



State of Ohio Environmental Protection Agency

**Southeast District Office**

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Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director

February 23, 2010

**RE: Coshocton County  
Clow Water Systems Co.  
Facility Id #:0616010006  
EU #: P901  
COMPLIANCE TEST  
Notice of Violation  
HPV GC8**

**Certified Mail #70073020000178848562**

Heather Klesch  
Clow Water Systems Company  
2266 South Sixth Street  
PO Box 6001  
Coshocton, OH 43812-6001

Dear Ms. Klesch:

On September 1 and 2, 2009, Air Compliance Testing, Inc. performed a particulate matter, PM10, sulfur dioxide, nitrogen oxides, carbon monoxide, and organic compounds emissions compliance test at Clow Water Systems Company, Inc. (Clow), 2266 South Sixth Street, Coshocton, OH, on Emission Unit (EU) P901, the 85 ton per hour cupola furnace. The test was conducted to meet the requirements of the PSD permit-to-install (PTI) 06-07432, issued on July 9, 2009. Ohio EPA, Division of Air Pollution Control (DAPC), received the test report on October 1, 2009. The test report has been reviewed and we have concluded that the tests were conducted according to the procedures specified in 40 CFR Part 60, Appendix A, U.S. EPA Test Methods 1 – 5, 6, 7E, 10, 25, and 201A. The results of the test showed the source was not in compliance with the applicable Ohio EPA regulations and the terms and conditions of your facility permits.

Permit requirements and test results for EU P901:

P901 – 85 tph cupola furnace	Particulate matter	Sulfur dioxide	Nitrogen oxide	Carbon monoxide	TGNMO	PM 10
9/1/2009-Tested Emission Rate:	3.19 lbs/hr	<b>1.29 lbs/hr</b>	16.5 lbs/hr	<b>&gt;373 lbs/hr</b>	13.7 lbs/hr	2.99 lbs/hr
Allowable Emission Rate:	6.63 lbs/hr	<b>1.27 lbs/hr</b>	37.4 lbs/hr	<b>43.35 lbs/hr</b>	22.9 lbs/hr	5.44 lbs/hr
Source Operating Rate:	71.5 tons/hr (85 tons/hr Max)					
Isokinetic Rate:	Run #1 – 99.6%	Run #2 – 102.1%	Run #3 – 100.2%	Afterburner temp- degrees F	1561 (min. 1300)	

**\*Bolded results are exceedances of the permit allowables**

Because an analyzer was used during the September 1 and 2, 2009 emission testing, the problem with carbon monoxide (CO) was identified during the test. Clow immediately began an investigation and committed to shut down operations except for testing purposes until the company could determine why the CO emissions were exceeding the permit allowable. On September 3, 2009, Clow submitted an Intent to Test (ITT) Notification to retest EU P901 for CO and nitrogen oxides (NOx) on September 29, 2009. After discussions with SEDO and receiving the preliminary test results that indicated that sulfur dioxide (SO2) emissions had also exceeded the permit allowable, Clow chose to retest EU P901 for all criteria pollutants. On September 21, 2009, Clow informed Ohio EPA of its decision.

On September 29 and 30, 2009, Clow resumed production and performed another particulate matter, PM10, SO2, NOx, CO, and organic compounds on EU P901. During the test, Kimbra Reinbold was informed that Clow had taken the following actions to address the CO and SO2 exceedences:

- three of the afterburner burners were tuned;
- the banking on the orifice ring in the cupola was removed; this banking had been installed to prevent the accumulation of hazardous waste;
- the opening of the orifice ring was decreased to increase flow velocity;
- an air ring was added to the bottom section of the cupola to enhance air flow because Clow found that the charge bucket was partially obstructing flow during charging; and,
- the company ceased using anode butts that replaced part of the coke in the metal mix because the anode butts contain ~three percent more sulfur than coke.

Ohio EPA received the second test report on October 29, 2009. This test report has been reviewed and we have concluded that the test was conducted according to the procedures specified in 40 CFR Part 60, Appendix A, U.S. EPA Test Methods 1 – 5, 6, 7E, 10, 25, and 201A. The results of the test showed the source to be in compliance with the applicable Ohio EPA regulations and your facility permit terms and conditions.

Permit requirements and test results for EU P901:

P901 – 85 tph cupola furnace	Particulate matter	Sulfur dioxide	Nitrogen oxide	Carbon monoxide	TGNMO	PM 10
9/29/2009 Tested Emission Rate:	3.45 lbs/hr	1.27 lbs/hr	20.1 lbs/hr	29.5 lbs/hr	4.40 lbs/hr	2.57 lbs/hr
Allowable Emission Rate:	6.63 lbs/hr	1.27 lbs/hr**	37.4 lbs/hr	43.35 lbs/hr	22.95 lbs/hr	5.44 lbs/hr
Source Operating Rate:	75.83 tons/hr (85 tons/hr Max)					
Isokinetic Rate:	Run #1 – 99.0%	Run #2 – 100.8%	Run #3 – 102.2%			

\*\*New SO2 limit of 2.47 lbs/hr was established in PTI #P0105615 issued on February 3, 2010

Parametric monitoring results for EU P901:

P901 – 85 tph cupola furnace	Average system $\Delta P$ (inches H <sub>2</sub> O)	Metal Melt Rate (tons/hr)	Venturi Scrubber Flow Rate (gpm)	Ring Jet Scrubber Flow Rate (gpm)
9/29/2009 Test	60	61.75	143	469

The table above summarizes the parametric monitoring results from the September 29 and 30, 2009 emission test for EU P901, which established the minimum parameter limits for the control system monitoring requirements per the permit language. Clow's Preventative Maintenance and Malfunction Abatement Plan for the Cupola Air Pollution Control System, as revised in January 2010, details the lower limits of the monitoring and associated recordkeeping requirements. The PMMAP was approved by Ohio EPA on January 28, 2010.

No further action is required to address the cupola compliance issues; however, be advised that acceptance by Ohio EPA of a compliance plan and schedule does not constitute a waiver of Ohio EPA's authority to seek civil penalties as provided in Section 3704.06 of the Revised Code. The determination to pursue or to decline to pursue such penalties in this case will be made by Ohio EPA at a later date.

All test information will be used by Ohio EPA personnel for permit processing and source compliance review. Please refer any questions concerning the above requirements to Kimbra Reinbold, DAPC, SEDO, at (740) 380-5245.

Thank you for your cooperation in this matter.

Sincerely,



Marco Deshaies  
Environmental Specialist  
Division of Air Pollution Control

MD/mlm

cc: Kimbra Reinbold, DAPC, SEDO (Emissions Unit File Copy)  
Marco Deshaies, DAPC, SEDO w/ CETA summary attachment  
~~Bruce Weinberg, DAPC, SEDO~~  
Lisa Holscher, U.S. EPA Region V  
Tom Kalman, DAPC, CO  
Test Report File Copy