BEFORE THE ILLINOIS POLLUTION CONTROL BOARD OF THE STATE OF ILLINOIS

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MIDWEST GENERATION, LLC Wet Dust Extractor System for Powerton Station

PROPERTY IDENTIFICATION NUMBER 10-10-09-100-002 or portion thereof PCB 14-(Tax Certification - Air)

NOTICE

TO: [Electronic filing] John Therriault, Clerk Illinois Pollution Control Board State of Illinois Center 100 W. Randolph Street, Suite 11-500 Chicago, Illinois 60601

> [Service by mail] Steve Santarelli Illinois Department of Revenue 101 West Jefferson P.O. Box 19033 Springfield, Illinois 62794

[Service by mail] Fred McCluskey Midwest Generation, LLC 440 South LaSalle Street, Suite 3500 Chicago, Illinois 60605

PLEASE TAKE NOTICE that I have today electronically filed with the Office of the Pollution Control Board the **APPEARANCE** and **RECOMMENDATION** of the Illinois Environmental Protection Agency, a paper copy of which is herewith served upon the applicant and a representative of the Illinois Department of Revenue.

Respectfully submitted by,

1st Robb H. Layman

Robb H. Layman Assistant Counsel

Date: December 6, 2013

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY 1021 North Grand Avenue East P.O. Box 19276 Springfield, IL 62794-9276 Telephone: (217) 524-9137

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD OF THE STATE OF ILLINOIS

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MIDWEST GENERATION, LLC Wet Dust Extractor System for Powerton Station

PROPERTY IDENTIFICATION NUMBER 10-10-09-100-002 or portion thereof PCB 14-(Tax Certification - Air)

APPEARANCE

I hereby file my Appearance in this proceeding on behalf of the Illinois Environmental

Protection Agency.

Respectfully submitted by,

ls Robb H. Qayman

Robb H. Layman Assistant Counsel

Date: December 6, 2013

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PROPERTY IDENTIFICATION NUMBER 10-10-09-100-002 or portion thereof

PCB 14-(Tax Certification - Air)

RECOMMENDATION

NOW COMES the ILLINOIS ENVIRONMENTAL PROTECTION AGENCY ("Illinois EPA"), through its attorneys, and pursuant to 35 Ill. Adm. Code 125.204 of the ILLINOIS POLLUTION CONTROL BOARD'S ("Board") procedural regulations, files the Illinois EPA's Recommendation in the above-referenced request for tax certification of pollution control facilities. The Illinois EPA recommends **issuance** of a tax certification covering the subject matter of the request. In support thereof, the Illinois EPA states as follows:

1. On or about April 25, 2008, the Illinois EPA received an application and supporting information from MIDWEST GENERATION, LLC, ("Midwest Gen") concerning the proposed tax certification of certain air emission sources and/or equipment located at its Powerton generating station in Tazewell County, Illinois. A copy of the application is attached hereto. [Exhibit A]. Following a belated discovery that the application had been misplaced, the Illinois EPA's undersigned attorney sought and obtained verbal confirmation from Midwest Gen concerning the continuing need for certification of the subject sources and/or equipment on December 6, 2013.

2. The applicant's principal business address is as follows:

Midwest Generation 440 South LaSalle Street, Suite 3500 Chicago, Illinois 60605 3. The facility address is as follows:

Midwest Generation Powerton Station 13082 East Manito Road Pekin, Illinois 61554

4. The subject matter of this request consists of a Wet Dust Extractor System, which was constructed and installed by Midwest Gen at the Powerton Station. As described in the application, the system employs "water injection and mechanical mixing" to knock down dust particles from the inlet air of certain coal handling process equipment. *See*, Exhibit A, page 1 at Section D. The system works by drawing the dust particles into a dust extractor fan, mixing the stream with pressurized water-applied spray nozzles, and passing it through a panel of "stainless steel woven mesh," where the particles are separated from the air/water/dust stream. *Id.* The system ensures that a "dry, dust-free air" stream is exhausted from the outlet, as the washed mixture of water and dust is collected through either wash-out of the panel or a set of demister vanes. *Id.* The application states that the system is employed "to control fugitive dust coal particles (PM) from the coal handling process equipment," and thus acts to prevent or reduce particulate matter emissions that would otherwise be emitted from the coal handling processes to the atmosphere. *Id.*

Section 11-10 of the Property Tax Code, 35 ILCS 200/11-10 (2002), defines
 "pollution control facilities" as:

"any system, method, construction, device or appliance appurtenant thereto, or any portion of any building or equipment, that is designed, constructed, installed or operated for the primary purpose of: (a) eliminating, preventing, or reducing air or water pollution... or (b) treating, pretreating, modifying or disposing of any potential solid, liquid, gaseous pollutant which if released without treatment, pretreatment, modification or disposal might be harmful, detrimental or offensive to human, plant or animal life, or to property."

Pollution control facilities are entitled to preferential tax treatment, as provided by
 35 ILCS 200/11-5 (2002).

7. Based on information in the application and the primary purpose of the Wet Dust Extractor System to prevent or reduce air pollution, it is the Illinois EPA's engineering judgment that the system and related appurtenances may be considered as "pollution control facilities" in accordance with the statutory definition and consistent with the Board's regulations at 35 Ill. Adm. Code 125.200. [Exhibit B].

8. Because the information in the application demonstrates that the Wet Dust Extractor System satisfies the aforementioned statutory and regulatory criteria, the Illinois EPA recommends that the Board **issue** the applicant's requested tax certification.

Respectfully submitted by,

1st Robb H. Layman

Robb H. Layman Assistant Counsel

DATED: December 6, 2013

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276 Telephone: (217) 524-9137

CERTIFICATE OF SERVICE

I hereby certify that on the 6th day of December, 2013, I electronically filed the following

instruments entitled NOTICE, APPEARANCE and RECOMMENDATION with:

John Therriault, Clerk Illinois Pollution Control Board 100 West Randolph Street Suite 11-500 Chicago, Illinois 60601

and, further, that I did send a true and correct paper copy of the same foregoing instruments, by

First Class Mail with postage thereon fully paid and deposited into the possession of the United

States Postal Service, to:

Steve Santarelli Illinois Department of Revenue 101 West Jefferson P.O. Box 19033 Springfield, Illinois 62794 Fred McCluskey Midwest Generation 440 South LaSalle Street, Suite 3500 Chicago, Illinois 60605

ls Robb <u>H. Layman</u>

Robb H. Layman Assistant Counsel

	Electronic Filing - Received, Clerk's Office : 12/09/2013 - * * * PCB 2014-075 * * *						
- 1	APPLICATION CERTIFICATION (PROPERTY TAX TREATMENT)						
х d		This. Agency is authorized to request this informa under 111inois RevisedSta"tues, 1979. Chapter, Section 502a-5. Disclosure of this information	, 120, on is				
¢	ILLINOIS ENVIRONMENTAL PROTECTION AGEN P. O. Box 19276, Springfield, IL 62794-9276	voluntary. However. failure to comply could pre your application front being processed or colild re in denial of your application for certification.					
	FOR AGENCY USE						
File No.							
	Company Name Midwest Generation, LLC - Powerton Station (Wet Dust Extractor)						
	Person Authorized to Receive Certification Fred McCluskey	Person to Contact for Additional Details Jeff Bard					
	Street Address 440 South LaSalle Street Suite 3500	same RECENTES					
ANT	Municipality, State & Zip Code Chicago, IL 60605	Municipality, State & Zip Code same APR 2 0 2008					
Sec. A APPLICANT	Telephone Number 312-583-6000	T I al Martin Martin					
AP	Location of Facility Quarter Section Township Range Cincinnati	Municipality Environmental Protection Agency Township					
	Street Address 13082 East Manito Road, Pekin, IL 61554	County Book Number Tazewell					
	Property Identification Number Parcel Number 10-10-09-100-002						
	Nature of Operations Conducted at the Above Location - Powerton Station (Wet Dust Extractor) Phase 1 Generation of Electricity from a coal fired power plant						
B TURING TONS	Water Pollution Control Construction Permit No. Date Issued						
Sec. E JFACT ERATI	NPDES Permit No.	Date Issued Expiration Date					
Sec. B MANUFACTURIN OPERATIONS	Air Pollution Control Construction Permit No. 04030053	Date Issued April 2, 2004					
	Air Pollution Control Operating Permit No. 95090074	Date Issued September 29, 2005					
Sec. C MANUFACTURING PROCESS	Describe Unit Process A steam electric boiler converts the chemical energy in the fuel coal into thermal energy that is used by a steam turbine. To achieve this two fundamental processes are necessary: combustion of the coal by mixing with oxygen, and the transfer of the thermal energy from the resulting combustion gases to the working fluids of water and steam. The device that converts mechanical energy into electrical energy is the generator. To handle the coal delivered to the plant a coal handling system that processes the coal is part of the operation for transfer and storage.						
NUF, PRO	Materials Used in Process						
MA	Coal						
Sec. D POLLUTION CONTROL FACILITY DESCRIPTION	Describe Pollution Abatement Control Facility – Wet Dust Extractor The dust extractor system is utilized to control fugitive dust coal particles (PM) from the coal handling process equipment. The dust extractor system uses water injection and mechanical mixing to remove dust from the inlet air. Dust laden air from the coal equipment source is drawn into a dust extractor fan where it is mixed with water that is discharged under pressure from water spray nozzles. The dust laden air is wetted by a mechanical action as it passes through the impeller which is rotating at approximately 3600 rpm. The dust/air/water mixture next passes around a bifurcated motor section and through a rectangular extractor panel manufactured from stainless steel woven mesh. The dust particles are separated from the air stream within the panel. The panel is periodically washed as needed by the action of a multi-nozzle spray bank. A set of demister vanes collect the excess water and dust mixture that has not drained away in the extractor panel, so that there is little water carried over from the unit ensuring only dry, dust free air is exhausted. <i>Exclusive A</i>						

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1.

Sec. E POLLUTION CONTROL FACILITY G DATA CONTROL FACILITY		Material Retained, Captured or Recovered					
	Cont	aminant or Pollutant D	ESCRIPTION	CRIPTION DISPOSAL OR USE			
	Particulate Matter		oal Dust	Coal dust collected in waste water stream			
			હતામની અને	ne sette state state sette			
			n Transmann ann an an an				
	(2) Points of Waste Water Discharge						
		Sec. 194					
		Plans a	nd Specifications Attached	Yes	No X		
ATA	(3)	Are contaminants (or residues) collected by	the control facility?	Yes	No X		
IG D/	(4)	Date installation completed: June 1, 2004 Status of installation on date of application: Complete					
POLLUT ACCOUNTING DATA	(5)	a. FAIR CASH VALUE IF CONSIDERED REAL PROPERTY: \$					
		b. NET SALVAGE VALUE IF CONSIDERED R	\$				
AC		c. PRODUCTIVE GROSS ANNUAL INCOME	\$				
		d. PRODUCTIVE NET ANNUAL INCOME OF		\$			
		e. PERCENTAGE CONTROL FACILITY BEAR	UE:	% 0.1%			
SIGNATURE	The following information is submitted in accordance with the Illinois Property Tax code, as amended, and to the best of my knowledge, is true and correct. The facilities claimed herein are "pollution control facilities" as defined in Section 11-10 of the Illinois Property Tax Code.						
		And?	Fred McCluskey Vice President, T	echnical Services			
	Sign	ature	Title				





ENGART DUST EXTRACTOR

OPERATION MANUAL

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INTRODUCTION

The purpose of the *Engart Dust Extractor* is to create a working environment that is **free** from dust. The Engart Dust Extractor has been a proven and reliable means of dust control in Underground Mining, Coal Preparation Plants, Mineral Processing Plants, and Power Plants around the world. The Engart Unit is the only dust extraction system available in the United States that is approved for use in any coal application from its beginnings underground through the processing stage, the power utility handling stage, and handling fly-ash dust after it is burned. From cradle to grave Engart units are proven methods of handling coal related dust.

The *Engart Dust Extractor* has a guaranteed efficiency of 98% - 99% total dust and 96% - 97% respirable dust.

To maintain the above efficiency the maintenance steps set out in the **Inspection, Maintenance & Troubleshooting Manual** should be closely followed.



STAGE 2: EXTRACTOR PANEL

The dust/air/water mixture passes through a rectangular extractor panel manufactured from stainless steel woven mesh.

The mesh contains 35 layers of two sizes of knitmesh.

The dust particles are separated from the airstream within the panel. The panel is periodically washed as needed by the action of a multinozzle spray bank.





The 'catchment' or 'demister' vanes collect excess water and dust mixture that has not drained away in the extractor panel, so that there is little water carried over from the unit ensuring only dry, dust free air is exhausted.





Fan Section

Engart Dust Extractors all employ **bifurcated** fans. This fan is designed to accommodate large dust loads, possible flammable gas and water. This all adds up to an extremely aggressive environment.

Sprays inject water onto a high-speed impeller, which forces the dust that has been drawn in, to mix with this water. This dirty wet air then passes through channels around the motor, leaving the motor to operate in a clean safe environment. No return air is allowed to either flow or leak over the unit's motor and, as an added protection, the impeller track is lined with marine brass to prevent sparking if the impeller blades were to come into contact with the casing.

The *Engart Dust Extractor* can therefore be considered one of the safest dust extraction systems available in the world.

The dust extractor is also fully approved as an auxiliary ventilating fan in underground mining applications in certain parts of the world.

<u>Dust Box</u>

This portion of the scrubber consists of:

- > Spray Chamber
- Demisting Section
- > Flow Diverter

Spray Chamber

The operational sprays direct water **against** the airflow. This causes the dust and air to mix thoroughly before it reaches the filter medium. This spray bank is in continual operation.

The second bank of sprays is used for flushing the filter medium. These sprays are activated **manually** or **automatically** at intervals determined by the Operator, based upon cutting rates.

Demisting Section

A stainless steel knitted mesh screen known, as a knitmesh panel and a bank of demisting vanes comprise this section. They are placed in such a way so as to gather and remove all the water. This water is then dropped into a sump. This allows only the dry, clean air to pass through and exit the rear of the scrubber.

Flow Diverter

A flow diverter simply diverts the systems exhaust air in the direction desired. In general, the exhaust direction is usually towards the floor. In plant applications where the unit is exhausted to the outside, the flow diverter is removed and a transition piece of ducting is added to direct the exhaust air to an outside environment. Other plant applications may require a splash pan to be added to help divert the humidified air more upward and catch any excess water before it hits the floor.

<u>Sump</u>

A sump is a compartment built into the bottom of the dust box and is designed in such a way so as to receive the water slurry from the knitmesh and demisting panels.

The sump is designed to allow the slurry to flow out as soon as possible. If the sump does not empty freely, sludge may build up, over flow and eventually block the sump. If the sump exit is blocked all the water entering the machine will be blown out the back along with the air leaving the scrubber. This will result in all the dust that has been extracted being placed back into the air.

The sump is as important as any part other part of the dust extractor, so it is important to ensure free flow into and out of the sump at all times.

DUST CAPTURE PRINCIPLES

PRINCIPLES

It has long been recognised that once dust is airborne it is virtually impossible to knock down without finely atomised high-pressure water.

When spray water droplets are too large, dust particles flow around the droplets and, when the droplets are too small, they simply evaporate.

It has also been demonstrated that if the water droplet size is bigger than the dust particle size then little dust suppression takes place.

Respirable dust is minus 7 micron in size and a typical water spray droplet size is in the order of 200 to 600 micron. This therefore explains why water sprays alone are not effective with respirable dust.

The Engart system therefore has been designed to obtain high collection efficiencies by using the energy ramp at the fan to break the surface tension of the water and encapsulate the dust particle in an atomised water droplet.

- The Engart system uses low-pressure water and a relatively large nozzle to spray the water into the system.
- Water is then atomised with the air-flow not high pressure.
- Without an energy transfer to force this dust particle into the The water droplet proper collection efficiency cannot be achieved.
- Partially wetted dust is also suited well within the Engart System
- Ductwork design can be matched to optimise fan design pressure, and collecting hoods to eliminate dust escape.

ENGART PRODUCT RANGE



L	r	r		· · · · · · · · · · · · · · · · · · ·		
	Type 36	Type 30	Type 27	Type 24	Type 18	
	CFM 36,000	CFM 22,250	CFM 17,000	CFM 13,000	CFM 6,000	
	Motor 200 hp	Motor 80 hp	Motor 80 hp	Motor 50 hp	Motor 20 hp	
	Length 118.3 inches	Length 82.6 inches	Length 77.5 inches	Length 69.5 inches	Length 57.2inches	
	Width 74.0 inches	Width 39.4 inches	Width 37.4 inches	Width 38.5 inches	Width 30.5 inches	
	Height 80.3 inches	Height 51.0 inches	Height 43.0 inches	Height 31.5 inches	Height 25.5inches	
	Water Use: 11gpm	Water Use: 9.2gm	Water Use: 7.9gpm	Water Use: 7gpm	Water Use: 6gpm	

ADVANTAGES:

- Compact High Volume Design
- Low Capital, Installation, and Operating Cost
- Various Industrial Applications
- Flexible Engineering Approach to Optimise Design and Implementation
- No Filters to Replace or Restrict Flow
- Motor specifications designed to meet plant requirements
- Success worldwide in dust management
- No Reduction in Performance Under High Dust Loads
- Local Service, Engineering and Support team
- A Dust Management System you can live with!



PLANT APPLICATIONS



ENGLARY door extraction systems are resultin from compact, reliable door management arits designed to remove 90% of one door from plant or mining operations. The contains are continually improved a Englary's the optic facilities to instant an optimum product to improve the genfrommental operating conditions of our containers. A clust management system you can live with:

Histore shows a Type ta installed in a Power Plant EGD building scrubbing fly ash and hydrated limes





Picture shows an Engart Type18 located in a power plant. The unit is located in the FGD building and is extracting a combination of fly ash and hydrated lime. A plastic knimesh filter for this type of application has replaced the stainless steel extraction panel.

- No Need for Compressed Air
- Exhaust Inside
- Eliminates return screw conveyors
- No Belts to Maintain
- No Bags to Change
- Flexible Engineering Approach
- Eliminates Baghouse Explosions

PLANT APPLICATIONS



Type 18 Engart Unit Located in Coal Tripper Room Coal Fired Power Plant

Unit installed to replace existing bag-house. Unit sized to meet pressure and volume requirements of existing ductwork. A small transition piece of new ducting is installed to connect to system. Unit is mounted with a 20-hp air-cooled explosion proof motor. A pressure switch is included in the fresh water for fail-safe if water supply is interrupted. The explosion risk of a bag house is eliminated and the air velocities in the ductwork remain high and constant throughout operation.

PLANT APPLICATIONS



Type 27 Engart Unit Located in Coal Tripper Room Coal Fired Power Plant

Unit installed to replace existing bag-house. Unit sized to meet pressure and volume requirements of existing ductwork. A small transition piece of new ducting is added to connect to system. Unit is mounted with a 75-hp air-cooled explosion proof motor. Pressure switch is tied to incoming water as a fail-safe in the event that the water supply is interrupted.

OPERATING PROCEDURES

PRE START CHECKS

Before initial startup, it is recommended that the following maintenance checks should be carried out:

- 1. Check that the filter screen(s) are clean. Refer to:
 - Inspection, Maintenance & Troubleshooting Manual
 Knitmesh Panel.
 - Safe Work Procedure Manual SWP 003M Cleaning Filter Screens.
- 2. Check that Sump is clean. Refer to:
 - Inspection, Maintenance & Troubleshooting Manual
 Sump.
 - Safe Work Procedure Manual SWP 007M Cleaning Sump.
- 3. Check water pressure to the dust extractor sprays. Refer to:
 - Inspection, Maintenance & Troubleshooting Manual
 Water Pressure Assembly.
- 4. Check that all doors, guards and ducting are in place and secure.

When carrying out the above checks, ensure that the following safety practises are strictly followed:





EYE PROTECTION

BEFORE STARTING

- Ensure there are no persons in the vicinity of the ducting inlet or immediately behind the discharge outlet.
- Due to dust extractor fan noise and the possibility of dust being stirred up by the high velocity discharge air, it is recommended that all workers standing in the immediate vicinity of the machine, be positioned on the side of the machine opposite to the dust extractor at all times, whilst ever the dust extractor is running.
- Ensure all persons in the immediate area are wearing appropriate HEARING PROTECTION before starting the dust extractor.



If extended exposure by workers to dust extractor fan noise is a significant risk, e.g. increasing the lengths of shifts, then it is recommended that a site-specific risk assessment be carried out to ascertain what appropriate barriers may be required.

START UP & RUN

- The start up & shut down sequence of the dust extractor is a function incorporated in the control functions of the mining machinery to which it is mounted or the plant system that requires dust collection. Please refer to the appropriate manuals and training for instructions.
- > When the dust extractor is running, check for the following:
 - Sluggish movement of air/dust at the face into the fan inlet ducting.
 - Dusty discharge air.
 - Water being blown out of the back of the unit in the discharge air.
 - Abnormal noise.

If any of the above circumstances occur



Refer to the *Inspection, Maintenance & Troubleshooting Manual – Troubleshooting.*





Illinois Environmental Protection Agency

P.O. Box 19506, Springfield, Illinois 62794-9506 Renee Cipriano, Director

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

Midwest Generation, LLC Attn: Scott B. Miller 440 South LaSalle Street, Suite 3500 Chicago, Illinois 60605

Application No: 04030053I.D. No.: 179801AAAApplicants Designation:Date Received: March 22, 2004Subject: Control for Coal Handling SystemDate Issued: April 2, 2004Date Issued: April 2, 2004Fowerton Generating Station, 13082 East Manito Road, Pekin, Tazewell County

Permit is hereby granted to the above-designated Permittee to CONSTRUCT air pollution control equipment consisting of wet dust extractor system for the coal silo for Unit 5, and dry fogger systems on the traveling tripper car and at some tripper room transfer points, as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- This permit is issued based on the new wet dust extractor system replacing existing baghouses, to improve safety and operational performance. The dry fogger systems will be used as a secondary control systems for the Unit 5 coal silo.
- 2a. Pursuant to 35 IAC 212.123(a), the emission of smoke or other particulate matter from the coal silo for Unit 5 shall not exceed an opacity greater than 30 percent, except as allowed by 35 IAC 212.123(b) and 212.124.
- b. i. The opacity of particulate matter emissions from the silo for Unit 5 shall not exceed 20 percent pursuant to the NSPS for coal preparation plants, 40 CFR 60, Subpart Y: This requirement is being imposed because the change in control is considered a modification, as it increases hourly particulate matter emissions from coal handling operations associated with preparation of coal at the plant.
 - ii. Notwithstanding the above, as provided by 40 CFR 60.8(c), opacity in excess of the above limit during periods of startup, shutdown and malfunction as defined by 40 CFR 60.7, shall not be considered a violation.
- c. At all times, the coal bunkers shall be operated in accordance with good air pollution control practices, as required by 40 CFR 60.11(d).
- 3a. The Permittee is authorized to continue operation of a coal silo in violation of the applicable requirements of 35 IAC 212.123 (Condition 2a) in the event of a malfunction or breakdown, subject to the following provisions. This authorization is provided pursuant to 35 IAC 201.262 as the Permittee has submitted "... proof that continued operation is required to provide essential service, prevent risk of injury to personnel or severe damage to equipment."

Page 2

- i. This authorization only allows such continued operation as necessary to provide essential service, prevent risk of injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee. As provided by 35 IAC 201.265, this authorization does not shield the Permittee from enforcement for any such violation and shall only constitute a prima facie defense to such an enforcement action.
- Upon occurrence of excess emissions due to malfunction or ii. breakdown, the Permittee shall as soon as practicable repair the affected unit or remove the affected unit from service so that excess emissions cease. Unless the Permittee obtains an extension from the Illinois EPA, this shall be accomplished within 24 hours* or noon of the Illinois EPA's next business day*, whichever is later. The Permittee may obtain an extension for up to a total of 72 hours* from the Illinois EPA, Air Regional Office. The Illinois EPA, Air Compliance Section, in Springfield, may grant a longer extension if the Permittee demonstrates that extraordinary circumstances exist and the unit can not reasonably be repaired or removed from service within the allowed time, it will repair the unit or remove the unit from service as soon as practicable; and it is taking all reasonable steps to minimize excess emissions, based on the actions that have been and will be taken.
 - For this purpose and other related provisions, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the affected operation out of service.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 3(b) and 4(c).
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- b. Pursuant to 35 IAC 201.263, the Permittee shall maintain records for each incident when operation of a coal silo continued during malfunction or breakdown with excess emissions, including the following information:
 - i. Date and duration of malfunction or breakdown.
 - ii. A description of the malfunction or breakdown.

Page 3

- iii. The corrective actions used to reduce the quantity of emissions and the duration of the incident, including a discussion of the transition to the rotoclones.
- iv. Confirmation of fulfillment of the requirements of Condition 4(c)(i), as applicable, including copies of follow-up reports submitted pursuant to Condition 4(c)(ii).
- v. If excess emissions occurred for two or more hours:
 - A. An explanation why continued operation was necessary.
 - B. The preventative measures planned or taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.
 - C. An estimate of the magnitude of excess emissions occurring during the incident.
- 4a. Particulate matter emissions from coal silo for Unit 5 shall not exceed 0.93 lb/hour and 6.0 tons/year.
- b. Notwithstanding the above, particulate matter emissions from a coal silo may exceed 0.83 lb/hour during a malfunction or breakdown. This authorization is subject to the same terms and conditions established in Condition 3 for exceedance of the opacity standard during a malfunction and breakdown.
- c. Pursuant to 35 IAC 201.263, the Permittee shall provide the following notifications and reports to the Illinois EPA, Compliance Section and Regional Office, concerning incidents when operation of a coal bunker continued during malfunction or breakdowns.
 - i. The Permittee shall notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) as soon as possible during normal working hours for each incident in which the opacity from a coal bunker exceeds 30 percent for more than five consecutive 6-minute averaging periods. (Otherwise, if opacity during a malfunction or breakdown incident only exceeds 30 percent for less than five consecutive 6-minute averaging periods in a row, the Permittee need only report the incident in the quarterly report.)
 - ii. Upon conclusion of each incident that is two hours or more in duration, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a detailed explanation of the event, an explanation why continued operation of an bunker was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and

Page 4

correct deficiencies with chronology, and when the repairs were completed or when the coal bunker was taken out of service.

- d. These provisions addressing continued operation during a malfunction or breakdown event may be revised in the CAAPP permit for the source.
- 5a. The Permittee shall perform inspections of the operations of the affected units as necessary but at least once per month, including the associated control measures, while affected units are in operation to confirm compliance with the requirements of this permit.
- b. The Permittee shall maintain records of the following for the above inspections:
 - i. Date and time the inspection was performed and name(s) of inspection personnel.
 - ii. The observed condition of the established control measures for the affected unit.
 - iii. A description of any maintenance or repair associated with established control measures that is recommended as a result of the inspection and a review of outstanding recommendations for maintenance or repair from previous inspection(s), i.e., whether recommended action has been taken, is yet to be performed or no longer appears to be required.
 - iv. A summary of compliance compared to the established control measures.
- 6. Upon written request by the Illinois EPA, the Permittee shall conduct observations of opacity for a coal silo in accordance with USEPA Reference Method 9.
- 7. The Permittee shall maintain the following records for Unit 5 coal silo:
 - a. A maintenance and repair logs for the dust extractor system, including the date and nature of maintenance and repair activities performed.
 - b. Operating and maintenance logs for fogger systems, including date and period of operation.
 - c. To demonstrate compliance with Condition 4(a), the Permittee shall keep records for particulate matter emissions from a coal silo (tons/month and tons/yr), with supporting calculations.
 - d. Records for any opacity observations performed by Method 9 that Permittee conducts or are conducted on its behalf to demonstrate compliance with Condition 2, including name of the observer, date and time, duration of observation, raw data, and conclusion.
- 8. All records required by this permit shall be retained at the source for at least 5 years from the date of entry and shall be readily accessible to the Illinois EPA for inspection and copying upon request.

Page 5

9. The coal silo for Unit 5 may be operated with the new wet dust extractor system pursuant to this construction permit until a CAAPP permit is issued for the source that addresses these systems.

If you have any questions concerning this, please contact Kunj Patel at 217/782-2113.

Donald E. Suth Le

Donald E. Sutton, P.E. Manager, Permit Section Division of Air Pollution Control

DES:KMP:psj

cc: Region 2



Illinois Environmental Protection Agency

1021 North Grand Avenue East, P.O. Box 19506, Springfield, Illinois 62794-9506 – (217) 782-2113 Rod R. Blagojevich, Governor Douglas P. Scott, Director

Memorandum

Technical Recommendation for Tax Certification Approval

Date: December 29, 2008

To: Robb Layman

From: Ed Bakowski 🥳

Subject: Midwest Generation, LLC. TC 08-04-251

This Agency received a request on April 25, 2008 from Midwest Generation, LLC. for an Illinois EPA recommendation regarding tax certification of air pollution control facilities pursuant to 35 Ill. Adm. Code 125.204. I offer the following recommendation.

The air pollution control facilities in this request include the following:

Wet Dust Extractor System which uses water injection and mechanical mixing to remove dust from the inlet air which reduces Particulate Matter emissions. Because the primary purpose of this system is to reduce or eliminate air pollution, it is certified as a pollution control facility.

This facility is located at 13082 East Manito Road, Pekin, Tazewell County The property identification number is 10-10-09-100-002

Based on the information included in this submittal, it is my engineering Judgement that the proposed facility may be considered "Pollution Control Facilities" under 35 IAC 125.200(a), with the primary purpose of eliminating, preventing, or reducing air pollution, or as otherwise provided in this section, and therefore eligible for tax certification from the Illinois Pollution Control Board. Therefore, it is my recommendation that the Board issue the requested tax Certification for this facility.

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Exhibit B