

Comments to Washington Department of Ecology (ECY)

Draft NPDES Permits for Cooke Aquaculture Marine Sites

October 26, 2020

Jim Parsons, General Manager

Cooke Aquaculture Pacific, LLC (CAP)

Dear Ms. Niewolny,

Thank you for the opportunity to comment on the draft NPDES permits for our facilities. Please accept the following comments as supplemental to those submitted to you recently by Mr. Kevin Bright, Permit Coordinator for our operations.

By the time these permits will be issued, should ECY approve them, over a year will have passed since we first notified ECY of our interest in a simple modification to culture an animal in our operations that is raised and released into public and private waters throughout the state of Washington by a variety of private, governmental and tribal entities. When coupled with the year spent obtaining permission from the Department of Fish and Wildlife to do so, we are now faced with a nearly untenable situation. As an entity we chose to follow the guidance given us by the State Legislature and cease the rearing of Atlantic salmon in Puget Sound, even though we would still legally be able to do so until the expiration of our leases in 2022. The farming of aquatic animals in the locations for which the draft NPDES permits are being considered has occurred for over three decades under an assortment of owners. Previous ownership, a Chicago-based venture capital company, had unfortunately allowed the marine farm infrastructure to fall into disrepair.

In 2016, Cooke Aquaculture Pacific purchased the farms, retained all its workforce, and began investing to modernize the operations. In the short year between asset purchase and the unfortunate Cypress Island facility collapse, new containment nets were purchased and installed at each facility, state-of-the-art feeding equipment guided by visualization of underwater fish activity was installed at the Clam Bay and Hope Island facilities, and the legal processes for facility (cage) replacements were initiated. These improvements alone were accomplished with investments of millions of dollars and planned investments of much more.

Cooke Aquaculture Pacific is staffed, managed, and operated by local Washington residents who pay taxes, purchase goods and services, and contribute to the local and state economy. Many of these folks have been part of the operations here for many years, and care deeply about local food production and the local marine jobs that it provides. The direct and indirect employment income and supply chain spinoffs generated from these operations contributes to the social and economic benefit of the communities in which we operate in many ways.

It must be noted that this community commitment is the operational standard that CAP's parent company, Cooke Aquaculture Inc. strives for as a global seafood leader working to help build vibrant working waterfronts. Cooke's commitment to sustainability, science-based marine practices, and forward-thinking innovation has afforded them many certifications and recognition in recent years.

In September of this year, Cooke was selected by SeafoodSource.com as one of the Top 25 Seafood Suppliers in North America for Sustainability & Conservation (<https://www.seafoodsource.com/news/environment-sustainability/the-top-25-seafood-sustainability-conservation>). All divisions within the Cooke family of companies have mandated sustainability, environmental and biodiversity policies enshrined within their operating and reporting practices.

Many of the assertions regarding the so-called “negative impacts of farm operations” that are being made by various individuals and groups are completely false and are unsupported by science. In the previous comment period I have provided ECY with summaries and complete references of recent science regarding discharge characteristics from cage operations and I thank you for considering them in your finding that there are no significant differences in discharge characteristics between Atlantic salmon and rainbow trout. We have worked transparently with ECY to also change operational aspects of our activities and will continue to do so to make certain that our operations perform to the highest standards.

Many commentators inaccurately state that the culture of aquatic animals in open-water marine environments is no longer a water-dependent use given advancements in upland and indoor finfish farming facilities. What needs to be understood here is that both upland and indoor systems depend not only on water but also on having sufficient energy to pump this water and space on which to do so.

While the Recirculating Aquaculture System (RAS) technology has indeed advanced over the past few decades, it is important to point out that CAP already operates a state-of-the-art Danish-designed RAS facility near Rochester, WA, that supplies juvenile animals for our marine operations.

In fact, the production cycle is such that our fish spend half of their lives in this RAS environment due to the security, environment, and control that it provides. This facility has a production capacity of approximately 90 metric tonnes of production with 95% or greater water reuse, and we are extremely proud of its success and positive impact to our operations. If, however, we were to expand this to produce the equivalent tonnage of harvest-size fish produced by our in-water farms, we would quickly exhaust the aquifer water supply even at this high rate of re-use, and we would consume massive amounts of electrical energy, thereby greatly expanding our carbon footprint and the ecological impact of our operations.

We at CAP, like other companies are doing, will continue to adapt and implement new RAS improvements as they develop; however, recent research is showing that this technology is not yet the panacea espoused by its proponents and will indeed cause its own set of problems related to land use, loss of biodiversity, and exacerbation of climate change. We would welcome the opportunity to host a visit to our Rochester site so that you might view the realities of RAS production and better understand its opportunities and limits.

The Bainbridge Island City Council recently affirmed that it “supports local, sustainable food production and acknowledges that sustainable, well managed net pen operations can safely produce local affordable seafood into the future, and that there is a place for farmed fish in the mosaic of sustainable local food choices in our community in the future”. This is indeed consistent with countries around the world who have recognized that many wild capture fishery stocks are at risk due to overfishing and farmed seafood is the answer for local healthy, sustainable food. In fact, the United Nations Food and Agricultural Organization is placing a major emphasis on aquaculture in an effort to solve world hunger.

Indeed, if the pandemic has taught us anything, it is that we as a nation can no longer rely on imports of any food items to sustain our people. Seafood has been consistently shown to be vitally important for human health. Currently, the US imports ~90% of the seafood it consumes. Over half of that is produced through aquaculture in countries that are much less regulated than our own.

With the understanding that all food production has some form of environmental impact, we owe it to ourselves to seek the truth on the real impacts of our protein production systems. No longer is it sustainable to make acquiring food “someone else’s problem” by ignoring where and how our food is produced. We owe it to ourselves to work together to find solutions to production and environmental hurdles.

The remaining comments are targeted primarily at sections in the draft permits that could be viewed as ambiguous. As you may well understand, given the litigious nature of environmental NGO’s it is important that specific requirements are well laid-out and easily understandable by all.

S. 3. A. 1 (and elsewhere) states that reporting will occur for a variety of parameters, including “..., percentage of nitrogen in feed, ..., feed conversion rates, ...”. Nitrogen in fish feed is a product of the amount of protein in the feed. Modern feed manufacturing requires that protein sources vary by time, amounts, and composition based upon a large number of external and economic factors. If ECY hopes to estimate the amount of elemental nitrogen being excreted from the cage rearing systems a simple arithmetic calculation of nitrogen percentage in the feed and food conversion efficiency will not provide an accurate estimate. Protein utilization and conversion efficiency of various feed ingredients will vary from feed batch to feed batch and is only estimated by understanding the digestibility of the various sources of protein, usually through in vitro analytical processes (see “Application of in vitro digestibility methods in aquaculture: Constraints and perspectives.” Moyano, F. J., et al. 2015. Reviews in Aquaculture, 7: 223-242. doi:[10.1111/raq.12065](https://doi.org/10.1111/raq.12065)). Over a given month (reporting period) several manufacturers and batches of feed within manufacturers may possibly be utilized. While feed manufacturers utilized by CAP generally conduct analyses of digestibility on ingredients, they may or may not be available for each specific batch and we may only have the “minimum guaranteed level of protein” to inform our report. We ask that ECY specify how they plan to use this data so that we can work with ECY, our manufacturers and our staff to better provide the information that will serve its intended purpose.

S3.G. Reporting Permit Violations. Several instances under this section are ambiguous. For example, under the requirements for 24-hour notification it is stated that CAP must report, “Any noncompliance that may endanger health or the environment, unless previously reported under immediate reporting requirements.”. However, no explanation is given on what must be reported “immediately”, only what action CAP must take immediately (reporting is not mentioned). We ask that this be clarified.

S. 8. B. 13. Notification of Unusual Events. This section remains ambiguous. As an example, the circumstances leading to the low water position of one support pontoon at the Orchard Rocks- South facility lead to the development of this section. However, the definition provided in this section, “An unusual event can create or lead to an increased potential for accidental fish escapement, structural failure of the net pen array, or spill” (**please note: the definition is somewhat different in S9**), was clearly never the case in this instance. The only containment nets that held fish at the facility were on the far end of the cage system, which was supported by five other pontoon systems that had normal buoyancy. Moorings were sound (which was why the system dipped) and there was never any danger

of accidental fish escapement, structural failure of the net pen array, or spill. Company records show that the condition had been noted the previous week, was determined to not be a hazard to fish escapement or structural integrity by staff, and was scheduled to be further analyzed early that coming week, confirmed by DNR in subsequent review. It was only upon a frantic reaction to the situation by well-meaning but ill-informed visitors to nearby houses and subsequent reporting to news media that this situation even became an issue. Further clarification of the definition of an Unusual Event is needed to prevent accusations of non-reporting, particularly since it is a condition within the discharge permit.

On behalf of our farm employees throughout the State and contracted processing workers based in Seattle, along with our many suppliers, buyers, and consumers of our products we request that the modifications we seek to the NPDES permits should be granted. We believe that the scientific literature, combined with the track record of CAP's NPDES performance and demonstrated willingness to work with ECY to constantly improve our operations speaks loudly and, we hope, convincingly toward that end.

Respectfully submitted this 26th day of October, 2020.