



City of Bolivar Files Complaint Challenging Piper Creek/Town Branch TMDL January 2017

In October, the City of Bolivar (the “City”) filed a lawsuit in federal district court seeking invalidation of the 2010 Piper Creek/Town Branch TMDL established by EPA pursuant to its obligations under a consent decree. At the heart of the dispute is the flawed reference condition approach used by EPA to develop the loads for total nitrogen (“TN”) and (“TP”).

The Piper Creek TMDL is driven by Missouri’s general (narrative) criteria, which require waters to be free from substances in amounts causing “the formation of putrescent, unsightly, or harmful bottom deposits or prevent full maintenance of beneficial uses” and causing “unsightly color or turbidity, offensive odor, or prevent full maintenance of beneficial uses.” Because Missouri does not have numeric criteria for TN and TP in freshwater streams, EPA “translated” Missouri’s general criteria into allocations for TN and TP directly based on EPA-recommended ecoregion concentrations.

Plainly, any reference condition approach is limited by the extent to which the reference condition resembles (or fails to resemble) the subject stream. By directly using recommended TN and TP ecoregion criteria, EPA cannot account for local conditions unique to Piper Creek even though studies have demonstrated that a waterbody’s response to nutrients depends on multiple site-specific factors. In its comments on the draft TMDL, the City pointed to significant differences between several streams included in the reference condition and Piper Creek, including setting (minimal urban impact v. urban-influenced), source of flow (spring fed v. surface water dominated), and flow conditions.

Further, the use of narrative criteria in this manner is inappropriate. The highly generalized approach taken by EPA in setting the Piper Creek TMDL cannot account for the possibility that the waterbody may achieve water quality standards (applicable designated uses and the narrative criteria) under less stringent limits than those imposed by the TMDL. Indeed, the sparse modeling performed by EPA does not directly evaluate whether the required nutrient reductions will prevent algal growth in Piper Creek and achieve the narrative standards driving the TMDL.

A segment of Piper Creek was listed on the Missouri 303(d) list as impaired (warm water aquatic life use) due to organic sediment from the City’s WWTF and other, unknown sources, as well as unknown pollutants from unknown sources. The creek is classified as a Class P (maintains permanent flow) waterbody, and it flows to the Pomme de Terre River. Based on studies completed between 2004 and 2009, EPA concluded (1) nutrients from nonpoint and point sources were contributing to observed algae growth upstream and downstream of the WWTF, (2) sediment from nonpoint and point sources were contributing to high sedimentation,



and (3) low DO could be due to decaying organic solids, algae growth, high consumption of oxygen from decaying matter on the streambed, and other physical factors associated with low reaeration rates. In its complaint, the City observes that all DO sample results downstream of its WWTF complied with the DO numeric water quality criterion of 5.0 mg/L.

Under the TMDL, the City's WWTF must reduce its TN load from "no limit" to 6.17 lbs/day; its TP load from "no limit" to 0.15 lbs/day; and its CBOD effluent load from "no limit" to 86 lbs/day. The City has asserted that its allocations for TN and TP are technologically unachievable, and, moreover, will require costly upgrades beyond the limits of affordability for its ratepayers. Further, the City argues that the use of Ecoregion 39 as a reference condition was arbitrary and capricious, and created "a standard, generally-applicable regulatory approach" for the selection and use of "reference" streams when setting TMDLs. As such, the City argues EPA was required to adopt its approach through notice and comment rulemaking.

We will follow this litigation as it develops. We encourage members to participate during TMDL development to avoid unachievable TMDL requirements. Also, administrative case law holds that permit writers are entitled to rely on unchallenged TMDLs, and challenges to permit limits based on a TMDL generally will be considered an impermissible collateral attack on the TMDL. Therefore, if it becomes necessary to challenge a TMDL, remain aware of statutory deadlines and, if possible, act before the TMDL is incorporated into permit limits.