

## **Wet Weather Standards Proposal**

### **Recommendation #1**

Ensure that the language in the Pollution Control Standards regarding the Fecal coliform criterion is adequate to provide year-round protection of public water supplies.

### **Proposal**

Section IV.C.1.a. Instream Water Quality Criteria -- Human Health Protection -- Bacteria (Pg. 9). Remove wording “for the months of November through April.”

Section V.B1.d.i. (Pg. 13). Wastewater Discharge Requirements -- Remove wording “During the months of November through April.”

**PROPOSAL ACCEPTED BY WET WEATHER WORKGROUP (WWWG).**

### **Recommendation #2**

Revise the language in the Pollution Control Standards to allow 10 percent of stream samples to exceed the E. coli maximum criterion of 240 CFU/100 mL. This would make it consistent with the Fecal coliform stream criterion and the Fecal coliform and E. coli effluent limitations, which allow 10 percent of samples to exceed the maximum criterion.

### **Proposal**

Section IV.C.1.c. Human Health Protection – Bacteria (Pg. 10). Change “nor exceed 240/100mL in any sample” to “nor exceed 240/100mL in more than 10 percent of all samples taken during any month.”

**PROPOSAL ACCEPTED BY WET WEATHER WORKGROUP (WWWG).**

### **Recommendation #3**

Review US EPA’s definitions of “moderate”, “lightly used”, and “infrequently used” terminology to describe full body contact recreation for applicability to the Ohio River along with the corresponding bacteria criteria.

### **Proposal**

In 40CFR131, Water Quality Standards for Coastal and Great Lakes Recreation Waters, US EPA sets forth definitions that specifically apply to the Great Lakes and coastal marine waters:

“Designated bathing beach waters are those coastal recreation waters that, during the recreation season, are heavily used (based upon and evaluation of use within the state) and may have: a lifeguard, bathhouse facilities, or public parking for beach access. States may include any other waters in this category even if the waters do not meet these criteria.”

“Moderate use coastal recreation waters are those coastal recreation waters that are not designated bathing beach waters but typically, during the recreation season, are used by at least half of the number of people as at typical designated bathing beach waters within the state. States may also include light use or infrequent use coastal recreation waters in this category.”

“Light use coastal recreation waters are those coastal recreation waters that are not designated bathing beach waters but typically, during the recreation season, are used by less than half of the number of people as at typical bathing beach waters within the state, but are more than infrequently used. States may also include infrequent use coastal recreation waters in this category.”

“Infrequent use coastal recreation waters are those coastal recreation waters that are rarely or occasionally used.”

Based on casual observation but not supported by hard data, the Ohio River seems to fit in the category of “Light Use”. With rare exception, contact recreation is relegated to water skiers and wave runners, not swimmers. Based on EPA’s recommended criteria for “Light Use”, that would change the E. coli single sample maximum from 240/100 mL to 409/100 mL.

\*\*\* The effect of a change from 240 to 409 based on 2005 data: 120 samples exceeded the E. coli single sample max. criterion of 240/100 mL and 82 samples exceeded 409/100 mL.

\*\*\* Revising the max. E. coli criterion would necessitate adopting a dual Fecal coliform criterion or dropping the Fecal coliform criterion. We have extensive paired data to develop a statistically significant relationship. Analysis of the paired data results in a proposed Fecal coliform maximum criterion of 517 CFU/100 mL.

**PROPOSAL ACCEPTED BY WET WEATHER WORKGROUP (WWWG).  
RECOMMENDATION TO DEVELOP A CORRESPONDING FECAL  
COLIFORM MAXIMUM CRITERION (ATTACHED).**

**Recommendation #4**

Review the various risk-levels to determine the appropriate level for the Ohio River.

**Proposal**

ORSANCO’s current E. coli criteria correspond to a risk level of 8 illnesses per 1000 swimmers as defined in the 1986 Ambient Water Quality Criteria document. US EPA’s 2002 Draft Implementation Guidance for Ambient Water Quality Criteria for Bacteria listed alternative criteria based on other risk-based illness rates. More recent finalized documents (40CFR131, Nov. 2004) do not specify alternative criteria, but follow along with the 1986 Ambient Criteria document.

Therefore, there does not seem to be a scientific or regulatory justification for selecting an illness rate other than to stay with what is currently in place -- 8 illnesses per 1000 swimmers.

\*\*\* Note that the criteria for marine waters is based on 19 illnesses per 1000 swimmers.

**PROPOSAL ACCEPTED BY WET WEATHER WORKGROUP (WWWG).**

**Recommendation #5**

Define a high flow condition that would apply to temporary suspension of the contact recreational use and corresponding criteria.

**Proposal**

Through an extensive search, there was only one document found describing flow-related recreational use issues, *Methods of Assessing Instream Flows for Recreation*, published in June 1978 by US Fish and Wildlife Service and US EPA. It specifies, for contact water skiing, a physically limiting stream velocity of 3.0 feet per second which is equivalent to 2 miles per hour. (The physically limiting velocity for power fishing boating is 3.4 miles per hour).

\*\*\*A review of historical recreation season flows at Cincinnati (mid-pool) indicates that velocities exceed 2 miles per hour approximately 18 percent of the time (velocities exceed 3 miles per hour approximately 8-9 percent of the time and exceed 3.4 miles per hour approximately 4 percent of the time).

Add Section IV.C.1.d. Parts b. and c. above, do not apply when river velocity exceeds 2 miles per hour when contact recreation is physically limited under such conditions.

Add Section V.B.1.d.iii. Parts ii. And iii. above do not apply river velocity exceeds 2 miles per hour when contact recreation is physically limited under such conditions.

\*\*\* When suspending primary contact recreation criteria, we may wish to substitute secondary contact recreation criteria which are five times the primary contact recreation criteria. These criteria protect human health from such recreational activities as boating.

**PROPOSAL ACCEPTED BY WET WEATHER WORKGROUP (WWWG).**

**Recommendation #6**

Review the public notification language in the Pollution Control Standards for possible revision.

**Proposal**

Current language in the standards is in Section V.B.3.b.8. Combined Sewer Systems (Pg. 14). It indicates that combined sewer overflows due to wet weather will not be in

violation of wastewater discharge requirements section provided that the system is operated in accordance with the nine minimum controls (and LTCP) one of which is:  
8) Public notification to ensure that the public receives adequate notice of CSO occurrences and CSO impacts.

No specific additional language is being proposed, however input on additional needs is requested. The US EPA has an implementation guidance document for the nine minimum controls which has additional detail on public notification requirements.

**PROPOSAL ACCEPTED BY WET WEATHER WORKGROUP (WWWG).**

**Recommendation #7**

Propose language for the standards similar to Indiana’s wet weather CSO language regarding suspension of the contact recreational use and associated criteria for CSO communities with an approved LTCP and UAA.

**Proposal**

Section V.B.3.b. Wastewater Discharge Requirements – Combined Sewer Systems – System Overflows During Wet Weather.

Add on to last paragraph, page 14: “In addition, the system must be operated in accordance with an approved Long Term Control Plan, where required, and the discharge must not interfere with the attainment of the water quality criteria set forth in Section IV”, **except as follows for combined sewer systems with an approved, fully implemented, long term control plan and approved Use attainability Analysis (UAA):**

**The approved Long Term Control Plan and UAA will identify the conditions, at or above which, the contact recreation use and associated bacteria criteria cannot be achieved. At or above such conditions, contact recreation bacteria criteria specified in Sections IV.C.1.b and IV.C.1.c, and wastewater discharge requirements specified in Sections V.B.1.d.ii and V.B.1.d.iii will not apply for a period not to exceed two days following the condition.**

\*\*\* Above, existing language is underlined and bold wording is added.

**PROPOSAL ACCEPTED BY WET WEATHER WORKGROUP (WWWG).**