

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

**IN THE MATTER OF:** )  
 )  
**WATER QUALITY STANDARDS AND** ) **R08-9**  
**EFFLUENT LIMITATIONS FOR THE** ) **(Rulemaking - Water)**  
**CHICAGO AREA WATERWAY SYSTEM** )  
**AND THE LOWER DES PLAINES** )  
**RIVER: PROPOSED AMENDMENTS TO** )  
**35 Ill. Adm. Code Parts 301, 302, 303 and** )  
**304** )

**METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER  
CHICAGO'S PRE-FILED QUESTIONS TO VICTOR CRIVELLO**

1. You indicate in your testimony that you recreate in the Calumet River System three or more weekends per month.
  - A. Have you gotten sick from recreating in these waters?
  - B. If so, how many times over how many years?
2. You have observed a great deal of recreation in the Calumet area. Have you ever heard of a documented disease outbreak resulting from all of this recreation?
3. On page 2, paragraph 1, in sentence 1, you stated that there has always been a large boating community on the Calumet Waterways.
  - A. Please define what you mean by "a large boating community."
  - B. Does a large boating community imply only private pleasure craft?
  - C. Do you have any survey data showing the number of recreational boats using the Calumet Waterways during a given year?
4. On page 2 of your testimony, you indicate that you have "primarily observed waterway uses from Ashland Ave. east along the Grand Calumet River."
  - A. Could you provide a map or otherwise clarify the location you are referring to, as Ashland Avenue crosses over both the Cal-Sag Channel and the Little Calumet River, but not the Grand Calumet River?
  - B. How frequently do you observe jet skiing, water skiing, and swimming between Ashland Avenue and the Calumet Water Reclamation Plant?
  - C. Would you be surprised if you were told that people should not swim near a wastewater treatment plant discharge, even if the plant was routinely meeting the

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proposed technology-based limit or even performing much better than the proposed fecal coliform limit?

5. On page 2, paragraph 1, in sentence 5, you stated that you observed swimming and tubing in the Calumet River System.
  - A. In which waterways did you observe swimming and tubing?
  - B. What was the frequency of swimming and tubing you observed in the Calumet River System?
  - C. Do you have any survey data showing the number of occurrences of swimming and tubing in the Calumet River System during a given year?
  
6. On page 2, paragraph 1 of your testimony, you state that “[t]he Cal-Sag River [*sic*] is also an area with heavy recreational uses. Even though occasional barge traffic does exist, there is always more than enough room to pass in a safe way.”
  - A. What is the basis for this statement? Did you record these observations?
  - B. Is this statement based on any field surveys or data collected on recreational uses on the Cal-Sag Channel or is the statement your personal opinion?
  - C. Do you have any survey data showing the number of recreational users on the Cal-Sag Channel?
  - D. Does the type and frequency of the recreational uses that you have observed on the Cal-Sag Channel differ east of Ashland Avenue?
  - E. Do you have any survey data showing the number of barges that pass through the Cal-Sag Channel?
  - F. Are you familiar with USACE data identifying between 4000-8000 commercial barge lockages through the O’Brien Lock and Dam annually?
  - G. Does that change your opinion concerning whether it is safe for recreational uses in the Cal-Sag Channel?
  
7. On page 3, paragraph 1, you state “Disinfection of the waters will be vital to the success of this plan.”
  - A. What is the basis for this statement?
  - B. Do you know that the proposed IEPA rule requires disinfecting the effluent of the Calumet Water Reclamation plant, which discharges to the Little Calumet River near 128<sup>th</sup> Street, Chicago, Illinois, rather than the waters in the river itself?
  - C. If you knew that the water quality in the east portion of the Little Calumet River, Grand Calumet River, Calumet River and the entire Lake Calumet area would not

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be improved, even if disinfection is implemented at the Calumet Water Reclamation Plant, would your opinion concerning disinfection change?

- D. If you knew that, despite disinfection, more than half of the time, bacteria levels would be much higher than 400 fecal coliform counts per 100 milliliters, would that affect your conclusion about how vital disinfection is to the Calumet Area Vision plan?
  - E. If disinfection did not result in reduced risk to recreational users, would you still believe that it should be required for the Calumet Vision Plan?
  - F. Are you aware of the risk assessment and epidemiology studies performed by the District?
  - G. To your knowledge, what were the conclusions of the microbial risk assessment study?
  - H. Are you aware of other sources of bacteria in the CAWS?
  - I. Have you conducted or are you aware of any study on the sources of contamination to the area that the Calumet Vision Plan covers with respect to bacteria and pathogens?
  - J. How would the Calumet Vision Plan be affected if significant sources of bacteria other than the WRP discharge, such as stormwater runoff and bird droppings, are not addressed?
8. According to your testimony, there are currently a large number of private boats that use the Calumet Waterways for recreational boating.
- A. Is disinfection of the treated effluent from the Calumet WRP necessary for recreational boating in the Calumet Waterways?
  - B. Can you explain why?
9. On page 4, paragraph 1, you contend that “continuing unsafe water conditions of the Calumet waterways will have a negative affect on these activities.”
- A. Explain what is an unsafe water condition?
  - B. Please describe the evidence you have that these waterways are unsafe for their proposed designated uses (non-primary contact uses).
  - C. Please describe your understanding of how the “unsafe” conditions in the CAWS would change if the plants disinfected.
  - D. What bacterial level would you consider “safe” in the Calumet waterways?

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- E. Do you know what bacteria levels would remain from combined sewer overflows and nonpoint sources in the Calumet waterways after the proposed disinfection requirements are implemented?
10. On Page 4, the first sentence of the 2<sup>nd</sup> paragraph, "I strongly support the disinfection of the Calumet waterways."
- A. How much do you believe the recreational risk level will decrease in the Cal-Sag Channel, downstream of the Calumet WRP after disinfection, if other significant sources of bacteria are not addressed?
  - B. If you knew that the disinfection at the Calumet Water Reclamation Plant, as proposed in this rule making, would not improve the water quality in the Little Calumet River east of 128<sup>th</sup> Street, the Grand Calumet River, the Calumet River and the entire Lake Calumet area, would that change your opinion?
11. On page 4 you state that, "Jet skiing, waterskiing, and tubing are activities where water contact is unavoidable."
- A. Do you consider these activities to be included within the incidental contact recreational use being proposed for these waterbodies?
  - B. To your knowledge, are primary contact activities being proposed as an attainable use for the CAWS during this rulemaking?
12. What protocols do you personally employ to minimize the potential of illness due to exposure to pathogens in the waterways in which you recreate?
13. What safety protocols would you recommend to the public when recreating in the CAWS?
14. Should certain areas be avoided due to barge and motorized boat traffic, absence of safe entry and exit locations, and/or other issues incompatible with recreational uses?
15. Do you avoid contact with the CAWS during certain times, such as during and following wet weather events?

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16. Even if the wastewater treatment plant effluent was disinfected, would you recommend that people, particularly children, should avoid exposure to the CAWS due to pathogen contributions from stormwater runoff and combined sewer overflows?

Dated: August 25, 2008

Respectfully submitted,

**METROPOLITAN WATER RECLAMATION  
DISTRICT OF GREATER CHICAGO**

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