

TASKS #10 & 11
NPDES Permit Review

The City of Portsmouth has ten (10) Combined Sewer Overflow (CSOs) locations which discharge to the Ohio and Scioto Rivers. The ten stations are identified in Portsmouth's NPDES Permit (Permit #: OPD00013*LD, Stations 002 – 011), with an effective date of August 1, 2009. Table 1 provides the description of location and receiving stream for each CSO.

Sampling Station	Description of Location	Receiving Stream
OPD00013002 .	Lawson Run CSO (Lat 38 deg 43' 51" Long 82 deg 58' 28")	Ohio River
OPD00013003 .	Mill St. LS overflow (Lat 38 deg 43' 45" Long 82 deg 59' 42")	Ohio River
OPD00013004 .	Front & Court St. LS overflow (Lat 38 deg 43' 48" Long 83 deg 00' 04")	Ohio River
OPD00013005 .	3rd & Madison LS overflow (Lat 38 deg 44' 03" Long 83 deg 00' 34")	Scioto River
OPD00013006 .	11th St. LS overflow (Lat 38 deg 44' 24" Long 82 deg 59' 59")	Scioto River
OPD00013007 .	17th St. LS overflow (Lat 38 deg 44' 41" Long 82 deg 59' 42")	Scioto River
OPD00013008 .	Ohio Power CSO (Lat 38 deg 45' 44" Long 82 deg 59' 31")	Scioto River
OPD00013009 .	29th St. CSO (Lat 38 deg 45' 26" Long 82 deg 59' 40")	Scioto River
OPD00013010 .	Marth Alley LS overflow (Lat 38 deg 44' 11" Long 82 deg 57' 24")	Ohio River
OPD00013011 .	Martha Alley & Buch St. CSO (Lat 38 deg 44' 32" Long 82 deg 56' 56")	Ohio River

Table 1

Discharges from CSO stations are allowed only during wet weather. The NPDES Permit requires that overflows be reported monthly; however there are no concentration and loading limits. The Schedule of Compliance (SOC) in Part I, C of Portsmouth's NPDES Permit provides the minimum elements to be addressed in the Long Term Control Plan (LTCP).

CSO Station 002 is located adjacent to the Lawson Run WWTP. During dry weather and wet weather flow rates less than 10 million gallons per day (MGD), the sewage is pumped to the WWTP. When combined sewage flow exceeds 10 million gallons per day (MGD), the excess combined sewage flow is diverted to Station 002.

Currently secondary treatment units (bio-filters & secondary clarifiers) **are not bypassed** during wet weather flows. The Strand Report recommended incrementally increasing the rated capacity of the existing primary clarifiers. Immediate rehabilitation of existing equipment is recommended to increase the rated capacity to 15 MGD. The second project involves new head works and additional primary clarifier capacity. If implemented, this would minimally provide an additional 5 MGD of primary treatment for combined sewage flow; however the secondary treatment units' rated capacity remain at 10 MGD. The result would be at least 5 MGD being bypassed around the secondary treatment units. As a stand alone alternative this may result in a violation of the US EPA bypass regulation as contained in 40 CFR 122.41(m). Section II.C.7 of the US EPA "CSO Control Policy" details very specific circumstances whereby this may be a viable option from the regulatory perspective.

The Ohio EPA SOC requires Portsmouth to evaluate increasing the primary treatment capacity. Should this alternative be financially feasible, it is noted that NPDES permit modifications will be required to ensure compliance with the regulation referenced in the paragraph above.

Utilizing a combination of the alternatives contained in the "Stilson & Strand Reports", and other alternatives which may be developed in responding to the 308 Request will identify the measures that are necessary to ensure CSOs comply with the requirements of the NPDES Permit.