Tabbin Institute for Metallurgical Studies

Energy and Environment Research Center

E2RC

ISO 9001 -2008

Report on

Exhaust Stack Emissions Measuremetn from

Tourah Cement Company

Aqua Misr Company

February 2015

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.(11)& clinker tunnels (2&4) factory (2) at Tourah Cement Company, TIMS team work had conducted these measurement in February 2015.

- ⇒ Measurements
- The following parameters were measured from stacks of Raw Mill
 - Concentration of dust emissions form stacks.
- 2. Concentration of combustion gases (Temp. O2) from stacks.
- > The Use Equipment
 - 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 U.S.A



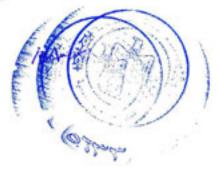


Table (1) Exhaust Stack Emission

Company Name

: Tourah Cement Company

Measurements date

: 23/2 /2015

Site Name

:Stack of Cement Mill No. (11) - Factory 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	40	
Stack Dimensions	Cm	35 x 85	
Cross section area	m ²	0.3	
Barometer P	mbar	1011	
Static Pressure	mmH ₂ O	-10	
Dynamic P. (Avg.)	mmH ₂ O	12.5	
Velocity	m/s	14.8	
H ₂ O	%	1	
O ₂	%	20.3	
Stack Flow Rate	m³/h	15850	
Dust concentration	mg/m³	8	50

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Table (2) Exhaust Stack Emission

Company Name

: Tourah Cement Company

Measurements date

: 23/2 /2015

Site Name

: Stack of clinker tunnel (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	45	
Stack Dimensions	Cm	35 x 85	
Cross section area	m ²	0.3	
Barometer P	mbar	1011	
Static Pressure	mmH ₂ O	-11	
Dynamic P. (Avg.)	mmH ₂ O	12.4	
Velocity	m/s	14.6	
H ₂ O	%	1	
O ₂	%	20.4	
Stack Flow Rate	m³/h	15770	٠.(٥
Dust concentration	mg/mg/	76	50

Table (3) Exhaust Stack Emission

Company Name

: Tourah Cement Company

Measurements date

: 23/2 /2015

Site Name

:Stack of clinker tunnel (4)

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	44	
Stack Dimensions	Cm	35 x 85	
Cross section area	m ²	0.3	
Barometer P	mbar	1011	<u></u>
Static Pressure	mmH ₂ O	-11	
Dynamic P. (Avg.)	mmH ₂ O	12.2	
Velocity	m/s	14.4	
H ₂ O	%	1	
O ₂	%	20.3	
Stack Flow Rate	m³/h	15550	
Dust concentration	mg/m³	20 5	50

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