

Ministry of Trade & Industry
Tabbin Institute for
Metallurgical Studies
(TIMS)

Energy & Environment Research Center

ISO
9001-2008

E2RC

Environmental Report

*for
Aqua Misr Co.*

At Helwan Cement Company

October, 2012

Introduction

According to the contract between *Aqua Misr Co.* and Energy & Environmental Research Center (E2RC) / Tabbin Institute for Metallurgical studies (TIMS) to execute Exhaust Stack emissions Measurement form the bag filter of Cement Mills at *Helwan Cement Company*, TIMS team work had conducted these measurement in October, 2012.

⇒ *Measurements*

⇒ The following parameters were measured form stacks of
Cement Mills

1. Concentration of Dust emissions form Stacks .
2. Concentration of Combustion Gases (Temp, O₂) from stacks .

⇒ *The Used Equipment*

1. Exhaust stacks emissions form stack of Cement Mill No. (7).
Universal Stack sampler. USA

Sampling Method : Isokinetic measurement

EPA method No. 1,2 velocity & flow rate

EPA method No. 5 dust emission

2. Combustion air analyzer Lancôm III U.S.A

Bak



Table (I)
Exhaust Stack Emission

Company Name : Helwan Cement Company
Measurements date : 08 / 10/2012
Site Name : Stack of Cement Mill No (7)

<i>Parameter</i>	<i>Unit</i>	<i>Out let</i>	<i>Maximum permissible limit law 4/1994 for Environmental protection and its amendment by law No.9/2009 and its executive regulation issued in 2011 & 7/10/2012</i>
Stack Temperature	°C	56	
Barometer P.	mbar	1009	
Static Pressure	mmH ₂ O	-5	
Dynamic P. (Avg.)	mmH ₂ O	10	
Stack Diameter	cm	90	
Velocity	m/S	15.56	
H ₂ O	%	3.0	---
O ₂	%	20.2	
Stack Flow Rate	m ³ /h	35634	
Dust concentration	mg/m ³	6.5	50

