NPDES Permits and Alaska 301(h) Facilities

U.S. EPA, Region 10

Water Division, NPDES Permitting Section

Spring 2022

ED_013192A_00000027-00001

Agenda

- Opening Remarks
- Introductions
- Background on NPDES Permits and 301(h) Waivers
- 301(h) in Alaska
- Permitting Process
- Next Steps

ED_013192A_00000027-00002

NPDES Permits and CWA § 301(h)

- NPDES Permits
- 301(h) Regulatory Background
- 301(h) Facilities nationally and in Alaska
- Nine Criteria for 301(h) waivers

ED_013192A_00000027-00003

NPDES Permits and CWA § 301(h)

- CWA requires a National Pollutant Discharge Elimination System (NPDES) permit to discharge pollutants to waters of the US
- 1972 CWA amendments required publicly-owned treatment works to achieve "secondary treatment" standards by 1977
  - Technology-based treatment standard for BOD, TSS, pH (85% removal, 6.0-9.0)
- 1977 CWA amendments added Section 301(h)
- Allows EPA, in limited circumstances and with concurrence from the State, to issue NPDES permits which relax secondary treatment standards for POTWs that discharge into marine or estuarine waters [i.e., 301(h)-modified permit]
- Waiver only applies to conventional pollutants BOD, TSS, pH (30% removal); must meet WQS.

ED_013192A_00000027-00004

CWA § 301(h)

- Must meet a set of nine (9) statutory criteria and corresponding regulations
  - CWA § 301(h)(1-9) and 40 CFR Part 125.58 - 125.68
- Facilities must have applied by Dec 29, 1982, to be considered eligible. No new 301(h) permits can be issued. Existing permits can be reissued if continue to meet criteria.
- 301(h)-modified permits issued for 5-year term. Applicant must re-apply for 301(h) waiver at each NPDES renewal.

ED_013192A_00000027-00005

301(h) Criteria

1. Must have applicable WQS for 301(h) pollutants: BOD, TSS, pH [40 CFR 125.61]
2. Discharge must not interfere with attainment or maintenance of water quality which assures protection of public water supplies; assures the protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife, and allows recreational activities in and on water [40 CFR 125.62]
3. Must establish and implement a monitoring program [40 CFR 125.63]
4. Discharge must not result in any additional pollution control requirements on any other point source or nonpoint source [40 CFR 125.64]

ED_013192A_00000027-00006

301(h) Criteria

5. Applicable pretreatment requirements for sources introducing waste into such treatment works must be enforced [40 CFR 125.65]
6. Pretreatment program must demonstrate it either: has in effect a program that achieves secondary treatment equivalency, or that industrial sources are in compliance with all applicable pretreatment requirements, including numerical standards set by local limits [40 CFR 125.65]
7. Establish and implement toxics control program designed to eliminate entrance of toxics from nonindustrial sources [40 CFR 125.66]
8. No new or substantially increased discharges (TSS, BOD) from the point source above that specified in the permit [40 CFR 125.66]

ED_013192A_00000027-00007

301(h) Criteria

9. -Must achieve primary treatment (30% removal) [40 CFR 125.60]

   -Must meet State WQS and federal 304(a)(1) criteria at edge of initial mixing area (i.e., Zone of Initial Dilution) [40 CFR 125.62]

   -Estuarine receiving waters must support a balanced indigenous population of shellfish, fish and wildlife, and allow for recreation in and on the water….without regard to the presence or absence of a causal relationship between such characteristics and the 301(h) discharge [40 CFR 125.59]

ED_013192A_00000027-00008

CWA § 301(h) Nationally

- ~208 applicants made 1982 deadline
- ~87 withdrawn or no longer eligible
- ~76 applications denied
- ~45 applicants and permittees remain
- Facilities clustered in six states (MA, ME, NH, CA, HI, AK) and five US territories (Puerto Rico, American Samoa, Guam, Virgin Islands, Palau)
- Majority small facilities discharging <5 mgd. Exceptions: Hawaii (20 & 90 mgd), San Diego (158 mgd), Anchorage/Asplund (28 mgd).

ED_013192A_00000027-00009

CWA § 301(h) in Alaska

- R10 has nine 301(h) facilities, all in Alaska, mostly smaller communities in southeast
- Original 301(h) permits were issued in the late 1980's and were last reissued in 2001/2002.
- All R10 301(h) permits are administratively continued.

ED_013192A_00000027-00010

CWA § 301(h) in Alaska

North

Anchorage (58 mgd; ~290k)

Whittier (0.3 mgd; ~1k)

Skagway (0.63 mgd; ~1k;)

Haines (2.9 mgd; ~1.7k)

Pelican (0.09 mgd; ~100)

Sitka (1.8 mgd; ~8.7k)

Petersburg (1.2 mgd; ~2.7k)

Wrangell (0.54 mgd; ~2.5k)

South

Ketchikan (7.2 mgd; ~8.2k)[2]

Note: Listed flows are facility-submitted design flows.

ED_013192A_00000027-00011

Permitting Process

- Review NPDES and 301(h) reapplications
- Review effluent, receiving water, and biological data
- Determine if applicant continues to meet CWA § 301(h)(1-9)
- Develop draft permit, fact sheet, and 301(h) decision
- Public review/State of Alaska Certification/Tribal Consultation/ESA Consultation
- Response to comments
- Final permit and 301(h) decision

ED_013192A_00000027-00012

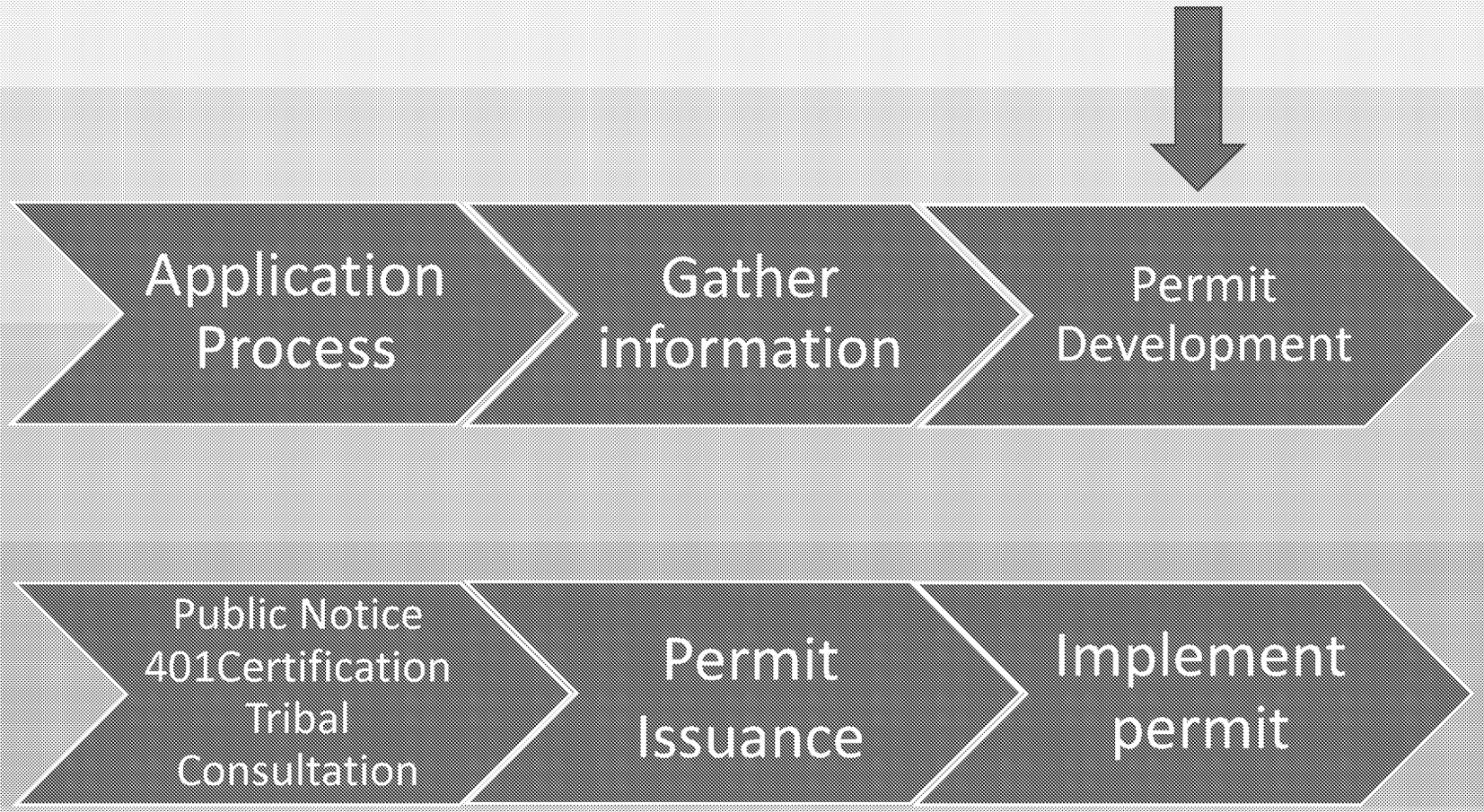
301(h) Decision

- Approval of waiver would renew the 301(h)-modified permit

- Denial of waiver would require eventual upgrade to secondary treatment, compliance schedule, jointly-issued NPDES permit with EPA/DEC until full secondary achieved (then DEC permit/facility)

ED_013192A_00000027-00013

Where are we in the 301(h) process?



ED_013192A_00000027-00014

Status and Next Steps

- Permit development underway for: Ketchikan, Wrangell, Petersburg, Sitka, Skagway, and Haines.
- Public notices will begin in summer 2022 (60-day notice)
- Government-to-government consultation will be offered to Tribal leadership at the beginning of public notice.

ED_013192A_00000027-00015

Resources

- Amended 301(h) Technical Support Document (EPA 842-B-94-007)
- Region 10's Permitting Program
- Regulations:
  - 40 Code of Federal Regulations (CFR) 125.56 – 125.68 and Appendix to Subpart G

ED_013192A_00000027-00016

Discussion and Q&A