

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:

PROPOSED SITE SPECIFIC)
RULE FOR CITY OF SPRINGFIELD,)
ILLINOIS, OFFICE OF PUBLIC)
UTILITIES, CITY WATER, LIGHT)
AND POWER AND SPRINGFIELD) PCB No. 2009-008
METRO SANITARY DISTRICT) (Rulemaking-Water)
FROM 35 ILL. ADM. CODE)
SECTION 302.208(g))

NOTICE OF FILING

To:

John Therriault, Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph St., Suite 11-500
Chicago, IL 60601

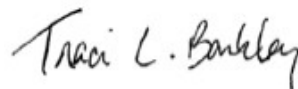
Marie Tipsord, Hearing Officer
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph St, Suite 11-500
Chicago, Il 60601

Christine G. Zeman
Hodge Dwyer Zeman
3150 Roland Avenue
P.O. Box 5776
Springfield, Illinois 62705-5776

Persons included on the attached
SERVICE LIST

PLEASE TAKE NOTICE that the Prairie Rivers Network today has electronically filed PRE-FILED QUESTIONS REGARDING R2009-008, a copy of which is herewith served upon you.

Respectfully Submitted,



Traci L. Barkley
Water Resources Scientist
Prairie Rivers Network
1902 Fox Drive, Suite G
Champaign, Illinois 61820
(217) 344-2371

DATED: December 5th, 2008

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:

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|-------------------------------|---|--------------------|
| PROPOSED SITE SPECIFIC |) | |
| RULE FOR CITY OF SPRINGFIELD, |) | |
| ILLINOIS, OFFICE OF PUBLIC |) | |
| UTILITIES, CITY WATER, LIGHT |) | |
| AND POWER AND SPRINGFIELD |) | PCB No. 2009-008 |
| METRO SANITARY DISTRICT |) | (Rulemaking-Water) |
| FROM 35 ILL. ADM. CODE |) | |
| SECTION 302.208(g) |) | |

**PRE-FILED QUESTIONS FROM PRAIRIE RIVERS NETWORK
REGARDING R2009-008**

The Prairie Rivers Network hereby files questions regarding R2009-008:

1. We have learned from the Final Environmental Impact Statement (Section 2.2.6.1) for the proposed dam and reservoir also known as Hunter Lake, that nearly 3.3 MGD are lost from CWLP's unlined ash ponds due to evaporation and seepage into the ground. Assuming that the seeped water would drain towards groundwater and Sugar Creek and contribute to increased boron (and other pollutants) concentrations and loading, why haven't these ponds been lined? Is the water currently seeping from the ponds causing violations of applicable groundwater standards? If only the FGD wastewater stream is diverted from the ponds, which if any groundwater standards may be exceeded?
2. Several other coal-fired electric generating stations in Illinois sell their coal combustion waste to be used as a beneficial by-product. What fraction of the ash currently being produced by units 31-33, and what fraction already in the ponds is potentially saleable for construction of other uses? Has CWLP explored this option?
3. Does a pipeline currently exist (not necessarily in use) linking Springfield Metro Sanitary's District to CWLP power production facilities?
4. Please provide data characterizing the quality of the groundwater beneath and adjacent to the ash ponds.
5. What does CWLP propose to do with the brine concentrator-spray dryer equipment, already purchased for over \$7 million?
6. What does the applicant consider "economically reasonable" for the treatment of boron?

7. What evidence is there that aquatic life on the Sangamon River, downstream of Sugar Creek is unimpaired by boron concentrations, despite compliance with the adjusted standard of 2mg/L?
8. What changes in the macroinvertebrate index have been observed in Sugar Creek since the creation of the ash ponds, and how does the MBI relate to the measured boron concentrations in Sugar Creek? Please provide a graph plotting both data sets over time, spanning at least the period before ash pond discharge caused violations of the state's boron water quality standard (1 mg/L) to the present day.
9. From the petition "The FGDS blowdown is a means to remove chlorides and other contaminants that would otherwise buildup in the system and cause a corrosive environment in the stainless steel towers." Please characterize with all available data the FGDS wastestream, prior to treatment or dilution, in terms of pollutants and concentrations. What must be added to or removed from this wastestream to avoid corrosion within towers, pipelines and holding tanks?
10. From other similar facilities we expect the FGDS wastestream will likely contain boron, sulfates, TDS, TSS, nitrate, ammonia, selenium, iron, cadmium, mercury, manganese, as well as other pollutants. If this wastestream is piped to the SMSD, what treatment, besides dilution, can we expect from the SMSD Spring Creek treatment process for the pollutants present in the FGDS wastestream?
11. How will the SMSD Spring Creek facility be able to meet the proposed adjusted standard of 11mg/L for boron during times when enough water may not be available for dilution (e.g. severe drought, or even future reductions in wintertime base usage as plumbing fixtures and appliances are replaced with equipment meeting federal water conservation standards mandating 40-70% reductions)?
12. The petition states "CWLP proposes collecting the FGDS wastestream in a 250,000 gallon influent holding tank. This tank will provide about 22 hours of holding time for the wastestream, anticipated to be approximately 187gpm. Please characterize drought conditions for the last 25 years and explain how the holding capacity proposed would be sufficient to comply with NPDES permit limits and water quality standards under those conditions.
13. In reference to the final product of the brine concentrator-spray dryer, the petition states, "...the byproduct would be considered a special waste according to chemical analysis of the projected waste byproduct." Please describe the nature of this special waste quantitatively in terms of the contaminant concentrations and the thresholds exceeded that place it in the special waste class. For each of the contaminants responsible, what options exist for removing them upstream or downstream of the brine concentrator? Has the applicant investigated disposal options for the byproduct, including such beneficial reuse as a wetting agent for dry fly ash disposal operations?

14. The Sangamon is known to be a commercially and recreationally important river for catfish, one of the species known as sensitive to boron. "The IDNR conducted a catfish survey of the Lower Sangamon River in 2003, which concluded that both channel catfish and flathead catfish appear to maintain very good populations, in both number of fish and size ranges. The 2003 catfish survey determined that channel and flathead catfish populations were robust, especially at the Riverside Park/Riverton section of the Sangamon River." Can you please explain how the proposed adjusted standards for boron will be protective of catfish residing in the segments for which the adjusted standards would be applied?
15. Please identify the location and length segments of the river proposed for the adjusted standard that have been surveyed for aquatic plants and describe the nature of the area where macrophyte surveys were conducted.
16. Besides the survey conducted at IEPA's AWQMN stations including E-24, E-25, E-26, was any additional information reviewed in terms of the presence, identification and density of plants within the site specific rule segment?
17. Can you please describe what types of habitat are available for fish residing in the affected segments of the Sangamon River? Please provide data in support of response.
18. Has a wetland survey been completed for segments within and adjacent to Spring Creek and the Sangamon River for which the adjusted standard is proposed? Have any wetlands been identified in these segments?
19. Please explain how the petitioners determined no current irrigation or potential for irrigation in the fields adjacent to the affected segments of the Sangamon River.
20. Have you conducted a study of chemical, biological and physical conditions of the segments assigned the 1994 Boron site-specific rule since the 1994 went into effect? Please provide information regarding macroinvertebrates, mussels, fish, macrophytes and water quality data (in addition to boron data already provided in record in support of this petition).
21. Please explain why this petition seeks an adjusted standard to 302.208 rather than the adjusted standard sought and approved in 1994 to 304.105.
22. At the time air pollution control technology such as the SCR's were selected for installation on the Dallman units, was CWLP provided with information regarding the concentration of boron that would be in the FGDS wastestream? Also at this time, was CWLP aware of effluent concentrations of boron both entering and discharged from the ash ponds?
23. Hanson Engineering's TSD, p. 92, explains that conversion to dry handling of fly ash could eventually reduce total boron loading to Sangamon River. What reasons does

CWLP have for not converting existing units (Dallman 31, 32 and 33) to dry fly ash disposal, knowing that boron reductions and water conservation would result?

24. Please explain what space is required for CWLP to convert each facility, Dallman Units 31, 32 and 33 from wet to dry fly ash and bottom ash disposal. Please describe each component, the space required and the configuration needed to accomplish handling and removal of dry ash.
25. What are the plans for the land currently occupied by the Lakeside Units that are soon to be retired?
26. To what extent do any existing facilities associated with the filter plant, pump house, intake structures constrain the space available for dry fly ash or bottom ash handling at units 31, 32 and 33? What would be the incremental cost of relocating those facilities as part of the planned renovation/replacement project?
27. Section 7 of the Burns & McDonnell report (B&M, 2005) shows the equivalent “annualized lake water cost” for each of the 5 options presented. The calculation for options 2, 3, 4 and 5 are transparent. How was the \$0.79/1000 gal figure for Option 1 calculated?
28. B&M (2005) states in Section 7.0 that the “current cost of lake water” is \$1.39/million gallons. Is that figure expected to remain constant over the life of the boron reduction project? If not, please provide estimated costs at 5-year intervals.
29. If both Options 3 and 4 were implemented as described in B&M (2005), or any other option eliminating discharge of sluice water to Sugar Creek, what additional cost would be incurred to decommission the ash ponds in a manner sufficient to reduce boron levels in Sugar Creek below 1 mg/l and to protect groundwater at that location?

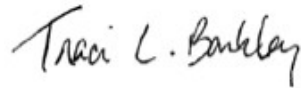
CERTIFICATE OF SERVICE

I, Traci L. Barkley, the undersigned, hereby certify that I have served the attached pre-filed questions of the Prairie Rivers Network regarding R2009-008 upon:

Mr. John T. Therriault
Assistant Clerk of the Board
Illinois Pollution Control Board
100 West Randolph Street
Suite 11-500
Chicago, Illinois 60601

via electronic filing on December 5th, 2008; and upon the attached service list by depositing said documents in the United States Mail, postage prepaid, in Chicago, Illinois on December 5th, 2008.

Respectfully Submitted,



Traci L. Barkley
Water Resources Scientist
Prairie Rivers Network
1902 Fox Drive, Suite G
Champaign, Illinois 61820
(217) 344-2371

SERVICE LIST- R2009-008
December 5th, 2008

John Theirrault, Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 W. Randolph, Suite 11-500
Chicago, Illinois 60601

Marie E. Tipsord
Illinois Pollution Control Board
James R. Thompson Center
100 W. Randolph, Suite 11-500
Chicago, Illinois 60601

Bill Richardson, Chief Legal Counsel
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, Illinois 62702-1271

Katherine D. Hodge and Christine G. Zeman
Hodge Dwyer Zeman
3150 Roland Avenue
P.O. Box 5776
Springfield, Illinois 62705-5776

Michael D. Mankowski
Assistant Attorney General
Office of the Attorney General
Environmental Bureau
500 South Second Street
Springfield, IL 62706

Joey Logan-Wilkey, Assistant Counsel
IEPA
1021 North Grand Ave. East
P.O. Box 19276
Springfield, IL 62794-9276