**Temporary compost rule amendment**

**FAQs and Notes – JPurcell 1/25/2019**

***Why is DEQ not considering elimination of the exemption for agricultural operations, requiring agricultural operations that digest manure to meet the pathogen reduction limits and testing requirements?***

DEQ researched what other states and EPA require for liquid digestate from manure digestion and learned that the limits and testing requirements currently in DEQ’s rules are impractical, difficult or impossible to meet, and are not needed to be environmentally protective. DEQ did not intend to treat non-farm operations differently than agricultural operations.

EPA allows class B management standards which recognize land application of digestate on farm fields at agronomic rates as environmentally protective and does not require manure digesters to meet very stringent pathogen reduction standards for class A materials. Land application of liquid digestate from manure digestion at agronomic rates will meet equivalent pathogen limits.

Additionally, land application of liquid digestate is environmentally preferable to the land application of raw manure. The anaerobic digestion of manure has pathogen and methane reduction benefits.

***I don’t think the rule should limit liquid digestate to only going to soil.  If an operator wanted to send their digestate to a WWTP would we allow it?  Would the rule prevent this?***

The rule amendment does not specify how digestate should be managed by an operator. The composting rules allow for other digestate management methods, including treatment at a waste water treatment plant. The Pathogen Reduction rule amendment applies only if digestate is to be beneficially used in agricultural operations.

***Does this apply to digesters that only take manure as their feedstock?  How will this apply to digesters that take multiple feedstocks (including manure)?***

The rule amendment applies to digestate that is applied to soil at agronomic application rates; regardless of the type of feedstock used by the digester.

***It appears that we’re providing rationale for removing the bacteria limit and also imposing the agronomic rate requirements. What’s the justification for imposing the agronomic rate requirement?***

The proposed rule amendment recognizes application of digestate to soil at agronomic rates is a beneficial use while providing pathogen reduction activities. Application rates of digestate above agronomic levels could impact ground or surface water. Agronomic application rates provide nutrients (i.e., nitrogen, phosphorus, potassium, etc.) at levels that promote plant growth and do not overload soil with excess nutrients that may leach to the water table with rain water.

***DEQ and ODA land application programs operate with some differences that have been questioned externally in the past. The temporary rule tends to take the DEQ compost rules closer to the ODA approach and further away from DEQ’s WQ biosolids rules (OAR 340-050). This may be fully justified, but it may also raise questions about internal DEQ inconsistency.***

DEQ’s WQ biosolids rules recognize land application of class B biosolids as an accepted management practice. This rule amendment simply allows this management practice for all anaerobic digesters sending liquid digestate to agricultural operations. Most digestate in Oregon is land applied as part of an ODA-approved Nutrient Management Plan; only two digesters in Oregon do not land apply under the authority of a CAFO permit. In 2016, DEQ and ODA signed an [MOU to investigate questions about the agricultural uses of solid waste](https://www.oregon.gov/deq/mm/swpermits/Pages/MM-Agriculture.aspx); including digestate.

***Why is this a problem now?***

This issue existed in the original permit issued to the Port of Tillamook Bay and is not a result of the modification to accept additional feedstock types. When the previous POTB permit was issued in February 2016 for manure only, DEQ incorrectly applied the agricultural operation exemption because the facility was digesting manure and sending the liquid digestate to farms for land application. When modifying the POTB permit to allow acceptance of type 3 feedstocks, DEQ became aware that the Port of Tillamook Bay does not meet the definition of agricultural operation as defined by ORS 467.120(2)(a).

After issuing the permit modification DEQ received a petition for reconsideration of the permitting decision. In reviewing the allegations in the petition, DEQ determined that there was legal uncertainty about the treatment of the pathogen reduction standards in the permit. While the permit requires land application of digestate at agronomic rates, it does not require meeting the pathogen reduction standard in the current rule.

The proposed rule amendment allows for safely and effectively managing liquid digestate from manure digesters, regulates all manure digesters equally regardless of location, and allows the Port of Tillamook Bay and other anaerobic digesters to be commercially viable while providing environmental benefits. Furthermore, the proposed temporary rule amendment would limit legal uncertainty related to the petition for reconsideration, without applying a standard to the permittee that is not operationally obtainable, and allow for the Port of Tillamook Bay’s anaerobic digester to resume operations.

***Who regulates the land application of liquid digestate, ensuring that it is applied at agronomic rates?***

In most cases, land application of liquid digestate is regulated by ODA in accordance with a CAFO permit or ODA-approved nutrient management plan. In some cases, land application is not regulated by ODA. DEQ may ask ODA to investigate questions of inappropriate application of digestate under a [Memorandum of Understanding](https://www.oregon.gov/deq/mm/swpermits/Pages/MM-Agriculture.aspx) signed by DEQ and ODA in 2016.

***Why shouldn’t digesters not located at agricultural operations meet more stringent pathogen reduction limits?***

Land application of liquid digestate from manure digestion should comply with the same requirements regardless of where the digestion occurs. DEQ did not intend to establish a pathogen reduction limit and testing requirements that are impracticable to meet. The proposed temporary rule changes establish similar requirements for management of liquid digestate from digestion of manure regardless of the digester location. The proposed requirements are environmentally protective and consistent with EPA requirements.

***Will land application of liquid digestate from manure digestion result in more bacteria releases to waters?***

Land application of manure is an accepted type of fertilization. Digestion reduces pathogens in liquid digestate by about 90% and is environmentally preferable to land application of undigested manure.

**Wym Matthews**

* The use is identical
* Digestate is to be applied on CAFO facilities in accordance with the permit and a nutrient management plan; if non-CAFO, only allowable if ODA-approved nutrient management plan
* In contrast, Farm Power is regulated under CAFO NPDES permit; the end use is the same, however the facilities are allowed to export waste, not subject to a nutrient management plan; a non-CAFO receiving digestate from a CAFO-permitted facility is not subject to the same rules
* POTB manure agreements were previously by volume; new feedstock agreements are by nutrient load; receiving farms cannot exceed nutrient load, calculated agronomic rates based on crop and yield
* A CAFO permitted digester that is no longer an agricultural operation, will require a DEQ solid waste permit
* ***How will POTB facility handle excess nutrients?*** 3 options include sending to a non-participating CAFO farm, sending to a non-CAFO facility with an ODA-approved nutrient management plan, or adding treatment to the facility to concentrate the nutrients for marketing as a fertilizer
* CAFO permits require an ODA-approved nutrient management plan upon registration and renewal, or if something changes
* Non-CAFO farms do not currently require ODA-approved nutrient management plans, however under this proposal, POTB would have to require such
* Other non-land application activities include sending to nursery; this would not be addressed by the proposed rule language
* Protecting surface water from non-point source pollution; water quality trend data demonstrates improvements; a number of factors, but digester is one
* Digesters reduce pathogens by ~95%
* Effluent that is land applied is significantly reduced
* “Reasonable and normal farm activities” are covered under Oregon’s right to farm laws; odors resulting from “reasonable and normal farm activities” as opposed to nuisance odors; a consideration if a facility is regulated by DEQ vs. ODA; industrial/commercial operation vs. a farm operation

**York Johnson**

* In the past, the digester significantly reduced pathogens, specifically bacteria
* We’ve seen water quality improvements in the watershed that this process could be one component of
* DEQ maintains ambient water quality monitoring locations in the Tillamook Bay watershed; and TEP has WQ monitoring sites throughout the watershed; no nutrient monitoring

**Lisa Phipps**

* Trend data shows improvements in water quality in the Tillamook Bay watershed.
* There are a number of factors that may contribute to these improvements, the pathogen reduction benefits of the digesters is one. Other watershed enhancements and improvements include: riparian restoration, wetland restoration, fencing and other setbacks, advanced farming and manure management practices.
* Digestion reduces the pathogen load that has the potential to impact surface water.
* ***What has happened to WQ with the digester not operating since 2017?*** Trend analysis occurs on a biannual basis and that data has not been analysed.
* There are 3 digesters in Tillamook County with the operating capacity to process 1/3 to 1/2 of the manure generated. Additionally, many of the participating farms are situated in the most vulnerable locations within the watershed. For example, the Tillamook River subbasin is slow moving, wide, and shallow, making it vulnerable to bacteria impacts.

**Public Forum**

Sarah Beaubien

* 80 member dairy farmers
* Odor, greenhouse gas, and pathogen reduction
* 2017 POTB closed the digester; there has been a coalition working to get the facility back up and running
* Nutrient filtration and biogas capture; consistent policies encourage digester development

Rachel Melissa

* Procedural
* Filed petition for reconsideration; awaiting response from DEQ
* Proposes “eliminating the pathogen reduction rule altogether”***(inaccurate)***
* Unclear why the sense of urgency
* Documents on this topic were only made available this morning
* Process is “designed to discourage public participation” ***(public participation opportunities during the permit issuance process; full advisory committee engagement in permanent rulemaking)***

Daryl Maas

* POTB currently has a permit to digest manure ***(POTB permit currently allows for the digestion of type 3 feedstocks)***
* Restricts additional feedstocks with added nutrients; restrictions on “on farm” digesters
* “no one is relying on the restart of this facility” ***(farmer, feedstock, and power purchase agreements are at risk if this facility does not resume operations)***

Kevin Maas

* ODA rules require 85-90% manure; must operate as primarily a manure facility ***(as is required of an agricultural operation regulated under a CAFO NPDES permit)***
* DEQ’s permit modification does not require percentage manure
* Operating under very different rules
* “no requirement to be associated with a farm” ***(inaccurate; the proposed rule requires land application at agronomic rates and the POTB permit requires land application under an ODA-approved nutrient management plan, regardless of CAFO status)***
* Increases the quantities of digestate in Tillamook County; land is limited
* Off farm digesters should be required to demonstrate adequate storage and land capacity