of existing EPs to Bag Filters,
Covering cement mills 1,3,4,5 feeding points and
Installation of Continuous emission monitoring system for
NOx & SOx
Type of Project: Air pollution control and Work placement reduction

1. Basic Information:

1.1 Main Product:

Product	Ton/year
Clinker (Intermediate)	3328000
Cement	4240531

1.2 Raw Material:

Raw Materials:	
Limestone	4893180 t/y
Clay	1606320 t/y
Pyrite	30136 t/y
Gypsum	396378 t/y
Energy:	
Mazot	180456 t/y
Natural Gas	208389000 m3/y
Electricity:	
From outside grid	504961155 kwh
Water:	
Municipal	2520000 m3/year

1.3 Project Location:

Kafr El-Elwa near Nile river – Helwan Governorate, P.O.Box 16, Cairo, EGYPT

1.4 **Project Objectives:**

- Reduction of TSP in stack emissions from an average of 700 t/y to <100 t/y.
- Reduction of TSP and PM₁₀ emissions in workplace to comply with the Environmental law 4/1994 modified by law 9/2009 and other environmental regulations.
- Emission load before and after implementation the project will be:

Parameters	Before the project (t/y)	After the project (t/y)	Reduction %
Dust	733	121	83.5%

1.5 **Project Description:**

The sub-project consists of the following:

Plant		Project description	Estimated cost KEGP
Helwan	Plants 1,2,3	Vacuum cleaning truck	1146
	Plant 2	Cover CM 1, 3, 4, 5 bankers & install 4 new bag filters	880
		New bag filter for packing M/C 3	600
		New bag filter for kiln feed system line 2	446
		New bag filter for cement mill 3 plant 2	540
		Cement mill 4 EP conversion	600
		Cement mill 5 EP conversion	600
		Cement mill 6 EP conversion	1000
		Cement mill 7 EP conversion	1000
		Cement mill 8 EP conversion	872
		Cement mill 9 EP conversion	950
		Upgrading the exists compressed air station to cover the needed compressed air capacities for the bag filters	800
		One device continues emission monitoring for Sox & Nox	1800
		One device continues emission monitoring for Sox & Nox	1800
		TOTAL	13,034 = US \$ 2.4 M

1.6 **Project Components:**

- Vacuum cleaning truck to enhance work environment
- Covers for CM 1,3,4,5 bankers and 4 bag filters
- Conversion of existing EPs to Bag filters for 6 cement mills
- 1 bag filter for packing machine no.3
- 1 bag filter for kiln feed of line 2
- 1 bag filter for cement mill 3 in Plant 2
- 2 continuous emission monitoring devices for SOx & NOx

1.7 **Actual Project Cost:**

Total project cost US\$ 2.64 M with US\$ 2.4 M Financed from EPAP II

1.8 **EPAP Technical Support:**

EPAP II TA prepared:

- Environmental audit(Part II)
- Compliance Action Plane (CAP)

EPAP II PMU will prepare:

- Technical agreement

2. **Eligibility Criteria**

2.1 **Environmental:**

- Emission load reduction by 83%
- Move from non-compliance to compliance

2.2 **Financial:**

- The project costs less than US\$ 8 million
- For cement mills bag filters with capital investment US\$ 1000000 and assuming cement losses 0.01% to be recycled back, payback period is about 16 years.

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

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	Sep 2010
Compliance Action Plan (CAP)	Y	Y	May 2010
Environmental Impact Assessment (EIA)	N/A	N/A	
Technical Agreement	N	N	

3.4 **Implementation Procedures:**

3.4.1 **Procurement procedures:**

- HCC (Helwan Cement Company) requested for “shopping” method

3.4.2 **Status of Implementation:**

Technical Document	submitted	Date	
		Achieved	Planned
Credit worthiness certificate	Y	August 2010	July 2010
Financial Agreement	N	-	October 2010
Awarding & Contracting	Y		Jan 2011
Installation and Commissioning	N		Jan2012
Startup	N		
Monitoring:			
Q1:	N		
Q2:	N		
Q3:	N		
Q4:	N		