Are TBELs in Ecology’s 2023 NPDES permit for CAFOs Adequate?

What are TBELs?

When Congress passed the Clean Water Act in 1973, it marked a significant change in how we regulated the discharge of pollutants into our waters across the country.

Consider this 1938 letter\(^1\) from a Forest Ranger to a Forest Supervisor protesting when he was prohibited from taking campsite garbage to the center of the Bridge of the Gods and dumping it into the Columbia River:

*Sergeant Grimm of the State Police, stationed at The Dalles, informs me that we will not be allowed to continue this practice, since it is in violation of the Oregon Game Code, Section 133.*

*It would hardly seem that Sergeant Grimm's position is tenable in view of the fact that cities farther up the river are emptying there (sp) sewers into the river. Also there may be some leeway in interpreting pollution when one considers that it is five miles or less from the bridge to tidewater.*

*If we are not to be allowed to dump garbage in the river some other method of disposal will have to be found very soon because garbage has been accumulating at the camp ground for some time.*

Prior versions of federal water pollution laws focused on achieving specific water quality that was deemed adequate to protect human health and the environment. This system, however, allowed for the continued use of our waters as ‘waste removal systems’ so long as the polluter did not violate the established water quality standard. This system proved both unworkable, because enforcement of the standards was difficult, and unprotective because it allowed for the
continued degradation of many waterbodies. That was supposed to change when Congress declared the “national goal that the discharge of pollutants into the navigable waters be eliminated by 1985.” 33 U.S.C. § 1251(a)(1).

In 1973 Congress charged the Environmental Protection Agency (EPA), and designated state agencies, with issuing National Pollution Discharge Elimination System (NPDES) permits that limit discharges to surface waters. Importantly, these permits must include Technology-Based Effluent Limitations (TBELs) that “require a minimum level of treatment of pollutants for point source discharges based on available treatment technologies, while allowing the discharger to use any available control technique to meet the limits.” That is, for each facility, the permit writing must determine what level of pollution reduction can be achieved for each type of pollutant discharged from that facility using modern pollution control technology, and then set “effluent limits” that limit the discharge of pollution accordingly. TBELs constitute a minimum floor of controls that must be included in a permit, irrespective of the discharger’s effect on the quality of the receiving water. See PUD No. 1 Jefferson Cnty v. Washington Dept. of Ecology, 511 U.S. 700 (1994), citing EPA v. California ex rel. Water Resources Control Board, 426 U.S. 200, 205, n. 12 (1976); American Petroleum Inst. v. EPA, 661 F.2d 340, 344 (5th Cir. 1981).

The CWA requires EPA to establish Technology-Based Effluent Limitation Guidelines (“ELGs”) based on the pollutant reductions that can be achieved by different types of facilities and operations. 33 U.S.C §§ 1311(b), 1314(b). Where EPA has established ELGs, they must be used to set the Technology-Based effluent limitations in an NPDES for each individual discharger. 33 U.S.C. § 1342(a)(1)(A). Where EPA has not established a Technology-Based ELG for type of discharger, the permit writer must use its “best professional judgment” (“BPJ”) to establish the TBELs. This requirement applies to the states when they administer the NPDES permitting program. 33 U.S.C. § 1314(b); 40 C.F.R. §§122.44(a)(1),123.25, 125.3.

EPA has established ELGs for CAFOs. These ELGs can be found at 40 C.F.R. § 122.42(e)(1), and require CAFO nutrient management plans to:
(i) Ensure adequate storage of manure, litter, and process wastewater, including procedures to ensure proper operation and maintenance of the storage facilities;

(ii) Ensure proper management of mortalities (i.e., dead animals) to ensure that they are not disposed of in a liquid manure, storm water, or process wastewater storage or treatment system that is not specifically designed to treat animal mortalities;

(iii) Ensure that clean water is diverted, as appropriate, from the production area;

(iv) Prevent direct contact of confined animals with waters of the United States;

(v) Ensure that chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants;

(vi) Identify appropriate site specific conservation practices to be implemented, including as appropriate buffers or equivalent practices, to control runoff of pollutants to waters of the United States;

(vii) Identify protocols for appropriate testing of manure, litter, process wastewater, and soil;

(viii) Establish protocols to land apply manure, litter or process wastewater in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter or process wastewater; and

(ix) Identify specific records that will be maintained to document the implementation and management of the minimum elements described in paragraphs (e)(1)(i) through (e)(1)(vii) of this section.

By adopting this technology-based control approach, Congress was actually just catching up to what was already required in Washington. Since 1945, Washington law has mandated “the use of all known, available and reasonable methods by industries and others to prevent and control the pollution of the waters
of the state of Washington,” a standard known as “AKART,” in order “to maintain the highest possible standards to insure the purity of all waters of the state.” RCW 90.48.010.

"AKART is an acronym that means all known, available and reasonable methods of prevention, control and treatment. AKART shall represent the most current methodology that can be reasonably required for preventing, controlling, or abating the pollutants associated with a discharge. The concept of AKART applies to both point and nonpoint sources of pollution. The term "best management practices" typically applies to nonpoint source pollution controls, and is considered a subset of the AKART requirement. The stormwater management manuals (see definition in this section) may be used as a guideline, to the extent appropriate, for developing best management practices to apply AKART for stormwater discharges.” WAC 173-218-030

With respect to the CAFO General Permit, Friends of Toppenish Creek and others have sued the Washington Department of Ecology in part because we believe the agency has failed to develop TBELs based on the federal law.

TBELs are “technology forcing”, in that they require facilities to use the appropriate level of technology to address the pollutants they may discharge. In addition, because the control technology will improve over time, the underlying premise is that we can engineer our way out of problems and eventually reach the end goal of eliminating all point source discharges – the final goal for all of us.

Thank you for reading.

Friends of Toppenish Creek

You have received this Fact Sheet because you are on a list of potentially interested parties. If you do not want to receive further information, please contact Jean Mendoza at jeanrmendoza@icloud.com
Garbage Under the Bridge at https://www.thebridgeofthegods.com/2021/08/12/365224/garbage-under-the-bridge

1 CAFOs are point sources. A point source is “any discernible, confined, and discrete conveyance, including any pipe, ditch, channel, tunnel, conduit, well, discrete fixture, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. The term does not include return flows from irrigated agriculture or agricultural stormwater runoff.” NPDES Permit Writers Manual https://www.epa.gov/sites/default/files/2015-09/documents/pwm_app-a.pdf

2 EPA Permit Limits – TBELs and WQBELs, at https://www.epa.gov/npdes/permit-limits-tbels-and-wqbel#

3 Where technology-based effluent limitations are not sufficient to meet applicable state water quality standards, permits must include additional limitations as stringent as necessary to meet such standards ("water quality based effluent limitations"). 33 U.S.C. § 1311 (b)(1)(C). We will discuss WQBELs in next week’s letter.

4 Best professional judgement means the method used by permit writers to develop technology-based NPDES permit conditions on a case-by-case basis using all reasonably available and relevant data. NPDES Permit Writers Manual https://www.epa.gov/sites/default/files/2015-09/documents/pwm_app-a.pdf

5 For an in-depth explanation of the rationale for challenging Ecology’s 2023 NPDES permits for CAFOs see comments submitted to Ecology on behalf of the appellants by the Western Environmental Law Center, available at http://www.friendsoftoppenishcreek.org/cabinet/data/WELC%20Comments%20NPDES%20permits%20for%20CAFOs.pdf