

## **A Factsheet for Implementing New *E. coli* Requirements**

### ***What new requirements??***

Ohio EPA adopted new rules on December 15, 2009 which included new water quality criteria for bacteria. Criteria for the bacteria *E. coli* have replaced standards for fecal coliform, as *E. coli* has been shown to be a better predictor of the potential for impacts to human health from exposure to wastewater effluent and surface waters which contain wastewater effluent. Other changes in these rules include:

- The standard recreation season when monitoring for bacteria is required has been changed to May 1<sup>st</sup> through October 31<sup>st</sup>;
- The Director of Ohio EPA now has explicit authority to extend effluent disinfection requirements beyond the May 1<sup>st</sup> through October 31<sup>st</sup> recreation season if necessary;
- The definitions of “Bathing Waters”, “Primary Contact”, and “Secondary Contact” have been revised; and
- The primary contact recreation use has been divided into three subclasses: Class A, Class B, and Class C. Each of these subclasses has different numeric *E. coli* criteria.

The new rules became effective on March 15, 2010.

### ***Implications for NPDES Permit Holders***

As NPDES permits are renewed, fecal coliform requirements will be phased out and *E. coli* limits and monitoring requirements will be put in place. If existing permits are modified for other reasons, *E. coli* requirements will also be included in the modification. Although many facilities may not require significant changes in order to meet the new limits, this may not be true for all treatment works. As a result, the need for a compliance schedule (and interim table) as well as the length of the compliance schedule will likely be determined on a case-by-case basis. Ohio EPA will consider allowing the permittee one recreation season to monitor *E. coli* discharge levels, train employees on measuring *E. coli*, obtain additional equipment, switch contract labs, and tweek their disinfection system, if necessary, prior to the imposition of limits. However, it may be appropriate to impose *E. coli* limits immediately for some some facilities, and Ohio EPA encourages permittees to begin monitoring for *E. coli* before it is actually included in permits. Also, it is recommended that permittees consult with the appropriate Ohio EPA district office inspector/permit staff prior to a permit renewal to determine the need for a compliance schedule.

### ***What determines the applicable *E. coli* limits for a facility?***

The *E. coli* limits which are applicable to a facility are dependent upon the use designation of the receiving waters for the discharge. The new rules have retained the recreation use categories of bathing waters, primary contact, and secondary contact. However, the primary contact category now has three separate classifications, distinguished by the frequency of recreational activities<sup>1</sup>:

- Class A – frequent recreational activity;

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<sup>1</sup> Examples of recreational activities in this context are swimming, boating, water skiing, and canoeing.

- Class B – occasional recreational activity; and
- Class C – infrequent recreational activity.

Class C is also defined as a waterbody with a very small drainage area (less than 3.1 square miles) which has been historically channelized.

The majority of facilities with NPDES permits in Ohio discharge to Class A or Class B streams. To determine the recreation use designation/classification which is applicable to a facility, use the table shown at:

[www.epa.ohio.gov/dsw/rules/3745\\_1.aspx#07](http://www.epa.ohio.gov/dsw/rules/3745_1.aspx#07)

If the facility does not discharge into one of the waterbody segments listed in the table referenced above, and the drainage area in the watershed upstream from the discharge is greater than 3.1 square miles, the receiving water is primary contact Class B. Permittees are encouraged to consult with the appropriate Ohio EPA district office inspector/permit staff to verify the proper use designation applicable to the discharge.

***Permit limits for E. coli***

Table 1 shows the limits for *E. coli* which will be included in NPDES permits. The 30-day average limits are based upon the water quality criteria for seasonal geometric mean, and the 7-day average limits have been derived using methodologies designed to ensure that the discharge will comply with the 30-day average limit.

**Table 1. *E. coli* NPDES Permit Limits**

Recreation Use	Class	E. coli (colony counts per 100 ml)	
		30-day average	7-day average*
Bathing Waters	--	126	284
Primary Contact			
	Class A	126	284
	Class B	161	362
	Class C	206	464
Secondary Contact	--	1030	2318

***What about direct discharges to the Ohio River?***

NPDES permits for facilities which discharge directly to the Ohio River will continue to include only fecal coliform limits and monitoring requirements.

***For additional information...***

See the contact information at: [http://epa.ohio.gov/dsw/permits/contacts\\_npdes.aspx](http://epa.ohio.gov/dsw/permits/contacts_npdes.aspx)