

Tabbin Institute for Metallurgical Studies

Energy and Environment Research Center

ISO 9001 -2008

E2RC

Report on

Exhaust Stack Emissions Measurement from
The Bag Filter of Raw Material Silo No.2 Kiln 8 at
Tourah Cement Company

Aqua Misr Company

July , 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 form the bag filter of raw material silo No.2 kiln 8 at *Tourah Cement Company*, TIMS team work had conducted these measurement in July, 2014.

⇒ *Measurements*

⇒ The following parameters were measured form stack of bag filter of raw material silo No.2 kiln 8

1. Concentration of dust emissions form stack.
2. Concentration of combustion gases (Temp. O₂) from stack.

⇒ *The Use Equipment*

⇒ Exhaust stacks emissions for bag filter of raw material silo No.2 kiln 8

1 .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



Table (1)
Exhaust Stack Emission

Company Name : Tourah Cement Company
Measurements date : 21/ 7 /2014
Site Name :stack of bag filter of raw material silo No.2 kiln 8

<i>Parameter</i>	<i>Unit</i>	<i>Out let</i>	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	80	---
Barometer P	mbar	1009	---
Static Pressure	mmH ₂ O	-10	---
Dynamic P. (Avg.)	mmH ₂ O	12	---
Stack dimensions	cm	60x142	
Stack area	M ²	0.852	
Velocity	m/s	19	---
H ₂ O	%	0.5	---
O ₂	%	20.2	---
Stack Flow Rate	m ³ /h	58276	---
Dust concentration	mg/m ³	5	50

