

WQBELs are designed to protect water quality by ensuring water quality standards are met in the receiving water and the designated use and downstream uses are protected. On the basis of the requirements of 40 C.F.R §125.3(a), additional or more stringent effluent limitations and conditions, such as WQBELs, are imposed when TBELs are not sufficient to protect water quality.

TBELs aim to prevent pollution by requiring a minimum level of effluent quality that is attainable using demonstrated technologies for reducing discharges of pollutants or pollution into the waters of the State. TBELs are developed independently of the potential impact of a discharge on the receiving water, which is addressed through water quality standards and WQBELs. The NPDES regulations at 40 C.F.R. §125.3(a) require NPDES permit writers to develop technology-based treatment requirements, consistent with CWA section 301(b), that represent the minimum level of control that must be imposed in a permit. The regulation also requires permit writers to include in permits additional or more stringent effluent limitations and conditions, including those necessary to protect water quality.

40 CFR Part §122.44(a)(1) requires that NPDES permits include applicable technology-based limitations and standards, while regulations at § 125.3(a)(1) state that TBELs for publicly owned treatment works must be based on secondary treatment standards and the “equivalent to secondary treatment standards” (40 CFR Part 133). The regulation applies to all POTWs and identifies the technology-based performance standards achievable based on secondary treatment for five-day biochemical oxygen demand (BOD<sub>5</sub>), total suspended solids (TSS), and pH.

The table below shows the secondary treatment standards for ponds:

Parameter	Secondary Treatment Standards	
	<i>30-day Average</i>	<i>7-day Average</i>
BOD <sub>5</sub>	30 mg/L	45 mg/L
TSS <sup>(1)</sup>	90 mg/L	--
BOD <sub>5</sub> removal (concentration)	≥ 85%	--
pH (Daily Minimum – Daily Maximum)	6.0-9.0 S.U.	

<sup>(1)</sup> Adjusted secondary standard for ponds in accordance with Federal Register, Volume 49, Number 184, page 37005, September 20, 1984