



REGION 10

SEATTLE, WA 98101

FAQ FOR SOUTHEAST ALASKA 301(H) FACILITIES

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1. What is a 301(h) waiver?

- When cities discharge wastewater, they must treat it to a certain minimum level – at least secondary treatment - under the Clean Water Act (CWA).
- Under CWA Section 301(h), cities that discharge to oceans or saline estuaries were able to apply for a waiver from the minimum secondary treatment. The deadline to apply was Dec. 29, 1982.
- The 301(h) waiver means they don't need to treat their wastewater as much, because there can be a lot of mixing in oceans and estuaries.
- Cities were only granted a waiver if they met a set of factors in the regulations that make sure that the biological community isn't harmed by the wastewater discharge.

2. Does a 301(h)-permit exempt a facility from the requirements of the Clean Water Act?

- No. Section 301(h) only “waives” secondary treatment requirements. Secondary treatment requirements pertain only to total suspended solids (TSS), biological oxygen demand (BOD), and pH in wastewater. TSS is a measure of the solids in the discharge, BOD is a measure of the organic material, which can impact oxygen levels in the receiving water, and pH is a measure of the acidity or alkalinity of the discharge. Secondary treatment requires 85% removal of TSS and BOD in effluent and a pH from 6.0 to 9.0. The “waiver” relaxes the secondary treatment requirement to 30% removal of TSS and BOD in the effluent. The pH range can be below 6.0 and above 9.0 if state WQS can be met.
- A 301(h) “waiver” is NOT a waiver from ANY other pollutant.
- 301(h) facilities must still meet ALL applicable state WQS and CWA 304(a)(1) criteria for ALL parameters, including toxics, bacteria, and nutrients.

3. Why are 301(h) waivers allowed?

- Federal law provides for it in Section 301(h) of the Clean Water Act if facilities can prove they meet a set of criteria designed to ensure the discharge will be protective of human health and the environment and meet state WQS.

4. How common are 301(h) waivers?

- There are twenty-four (24) 301(h)-modified permits in the United States and territories, with 9 of them in Alaska.

5. How do you get a waiver? Is it becoming harder to keep a waiver? Have the number of waivers decreased? Why? Is there a policy to eliminate 301(h) waivers?

- Only facilities which applied for an original 301(h) waiver by Dec. 29, 1982, and met the statutory and regulatory criteria of CWA section 301(h) were eligible for a 301(h)-modified permit.
- There are no new 301(h) facilities. The number of waivers has declined from a high of ~45 to 24 today; 9 of the remaining 24 are in Alaska.
- There are several reasons for the steady decline in the number of 301(h) permits, including new state water quality requirements, facilities not complying with their permits, not meeting primary treatment, and some communities deciding to upgrade to secondary treatment technology.
- CWA section 301(h) is a statutory provision and there is no EPA policy to eliminate 301(h) waivers. If facilities and their receiving waters continue to meet the 301(h) criteria, they can continue to operate under a 301(h) waiver in perpetuity.

6. Why is EPA issuing these permits? What is the role of the State of Alaska?

- Only EPA can issue 301(h)-modified NPDES permits, so EPA is writing the permits for the 301(h) facilities in Alaska.
- When EPA writes permits, EPA must request certification under Section 401 of the CWA from the jurisdiction where the permit discharges. Since these permits discharge to Alaska waters, EPA will need to request 401 certification from the Alaska Department of Environmental Conservation (ADEC).
- ADEC's role is to review the permit to ensure it meets Alaska's WQS and state law, and to provide a 401 certification of the 301 modified permit. The 401 certification is the State's concurrence that the permit meets State law, including WQS. EPA cannot issue a 301(h) permit unless the State grants 401 certification or waives their right to certify.
- The 401 certification issued by ADEC can contain conditions to meet state water quality requirements including the authorization of mixing zones and schedules of compliance to meet new permit requirements.
- EPA has been working in close coordination with ADEC throughout the permit renewal process for each facility.

7. Why are new/more stringent bacteria limits required now?

- The 301(h) permits being renewed in SE Alaska are proposing more stringent bacteria limits for fecal coliform and new limits for enterococcus. Fecal coliform is an indicator of bacteria levels in shellfish that can make people sick. Enterococcus is an indicator of bacteria in water for gastrointestinal diseases that can also make people sick.
- The proposed limits are a condition of ADEC's 401 certification, or concurrence, of the renewed permits, and are necessary for the discharge to comply with Alaska water quality standards.
- The existing permits have bacteria limits for fecal coliform that are much higher than typical wastewater facilities.
- For fecal coliform, the new draft permit limits will require the SE facilities to treat their wastewater more to make sure their discharge meets Alaska's water quality standards and ensures the protection of human health and the environment.
- For enterococcus, ADEC established new water quality standards in 2017 that were not in effect the last time the SE permits were issued. The new reissued permits will include limits to ensure the discharge complies with these new water quality standards.

8. How long will facilities have to meet the new bacteria limits?

- None of the communities with 301(h) waivers currently provide consistent disinfection treatment to meet the proposed lower bacteria limits.
- The 301(h) facilities will need to upgrade the type of treatment they have at their facility to comply with the new bacteria limits. This will require investments to install or expand disinfection treatment in their plants (UV or chlorination).
- Since the facilities will need to upgrade, ADEC is providing them with a compliance schedule that will allow them more time to comply with the new bacteria limits.
- The compliance schedule is a condition of ADEC's 401 certification and requires communities to meet final effluent limits for bacteria in five years. It also contains interim steps the facilities must take to ensure consistent progress toward achieving the final limits.

9. What are the 301(h) criteria?

- The CWA has nine criteria and regulations that implement those nine criteria.
- In general, the criteria are designed to ensure the facility is well-operated and monitored, does not cause harm to the receiving water, human health, or biota, meets all State requirements and WQS, and is discharging to a healthy receiving water.

10. Why did EPA perform new dilution modeling of these discharges? Why did ADEC perform additional modeling?

- Dilution modeling was not conducted during the last permit development cycle for many communities.
- For other communities, dilution modeling occurred over 20 years ago.
- EPA and ADEC required new modeling to determine the dilution achieved after initial mixing.
- The modeling is necessary to determine how much pollution a facility can discharge from their wastewater and still be safe for the biological community after dilution in a certain area, which is called the zone of initial dilution (ZID).
- ADEC has its own set of mixing zone requirements. To conduct the mixing zone analysis under Alaska state law, ADEC needed to conduct additional modeling. ADEC determined that this supplemental modeling was needed to be consistent with how they establish mixing zones in permits that ADEC issues. The mixing zones are smaller than the ZIDs and ADEC has included these mixing zones as conditions of the 401 certifications.

11. How much will disinfection cost?

- The cost to upgrade the facility with disinfection technology depends on many factors.
- Communities will likely need to engage the services of professional engineering firms to assess disinfection options considering the size and flow of the facility, current levels of performance, and other factors.

12. What resources are available to assist communities with the financial burden of system upgrades?

- Several programs exist to assist communities with the financial burden of upgrading or expanding wastewater infrastructure (CWSRF and WIFFIA).
- EPA is also aware of some communities requesting and receiving congressionally directed funding (i.e., earmarks) for anticipated future wastewater requirements.

For additional information contact USEPA Region 10, NPDES Permitting Section at epar10wd-npdes@epa.gov.