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COMPLIANCE TEST REPORT

for

VISIBLE EMISSIONS OBSERVATIONS (VE)

Belle River Fuels, LLC

Chem-Mod Coal Handling System

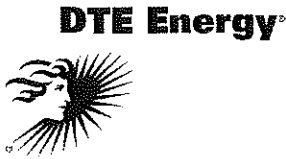
**Belle River Power Plant
East China, Michigan**

June 22, 2015

Prepared By
Environmental Management & Resources
Environmental Field Services Group
DTE Corporate Services, LLC
7940 Livernois H-136
Detroit, MI 48210

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EXECUTIVE SUMMARY

DTE Energy's Environmental Management & Resources (EM&R) Field Services Group performed visible emissions (VE) observations of the Reduced Emissions Fuel (REF) Coal Handling System at the DTE Electric, Belle River Power Plant, located in East China, Michigan. The fieldwork, performed on June 22, 2015, was conducted to satisfy requirements of the New Source Performance Standard (NSPS) under 40 CFR 60, Subparts A and Y and Michigan Department of Environmental Quality (MDEQ) Permit to Install No. 164-08B. Visible emissions observations were conducted on four (4) sources.

The results of the VE observations are highlighted below:

**Visible Emissions Observations Summary
Belle River REF System
June 22, 2015**

Source	Production Rate (Tons/hour)	Visible Emissions (%)
(Plant P) Dust Collector No. 1	988	0
(Product) Dust Collector No. 2	988	0
CMA Silo Dust Collector	35	0
Day Bin Vent Filter No.1 ¹	2.91	0

¹Day Bin No. 2 is out-of-service



1.0 INTRODUCTION

DTE Energy's Environmental Management & Resources (EM&R) Field Services Group performed visible emissions (VE) observations of the Reduced Emissions Fuel (REF) Coal Handling System at the DTE Electric, Belle River Power Plant, located in East China, Michigan. The fieldwork, performed on June 22, 2015, was conducted to satisfy requirements of the New Source Performance Standard (NSPS) under 40 CFR 60, Subparts A and Y and Michigan Department of Environmental Quality (MDEQ) Permit to Install No. 164-08B. Visible emissions observations were conducted on four (4) sources.

All observations were performed for 30-minutes. Each observation consisted of five 6-minute averages as per the requirements in 40CFR 60.257 (a)(ii). All of the stipulations of 40CFR 60.257 were met.

The fieldwork was performed in accordance with EPA Reference Methods. The following EM&R personnel participated in the observation program: Mr. Thomas Snyder, Senior Environmental Technician. Mr. John Smith, at Belle River Power Plant, provided process coordination for the testing program.

2.0 SOURCE DESCRIPTION

The Belle River Power Plant (BRPP) located at 4505 King Road, East China, Michigan 48054, employs the use of two (2) dry bottom coal-fired boilers. Each unit is nominally rated at 697 gross megawatts (GMW).

The REF coal handling system includes the following processes which require VE testing as part of 40 CFR 60, Subpart A and Y regulations and MDEQ Permit No. 164-08B. The visible emissions observations were performed on the equipment listed below (See Figures 1 through 4):

1) (Plant P) Dust Collector No.1 (EU-CHEMMOD-BR)

Dust Collector No. 1 controls emissions from two existing enclosed coal conveyors (CV23 and CV24) and two REF process feed conveyors (TH-8A).

2) (Product) Dust Collector No.2 (EU-CHEMMOD-BR)

Dust Collector No. 2 controls emissions from the common product (refined coal) enclosed conveyor and from the transfer of refined coal to existing enclosed conveyors (CV19 and CV20).

**3) CMA Silo Dust Collector (EU-CHEMMOD-BR)**

The 750 ton CMA Silo is controlled by a dust collector positioned at the top of the silo which is activated during filling operations.

4) Day Bin Vent Filters No. 1 and 2 (EU-CHEMMOD-BR)

There are two day bins which hold the solid CMA with vent filters located at the top of the bin which are activated during filling operations. Currently only Day Bin No. 1 is in operation (Day Bin No. 2 is out-of-service).

The REF coal handling system operates as needed to service the treated refined coal needs of the plant.

3.0 SAMPLING AND ANALYTICAL PROCEDURES

DTE Energy obtained emissions measurements in accordance with procedures specified in the USEPA *Standards of Performance for New Stationary Sources*. The sampling and analytical methods used in the testing program are indicated in the table below

Sampling Method	Parameter	Analysis
USEPA Method 9	Visible Emissions	Field data analysis

3.1 VISIBLE EMISSIONS (USEPA METHOD 9)**3.1.1 Sampling Method**

VE observations were conducted in accordance with the procedures outlined in USEPA, "Standards of Performance for New Stationary Sources" (*Federal Register*, 40 CFR 60), Method 9, "Visible Determination of the Opacity of Emissions from Stationary Sources."

3.1.2 Sampling Equipment

VE sampling equipment consisted of EPA Method 9 data sheets, clipboard & pen, compass, and stopwatch. Meteorological data was obtained from the local airport via cell phone and the internet.



4.0 RESULTS

All observations were performed for 30-minutes. Each observation consisted of five 6-minute averages as per the requirements in 40CFR 60.257(a)(ii). All of the stipulations of 40CFR 60.257 were met. Field data sheets associated with the testing are included in Appendix A.

The REF coal handling operations were maintained at their normal operating loads during all VE observations. Process data for the test periods is included in Appendix B.

The observer USEPA Method 9 certification sheet is included in Appendix C.

Results presented in this report are representative of the VE emissions from each source under normal operating conditions.

This report prepared by: *Thomas Snyder*
Mr. Thomas Snyder, QSTI
Senior Environmental Technician, Field Services Group
Environmental Management and Resources
DTE Energy Corporate Services, LLC

This report reviewed by: *Mark D. Grigereit*
for Mr. Mark Grigereit
Principal Engineer, Field Services Group
Environmental Management and Resources
DTE Energy Corporate Services, LLC

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FIGURES



Figure 1

Site:
Belle River Power Plant
East China, MI

Source:
ChemMod System
(Plant) Dust Collector No. 1

Sampling Dates:
June, 2015

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Figure 2

Site:
Belle River Power Plant
East China, MI

Source:
ChemMod System
(Product) Dust Collector No. 2

Sampling Dates:
June, 2015

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Figure 3

Site:
Belle River Power Plant
East China, MI

Source:
ChemMod System
Day Bin Vent Filter No. 1

Sampling Dates:
June, 2015

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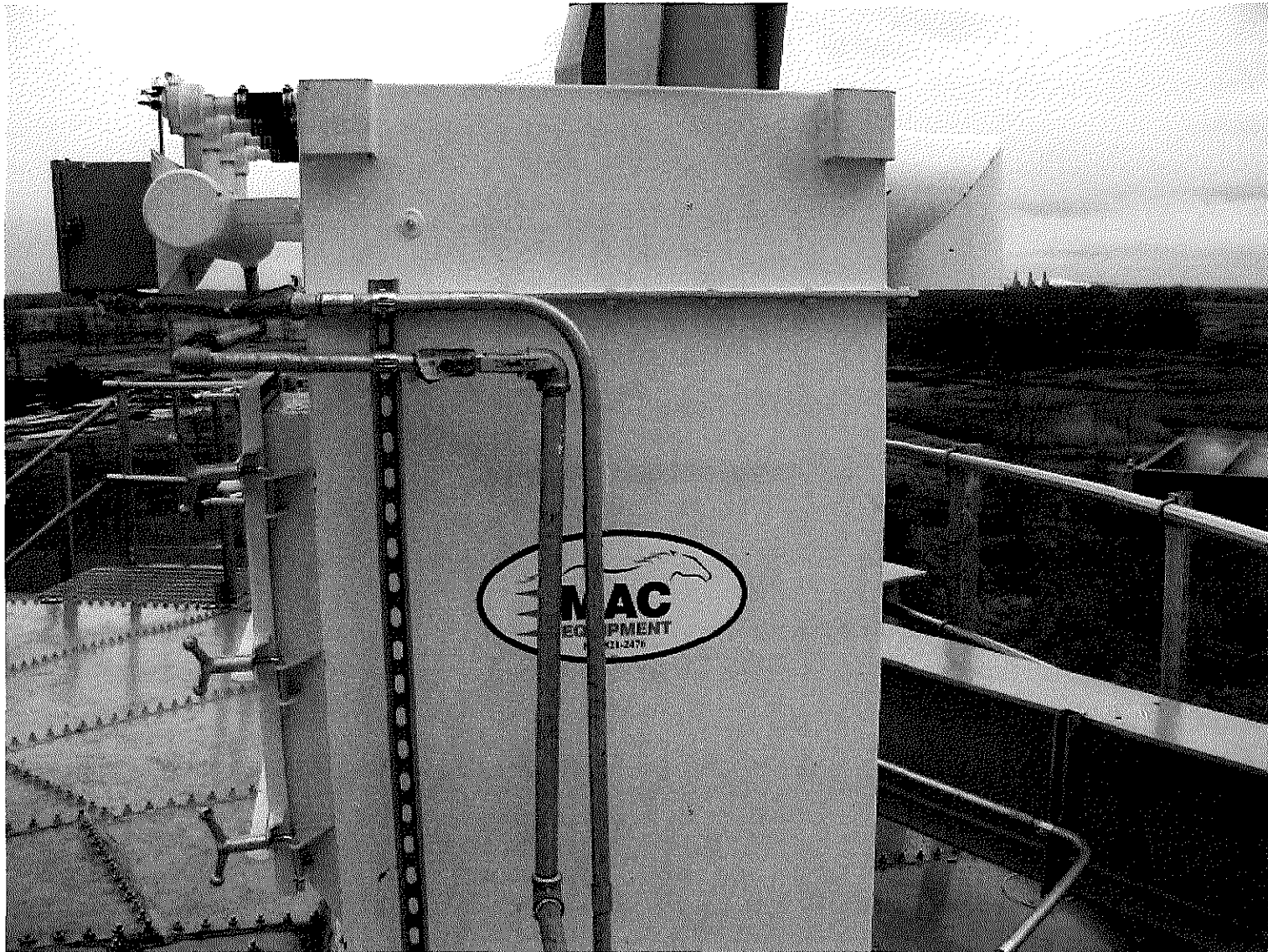


Figure 4

Site:
Belle River Power Plant
East China, MI

Source:
ChemMod System
Silo Dust Collector

Sampling Dates:
June, 2015

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