

*Tabbin Institute for Metallurgical Studies*

Energy and Environment Research Center

*ISO 9001 -2008*

**E2RC**

**Report on**  
**Environmental State**  
**For**  
*Aqua Misr Company*

*January 2017*

## *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/E2RC)* to execute Exhaust Stack emissions Measurement from the bag filter of Kiln feed filter factory (2) at *Tourah Cement Company*, TIMS team work had conducted these measurement in Jan 2017.

### ⇒ *Measurements*

⇒ The following parameters were measured from stacks of Raw Mill

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. 10  
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 Lancom- III UK



Table (1)  
Exhaust Stack Emission

Company Name : Aqua Misr Co.  
Measurements date : 02/01 /2017  
Site Name : Tourah Cement Company –  
Kiln Feed Filter – Faactory 2

<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. 964/2015
Stack Temperature	°C	38	---
Stack Dimensions	Cm	40 x 85	
Cross section area	m <sup>2</sup>	0.34	
Barometer P	mbar	1014	---
Static Pressure	mmH <sub>2</sub> O	-9	---
Dynamic P. (Avg.)	mmH <sub>2</sub> O	11.1	---
Velocity	m/s	11.7	---
H <sub>2</sub> O	%	<1	---
O <sub>2</sub>	%	20.5	---
Stack Flow Rate	m <sup>3</sup> /h	14327	---
Dust concentration	mg/m <sup>3</sup>	5	50

