Implementation of HB 3814 (enacted)

Internal Management Directive

12/18/2025

State of Oregon
DEQ Department of Environmental Quality

This document was prepared by
Oregon Department of Environmental Quality

Water Quality Permitting and Program Development
700 NE Multnomah Street, Suite 600
Portland Oregon, 97232

Contact: Aliana Britson
Phone: 503-229-6044

www.oregon.gov/deq

State of Oregon
DEQ Department of Environmental Quality

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Español | 한국어 | 繁體中文 | Русский | Tiếng Việt | العربية
800-452-4011 | TTY: 711 | deqinfo@deq.oregon.gov

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Document development

Prepared By: Aliana Britson, Senior Permit Policy Consultant

James McConaghie, Water Quality Standards Coordinator
Jeff Linzer, Senior Permit Writer

Robert Burkhart, Senior Permit Program Consultant
Emma Prichard, NPDES Permit Writer

Tatyana Isupov, Water Quality Standards Specialist

Reviewed By:

Rebecca Bodnar, Water Quality Permitting and Program Development Manager
Jeff Navarro, Water Quality Senior Permit Program Analyst

Ranei Nomura, Western Region Water Quality Program Manager

Tiffany Yelton-Bram, Northwest Region Water Quality Source Control Section Manager
Connie Dou; Standards, Source Water Protection and Assessments Manager

Sara Slater, Acting Water Quality Deputy Administrator

Approved By: Jennifer Wigal Date: 12/16/2025

Jennifer Wigal, Water Quality Administrator

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1. Purpose of the IMD

HB 3814 (enacted) was officially signed by Governor Kotek on May 14, 2025. The bill, effective October 1, 2025, allows a bacteria mixing zone (referred to as a “Regulatory Mixing Zone” or RMZ by DEQ to a seafood processing facility for the discharge of wastewater effluent if the department determines that the RMZ would not adversely affect public health and that best management practices are implemented to prevent the inclusion of bacteria from external fecal sources. For the complete bill text see Section 3.

The purpose of this IMD is to promote consistent application of HB 3814: the department may determine, based on a review of information that clearly demonstrates that the mixing zone would not adversely affect public health, that a bacteria RMZs may be included in NPDES permits for seafood processing facilities for the discharge of wastewater effluent into waters of the state. This IMD supplements the “Oregon Bacteria Rule: Bacteria Criteria for Marine and Estuarine Waters” IMD (2/18/2011) (“Bacteria IMD”) and will be incorporated into the Bacteria IMD at a future date. This IMD provides guidance to staff on what is considered an adverse effect on public health, appropriate sizing of bacteria RMZs, necessary information to request from permittees and future permit applicants, how to develop bacteria limits for implementation in permits, and how to determine best management practices (BMPs) to prevent inclusion of bacteria from external fecal sources.

This IMD is to be used by NPDES permitting mixing zone subject matter experts, bacteria subject matter experts, and permit writers when issuing or modifying NPDES permits for seafood processing facilities.

2. Acronyms used in this directive

BMP: Best Management Practices

BSMP: Bacterial Source Management Plan

DEQ: Oregon Department of Environmental Quality

EPA: Environmental Protection Agency

FIB: Fecal Indicator Bacteria

HB: House Bill

IMD: Internal Management Directive

NPDES: National Pollutant Discharge Elimination System

OAR: Oregon Administrative Rule

ODA: Oregon Department of

Agriculture **ODFW**: Oregon

Department of Fish and Wildlife

RMZ: Regulatory Mixing Zone

RPA: Reasonable Potential

Analysis **RWQC**: Recreational

Water Quality Criteria **TMDL:**

Total Maximum Daily Load

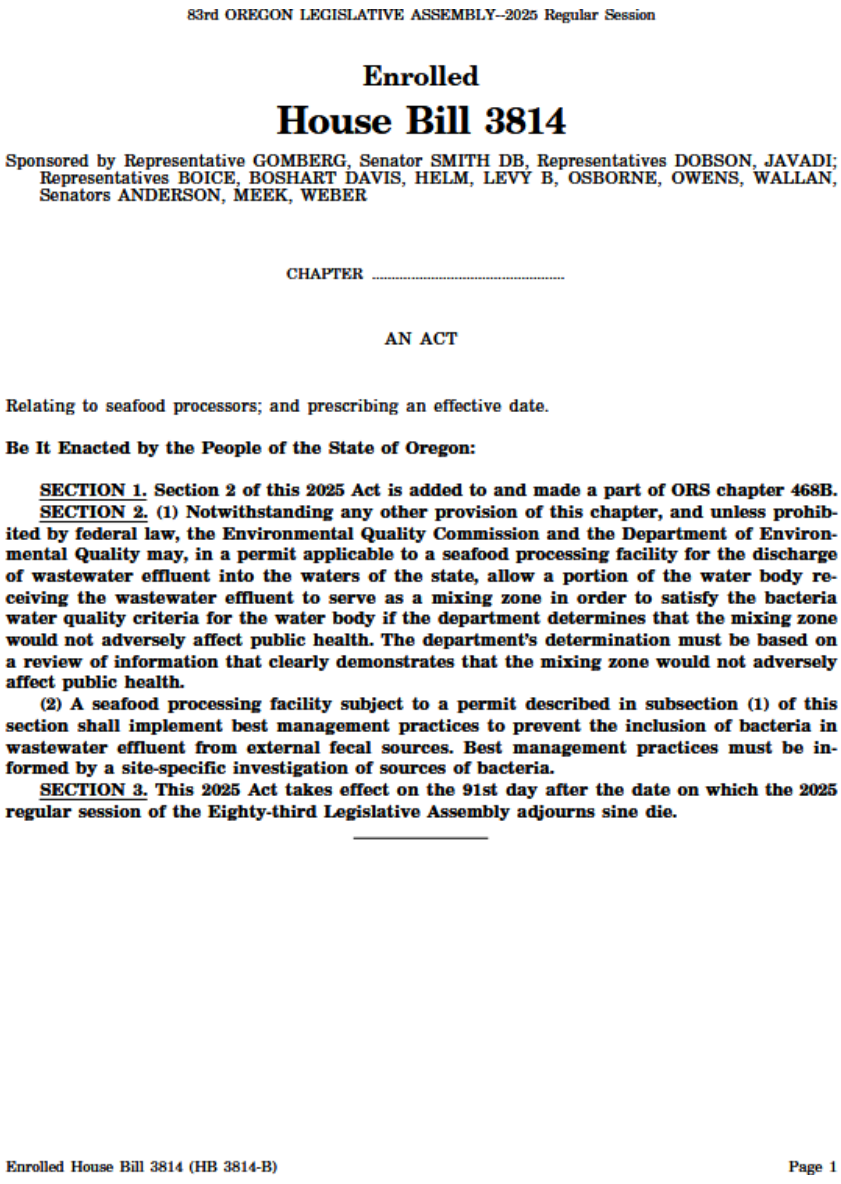
TSD: Technical Support Document

WLA: Waste Load Allocation

WQBEL: Water Quality Based Effluent Limit

3. House Bill 3814 (enacted)

HB 3814 was officially signed by Governor Kotek on May 14, 2025, and takes effect on October 1, 2025. The bill authorizes DEQ to grant a bacteria RMZ for seafood processing facilities for the discharge of wastewater effluent into waters of the state, provided the department determines that the RMZ will not adversely affect public health and that BMPs are implemented to prevent the inclusion of bacteria from external fecal sources.



83rd OREGON LEGISLATIVE ASSEMBLY--2025 Regular Session

Enrolled

House Bill 3814

Sponsored by Representative GOMBERG, Senator SMITH DB, Representatives DOBSON, JAVADI; Representatives BOICE, BOSHART DAVIS, HELM, LEVY B, OSBORNE, OWENS, WALLAN, Senators ANDERSON, MEEK, WEBER

CHAPTER .....

AN ACT

Relating to seafood processors; and prescribing an effective date.

Be It Enacted by the People of the State of Oregon:

SECTION 1. Section 2 of this 2025 Act is added to and made a part of ORS chapter 468B.

SECTION 2. (1) Notwithstanding any other provision of this chapter, and unless prohibited by federal law, the Environmental Quality Commission and the Department of Environmental Quality may, in a permit applicable to a seafood processing facility for the discharge of wastewater effluent into the waters of the state, allow a portion of the water body receiving the wastewater effluent to serve as a mixing zone in order to satisfy the bacteria water quality criteria for the water body if the department determines that the mixing zone would not adversely affect public health. The department's determination must be based on a review of information that clearly demonstrates that the mixing zone would not adversely affect public health.

(2) A seafood processing facility subject to a permit described in subsection (1) of this section shall implement best management practices to prevent the inclusion of bacteria in wastewater effluent from external fecal sources. Best management practices must be informed by a site-specific investigation of sources of bacteria.

SECTION 3. This 2025 Act takes effect on the 91st day after the date on which the 2025 regular session of the Eighty-third Legislative Assembly adjourns sine die.

Enrolled House Bill 3814 (HB 3814-B) Page 1

Figure 3-1: Full Text of HB 3814

The sections below provide guidance for how this bill is implemented by DEQ. The figure below outlines the full process, from determining whether a bacteria RMZ does not adversely affect public health through final implementation of limits in the permit.

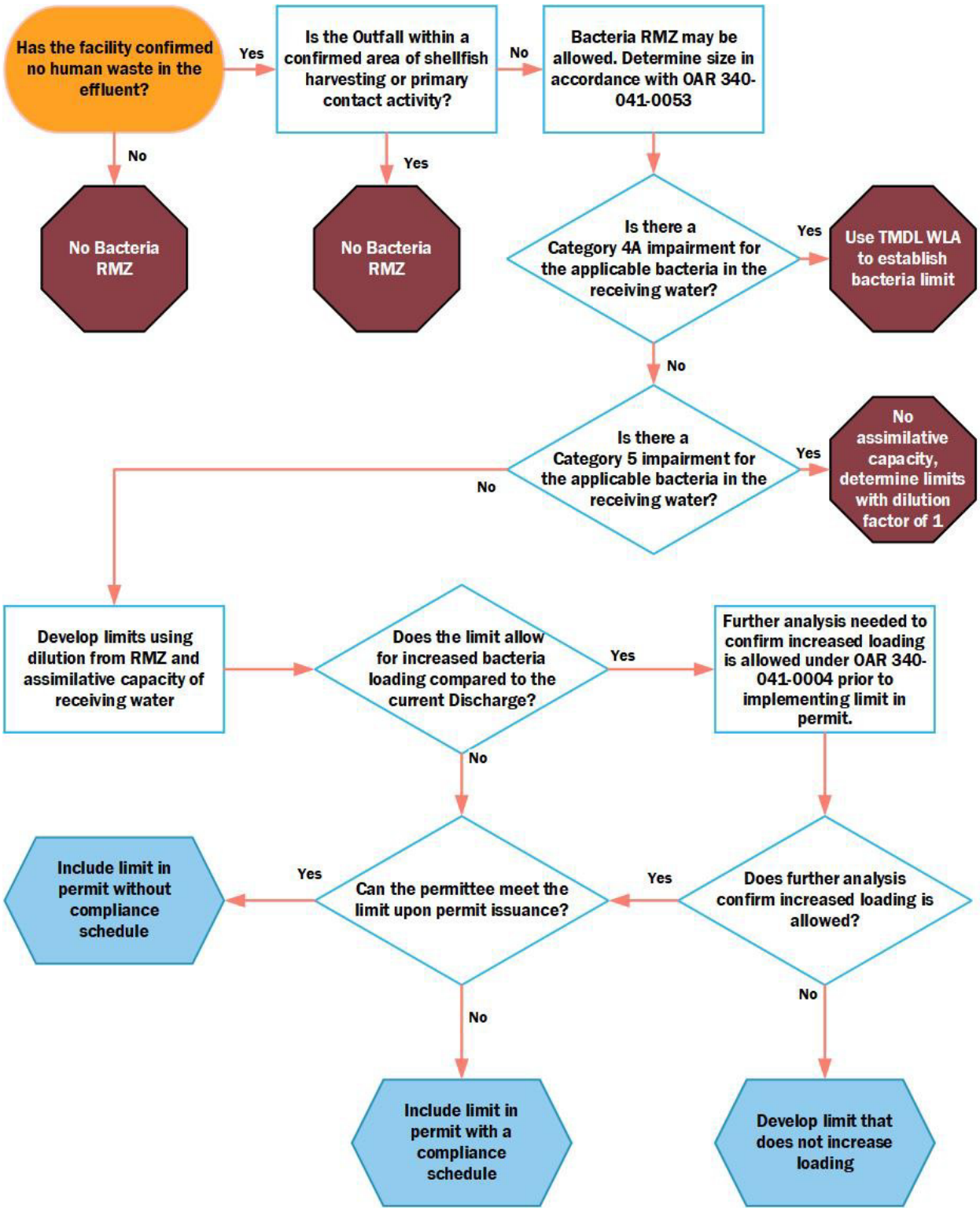


Figure 3-2: Flowchart of Process

3.1 HB 3814 and bacteria rules

Current bacteria rules are outlined in OAR 340-041-0009. OAR 340-041-0009(6) specifies the implementation of bacteria criteria in NPDES permits and specifically states the bacteria limitations for effluent discharges associated with fecal sources in areas with the designated beneficial uses of coastal contact recreation and freshwater contact recreation. Because the rule states bacteria in effluent discharges may not exceed numeric thresholds for *enterococcus* or *E. coli* in waters designated for contact recreation, no RMZ have been applied to NPDES applicants when determining limits for these analytes. HB 3814 clarifies that seafood processing facility permits may have RMZs for bacteria and thus dilution may be applied to the limits specified in OAR 340-041-0009(6)(a) and (b). Fecal coliform criteria are in a separate section of rule (OAR 340-041-0009(1)(c)) that does not specify NPDES limits. Therefore, RMZs are applied to fecal coliform limits in areas where shellfish harvesting is designated, but actual harvesting is unlikely.

4. Bacteria criteria

4.1 Background

The current Oregon water quality standard for bacteria, updated in 2016, is based on EPA's 2012 national recommended criteria (U.S. EPA, 2012) for *enterococcus* in coastal recreational waters, *E.coli* in recreational freshwater, and EPA's 1976 recommended criteria (U.S. EPA, 1976) for fecal coliform in shellfish producing waters. These standards are intended to protect people engaging in contact recreational activities or shellfish consumption from fecal sources in effluent discharges. EPA has long used fecal indicator bacteria (FIB), *E. coli*, *enterococcus*, and fecal coliforms to assess the safety of recreational and shellfish producing waters. While most strains of these bacteria do not directly cause illness, they serve as indicators of pathogens from fecal contamination and correlate with rates of illness in exposed persons (Oregon Department of Environmental Quality, 2016).

4.1.1 Primary contact recreation

The Recreational Water Quality Criteria (RWQC) defines primary contact recreation as activities involving a high level of bodily immersion and potential ingestion, such as swimming and water play, with illness risk assessed over a 10-to-12-day period after exposure (U.S. EPA, 2012).

EPA's 2012 RWQC were informed by studies examining gastrointestinal illness rates among swimmers following exposure to waters with wastewater treatment plant influence. These studies included comparisons of marine and freshwater beaches and found little statistical difference in illness risk between the two, suggesting that factors like the source of fecal contamination and environmental variables (such as water body size, sediment, and transport of pathogens) are more critical than whether the water is coastal or inland. Additional physical and biological conditions of coastal versus non-coastal waters can influence how long FIB and

pathogens survive. These environmental differences complicate the relationship between indicator bacteria and human health risks.

EPA has acknowledged that the 2012 RWQC recommendations were developed with uncertainty in the scientific understanding of the health risks associated with nonhuman sources of fecal contamination. Therefore, EPA recommended the criteria be applied uniformly, regardless of the source of contamination, unless site-specific standards are justified, or an epidemiological study demonstrates that nonhuman sources did not pose a human health risk.

The 2012 RWQC emphasized that both human and animal feces in recreational waters can present health risks, especially to vulnerable populations. Differences in FIB sources are observed between waters impacted by treated wastewater from wastewater treatment plants and those affected by non-sewage sources. Studies cited by EPA show that the risk from animal-sourced contamination can vary widely, sometimes higher and other times significantly lower than the risk level of human fecal contamination. Research also indicates that the types of illnesses linked to swimming vary with the source: human fecal contamination tends to result in viral illnesses, while animal sources more often lead to bacterial and protozoan infections (U.S. EPA, 2012). EPA's 2012 RWQC did not delineate between fecal contamination from warm-blooded and cold-blooded animals; seafood sources were not analyzed separately.

EPA's 2012 RWQC explains that the recreational "criteria are designed to protect primary contact recreation, including swimming, bathing, surfing, water skiing, tubing, water play by children, and similar water contact activities where a high degree of bodily contact with the water, immersion and ingestion are likely." EPA also has guidance for developing bacteria criteria for secondary contact recreation for activities with a lower degree of bodily contact and where immersion and ingestion of ambient water is less likely than primary contact recreation. EPA defers to the states to define the specific activities but lists examples of secondary contact activities such as "boating, canoeing in calm water (i.e., no capsizing), fishing, kayaking in calm water (i.e., no capsizing), rowing in calm water (i.e., no capsizing), sports diving with full face mask, wading/splashing, walking." If immersion is possible but is less than equivalent exposure to "a full day at the beach", it could be considered secondary contact and not primary contact (U.S. EPA, 2022). DEQ considers boating and fishing to be secondary contact beneficial uses but does not currently have bacteria criteria associated with secondary contact uses.

4.1.2 Shellfish harvesting

Oregon's water quality standards have included numeric criteria for shellfish harvesting since 1979 and were based on EPA's 1976 recommended criteria (U.S. EPA, 1976). These values were updated in the 1986 U.S. EPA Quality Criteria for Water to include findings that related values between total coliform and fecal coliform. These criteria were derived from total coliform values "accepted by international agreement" to be 70 total coliforms per 100 mL and having no more than 10% of values exceeding 240 total coliforms. Waters that met these requirements showed no evidence of disease outbreak from shellfish consumption. This standard was selected to maintain acceptable quality of shellfish meats and human health outcomes.

However, studies found that fecal coliform contamination may occur from non-fecal sources. In response, the National Shellfish Sanitation Program conducted a series of studies to evaluate the relationship between the occurrence of total coliforms to fecal coliforms. They found that a 70 total coliform MPN per 100 mL at the 50th percentile was equivalent to a fecal coliform MPN of 14 per 100 mL. Therefore, a median value for a fecal coliform standard is 14 and the 90th percentile should not exceed 43 for a 5-tube, 3-dilution method (U.S. EPA, 1986). These EPA recommended values serve as the basis for DEQ bacteria criteria for shellfish harvesting (Oregon Department of Environmental Quality, 2016).

EPA's recommended bacteria criteria for shellfish harvesting are based on a primary epidemiological exposure route of raw shellfish consumption. EPA cites evidence that shellfish meats have higher concentrations of fecal coliform bacteria when grown in waters and sediments with higher fecal coliform concentrations, increasing likelihood of human illness from raw shellfish consumption (U.S. EPA, 1976). EPA's recommended criteria do not explicitly define activities considered under "shellfish harvesting". ORS 622.010 defines shellfish as mollusks, specifically edible species of oysters, clams, mussels and scallops. When defining shellfish harvesting areas in the 2016 updates to the bacteria criteria, DEQ considered the harvest of oysters, clams, mussels and scallops as well as their respective salinity tolerance (Oregon Department of Environmental Quality, 2016).

4.2 Determining applicable bacteria criteria

The applicable bacteria criteria depend upon the designated beneficial uses of the location the applicant discharges into (OAR 340-041-0009). Designated beneficial uses for each basin are defined in OAR 340-041.

Table 4-1: Applicable Bacteria Criteria

Designated Beneficial Use	Applicable Bacteria Criteria
Freshwater Contact Recreation	*E. coli*
Coastal Contact Recreation	*Enterococcus*
Shellfish Harvesting	Fecal coliform

In situations where there are multiple designated beneficial uses, then the bacteria criteria for each designated beneficial use applies simultaneously. For example, if an applicant discharges into an area that is designated both as coastal contact recreation and as shellfish harvesting, then both the *enterococcus* and fecal coliform criteria apply, limits are derived for both *enterococcus* and fecal coliform, and monitoring is required for both *enterococcus* and fecal coliform.

4.3 Alternative criteria

The language of the bill does not allow or require the development of alternative bacteria criteria

for seafood processing wastewater. RMZs only allow for the suspension of the criteria within the boundary of the mixing zone (OAR 340-041-0053). It is outside the scope of this IMD to outline the pathway for the development of alternative, site-specific bacteria criteria for seafood processing facilities. Site-specific criteria would need to be adopted through the administrative rulemaking process.

5. RMZs for bacteria

5.1 Adverse effect to public health

The statute requires that any bacteria mixing zone must not adversely affect public health. To ensure consistent application of this requirement, DEQ has established the following criteria for staff to use to determine that a bacteria RMZ could be provided while also remaining protective of public health:

- There are no identified sources of human waste in the effluent.
- The bacteria RMZ may not overlap with areas of confirmed primary contact recreation or shellfish harvesting activities.
- Bacteria RMZs may not overlap.

5.2 Human waste exclusion requirement

Because human fecal sources are known to adversely affect public health, no human waste may be present in the effluent of a seafood processing facility for a RMZ to be granted. A positive demonstration that the effluent is free of human fecal matter must be confirmed before DEQ will consider authorization of a RMZ. If an applicant cannot conclusively demonstrate the absence of human fecal matter in the effluent, DEQ cannot verify that the RMZ would not adversely affect public health.

To demonstrate that external human waste sources are not entering the effluent, the permit writer must request that the applicant submit a written report of a dye test. Results are subject to DEQ review and approval.

The dye test requirement is described as follows:

Scope of testing: Dye testing of plumbing system from all potential sources of human waste at the facility such as toilets, showers, bathroom and kitchen sinks, utility sinks located in bathrooms, and bathroom floor drains to ensure that there are no cross connections where human waste could enter the effluent.

Travel time determination: The facility must estimate the expected travel time to the outfall from all dye test locations and include method of estimation in the written report.

Observation period: At the time of the dye test the furthest point downstream of the

wastewater treatment system that can reasonably be observed (such as the outfall pipe listed in application or NPDES permit, an accessible point between the outfall and treatment system, or the end of the treatment system) must be observed until the greatest expected travel time to the observation location plus three (3) hours has passed.

The written report must include the following:

i. The full names of the personnel who completed the dye test and the date(s) the test was conducted.

ii. The type of dye used, including manufacturer and color.

iii. Each location and entry point where dye was injected, the quantity of dye used at each location, and the exact time when the dye was introduced.

iv. Documentation of the time and location where the dye was first observed, or the last time and location where the dye was not observed.

v. Timestamped photographs or video of each dye injection point and the downstream point(s) where dye was observed.

vi. A narrative description assessing the observed flow patterns to determine if the plumbing system is connected as shown in facility diagrams. If the observed flow patterns are not matching expected flow patterns based on facility diagrams, include in the narrative as well.

vii. Identification of any leaks or potential cross-connections.

viii. A map(s) and/or diagram(s) (hand drawn is acceptable) showing all dye test locations, the expected flow path to the outfall, and the location of the flow patterns described in the narrative, if applicable.

ix. A signature and certification from the responsible official in accordance with 40 CFR 122.22.

DEQ may request additional testing, as needed.

5.3 Determining areas of confirmed primary contact recreation and shellfish harvesting use

RMZs would not be protective of public health and therefore may not be granted in areas where activities related to primary recreational contact or shellfish harvesting are known to occur.

When determining the bacteria RMZ boundaries, DEQ will identify these areas by consulting relevant sources such as existing shellfish use maps, county websites, recreational websites, and other documentation that indicates primary recreational contact or shellfish harvesting is occurring within the local area. Examples include the *Estuary Shellfish Mariculture Explorer* by Oregon Department of Land Conservation and Development (Estuary Shellfish Mariculture Explorer) or *Surf-Forecast.com* (Oregon Surf Forecast & Surf Reports). DEQ may also rely on communications, either written or verbal, that confirm the activity is occurring. These may come

from state or federal government staff (e.g., Oregon Department of Fish and Wildlife biologists), tribal governments, or public input. Examples of public input include written comments during a NPDES permit public notice period, verbal comments during a NPDES permit public hearing, emails submitted by concerned citizens, or conversations with community members during site visits. Examples of documentation that would confirm the activity is occurring include (but are not limited to) recreation use studies, photographic or video evidence of primary recreation or shellfish harvesting in the area of the proposed RMZ, first person accounts of primary recreation or shellfish harvesting within the area, declarations of tribal reserved rights, evidence of historic use for the activity since 1975 for primary recreation or shellfish harvesting, or professional opinions from state or federal government staff.

In some cases, clearly defined boundaries around a confirmed primary contact or shellfish harvesting area may not be able to be established. In these situations, a site-specific buffer zone will be included between the RMZ boundary and the area of confirmed primary contact or shellfish harvesting activity to protect public health.

5.4 Sizing a bacteria RMZ

The mixing zone rule requires that RMZs be as small as feasible, avoid overlapping with other RMZs, be less than the total stream width, minimize adverse effects on the indigenous biological community, not threaten public health, and minimize adverse effects on designated beneficial uses outside of the RMZ (OAR 340-041-0053(2)(c)(A through E)). The *Regulatory Mixing Zone IMD, Part I* provides guidance on appropriately sizing a RMZ while accounting for these factors.

When feasible, DEQ recommends designating a single RMZ for all parameters, as this approach simplifies permit implementation and supports compliance with RMZ requirements in rule. If a separate bacteria RMZ is necessary, it is recommended that the bacteria RMZ not exceed the size of the RMZ established for other parameters, because doing so may conflict with the rule requirements described above.

RMZs are not granted in areas with confirmed shellfish harvesting activity, as this would conflict with OAR 340-041-0053(2)(c)(C), which requires that RMZs minimize adverse effects on the indigenous biological community. RMZs may be allowed in areas of confirmed primary contact recreation as long as the parameters the RMZ is allowed for do not impact public health consistent with OAR 340-041-0053(2)(c)(D). An example of a parameter that would not be expected to impact public health is total residual chlorine. If the applicant's RMZ for non-bacteria parameters overlaps with areas of confirmed primary contact recreation, a separate, smaller bacteria RMZ may be designated to avoid the area. However, if the RMZ for other parameters lies wholly within an area of confirmed primary contact recreation, a bacteria RMZ would not be allowed because of the possible adverse effect on public health. The permit could still provide for a RMZ for other parameters, provided that the requirements of OAR 340-041-0053(2)(c)(A through E) are met.

For example, in Figure 5-1 Outfall A is outside of the confirmed clamming area (purple) and

recreational swimming area (pink); therefore, the RMZ (blue circle) applies to all parameters including bacteria. Outfall B is within the clamming area and, to comply with OAR 340-041-0053(2)(c)(C), no RMZ is authorized. Outfall C has a RMZ (red circle) that overlaps with the recreational swimming area; therefore, a separate, smaller RMZ (yellow circle) is designated for bacteria.

Figure 5-1: Example of possible RMZ scenarios. Image is for illustrative purposes only and does not reflect actual outfalls, allocated RMZs, or activities.

5.4.1 Biotoxin closures

Biotoxins may concentrate in shellfish as a result of harmful algae blooms, posing risks to people who recreationally harvest and consume shellfish. The Oregon Department of Agriculture (ODA) and Oregon Department of Fish and Wildlife (ODFW) jointly issue recreational shellfish closures when biotoxin test results exceed safe levels for human consumption. Biotoxin closures that are caused by bacteria will be considered when sizing bacteria RMZs. In cases where biotoxin closures are not due to bacterial sources (such as harmful algae blooms), the biotoxin closures will not be considered when sizing bacteria RMZs. Any other closures not due to bacterial sources would likewise not be considered when sizing bacteria RMZs.

6. Determining bacteria limits

6.1 Applicability of limits

OAR 340-041-0009 specifies that bacteria limits should be incorporated into the permit in areas designated for primary contact recreation and shellfish harvesting. HB 3814 only specifies the allowance of a RMZ for a wastewater discharge from seafood processing facilities and does not alter the bacterial water quality standard in OAR 340-041-0009. Therefore, relevant bacteria limits (calculated using the process outlined below) will be included in permits authorizing wastewater discharges from seafood processing facilities, regardless of the concentration of the bacteria discharged or disinfection systems employed at the facility. The bacteria criteria as defined in OAR 340-041-0009 must be met at the edge of the RMZ.

6.2 Determining dilutions

Dilutions to be used in deriving bacteria limits should be determined in accordance with the Regulatory Mixing Zone IMD – Part 2 (current version). For the purposes of limit derivation for bacteria, the dilutions associated with the Chronic Aquatic Life criteria outlined in the RMZ IMD should be used. The Chronic Aquatic Life modeling scenario dilutions in the IMD utilize the 7Q10 flow value for riverine scenarios or a 50th percentile velocity and density profile that results in the lowest mixing for tidally influenced scenarios. This approach, which is utilized by other states that allow bacteria RMZs (Washington State Department of Ecology, 2018), ensures that bacteria criteria will be met at the edge of the RMZ during times when available dilution is minimal.

6.3 Determining assimilative capacity

Determinations of effluent limits for bacteria should include an estimation of the assimilative capacity of the receiving water into which the effluent is discharged. In accordance with the RPA IMD, assimilative capacity should be determined using the 90th percentile concentration of ambient data. A minimum of 4 samples collected at least one week apart and sampled from outside of the RMZ boundary is recommended. Ambient data characterization is further described in the RPA IMD. If no recent (within the last 10 years) local data is available, data should be collected by the applicant for the characterization of assimilative capacity. For areas which are listed as “water quality limited” (Category 4 or 5) on the Integrated Report, there is assumed to be no assimilative capacity, and no ambient data collection is required. If evidence indicates that the IR listing may be incorrect, DEQ will follow the process outlined in the Memo “How to Resolve a Discrepancy with an Assessment Unit Listing in the Integrated Report” (Britson, 2023) to resolve the issue and document the resolution.

6.4 Derivation of limits

Effluent limits will be determined based on the methodology outlined in the EPA Technical

Support Document for Water Quality-based Toxics Control (TSD) Section 5.4 and 5.5.

Additional detail on how this is implemented by Oregon DEQ can be found in the RPA IMD. Limits derived in accordance with this methodology will be applied in the permit as a maximum daily limit and an average monthly limit. Using the TSD methodology ensures that limits will be protective of the designated use, as the methodology calculates conservative limits based on a Waste Load Allocation (WLA) that defines the effluent quality necessary to comply with the relevant criteria at the edge of the RMZ, and accounts for effluent variability to ensure that the waste load allocation is not exceeded. This is more protective than approaches that derive limits by directly multiplying the criteria by the dilution, as they do not account for effluent variability.

Because these limits are based on water quality criteria, they will be Water Quality Based Effluent Limits (WQBELs) for the purposes of permit implementation.

For receiving water bodies that are listed as Category 5 on the integrated report for bacteria, there is no assimilative capacity, and effluent limits will be set at the applicable criteria values. For receiving water bodies with a completed TMDL for bacteria, the WLA designated in the TMDL will be utilized to develop bacteria limits.

6.5 Growth or decay factors

While bacteria growth can vary depending on conditions, the conditions of most receiving waters are in general not conducive to bacterial growth (Eregno, et al., 2018; Carlucci & Pramer, 1959; Korajkic, Wanjugi, Brooks, Cao, & Harwood, 2019). Therefore, a growth factor does not need to be included when determining bacteria limits. Though bacterial decay is the more likely scenario, decay rates tend to occur on the scale of hours to days (Eregno, et al., 2018; Korajkic, Wanjugi, Brooks, Cao, & Harwood, 2019), while effluent travel time from the outfall to the edge of the RMZ is measured in seconds to minutes. Therefore, the bacteria from the effluent will reach the edge of the RMZ before any meaningful decay has occurred, and it is not appropriate to incorporate a decay factor when determining effluent limits.

6.6 Compliance limits

Bacteria tests have defined detection ranges, beyond which the actual quantity of bacteria in a sample cannot be measured. The applicable detection range depends on the specific test method used and sample dilution. Reported results that exceed the upper detection range preclude a determination of compliance with permit effluent limitations.

If the applicant reports bacteria data in excess of the upper range of detection (for example, “>2419 #/100 ml” or TNTC, “too numerous to count”), compliance with the permit effluent limitation cannot be determined. To address this, permits will require that reported bacteria data fall within the quantifiable range of the applicable limit. For example, if a permit includes a maximum daily limit of 300 #/100 ml, the test method used must have an upper detection range greater than 300 #/100 ml. This requirement ensures that compliance with bacteria limits can be verified.

6.7 Compliance schedules

If an applicant is unable to meet a new or more stringent bacteria limit at the time of permit issuance, a compliance schedule may be included to allow time for necessary facility modifications. Compliance schedules must comply with the requirements in 40 CFR 122.47 and OAR 340-041-0061(12). These provisions require that the compliance schedule be as short as possible, and that annual milestones be included for any compliance schedule longer than one year.

6.8 Antidegradation

DEQ must ensure that permits and permit limits comply with Oregon's antidegradation policy found in OAR 340-041-0004. This policy protects water quality by limiting unnecessary degradation from new or increased sources of pollution. Details on how DEQ implements the policy are included in guidance available on DEQ's antidegradation web page.

When establishing bacteria limits, it is necessary to evaluate if the calculated limit would result in an increased bacterial load compared to the current discharge. Any increase resulting from the allocation of an RMZ is subject to review under the state's antidegradation policy. Increases in loading are determined by evaluating the bacteria load currently discharged, regardless of whether an effluent limit or benchmark is in place.

To perform an antidegradation analysis, both ambient data (to determine assimilative capacity; see section 6.3) and effluent data (to quantify existing bacterial loading) are required. Any bacteria limit that would allow increased loading must undergo further review to determine whether increased loading is permissible under OAR 340-041-0004 prior to incorporation into a permit. Conversely, limits that maintain or reduce existing loading may be incorporated into the permit without additional review.

7. Best management practices

Section 2 subsection (2) of HB 3814 requires that best management practices (BMPs) be included in a permit to reduce external fecal sources of bacteria in order for the applicant to qualify for a mixing zone. These BMPs must be site-specific. External fecal sources are defined as any fecal bacterial not originating from the processing of seafood itself. Examples include human waste from sanitary sewer systems, seagull waste entering drains connected to the effluent treatment system, or animal feces tracked in by employees.

To implement this section of HB 3814, it is recommended that DEQ staff request that applicants submit and maintain a site-specific Bacterial Source Management Plan (BSMP). To be persuasive these plans may include, but are not limited to, the following information:

1. Identification of all external fecal bacteria sources.
2. Strategies for reducing each identified source.

3. A program for routine verification of external sources and reduction strategies.
4. A training program for all staff.

Each of these items is described in the following sections.

7.1 Identifying external fecal sources

An approvable BSMP should identify all locations and pathways by which external fecal bacteria can enter the effluent. Human fecal waste is of primary concern, as it poses the greatest risk to public health. To grant a mixing zone, staff must have evidence that no human fecal matter enters or cross-contaminates the effluent (see Section 5.2). Other sources must also be documented, with site diagrams showing points of entry (such as storm drains), and associated areas. Only sources that connect to the NPDES-permitted outfall(s) must be included. Areas draining to stormwater systems covered by a separate permit (such as an NPDES 1200-Z) are outside the scope of HB3814 and need not be included in the BSMP.

7.2 Reduction of external fecal sources

An approvable BSMP should describes clear strategies to reduce external fecal sources. Examples include requiring all employees to clean footwear prior to entering the facility, ensuring seafood residuals are properly managed to avoid attracting seagulls, and maintaining pest management practices to prevent rodent intrusion. Practices required by other regulatory agencies may be referenced in the BSMP (for example, pest management requirements to comply with food safety regulations).

7.3 Routine verification

An approvable BSMP should establishes a schedule for verifying that no additional external fecal sources are present. It must include measures to confirm that changes to sanitary sewer or other related infrastructure do not introduce new fecal sources or cross-contamination between process effluent lines and sanitary sewer lines. Verification should also ensure that reduction strategies are implemented effectively. Outcomes of these verifications must be documented and maintained on site.

7.4 Implementation of BMPs in permits

HB 3814 states that “A seafood processing facility subject to a permit…shall implement best management practices”. Given this, staff should request that applicants submit the BSMP for review and approval either when requesting a mixing zone for an existing permit modification, or with a new or renewal permit application. Consistent with HB 3814, permits will include a Schedule D condition requiring BSMP implementation and maintenance. Schedule B will require annual BSMP reports documenting whether additional external fecal sources were identified, whether reduction strategies are being maintained, and an analysis of the effectiveness of those strategies.

8. References

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9. Record of revisions to directive

Revision	Date	Changes	Editor
Creation of IMD	12/18/2025	New IMD	Aliana Britson