

Seafood Processing Wastewater Permits

Seafood processors seeking to renew or establish a new wastewater permit with DEQ must either meet the requirements of the 2020 900-J general permit or an individual permit issued specifically for their location. The renewed 900-J includes significant changes to reflect evolving industry practices and current water quality conditions.

The majority of the processing facilities are located in coastal Oregon communities or along major rivers close to the ocean. This updated permit more effectively protects Oregon's waters for fishing, swimming, shellfish production and other uses.

The role of wastewater permits

Wastewater carries pollutants that can harm or kill aquatic life and make humans sick. Under federal and state law, DEQ provides permitting options to facilities whose operations involve discharging their wastewater into the environment. The permits require that the wastewater be treated to remove pollutants to a level that protects human health and aquatic life.

There are two kinds of permits: general and individual. General permits cover like wastewater for similar facilities. They can provide a more efficient and cost-effective permitting option, but sometimes involve more conservative limits and conditions than individual permits. DEQ writes individual permits for a particular facility at a particular location. In some situations, the limits for a business with an individual permit are less conservative than a general permit, because DEQ can apply create site specific conditions, such as a mixing zone for some pollutants.

Pollutants in seafood processing wastewater

Seafood processing wastewater carries wastes (such as bits of fish, fish blood, seafood digestive system wastes, seafood storage water, and cleaning products residuals) that has a high biochemical oxygen demand, or BOD. High biochemical oxygen demand is the condition when the chemicals in the wastewater bind with the dissolved oxygen in the water, robbing the water of the oxygen needed by fish and aquatic life. This can cause "dead zones." The wastewater also has total suspended solids, or TSS, which are fine materials that float in the water. These solids can block light, consume oxygen and create nuisance conditions. In addition, larger seafood processors report pollutants that include oils, grease, chlorine, and certain metals, which can be toxic to aquatic life. Seafood processing wastewater may also contain fecal bacteria at levels that are above what is safe for water contact recreation and shellfish growing.





DEQ working with permitted facilities to comply with regulations

Facilities that have permits are not being shut down by DEQ. Some facilities have not complied with the permits and, when that happens, DEQ works with the facility to set clear goals and timelines for returning to compliance. If a facility operates without a permit, DEQ will pursue enforcement.

DEQ's response to a facility not meeting permit requirements

The renewed 900-J general permit gave seafood processors time to decide on whether to apply for that permit or to apply for an individual permit. If the general permit was chosen, they had more than a year to pursue changes at their plant before the permit went into effect.

When writing an individual permit, DEQ can work with the facility to develop a schedule for coming into compliance with requirements for certain pollutants.

Treating wastewater from seafood processing is not new. Throughout the U.S., seafood processors have operated under permits issued by their state or the U.S. Environmental Protection Agency. Efforts to divert wastes for processing – like isolating the heads, tails and guts to quick freeze for other by product recovery processes – reduces the amount of material that goes into the wastewater that the facility must treat. Newer processing lines are built with the technology to recover more and more of the product before it becomes waste. The wastewater itself can be filtered, settled, and treated to separate out solids and dissolved pollutants.

Permit requirements and how they differ for the 900-J general permit versus an individual permit

DEQ uses laboratory analysis of wastewater provided by the industry to determine what pollutants are the wastewater and the quantity of those pollutants. DEQ also has data about the quality of the water in the ocean, bays, rivers and lakes that receive treated wastewater.

EPA also has research on the wastewater from seafood processors used in determining what pollutants are in the wastewater and what reduction of those pollutants is achievable.

In the general permit, DEQ used data from the processors previously covered under the permit in order to set permit limits that would be protective of the receiving waters in the various locations where seafood processors are located. For some pollutants that had not been addressed in the previous general permit, DEQ set benchmarks, not limits. This approach allows us to gather more data on the pollutants and allows the facilities to change practices, such as cleaning processes, to reduce the pollutants, instead of facing a violation of the permit.

An individual permit is written for a specific facility at a specific location. DEQ will look at the data provided by the facilities about their wastewater and data about the receiving water closely. Following federal and state law, the permit can include site specific features, such as a mixing zone for certain pollutants, that may make it easier for the facility to comply with the permit. For some pollutants, DEQ may include a compliance schedule which allows the facility to take time over the five years of the permit to acquire the technology to treat the wastewater.

How DEQ seafood processing wastewater regulations compares to drinking water standards

DEQ sets limits to protect human health and aquatic life. Some pollutants in drinking water, like chlorine, are fine for humans to consume up to certain levels but aquatic life would die or be impaired if exposed to the same levels. Drinking water standards are set solely with human health in mind. There are circumstances when



wastewater that is being discharged to the environment needs to have lower concentrations of certain pollutant parameters than may be required for drinking water. It should be noted that the more the wastewater is treated to meet limits for high biological oxygen demand, total suspended solids and oil and grease, the easier it is to treat for other pollutants, such as metals, chlorine and ammonia.

DEQ approaches writing permits in the same way for each industry type in order to assure that wastewater discharged to the environment protects human health and aquatic life. Other industries do have pollutants in their wastewater like those found in seafood processing wastewater and they are expected to treat their wastewater to comply with their permits.

Background on 900-J general permit renewal

DEQ updated the 900-J seafood processor general permit to adapt its coverage to changes in industry practices and water quality, ensuring that facilities meet state and federal requirements. DEQ started the renewal process in early 2016 by engaging seafood processors, tribal governments, and local government representatives and put out a draft of the updated 900-J permit for public comment in 2018.

DEQ considered the comments submitted along with the regulatory objectives of updating the permit to be protective of human health and the environment. Based on the comments DEQ received on the draft 900-J permit in 2018, DEQ revised the permit and opened an additional comment period in 2019. On Oct. 1, 2020, DEQ issued the updated 900-J.

More online

Learn more about the 900-J general permit on DEQ's <u>Seafood Processing General</u> Wastewater Permit Renewal page.



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