



To: Michael Chambers, Marine Aquaculture Specialist, New Hampshire Sea Grant

From: Amanda Nichols, Ocean and Coastal Law Fellow, National Sea Grant Law Center

Re: Applicability of NPDES Permit Requirements to Fish Hatcheries and Offshore Farms (NSGLC-19-04-03)

Date: June 5, 2019

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## Advisory Request Summary

In April 2019, New Hampshire Sea Grant asked the National Sea Grant Law Center (NSGLC) to provide some background information on the Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES) permit requirements for commercial aquaculture facilities. Our research findings are summarized below. Please note, the information below is legal research provided for education and outreach purposes and does not constitute legal advice or representation of New Hampshire Sea Grant or its constituents.<sup>1</sup> Aquaculture operators seeking NPDES permits should request a pre-application meeting with the nearest Environmental Protection Agency (EPA) regional office as early as possible to help resolve any questions and seek personalized guidance from the agency.

## NPDES Permitting Requirements

Under the Clean Water Act (CWA), a NPDES permit is required to discharge "pollutants" from a "point source" into "Waters of the United States" (WOTUS). An aquaculture operator would be required to obtain a NPDES permit only if the facility meets these jurisdictional thresholds. If the facility does not discharge into WOTUS, for example, no NPDES permit will be required. Similarly, no permit would be required if the facility does not meet the definition of a point source or does not discharge pollutants. NPDES permits may be either issued by the EPA or state agencies who have received delegated authority from the EPA.

In general, the term "pollutant" is defined very broadly, and includes wastes generated by aquaculture operations including excess feed and escaped fish.<sup>2</sup> A point source is "any discernible, confined and discrete conveyance ... from which pollutants are or may be discharged."<sup>3</sup> Aquaculture facilities do fall within the definition of "point source", as ponds, tanks, net pens, cages, and other gear used to rear fish are discrete conveyances that can result in the discharge of pollutants into surrounding waters. Although the full scope of WOTUS is the

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<sup>2</sup> See U.S. Pub. Interest Research Grp. v. Atl. Salmon of Maine, LLC., 215 F. Supp. 2d 239 (D. Me. 2002) (finding that discharges from an offshore salmon farm constitute pollutants under the CWA); Wild Fish Conservancy v. Cooke Aquaculture Pac. LLC, No. C17-1708-JCC, 2019 WL 1880035 (W.D. Wash. Apr. 26, 2019) (holding that an offshore commercial salmon farm discharged pollutants in violation of the CWA).

<sup>3</sup> 33 U.S.C. § 1362(14).

subject of ongoing regulatory action and active litigation, waters capable of navigation and ocean waters out to 200 nautical miles fall within the regulatory scope of the CWA.<sup>4</sup>

The EPA has issued regulations outlining the applicability of NPDES to concentrated aquatic animal production facilities (CAAPs).<sup>5</sup> CAAPs are hatcheries, fish farms, or other facilities that meet the criteria set forth in Appendix C to the regulations. A facility qualifies as a CAAP if it contains, grows, or holds aquatic animals in either of the following categories:

- I. Cold water fish species or other cold water aquatic animals<sup>6</sup> in ponds, raceways, or other similar structures which discharge at least 30 days per year, not including:
  - a. Facilities producing less than 9,090 harvest weight kilograms (approximately 20,000 pounds) of aquatic animals per year; or
  - b. Facilities feeding less than 2,272 kilograms (approximately 5,000 pounds) of food during the calendar month of maximum feeding.
- II. Warm water fish species or other warm water aquatic animals<sup>7</sup> in ponds, raceways, or other similar structures which discharge at least 30 days per year, not including:
  - a. Closed ponds discharging only during periods of excess runoff; or
  - b. Facilities producing less than 45,454 harvest weight kilograms (approximately 100,000 pounds) of aquatic animals per year.<sup>8</sup>

The phrase “ponds, raceways, or other similar structures” is broadly interpreted by the EPA. According to EPA staff, any type of facility engaging in commercial aquaculture may be designated a CAAP, including those culturing fish using net pens or offshore cages. In fact, Appendix L to the EPA’s CAAP guidance specifically notes that net pen operations meeting CAAP production thresholds are subject to NPDES effluent limitations guidelines (discussed further below).<sup>9</sup> The EPA also notes in its guidance that the term “net pen” includes offshore cage aquaculture.<sup>10</sup>

Commercial aquaculture facilities can also be designated as CAAPs on a case-by-case basis by the EPA or a state agency upon the determination that a facility is a significant contributor of pollution to WOTUS.<sup>11</sup> In making such a designation, the following factors must be considered:

- The location and quality of the receiving waters;
- The holding, feeding, and production capacities of the facility;
- The quantity and nature of the pollutants reaching WOTUS; and
- Other relevant factors.<sup>12</sup>

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<sup>4</sup> *Id.*

<sup>5</sup> See 40 C.F.R. § 122.24 and 40 C.F.R. § 122 app. C.

<sup>6</sup> 40 C.F.R. app. C (“Cold water aquatic animals” include, but are not limited to, the *Salmonidae* family of fish (e.g., trout and salmon)).

<sup>7</sup> *Id.* (“Warm water aquatic animals” include, but are not limited to, the *Ameiuride*, *Centrarchidae*, and *Cyprinidae* families of fish (e.g., catfish, sunfish, and minnows, respectively)).

<sup>8</sup> *Id.*

<sup>9</sup> *Compliance Guide for the Concentrated Aquatic Animal Production Point Source Category*, U.S. ENVIRONMENTAL PROTECTION AGENCY L-1 (Mar. 2006), [https://www.epa.gov/sites/production/files/2015-11/documents/caap-aquaculture\\_compliance-guide\\_2006.pdf](https://www.epa.gov/sites/production/files/2015-11/documents/caap-aquaculture_compliance-guide_2006.pdf).

<sup>10</sup> *Id.* at 1-1.

<sup>11</sup> 40 C.F.R. § 122.24(c).

<sup>12</sup> 40 C.F.R. § 122.24(c)(1).

In cases where a facility is designated a CAAP on a case-by-case basis, a NPDES permit application is not required until the EPA representative has conducted an on-site inspection of the facility and has determined that it should be regulated under the permit program.<sup>13</sup> There is no similar inspection requirement prior to filing an application for facilities that meet the CAAP criteria discussed above.

It is important to note that any aquaculture facility that discharges pollutants into WOTUS is subject to NPDES permitting requirements, regardless of whether it meets the CAAP criteria. EPA's position on this issue has shifted over the years, and its guidance is not clear. However, this interpretation of the CWA was affirmed by the Ninth Circuit Court of Appeals in 2018, which held that pipes, ditches, and channels discharging pollutants from non-concentrated aquatic animal production facilities are point sources within the meaning of the CWA.<sup>14</sup>

Depending on the type of system used as well as production levels, some CAAPs will be subject to certain effluent limitations guidelines (ELGs).<sup>15</sup> ELGs are national standards for wastewater discharges to surface waters and publicly owned treatment works. ELGs are used by permit writers to set requirements and limits for individual facilities. CAAP ELGs apply to both existing and new CAAP facilities that:

- Use flow-through, recirculating, or net pen systems;
- Directly discharge wastewater; and
- Produce at least 100,000 pounds of fish, mollusks, or crustaceans per year.<sup>16</sup>

CAAP ELG requirements are included in individual NPDES permits, and require that operators abide by certain management practices and record-keeping activities, rather than numerical "discharge limits." State permitting authorities may also set additional requirements as needed to protect water quality or other requirements that apply under state or local law.

### **Discharges to Publicly Owned Treatment Works**

Aquaculture facilities that discharge solely into municipal sewer systems are not subject to NPDES permitting requirements, as they are not discharging directly into WOTUS. However, such operations may be subject to local permitting requirements. The CWA establishes a regulatory program to address indirect discharges into publicly owned treatment works (POTWs) through the National Pretreatment Program.

Under the CWA, POTWs are sewage treatment plants owned and operated by a state or municipality.<sup>17</sup> The definition includes any devices and systems used in the storage, treatment,

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<sup>13</sup> 40 C.F.R. § 122.24(c)(2).

<sup>14</sup> See *Olympic Forest Coal. v. Coast Seafoods Co.*, 884 F.3d 901 (9th Cir. 2018).

<sup>15</sup> Certain systems are not covered by the CAAP ELGs, including: (1) closed pond systems unless discharges occur more than 30 days per year, (2) molluscan shellfish farms (including nurseries), (3) shrimp ponds, (4) crawfish production, (5) alligator production, (6) aquaria, and (7) net pens rearing native species released after a growing period of no longer than four months to supplement commercial and sport fisheries.

<sup>16</sup> *Concentrated Aquatic Animal Production Effluent Guidelines*, U.S. ENVIRONMENTAL PROTECTION AGENCY, <https://www.epa.gov/eg/concentrated-aquatic-animal-production-effluent-guidelines>.

<sup>17</sup> 33 U.S.C. § 1292(2).



recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature, as well as sewers, pipes, and other conveyances if they convey wastewater to a POTW.<sup>18</sup>

The National Pretreatment Program requires industrial and commercial dischargers, called industrial users, to obtain permits or other similar authorization to discharge wastewater to the POTW. The EPA establishes national pretreatment standards for pollutants in wastewater from indirect dischargers that may pass through, interfere with, or are otherwise incompatible with POTW operations.<sup>19</sup> POTWs are then required to establish local pretreatment programs through which they must enforce all national pretreatment standards and requirements.

There are currently no national pretreatment standards for discharges from aquaculture operations. However, industrial users “may not introduce into a POTW any pollutant(s) which cause pass through or interference” with POTW operations.<sup>20</sup> This prohibition applies regardless of whether the user is subject to National Pretreatment Standards. POTWs may also impose more stringent local requirements if necessary to protect site-specific conditions at the POTW. The pretreatment program essentially gives municipal sewage treatment plants the authority to regulate indirect industrial dischargers in order to avoid or prevent compliance issues with the POTW’s permits.

Aquaculture facilities that intend to discharge into a municipal wastewater system should communicate with their POTW operator to determine what requirements, if any, may apply. Aquaculture operators may have to obtain a local or state pretreatment permit prior to discharging to a POTW.

I hope you find the above information useful. Please contact us with any follow-up questions. Thank you for bringing your question to the National Sea Grant Law Center.

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<sup>18</sup> *Id.*

<sup>19</sup> *National Pretreatment Program*, U.S. ENVIRONMENTAL PROTECTION AGENCY, <https://www.epa.gov/npdes/national-pretreatment-program#self>

<sup>20</sup> 40 C.F.R. § 403.5(a)(1). (Noting that “pass through” occurs when discharge exits a POTW into WOTUS in violation of the POTW’s NPDES permit, and “interference” occurs when a discharge inhibits or disrupts a POTW in a way that is violative of the POTW’s NPDES permit.)