



State of Oregon  
Department of  
Environmental  
Quality

# Oregon Department of Environmental Quality

**DATE: Feb. 6, 2019**

## **Notice of Proposed Temporary Rulemaking**

Composting Special Pathogen Reduction Temporary Rule 2019

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## Accessibility Information

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You may review copies of all documents referenced in this announcement at:

Oregon Department of Environmental Quality  
700 NE Multnomah St., Ste. 600  
Portland, OR, 97232

To schedule a review of all websites and documents referenced in this announcement, call Audrey Obrien 503-229-5072 (800-452-4011, ext. 5622 toll-free in Oregon).

DEQ can provide documents in an alternate format or in a language other than English upon request. Call DEQ at 800-452-4011 or email [deqinfo@deq.state.or.us](mailto:deqinfo@deq.state.or.us).

## Introduction

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DEQ invites public input on proposed rule amendments to chapter 340 of the Oregon Administrative Rules.

## Request for Other Options

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During the public comment period, DEQ asks for public comment on whether there are other options for achieving the rules' substantive goals while reducing the rules' negative economic impact on business.

## Procedural Summary

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### More information

Information about this rulemaking is on this rulemaking's web page: [Temporary composting rule web page](#)

### How to comment on this rulemaking proposal

DEQ is asking for public comment on the proposed rules. Anyone can submit comments and questions about this rulemaking. A person can submit comments through an email to:

[Compostingtemp2019@deq.state.or.us](mailto:Compostingtemp2019@deq.state.or.us)

### **Comment deadline**

DEQ will only consider comments on the proposed rules that DEQ receives by 4 p.m., on Thursday, February 14, 2019.

### **By mail**

Oregon DEQ  
Attn: Audrey Obrien  
700 NE Multnomah St., Room 600  
Portland, OR 97232-4100

### **Sign up for rulemaking notices**

Get email or text updates about DEQ rulemaking by signing up through this link: [DEQ Email Notice List](#).

## **DEQ recommendation to the EQC**

DEQ recommends that the Oregon Environmental Quality Commission:

1. Determine that failure to act promptly would result in serious prejudice to the public interest or the interests of the parties concerned as provided under the Justification section of this staff report.
2. Adopt TEMPORARY rules as included in this notice as part of chapter 340 of the Oregon Administrative Rules to be effective on filing with the Oregon Secretary of State.

## **Overview**

DEQ has identified a problem in the current DEQ solid waste compost rules that, if not corrected, will cause serious prejudice to the Port of Tillamook Bay (POTB), Tillamook Biogas, LLC, and parties to contracts associated with the operation of the POTB's anaerobic digester. DEQ proposes modifying the compost rules to ensure consistent requirements apply to the anaerobic digestion of manure. The rules currently require liquid digestate from anaerobic digesters not located at an agricultural operation to meet pathogen limits and testing requirements that are not operationally obtainable when processing manure. Digesters located at agricultural operations are not required to meet these same limits and testing requirements.

DEQ issued POTB a composting permit under the composting rules that had been updated to include anaerobic digesters in 2013. When issuing that permit, DEQ treated POTB as an

agricultural operation that is exempt from the pathogen reduction requirements of the rules. Prior to 2013, the Port of Tillamook Bay's anaerobic digester operated under a DEQ solid waste treatment permit. The POTB had never been required to meet the pathogen reduction limits in the past and DEQ did not intend for the requirements to apply to facilities that send liquid digestate to farmland for land application.

In fall of 2018, POTB applied to DEQ for a permit modification in order to accept Type 3 feedstocks. The POTB digester has not been in operation since 2017 because POTB considered operation of the facility not to be economically viable. POTB requested the permit modification because adding Type 3 feedstock would allow the facility to operate and become economically viable. Tipping fees associated with the acceptance of Type 3 feedstocks provide a source of revenue, improving the commercial viability of the operations. The addition of Type 3 feedstocks would also increase methane generation, producing renewable energy and improving another revenue stream that would allow the facility to begin operations. POTB's contracted digester operator, Tillamook Biogas, LLC, has lined up feedstock and power purchase agreements in anticipation of the facility coming on line this spring.

In considering the permit modification, DEQ, in consultation with The Oregon Department of Agriculture, determined that the POTB facility was not an agricultural operation exempt from the pathogen reduction requirements of the composting rules. The pathogen reduction requirements are not operationally obtainable or economically viable for manure digesters. As explained below, and consistent with the original intent of the rules, it is not environmentally beneficial to apply the pathogen reduction limitations to land applied manure digestate. DEQ therefore issued the POTB permit modification with requirements that the digestate be appropriately land applied in order to ensure pathogen issues were addressed.

After issuing the permit modification, DEQ received a petition to reconsider the permitting decision citing the need for non-agricultural digesters to meet the pathogen reduction limits and testing requirements in the compost rules. DEQ granted the petition to reconsider on Jan. 31, 2019. The permit remains in effect pending reconsideration. However, there is regulatory uncertainty regarding the application of the pathogen reduction requirements to the POTB facility. Application of the pathogen reduction limits would contradict DEQ's intention to treat anaerobic digesters consistently. It would also make operation of the facility not economically viable and failure to apply the limits could result in legal risk. As explained below, DEQ understands that failure to begin operations early this spring would result in the facility being unable to realize the various contracts that are currently in place that would allow the facility to begin operations. There is uncertainty whether circumstances would allow the facility to begin operations at a later date if it is unable to begin at this time.

DEQ intends to proceed with permanent rule-making to address the inconsistency in the rules. However, in the interim, DEQ proposes that the Environmental Quality Commission address the regulatory and legal uncertainty by adopting this proposed temporary rule amendment.

The current rules apply the pathogen reduction requirements inconsistently and create prejudice against the public and affected parties. The regulatory uncertainty created by the inconsistent treatment of manure digesters in the rules will delay, or halt altogether,

operations of the POTB's anaerobic digester and result in the POTB's public infrastructure remaining underutilized. The Governor's North Coast Regional Solutions Team has been working closely with the POTB and its contracted operator, Tillamook Biogas, LLC, to ensure this valuable community asset does not remain idle. The current alignment of contracts for operation, feedstocks, and power presents an opportunity to utilize the digester providing community benefits of odor and pathogen reduction provided by the digestion process. Residents of rural Tillamook County also stand to benefit from the green power promised to the local utility. Failing to meet these current contractual obligations creates the risk that the digester will not operate at all in the near future, which would result in prejudice to the community. This proposed rule change addresses both public and private prejudice by applying the pathogen reduction requirements consistently to all anaerobic digester operations.

The proposed temporary rule modification would provide an exemption from the pathogen reduction testing limits for liquid digestate from anaerobic digesters not located at agricultural operations, where the liquid digestate is applied to soil at agronomic rates. As a temporary rule, the proposed changes would be effective for a maximum of 180 days. DEQ staff are working on a proposed permanent rule amendment which will include a public notice and comment period before it is finalized. Staff intend to bring that proposed permanent rule for Commission consideration and action in August 2019.

## Statement of need

DEQ added anaerobic digestion requirements to the DEQ compost rules in 2013. The current rule language applies requirements inconsistently to anaerobic digesters based on where the facility is located. The proposed temporary rule amendment corrects this oversight until DEQ can adopt a permanent rule.

Prior to 2013, the Port of Tillamook Bay's anaerobic digester operated under a DEQ solid waste treatment permit. After adding anaerobic digester requirements to the compost rules, DEQ issued a new compost permit to POTB's anaerobic digestion facility in 2013. This permit allowed the facility, which is not located at an agricultural operation, to digest manure only. At the time, DEQ incorrectly considered the POTB digester an agricultural operation and the 2013 permit did not require POTB to meet the pathogen reduction limits or testing requirements because the liquid digestate was to be returned to farmland for land application.

In October 2018, DEQ issued a permit modification to authorize the POTB to accept additional feedstocks for digestion. While issuing the modification, DEQ, after consultation with the Oregon Department of Agriculture determined that the POTB digester did not meet the definition of an agricultural operation and identified the inconsistency in the rule that would subject the POTB facility to a standard that was not meant to apply to manure digesters. The result would create inconsistent regulation between similar operations. To address this issue, DEQ included a permit condition to allow the POTB to land apply liquid digestate at agronomic rates in compliance with an Oregon Department of Agriculture approved nutrient management plan.

In December 2018, DEQ received a petition to reconsider the POTB permit modification decision. DEQ determined that the rule amendment is urgent to provide regulatory and legal certainty to non-

agricultural operations, ensuring they can manage liquid digestate in a manner similar to an agricultural operation. The proposed temporary rule would allow the POTB, and other digesters not located at agricultural operations, to be commercially viable while providing safe and effective manure management and the environmental benefits of pathogen reduction and methane capture.

DEQ has allowed the Oregon Department of Agriculture (ODA) to regulate digesters located at agricultural operations under Confined Animal Feeding Operation (CAFO) water quality permits. Manure digesters located at CAFO-permitted agricultural operations are exempt from pathogen rule requirements, while those not co-located with agricultural operations must meet the requirements. DEQ did not intend for this result when the compost rules were adopted. In fact, DEQ has treated off-farm digesters the same as on-farm digesters until learning that the off-farm digesters were not considered agricultural operations.

In most instances, liquid digestate from anaerobic digesters is applied on agricultural lands at agronomic rates under a CAFO permit and ODA-approved nutrient management plan. DEQ researched EPA and other states' digestate management requirements and consulted with the Oregon Department of Agriculture. Soil application of liquid digestate at agronomic rates is a safe and appropriate management method. Furthermore, the land application of digested manure is more environmentally protective than the land application of raw manure, given the pathogen and methane reduction benefits.

The proposed temporary rule modification would provide an exemption from the pathogen reduction testing limits for liquid digestate from digesters not located at agricultural operations, provided the liquid digestate is applied to soil at agronomic rates.

## Justification

In the case of the Port of Tillamook Bay, DEQ has issued the permit modification in question and the permit is active. However, the regulatory uncertainty relating to this decision will delay operations of the DEQ-permitted facility. Failure to act promptly would result in the POTB's public infrastructure remaining underutilized, wasting a valuable community asset. Furthermore, regulatory uncertainty will delay or potentially halt operations indefinitely, postponing the odor and pathogen reduction benefits provided by the digestion process, and putting farmer, feedstock, and power purchase agreements at risk. Without this facility:

- Manure management options are limited for participating dairy farmers;
- Feedstock agreements for managing organic materials such as seafood processing waste are at risk, limiting alternatives to landfilling; and
- The local utility and its customers risk losing a sustainable source of green power promised by the power purchase agreement.

The POTB's community digester was initially built in 2003 to address the manure management needs of Tillamook County's dairy industry. The facility was closed in 2017 for financial reasons and has remained idle since. For the first time since the facility was shuttered, all permits and agreements are in place for operations to resume. The Port entered into a third-party operator agreement with Tillamook Biogas, LLC in June 2018. DEQ modified the POTB permit in October

2018 to accept type 3 feedstocks, revenue from which makes the operation commercially viable. Manure agreements have been negotiated with participating dairy farms, manure hauling contracts are in place, and feedstock agreements have been secured. The power purchase agreement was the final critical component before beginning operations and it was fully executed with the local utility, Tillamook PUD, in December 2018. These agreements are at risk should this facility not become operational.

While the details of these agreements are proprietary, feedstock agreements are subject to non-performance clauses. One agreement provides for the facility to accept seafood processing waste beginning April 1, 2019. Seafood processing is seasonal in nature and missing this window of opportunity will place this feedstock agreement at risk. As stated earlier, the commercial viability of the operations is tied to the addition of type 3 feedstocks. Putting these feedstock agreements at risk places the entire project at risk.

As previously stated, the current rules treat similar operations differently. The standard is not economically viable for permittees processing manure to comply with, while at the same time, the current rule does not result in environmental benefit. This was not DEQ's intent when it originally proposed the rule. The proposed rule amendment will allow for the safe and effective management of liquid digestate from manure digesters, regulate all manure digesters equally regardless of location, and allow the POTB and other anaerobic digesters to be commercially viable while providing environmental benefits.

The legal certainty the temporary rule amendment provides will allow for the POTB's anaerobic digester to resume operations. This will enable the facility to begin receiving manure and additional organic wastes, providing pathogen reduction and methane capture benefits, and increasing biogas production, creating renewable energy while protecting the environment. Without this temporary rule amendment, the POTB digester will remain idle, putting the operator, Tillamook Biogas, LLC, at risk of non-performance under contract agreements with the POTB, the Tillamook County Creamery Association, participating dairy farmers, Tillamook PUD, seafood processors and other type 3 feedstock providers.

The proposed temporary rule amendment as presented for the Commission's consideration would:

- Eliminate the inconsistent application of the pathogen reduction rule, regulating all facilities that digest manure equally, regardless of location;
- Encourage the anaerobic digestion of manure and the associated environmental benefits of pathogen reduction and biogas capture; and
- Limit regulatory and legal uncertainty related to the inconsistency in DEQ's rules, providing for the Port of Tillamook Bay's anaerobic digester to resume operations.

### **Prejudice to the public and affected parties**

The current rule applies the pathogen reduction requirements inconsistently and creates prejudice against the public and affected parties.

The POTB's Hooley Digester was originally constructed in 2003, following a collaborative community effort including the dairy industry and local governments in Tillamook County convened to address manure management concerns. The dairy industry is critical to Tillamook County's economy. Regulations and coastal climate considerations required raw

manure to be processed prior to land application. A centralized community digester was designed to treat manure from area farms, create power for the local community and provide compost fiber for fertilizer and animal bedding.

The community digester has been subsidized by the POTB for many years. Costs associated with hauling manure have increased and manure alone does not produce sufficient power revenue to ensure financial viability. The introduction of type 3 feedstocks improves methane generation, increasing revenue from power as well as tipping fees, and improving the commercial viability of the operation.

Significant public investment has been made in the construction and operation of the POTB anaerobic digester. The Governor's North Coast Regional Solutions Team has been working closely with the POTB and its contracted operator, Tillamook Biogas, LLC, to ensure this valuable community asset does not remain idle. The current alignment of contracts presents an immediate and viable opportunity. Should this facility not become operational, these agreements and the entire project are at risk.

This proposed rule change addresses prejudice by reducing legal uncertainty and applying the pathogen reduction requirements consistently to all anaerobic digester operations. DEQ intends to address this inconsistency through permanent rulemaking. However, this matter is urgent given the current permit consideration and warrants this temporary rule amendment.

### **Consequences of not taking immediate action**

- Underutilization or closure of public infrastructure at the POTB would continue without the temporary rule and permanent rule changes.
- Anaerobic digesters not located at agricultural operations will remain subject to pathogen reduction limits that are not operationally obtainable. This is inconsistent with requirements for anaerobic digesters located at agricultural operations. This inconsistency in how the pathogen reduction rule is applied affects the commercial viability of facilities not located at agricultural operations, without environmental benefit.
- Failure to act promptly will result in the POTB's public infrastructure remaining underutilized. Delayed or halted operations will postpone the odor and pathogen reduction benefits provided by the digestion process, creating prejudice against the public. Residents of rural Tillamook County also stand to benefit from the green power promised to the local utility. The project's power purchase agreement, as well as farmer and feedstock agreements, will be at risk if this facility remains idle, creating prejudice against the public and affected parties.
- Potential environmental damage may occur from raw manure being applied to farm land without the environmental benefits gained from the process of pathogen reduction that occurs during anaerobic digestion.
- Potential environmental damage may occur from increased methane release due to increased storage and land application of raw manure that is not processed through anaerobic digestion. In contrast, biogas captured at anaerobic digestion facilities is not vented to the atmosphere, can be flared, upgraded to renewable natural gas for use in vehicles, or burned to create electricity, mitigating this potent greenhouse gas.

## **Affected parties**

- Anaerobic digesters that accept manure feedstock
- Port of Tillamook Bay
- Tillamook Biogas, LLC
- Tillamook PUD
- Tillamook County Creamery Association
- Participating dairy farmers
- Other feedstock providers

DEQ is holding a public comment period to accept public comments on the proposed temporary rule changes. After considering all comments received and making any appropriate changes to the temporary rule indicated by the comments, DEQ intends to ask the EQC to adopt the temporary rule changes. If EQC approves the temporary rule changes, the rule language would become effectively immediately. DEQ will then undertake a permanent rule-making to address this concern.

## **How temporary rule would avoid or mitigate consequences**

The proposed temporary rule change would eliminate the inconsistent application of the pathogen reduction rule and provide regulatory and legal certainty to all parties. This will allow the POTB digester to resume operations with clear rule and permit direction. This temporary rule amendment would regulate facilities that digest manure equally and allow for soil application of liquid digestate from anaerobic digesters not located at agricultural operations. The temporary rule would avoid potential negative environmental consequences by allowing all anaerobic digesters to manage manure similarly, regardless of location. The proposed temporary rule would eliminate costly equipment and operations upgrades necessary for manure anaerobic digesters to meet the current liquid digestate pathogen reduction limit and testing requirements. The proposed temporary rule would encourage the anaerobic digestion of manure and the associated environmental benefits of pathogen reduction and biogas capture.

# Rules affected, authorities, supporting documents

## Land Division

Materials Management

OAR 340-096-0140

- Amend OAR 340-096-0140 (1) and 140 (2) (new language is in bold font):

(1) All composting facilities must comply with this rule, except that agricultural operations as defined by ORS 467.120(2)(a) producing composted material and digestate only for on-farm use are not subject to the requirements of this rule. The department may require that an agricultural operation **or other facility excluded under section 2 of this rule** comply with this rule if the department determines that such compliance is necessary to protect human health or the environment.

(2) All composted material and digestate, excluding: **1) composted material and digestate that is sent as feedstock to a composter possessing either a composting permit or registration, or 2) digestate applied to soil at agronomic application rates and consistent with site restrictions in 40 C.F.R. §503.32(b)(5)**, must meet the following limits:

## Statutory authority

ORS 459.045, 459A.025, 468.020, 468.065

## Statute implemented

ORS 459.005, 459.015, 459.205

## Legislation

Does not apply

## Documents relied on for rulemaking

Document title	Document location
Safe Management of Liquid Digestate from Anaerobic Digestion – White Paper	40 Code of Federal Regulations Part 503 – Standards for the Use or Disposal of Sewage Sludge; Subpart D – Pathogens and Vector Attraction Reduction

Document title	Document location
Letter in support of temporary rule from ODFA	EPA Environmental Regulations and Technology Guidance Document – <i>Control of Pathogens and Vector Attraction in Sewage Sludge Under CFR Part 503</i>
Washington Dept. of Ecology <i>Guidelines: Operating an Anaerobic Digester Exempted From Solid Waste Handling Permit</i>	Washington Administrative Code 173-350 Solid Waste Handling Standards including sections: 220 Composting Facilities; 225 Other Organic Material Handling Activities; 230 Land Application; and 250 Anaerobic Digesters

## Housing costs

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As ORS 183.534 requires, DEQ evaluated whether the proposed rules would have an effect on the development cost of a 6,000-square-foot parcel and construction of a 1,200-square-foot detached, single-family dwelling on that parcel.

DEQ determined the proposed rules would have no effect on the development costs because the DEQ Solid Waste Composting rules only affect DEQ permitted composting facilities.

## **EQC Prior Involvement**

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DEQ presented these proposed temporary rule amendments to the EQC at the January 25, 2019, meeting. At the EQC's request, DEQ is holding a public comment period on the temporary rule. DEQ also added additional information to this notice in response to EQC questions.

# Implementation

## Notification

The proposed temporary rules would become effective upon filing with the Secretary of State, immediately after EQC adopts them. DEQ would notify affected parties immediately after EQC adoption.

## Compliance and enforcement

- Affected parties – DEQ permitted Solid Waste facilities
- DEQ staff – Materials Management regional staff
- Oregon Dept. of Agriculture Confined Animal Feeding Operation staff

## Measuring, sampling, monitoring and reporting

- Affected parties – DEQ permitted Solid Waste facilities
- DEQ staff – Material Management regional staff
- Oregon Dept. of Agriculture Confined Animal Feeding Operation staff

## Systems

None to update at this time

## Training

- Affected parties – DEQ permitted Solid Waste facilities
- DEQ staff – Material Management staff
- Oregon Dept. of Agriculture Confined Animal Feeding Operation staff

# Public Involvement

## **Public comment period**

DEQ opened a public comment period for this proposed temporary rule on Thursday, February 7, 2019. The comment period will close at 4:00 p.m. on Thursday, February 14, 2019. DEQ will not consider any comments submitted after 4:00 p.m. on February 14, 2019.

## **How to submit comments**

Any person can submit comments about this proposed temporary rule by submitting an email to: [compostingtemp2019@deq.state.or.us](mailto:compostingtemp2019@deq.state.or.us).