

*Tabbin Institute for Metallurgical Studies*

Energy and Environment Research Center

**E2RC**

*ISO 9001 -2008*

# Report on

Exhaust Stack Emissions Measurement from  
Cement Mill No. (9) Factor (2)

Tourah Cement Company

*Aqua Misr Company*

*November , 2014*

## *Team Work*

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## Introduction

According to the contract between *Aqua Misr Co. and Energy and Environment Research Center / Tabbin Institute for Metallurgical Studies (TIMS)* to execute Exhaust Stack emissions Measurement from the bag filter of cement Mill No.(9) factor (2) at *Tourah Cement Company*, TIMS team work had conducted these measurement in November, 2014.

### ⇒ *Measurements*

- ⇒ The following parameters were measured from stacks of *Cement Mill No. 9*
  1. Concentration of dust emissions form stacks .
  2. Concentration of combustion gases (Temp. O<sub>2</sub>) from stacks.

### ⇒ *The Use Equipment*

1. Exhaust stacks emissions for bag filter of *Cement Mill No. 9*  
Universal Stack sampler. USA

Sampling method : Isokinetic measurement

EPA method No. 1,2 velocity & flow rate

EPA method No. 5 dust emission

- 2 .Combustion gas analyzer Lancôm- III U.S.A

*Bahia*



Table (1)  
Exhaust Stack Emission

Company Name : Tourah Cement Company  
Measurements date : 22/11 /2014  
Site Name : Stack of Cement Mill No. (9) – Factor 2

Parameter	Unit	Out let	Maximum permissible limits according to law 4/1994 for Environment protection and its amendments by law No.9/2009 and its executive regulation issued in 1995 and its amendments issued no. 1095/ 2011 & 710/2012
Stack Temperature	°C	65	---
Barometer P	mbar	1009	---
Static Pressure	mmH <sub>2</sub> O	-24	---
Dynamic P. (Avg.)	mmH <sub>2</sub> O	9.6	---
Velocity	m/s	13.55	---
H <sub>2</sub> O	%	0.5	---
O <sub>2</sub>	%	20.4	---
Stack Flow Rate	m <sup>3</sup> /h	15833	---
Dust concentration	mg/m <sup>3</sup>	9.4	50

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