UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
25063 CENTER RIDGE ROAD
WESTLAKE, OH 44145-4114

March 2, 2017

MEMORANDUM

SUBJECT: Clean Air Act Monitoring, American Electric Power, Cheshire, Ohio

FROM: Katharina Bellairs, Environmental Engineer (ME-W) KB

THRU: Mark Conti, Lead Environmental Engineer (ME-W) MEC

TO: Air Enforcement and Compliance Assurance Branch, IL/IN Section (AE-18J)
Nathan Frank, Section Chief

On August 1, 2016, I performed off-site visible emission readings under the Clean Air Act at American Electric Power, Gavin Station, Cheshire, Ohio, at Ethan Chatfield's request. My findings are attached.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
25063 CENTER RIDGE ROAD
WESTLAKE, OHIO 44145

DATE:	March 2, 2017
SUBJECT:	CLEAN AIR ACT OFF-SITE MONITORING EVALUTION REPORT American Electric Power – Gavin Generating Station
FROM:	Katharina Bellairs, Environmental Engineer OECA – Cleveland Office
THRU:	Mark Conti, Lead Environmental Engineer OECA – Cleveland Office
TO:	Nathan Frank, Section Chief Air & Radiation Division, AECAB (IL/IN)

BASIC INFORMATION

Facility Name: American Electric Power – Gavin Generating Station

Facility Location: 7397 Ohio Seven, Cheshire, Ohio 45620

Date of Inspection: August 1, 2016

Lead Monitor: Katharina Bellairs, Environmental Engineer

Purpose of Monitoring Evaluation: Perform Method 9 and Alternative Method 082 Opacity Readings

Facility Type: Electric Generating Station

Arrival Time: approximately 2:00 p.m. EST
Departure Time: approximately 3:00 p.m. EST

MONITORING INFORMATION

Field Measurements: were taken during this inspection.
I arrived in Cheshire, Ohio, and stopped south of the intersection of Gravel Hill Rd and Turkey Hill Road. I performed Method 9 visible emissions readings from 2:18 to 2:38 p.m. EST and Method 082 alternative visible emission readings with Virtual Technology's opacity camera from 2:04 p.m. EST to 2:39 p.m. EST. My reading location was at 38.938451, -82.131927.

SIGNATURES

Lead Monitor: _____ Date: 3/2/17

Lead Environmental Engineer: Mark Conti Date: 3-2-2017

APPENDICES AND ATTACHMENTS

Method 9 Visible Opacity Reading Report

VISIBLE EMISSION OBSERVATION FORM

Form Number	Page	Of

Continued on VEO Form Number

Method Used	Equipment Owner	Facility Name	EO Street Address	EO City	EO State	EO Zip
Method 9	N/A	AEP Gavin Power Plant	7397 OH-7	Cheshire	OH	45620

Observation Date	Time Zone	Start Time	End Time
8/1/2016	EST	14:18:46	14:38:34

Process	Unit	Operating Mode
N/A	N/A	N/A

Control Equipment	Operating Mode
N/A	N/A

Describe Emission Point: brownish gray/white smoke from left stack

Height of Emiss. Pt.	Height of Emiss. Pt. Rel. to Observer
Start 1319.97 End Same	Start 1315.97 End Same
Distance to Emiss. Pt.	**Direction to Emiss. Pt. (Degrees)**
Start 4803.33 End Same	Start 111.1 End Same

Vertical Angle to Obs. Pt.	Direction to Obs. Pt.
Start 14.25 End Same	Start 111.49 End Same

Distance and Direction to Observation Point from Emission Point: Start 381.28 / 116.54 End Same

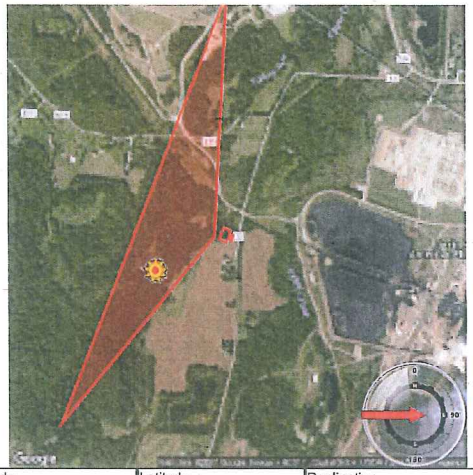
Describe Emissions: brownish gray/white smoke
Start from left stack, lofting End Same

Emission Color	Water Droplet Plume
Start gray End gray	Attached: (X) Detached: ( ) N/A: ( )

Describe Plume Background: Start Gray and white clouds End Same

Background Color	Sky Conditions
Start End	Start Overcast End Same
Wind Speed	**Wind Direction**
Start 2 End Same	Start 270 End Same

Ambient Temp.	Wet Bulb Temp.	RH Percent
Start 91 End Same	Start 69 End Same	Start 55 End Same



Longitude	Latitude	Declination
082.07.54.937 W	38.56.18.424 N	

Notes

	Opacity	Comments
1	25	
2	25	
3	25	Avg. Opacity = 31
4	30	
5	35	
6	30	
7	40	
8	25	
9	30	
10	30	
11	30	
12	15	
13	20	
14	15	
15	N/A	
16	30	
17	20	
18	25	
19	35	
20	35	
21	25	
22	20	
23	25	
24	25	
25	30	
26	35	
27	20	
28	25	
29	30	
30	20	
31	25	
32	35	

Observers Name (Print)	
Katharina Bellairs	
Observers Signature	**Date**
Katharina Bellairs	8/1/2016
Organization	
USEPA Region 5	
Certified By	**Date**
Opacitair Inc	4/13/2016

	Opacity		Opacity		Opacity		Opacity		Opacity
33	30	34	30	35	30	36	*30*	37	N/A
38	N/A	39	N/A	40	N/A	41	N/A	42	N/A
43	N/A	44	N/A	45	N/A	46	N/A	47	N/A
48	N/A	49	N/A	50	*40*	51	*35*	52	*30*
53	*35*	54	*40*	55	*30*	56	*30*	57	*35*
58	*35*	59	*30*	60	*30*	61	*20*	62	*30*
63	*25*	64	*30*	65	*30*	66	*35*	67	*35*
68	*35*	69	*30*	70	*25*	71	*30*	72	*30*
73	*30*	74	35	75	30	76	35	77	35
78	20	79	15	80	25	81		82	
83		84		85		86		87	
88		89		90		91		92	
93		94		95		96		97	
98		99		100		101		102	
103		104		105		106		107	
108		109		110		111		112	
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198		199		200		201		202	
203		204		205		206		207	
208		209		210		211		212	
213		214		215		216		217	
218		219		220		221		222	
223		224		225		226		227	
228		229		230		231		232	
233		234		235		236		237	
238		239		240		241		242	
243		244		245		246		247	
248		249		250		251		252	
253		254		255		256		257	
258		259		260		261		262	

Source

Name: AEP Gavin Power Plant
Address: 7397 OH-7
City: Cheshire
State: OH
Zip: 45620
Phone:
Local ID:

Regulatory

Permit ID:
Condition:
Regulatory Reference:

Process

Process: N/A
Unit: N/A
Operating Mode: N/A

Complaint

Name:
Address:
City:
State: NA
Zip:

Equipment

Name: N/A

Type of Inspection

Type of Inspection: Surveillance

Sun

Altitude: 63.2
Azimuth: 241.4
Data Source: Manual

Map Information

Map Type: USGSDRG
Map Width: 5000

Analysis

Averaging Type: Manual
Method: Method 9
Number of Images: 24
Rolling High Count: 24
Seconds Between Images: 15
Who Created: DOCS II
Creation Date: 9/22/2011

Analyst Name: Katharina Bellairs
Affiliation: USEPA Region 5
Comments: