AP32 Section:	12.5.1
Background Chapter	3
Reference:	44
Title:	Stack test report summary sheets for Tuscaloosa Steel, Tuscaloosa, AL. Testing conducted on April 25, 2001. Received from Doug Carr, Alabama Department of Environmental Management on April 10, 2002.

Stack Test Report

Report generated on 08/09/2001

Facility Name: **Tuscaloosa Steel** Facility Number: **413-0033 X005**

Source Name: **Electric Arc Furnace** Title V?: Yes Test Date: **04/25/2001**

Source Information

Pollutants	Allowables	Regulations	Subpart/Chapter
PM	.0035 GR/DSCF, 32.5 LB/HR	BACT	NSPS - AAa
CO	2.0 LB/TON, 320 LB/HR	BACT	
NOx	.35 LB/TON, 56 LB/HR	BACT	
VOC	.130 LB/TON, 20.8 LB/HR		

Subpart AAa allows 4 hours per run and requires the normal 3 runs. This is to ensure there is enough material on the filter to have an accurate test.

ESB inspector: **DKC** Signature: _____ Date: 8-8-01

Observation Information

Test Methods: **M5 & M9**

Test Company: Entec Initial Test?: No

EMS Observer: **STR** ESB Observer: DKC Activity: STACK TEST

see DKC for test plan

Evaluation Information

Report Received by ADEM: Evaluator: **STR**

Report Submitted to EMS: Date Evaluation Finished 06/18/2001

Pollutant	Run #1	Run #2	Run #3	Average	Units
PM	9.28	3.18	3.11	5.1900	lb/hr
C_s	0.0009	0.0003	.0003	0.0005	gr/dscf

Signature: _____ Date: 8/9/2001

Particulate Matter, Method 5

Tuscaloosa Steel
413-0033
Scott Roberts
Baghouse Stack

TEST DATE: April 25, 26, 27, 2001
TESTED BY: ENTEC
EVAL. DATE: 6/18/01

RUN #	1 - 10:40	2 - 9:50	3 - 10:02		
	0	0	0		
^H	1.79	1.61	1.71	"H2O	
SQRT ^p	1.292	1.228	1.264	"H2O^0.5	
Tm	89	97	89	F	
Ts	171	155	187	F	
Pb	30.02	30.06	30.09	in Hg	
Ps	29.93	29.94	29.94	in Hg	
%CO2	0	0	0	%	
%O2	20.9	20.9	20.9	%	
%CO	0	0	0	%	
Vm (ft^3)	173.95	262.4	169.3	ft^3	
Vlc (ml)	64.7	48.9	42.3	ml	
Mn (mg)	10.1	5.3	3.4	mg	
Y (MCF)	1.001	1.001	1.001	---	
Cp	0.84	0.84	0.84	---	
Dn	0.182	0.182	0.182	in	
As (sqft)	298.6	298.6	298.6	ft^2	
time	240	360	240	min	
Combustion Factor	#DIV/0!	#DIV/0!	#DIV/0!	O2 burned/CO2 produced	
An	1.81E-04	1.81E-04	1.81E-04	ft^2	
Pm	30.15	30.18	30.22	in Hg	
Md	28.84	28.84	28.84	lb/lbmole	
Vwstd	3.045	2.302	1.991	ft^3	
Vmstd	168.692	251.037	164.532	ft^3	
Bws MEAS.	1.8	0.9	1.2	%	
Bws THEO.	41.5	28.5	59.0	%	
Bws	1.8	0.9	1.2	%	
Vlc THEO.	64.7	48.9	42.3	ml	
Ms	28.64	28.74	28.71	lb/lbmole	
vs	79.6	74.6	78.8	ft/sec	
Qa	1426080	1335737	1410975	acf/min	
Qstd	1172524	1137115	1138449	dscf/min	
Vn	205.254	295.003	204.000	acf	
% ISOKINETIC	99	101	100	%	
				Averages:	
Cs	0.0009	0.0003	0.0003	0.0005	gr/dscf
PMR	9.28	3.18	3.11	5.19	#/hr

ADEM

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Education/Outreach: 394-4383

April 10, 2002

Tanya Ali
Chemical Engineer
Alpha-Gamma Technologies, Inc.
4700 Falls of Neuse Road, Suite 350
Raleigh, NC 27609

Dear Ms. Ali:

Enclosed is the information you requested. If you have questions or comments, please call me in Montgomery at (334) 270-5677.

Sincerely,

Doug Carr
Industrial Minerals Section
Engineering Services Branch
Air Division

DKC:dkc

Birmingham Branch
110 Vulcan Road
Birmingham, Alabama 35209-4702
(205) 942-6168
(205) 941-1603 [Fax]

Decatur Branch
2715 Sandlin Road, S.W.
Decatur, Alabama 35603-1333
(256) 353-1713
(256) 340-9359 [Fax]

Mobile Branch
2204 Perimeter Road
Mobile, Alabama 36615-1131
(334) 450-3400
(334) 479-2593 [Fax]

Mobile – Coastal
4171 Commanders Drive
Mobile, Alabama 36615-1421
(334) 432-6533
(334) 432-6598 [Fax]

Melanie Taylor

From: Carr, Doug [DKC@adem.state.al.us]
Sent: Thursday, July 18, 2002 7:41 PM
To: 'Melanie Taylor'
Subject: RE: Emissions data for IPSCO Steel, Trico Steel, Tuscaloosa Steel

Yes these include the LMF. And yes Lancing
Doug Carr
Engineering Services Branch
Air Division
ADEM
334-270-5677
DKC@ADEM.STATE.AL.US <mailto:DKC@ADEM.STATE.AL.US>

-----Original Message-----
From: Melanie Taylor [mailto:mtaylor@alpha-gamma.com]
Sent: Thursday, July 18, 2002 11:15 AM
To: 'dkc@adem.state.al.us'
Subject: Emissions data for IPSCO Steel, Trico Steel, Tuscaloosa Steel

Doug,
I am a contractor working with the US EPA on updating emission factors for iron and steel production facilities. In April you sent my colleague (Tanya Ali) some emissions data for IPSCO Steel (Facility # 503-8065), Trico Steel (712-0-037) and Tuscaloosa Steel (413-0033) at our request. The tests were done on the following dates:

Tuscaloosa Steel 4/25/01
IPSCO Steel 10/2/01
Trico Steel 9/2/97, 10/24/00, 10/9/99

The documents you sent state that the sources tested were the Electric Arc Furnace with a baghouse. I would like to confirm whether the emissions data from the baghouses only includes emissions from the Electric Arc Furnace and not from any other processes at the facility, such as a ladle metallurgical station. Some minimills have emissions from both an electric arc furnace and a ladle metallurgy process vented to a common baghouse, so I would like to confirm whether the test data for these facilities are for the EAF operations only and not from other operations such as a ladle metallurgy furnace. (My question is not about the opacity data but the other pollutants such as PM, SO2, and NOx.) Also, for the 10/24/00 testing at Trico Steel, do you know if the EAF had oxy-fuel burners or oxygen lancing during the testing, as that could potentially affect the NOx emissions? Any assistance you can provide in this is greatly appreciated.

If you have any questions, my number is (919) 954-0033 x118.

Melanie Taylor
Environmental Engineer
Alpha-Gamma Technologies, Inc.
4700 Falls of Neuse Road
Suite 350
Raleigh, NC 27609
Phone: (919) 954-0033 ext. 118
Fax: (919) 954-0379
Email: mtaylor@alpha-gamma.com