



June 30, 2021

Emily Kijowski
Washington Department of Ecology
PO Box 47600
Olympia, WA 98504-7600

Dear WA State Dept. of Ecology,

Please consider these comments regarding Ecology's proposed General Permit for Biosolids from the Friends of Toppenish Creek (FOTC), a 501 C (3) non-profit in Yakima County.

Friends of Toppenish Creek is dedicated to protecting the rights of rural communities and improving oversight of industrial agriculture. FOTC operates under the simple principle that all people deserve clean air, clean water and protection from abuse that results when profit is favored over people. FOTC works through public education, citizen investigations, research, legislation, special events, and direct action.

Grammatical, clerical, miscellaneous problems:

Page 1, First Sentence: There is no Chapter 70A.225 RCW. The statute is Chapter 70A.226 RCW.

Page 5, Fourth line correction:

Section (4) of this permit applies to facilities with active biosolids management programs, but not those ~~than~~ that manage only septage (1.2.2 above).

Page 6, Figure 1, Second Step correction:

Existing Baseline facilities without active programs are automatically covered on the effective date of the general permit. To confirm your permit, consult the Facility List provided by Ecology.

Page 6, Figure 1, Fifth Step says:

Existing facilities with active programs must submit a complete permit application within 90 days of permit issuance.

This cannot be correct. Ecology should not issue a permit before the permit application is submitted.

Pages 44-45, Site Specific Land Application Maps must contain:

Item (10) should be rewritten to say, *If the seasonal groundwater is three feet (0.91 meters) or less below the surface, a management plan describing how you will protect groundwater. For example, you may propose General Permit for Biosolids Management Publication 21-07-006 45 May 2021 to limit applications to the time of year when groundwater has receded to ~~less than~~ more than three feet (0.91 meters) below the surface.*

Page 47 Glossary of Terms defines:

This is the definition of septage from WAC 173-350-100 and from WAC 173-308-080.

Septage or domestic septage: Liquid or solid material removed from septic tanks, cess pools, portable toilets, type III marine sanitation devices, vault toilets, pit toilets, RV holding tanks, or similar systems that receive only domestic sewage. Septage may also include commercial or industrial septage mixed with domestic septage if approved in accordance with the provisions in WAC 173-308-020(3)(g)

WAC 173-308-005 states:

(c) Septage. *Unless the context requires otherwise, "septage" is the term used in this chapter to refer to septage that is or will be managed as septage.*

This last definition is circular, confusing and provides an unclear exception for “context”.

Concerns regarding Sections 3 and 4:

Sections 3.4.2 and 4.4.2 say:

Soil sampling and analysis plans must conform to cooperative extension guidelines or generally accepted guidance or be prepared by a soil scientist, agronomist, crop adviser, or other certified or licensed professional.

This requirement is so general that it is not enforceable. There should be a listing of accepted guidelines.

Sections 3.4.5 and Section 4.4.5 Point of Compliance say:

The point of compliance for a sample is the date on which the sample is taken, not the date on which results are subsequently reported. It is a violation of this permit to use or distribute biosolids that fail to meet applicable standards.

This is not a correct definition of Point of Compliance. Point of Compliance is not a date. A correct definition would read something like:

Point of compliance means the geographic location at which the concentration of the chemical of concern is to be at or below the risk-based corrective action standard determined to be protective of public health and the environment.

Section 3.6.3 Soil Testing Required, does not specify testing for phosphorous. It should. When biosolids are applied next to rivers, as they are in Yakima County, there is a risk of phosphorous runoff into a body of water with consequent eutrophication.

Section 3.6.4 Application Rates should address phosphorous needs of the crop as well as nitrogen.

Section 3.8.3 allows Ecology to create exceptions to the rule. This gives Ecology the power to make special deals with no citizen oversight. Strongly suggest removing this exception.

Section 4.5.3: There is no protocol for soil sampling. Many fields are non-homogeneous with high and low areas and different soil types in the same field. In order to obtain useful soil samples, there must be guidelines for where to sample, how deep to sample, and how many samples to take. There should be testing for phosphorous as well as nitrogen. Testing for nitrogen should be for nitrate, ammonia and total kjeldahl nitrogen (TKN).

Section 4.5.9.3. Buffers:

The distance from surface waters is defined as 33 feet. The permit does not state where the measurements will be taken. The edges of rivers and streams fluctuate throughout the year. Is the point of measurement the high water mark? Biosolids are applied near surface waters that flood every year.

The permit does not address differences in soil porosity and varying distances for mixing zones in which ground and surface waters interact. It is likely that many mixing zones (hyporheic zones) extend beyond 33 feet from the edges of large rivers.

Thirty three (33) feet is inadequate to prevent leaching of heavy metals, nutrients and toxic chemicals into rivers that support fisheries.

Ecology Discretion:

There are sections in the permit that give Ecology the discretion to rewrite and go against the permit, apparently whenever the agency wishes.

Page 1, Line 17: *Unless modified by this permit or an approval of coverage under this permit, the rules in Chapter 173-308 WAC are applicable.*

Page 22, Line 20: *On a case-by-case basis, Ecology may impose requirements that are in addition to or more stringent than the requirements in this permit.*

Page 31, Sections 3.8.3 and 4.5.9.3 qualify the requirements in the tables * *Unless a different buffer is approved or required by Ecology* ** *Unless approved by Ecology*. This gives Ecology

permission to approve unusual buffers, to approve application of septage on wetlands, public contact sites, on frozen or snow covered ground.

Page 35, Line 22: *For facilities with surface impoundments characterizing biosolids under section 2.5.1, the number of samples is determined based on the estimated quantity of solids in the impoundment at the time of sampling, or as otherwise approved by Ecology.*

Page 39, Table B3: Ecology can approve a modified waiting period.

Page 39, Section 4.5.9.2: *Public access must be restricted following the application of Class B biosolids. Minimally, you must maintain posted informational signs during the time site access is restricted, in accordance with the requirements in Table B4. Exceptions to these requirements must be approved in writing by Ecology.*

Suggestions to strengthen the permit:

For facilities located near rivers and streams that support anadromous fisheries the permits should be published in tribal newspapers. For facilities located in ethnic communities, public hearings should be advertised in languages used by significant population subgroups. Consider radio and television advertising in lieu of print media. Explain what is in biosolids.

The permit does not address insurance, bonding, liability, and compensation when a spill occurs. In 2015 a LOOP truck spilled 30,000 pounds of biosolids into Swauk Creek near Blewitt Pass. These things happen. There should be provisions to ensure that the responsible party, and not the taxpayers, returns the natural environment to as normal as possible, and that there is adequate supervision of the restoration.

Biosolids as Fertilizer:

If biosolids are marketed as soil amendments and fertilizer, then biosolid application should meet the standards that are in place for manure management. See Ecology's National Pollutant Discharge Elimination System (NPDES) permit for Concentrated Animal Feeding Operations (CAFOs). Permitting for biosolids should:

- Address stormwater runoff and emergency plans for once in 25 year storm events.
- Prohibit application of biosolids to the land when there is no crop growing.
- Require spring soil sampling to a depth of three feet prior to biosolid application.
- Require soil testing to a depth of 3 feet each fall at the end of harvest on land that received biosolid applications. Develop a protocol to reduce future biosolid and fertilizer application if nitrate levels in the fall sampling exceed 15 parts per million (ppm).
- Require composting and other treatment of sewage sludge and septage to take place on a hardened surface with > 95% compaction.
- Require groundwater monitoring when beneficial use facilities are located on land with well drained soils.

- There should be no land application of biosolids to fields with saturated soil.
- Applicators should estimate the amount of nitrogen lost to volatilization.

Questions:

- How does Ecology know that manufactured inerts, including plastics, will not impact soil health and/or end up in crops?
- Ecology has been aware of per- and polyfluoroalkyl substances (PFAS) in biosolids since at least 2008. Why has Ecology failed to require testing for PFAS in biosolids that are land applied? Wouldn't it be prudent to stop application of biosolids to cropland until there are clear safety limits? Who will compensate farmers if biosolid applications leave PFAS in the soil that renders it useless for growing crops?
- FOTC performed a study in 2018 that found dioxins and furans in domestic well water in the Lower Yakima Valley where sewage sludge/biosolids are applied to farmland. Ecology is performing follow up testing. The EPA acknowledges that dioxins and related chemicals remain in the sewage sludge from wastewater treatment plants. How can Ecology protect people with domestic wells from this contamination?
- How does Ecology address the presence of pharmaceuticals, pesticides and other chemicals that likely change the biota on land where biosolids are applied?
- In light of the HEAL Act is it acceptable for people in populous areas to export their sewage sludge to rural communities where people are poorly equipped to question the impact on public health and the environment?

Thank you for taking the time to read and consider each of these concerns.

Sincerely,



Jean Mendoza

Executive Director, FOTC

3142 Signal Peak Road
White Swan, WA 98952