# BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	R15-21
AMENDMENTS TO 35 ILL. ADM. CODE	)	(Rulemaking-Air)
PART 214, SULFUR LIMITATIONS, PART	)	
217, NITROGEN OXIDES EMISSIONS,	)	
AND PART 225, CONTROL OF EMISSIONS	)	
FROM LARGE COMBUSTION SOURCES	)	

## **NOTICE**

To: John Therriault, Assistant Clerk Illinois Pollution Control Board James R. Thompson Center 100 West Randolph, Suite 11-500 Chicago, Illinois 60601-3218

PLEASE TAKE NOTICE that I have today filed with the Office of the Pollution Control Board the <u>Post-Hearing Comments of the Illinois Environmental Protection Agency</u>, a copy of which is herewith served upon you.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By: /s/ Dana Vetterhoffer
Assistant Counsel

DATED: July 23, 2015 1021 N. Grand Ave. East P.O. Box 19276 Springfield, IL 62794-9276 (217) 782-5544

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# POST-HEARING COMMENTS OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

The Illinois Environmental Protection Agency ("Illinois EPA" or "Agency"), by its attorney, hereby submits its post-hearing comments in the above rulemaking proceeding with regard to the July 8, 2015, hearing.

#### Questions from Illinois Environmental Regulatory Group

At hearing, representatives of the Illinois Environmental Regulatory Group ("IERG") asked whether, prior to the Agency's proposal, there were compliance measures in place that required "records like these to be kept" (referencing the Agency's proposed recordkeeping requirements for the fuel sulfur content limitations in Part 214). (Transcript of July 8, 2015, Hearing ("Transcript") at p. 15). Part 214 currently contains provisions requiring that certain units keep similar types of records; it does not, however, contain similar recordkeeping requirements that are applicable to all diesel-burning stationary sources in Illinois. Federal regulations likely contain additional recordkeeping requirements for certain types of sources utilizing diesel fuel.

IERG representatives also asked whether continuous emissions monitors ("CEMS") were an option for compliance when the 1972 version of Section 214.301 was promulgated.

(Transcript at p. 17). The Agency does not know for certain, but believes that it is unlikely that CEMS were an option in 1972.

IERG representatives asked the Agency whether it is aware of any instance where the 2000 ppm concentration standard set forth in Section 214.301 "was the basis for a modeled emission." (Transcript at p. 25). The Agency interpreted this question to pertain to final modeling demonstrating attainment. Based on this understanding, the Agency is currently aware of four large sources in the modeling domain with one or more such units: Ingredion (formerly Corn Products International, Inc.), Ardagh Glass, Inc. (formerly Saint-Gobain Containers), Congress Development Co., and Koppers. The Agency is unable to examine each smaller source in detail within the timeframe available to it, but suspects that there are additional smaller sources currently limited by the 2000 ppm limit.

## Comments from the Sierra Club

At hearing, representatives of the Sierra Club provided comments, some of which included questions directed at the Agency (although the questions were not posed to the Agency at hearing when Agency personnel were available to provide answers in person).

The Sierra Club asked for a more detailed explanation regarding the Agency's proposed 30-day average sulfur dioxide ("SO<sub>2</sub>") emission limitation for certain emission units at Midwest Generation's Powerton facility, set forth in Section 214.603. Specifically, the Sierra Club asked for additional explanation "as to how the 30-day average at 3,452 pounds per hour will prevent short-term one-hour spikes of SO<sub>2</sub> that would exceed the standard, the National Ambient Air Quality Standard" ("NAAQS"). (Transcript at 49).

As explained in the Agency's Technical Support Document, while there may be occasional hours in which emissions exceed the modeled 6,000 lb/hr design value, the United

States Environmental Protection Agency ("USEPA") has determined that this averaging methodology is still protective of the 1-hour NAAQS. Assumptions in the modeling are very conservative with respect to the potential for all modeled units in the modeling domain emitting at their maximum allowable rates at all times. Thus, the probability is vanishingly small that such a hypothetical exceedance of the critical emission value would occur while all other nearby units are emitting at maximum levels and while conducive meteorological conditions also exist. If the Agency were to try to consider a hypothetical exceedance in this way, it would logically follow that the Agency would also have to consider every dip in emissions from every other nearby source. Instead, the USEPA modeling methodology serves as a conservative means of estimating the same type of situation.

Further, as required by USEPA, Powerton's emission limitation reflects a "downward adjustment" to ensure it is comparably stringent to a 1-hour limit. As noted in the Agency's Technical Support Document, the USEPA has confirmed that the Illinois EPA's analysis and methodology in making this downward adjustment is consistent with federal guidance on the subject, and that the 30-day average limit in the Agency's proposal is an appropriate limit for the Powerton units at issue. (See USEPA's Guidance for 1-Hour SO<sub>2</sub> Nonattainment Area SIP Submissions, ("Guidance")).

Next, the Sierra Club asked why the Powerton units subject to the 30-day average emission limitation cannot instead meet a 1-hour average emission limitation. (Transcript at 49). USEPA gave states the option of averaging under certain circumstances in an effort to strike an "appropriate balance between providing a strong assurance that the NAAQS will be attained and maintained, while still acknowledging the necessary variability in source operations." (Guidance at 24). Contrary to comments made by a Sierra Club representative at hearing, the Agency is not

aware of any USEPA guidance indicating that longer averaging periods are only appropriate when compliance with a 1-hour average is "physically impossible." USEPA agreed in its Guidance that longer-term averaging is appropriate to address emissions variability and that certain types of sources may need longer averaging periods, in response to public comments indicating that such types of units include those burning fuel with variability in the sulfur content, those with variability in their operating load, and those with pollution control devices. Also, according to the Guidance, units with dry scrubber control technology like the type that will be in use at Powerton can have greater variability in their emission distribution than units with wet scrubbers or even uncontrolled units. The Agency also addresses this issue in its Responses to the Board's Second Set of Pre-Filed Questions, filed concurrently with these comments.

In relation to Powerton's 30-day average emission limitation, the Sierra Club asked that the Agency "explain what conversion factor it used and why that conversion factor is appropriate." (Transcript at p. 50). As explained in the Agency's Technical Support Document, the "conversion factor" used was the ratio between the 30-day average emissions and the average hourly emissions of a similar unit, with control equipment similar to that which will be installed at the Powerton unit. It results in multiplying the 6,000 lb/hr design value by 0.58. USEPA guidance indicated the average ratio for units of this type is 0.62, making the proposed 30-day average emission limitation for Powerton's units more stringent than guidance suggested.

The Sierra Club noted a certain fenceline receptor in "Column O of the Pekin spreadsheet," impacted at a level just over 196 micrograms per cubic meter. The Sierra Club asked whether, considering the Powerton facility's 30-day average emission limitation, the Agency will be able to demonstrate that spikes in emissions at the Powerton facility will not

cause an exceedance of the SO<sub>2</sub> NAAQS at that receptor. (Transcript at 51). This receptor is on the fenceline of Aventine Renewable Energy, not near the Powerton facility. The modeling shows that Powerton contributes only 0.03% of the total modeled contribution to this receptor, making it extremely unlikely that variability in Powerton emissions would cause a NAAQS exceedance at that location.

The Sierra Club inquired generally whether certain portions of the Agency's proposed revisions to the Combined Pollutant Standard in Part 225 "belong in this rulemaking."

(Transcript at 51). Specifically, the Sierra Club questioned proposed provisions under which Midwest Generation's Will County 4 unit will be exempted from the requirement to install flue gas desulfurization ("FGD") equipment, in lieu of Midwest Generation's Joliet 6 unit having such exemption.

As explained in the Agency's Statement of Reasons and Technical Support Document, the Agency's proposed revisions to Part 225 came about as a result of stakeholder outreach efforts for the current rulemaking. Collectively, the revisions to Part 225 will significantly reduce SO<sub>2</sub> emissions in and around the Lemont nonattainment area, aiding the Agency's efforts to demonstrate attainment of the SO<sub>2</sub> NAAQS in that area. For that reason, the Part 225 revisions, including those regarding the FGD exemption discussed above, were appropriately included in this rulemaking proposal.

Finally, the Sierra Club noted that actual emissions from certain units at Illinois Power Holdings' E.D. Edwards facility are already at or below the emission limitations proposed by the Agency in Section 214.603, and asked, "[H]ow is the attainment for Pekin, Tazewell County, going to be achieved"? As explained in the Agency's Technical Support Document, the Agency is required to demonstrate attainment of the SO<sub>2</sub> NAAQS based on allowable emissions, not

actual emissions. Several of the emission limitations in the Agency's proposed Section 214.603 are at or below the pertinent unit's actual emissions, but represent a tightening of the unit's allowable emissions to the levels necessary to ensure attainment of the SO<sub>2</sub> standard.

#### Clarification

In its responses to the Board's pre-filed questions, specifically Question 6, the Agency indicated in Table 3-A its understanding that the Powerton units subject to the emission limitation in Section 214.603 could meet the new proposed allowable limit. The Agency would like to clarify that Powerton cannot as of this time meet the allowable limit; rather, the source intends to utilize dry scrubbers and very low sulfur coal to comply with the limitation in such Section.

#### Proposed Amendment

In its original submittal to the Board, the Agency proposed what the Agency believed to be clarifying, non-substantive amendments to Section 214.301. The Agency proposed additional changes to this Section in its Second Motion to Amend Rulemaking Proposal, filed with the Board on July 7, 2015.

The Agency has had several discussions with industry representatives regarding potential unintended consequences of the Agency's proposed changes. As these changes were not meant to impose new or additional requirements upon sources, and as the changes are not needed for the Agency's State Implementation Plan submittal to USEPA, the Agency requests that all of its proposed revisions to Section 214.301 be removed from this rulemaking, as follows.

#### Section 214.301 General Limitation

Except as further provided by this Part, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppmon a dry basis.—Sources without a sulfur dioxide continuous emissions monitoring system must demonstrate compliance, as required, using performance testing in compliance with the

requirements set forth in 35 III. Adm. Code 283. Sources with a sulfur dioxide continuous emissions monitoring system must demonstrate compliance with the emission limitation above,

when averaged over a one hour period.

The Agency believes that industry representatives are in agreement with this proposed

change, and that this change resolves issues surrounding this Section that were addressed in the

Pre-Filed Testimony of David Kolaz on Behalf of IERG, filed with the Board on July 17, 2015.

Transcriptional Error

On page 15, line 7, the Transcript incorrectly indicates that counsel for the Agency

questioned David Bloomberg, an Agency witness; rather, counsel for IERG (Ms. Allgire)

conducted such questioning. Along the same lines, on p. 4 of the Transcript, counsel for the

Agency is incorrectly listed as questioning Mr. Bloomberg.

Response to Board Request

At hearing, the Board asked if the Agency could provide an analysis of economic and

budgetary effects in response to the Joint Committee on Administrative Rules' request. The

Agency provided such an analysis as part of its original rulemaking proposal, and is uncertain

what additional information the Board is requesting.

ILLINOIS ENVIRONMENTAL

PROTECTION AGENCY

By: /s/ Dana Vetterhoffer

Assistant Counsel

DATED: July 23, 2015

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#### **CERTIFICATE OF SERVICE**

I, the undersigned, an attorney, affirm that I have served the attached <u>Post-Hearing</u> <u>Comments of the Illinois Environmental Protection Agency</u> upon the following person(s) by emailing it to the e-mail address(es) indicated below:

Daniel Robertson, Hearing Officer Illinois Pollution Control Board daniel.robertson@illinois.gov

I affirm that my e-mail address is dana.vetterhoffer@illinois.gov; the number of pages in the e-mail transmission is 10; and the e-mail transmission took place today before 5:00 p.m.

I also affirm that I am mailing the attached by first-class mail from Springfield, Illinois, with sufficient postage affixed, to the following persons:

#### SEE ATTACHED SERVICE LIST

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By: /s/ Dana Vetterhoffer
Assistant Counsel

DATED: July 23, 2015

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