



Senate Finance

Clean Water Act Section 301(h) Waivers For Wastewater Treatment Plants April 14, 2022

- Randy Bates, Director, Division of Water
- Gene McCabe, Wastewater Discharge Authorization Program Manager, Division of Water
- Carrie Bohan, Facilities Program Manager, Division of Water

301(h) Background

- Section 301(h) added to Clean Water Act in 1977
- Allowed case-by-case review for municipal wastewater treatment facilities discharging to marine waters
- Waiver provided relief from requirement to provide secondary treatment (waivers issued in the late 70's and early 80's)
- Nationally – 208 communities applied, 87 no longer eligible, 76 denied
- 45 facilities in MA, ME, NH, CA, HI, AK, and territories

301(h) Criteria

- Section 301(h)(1-9) establishes criteria for a 301(h) waiver
 - Facility must achieve primary treatment – 30% removal for Biological Oxygen Demand (BOD) and Total Suspended Solids (TSS)
 - Facility must control toxics and pretreat industrial inputs
 - Facility must monitor discharge and may not create pollution control requirements on other discharges
- Waiver addresses BOD, TSS, and pH
- All pollutants must meet Alaska Water Quality Standard (WQS)

301(h) AK Communities

- 9 waived facilities in AK

From north to south, with authorized discharge capacity:

- Anchorage – 58 million gallons per day (mgd)
- Whittier – 0.3 mgd
- Skagway – 0.63 mgd
- Haines – 2.9 mgd
- Pelican – 0.09 mgd
- Sitka – 1.8 mgd
- Petersburg – 1.2 mgd
- Wrangell – 0.54 mgd
- Ketchikan – 7.2 mgd

301(h) Re-Issuance Process

EPA – Focus: meeting 301(h) criteria

- Develop Draft Permit & 301(h) decision
- Develop supporting documents
- Public notice draft permit
 - Request Section 401 Certification
- Conduct public hearings, respond to comments and revise permit

- Reissue permit

Waiver from Secondary

DEC- Focus: meeting AK WQS

- Review draft permit and associated EPA-driven permit limits
- Conduct review to determine if proposed permit will meet Alaska WQS
- Conduct antidegradation analysis
 - Evaluate alternatives to exceeding WQS for practicability
- Draft Section 401 Certification and authorize mixing zones
- Public notice proposed 401 Certification
 - 30 Days – can be concurrent with permit public notice
- Issue 401 Certification

Requirement for disinfection to meet WQS

T
I
M
E
L
I
N
E

Why Disinfection?

- Fecal coliform bacteria discharge from a 301(h) facility does not meet (and has never met) Alaska Water Quality Standards
- Exceedances, like these from 301(h) facilities, require a mixing zone for dilution
- Mixing zones may be authorized under state authority and must be as small as practicable
- Facilities must evaluate all options to treat pollutants prior to requesting a mixing zone to dilute their discharge
- For the 301(h) facilities, disinfection will reduce the size of the mixing zone substantially

Why Disinfection?

- 18 AAC 70.015 – Antidegradation policy
- 18 AAC 72.050 – Minimum treatment
- 18 AAC 72.990(21) – Definition of “disinfect”
- 18 AAC 70.016 – Tier 2 department determination
- 18 AAC 70.240 – Mixing Zones

Disinfection Capital Costs

- Cost estimates for disinfection range from \$2-15M per facility
- Funding options include:
 - State Revolving Fund – Low interest loans with possible subsidy
 - ~\$90M available now
 - FY23 base grant ~\$10M
 - Infrastructure supplemental funding
 - \$10.7M in FY23 with required 49% subsidy to disadvantaged communities
 - FY24 – FY26 \$55.4M total in addition to annual base grants
 - Commercial Passenger Vessel fees grant program
 - SB 180, HB 303 – proposed grant program ~\$4M annually
 - Congressional Earmarks



Discussion and Questions

Thank you !