Asplund Wastewater Treatment Facility NPDES 301(h) Permit Renewal - Status Update

Presentation to Assembly Enterprise and Utility Oversight

Committee

April 21, 2022

Today's Presentation

- 1. Provide a refresher on 301(h) and the Asplund WWTF
- 2. Request approval for 301(h) Assembly items on 4/26 Meeting
- 3. Summarize & Review Scope of Work for Assembly items
- 4. Explain the consequences of permit loss
- 5. Answer?'s





Asplund WWTF & Permit History



Named for Mayor John M. Asplund, a tireless advocate for wastewater treatment for Anchorage

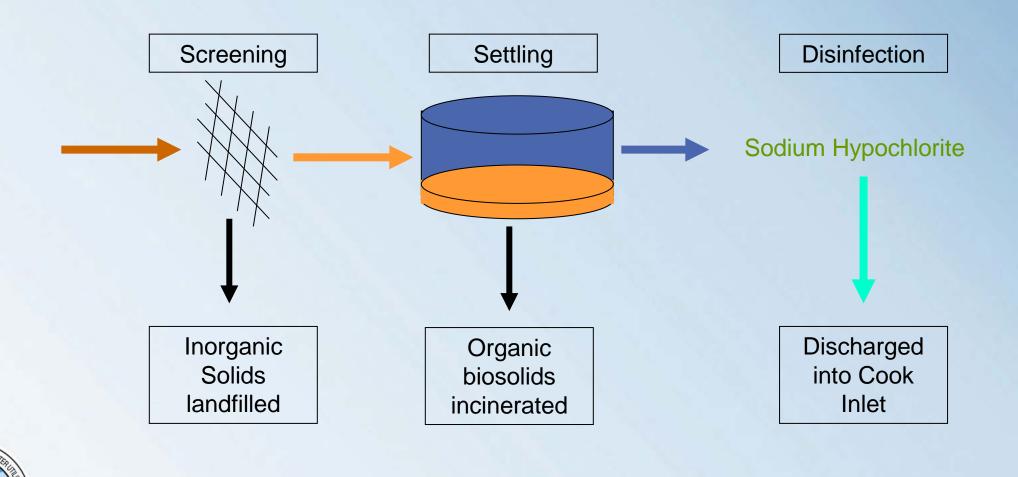
- Began operations in 1972
- Largest WWTF in Alaska
- Upgraded in 1989 to 58 MGD capacity, currently operates @ 30 MGD
- Congress added Section 301(h) to Clean Water Act in 1977
- EPA permitted with 301(h) modification in 1985
- EPA reauthorized 301(h) permit in 2000
- AWWU submitted timely application in 2005 and has been on EPA Administration extension since
- AWWU administers an extensive marine monitoring program. (over 36 years)
- https://www.awwu.biz/water-quality/cook-inletwater-quality
- No adverse environmental impacts.
- Initiating updated permit re-application process with EPA and ADEC (linked authority)

What is § 301(h) of the Clean Water Act (CWA)?

- Federal Statute provides for a variance from the standard secondary treatment requirement for discharge to a marine environment
- Statute calls out criteria for eligibility for the permit variance, including:
 - AWWU must operate plant to meet primary treatment standards
 - Discharge to environment does not degrade waters
 - Monitoring is done to ensure no degradation
 - Potentially toxic pollutant are controlled through an Industrial Pretreatment Program.
- Utility's performance and results are monitored by Federal and State authorities and subject to their renewal specified in law



Asplund WWTF Primary Treatment Process



Requesting Approval of 301(h) Permit Integration Professional Services Contract*

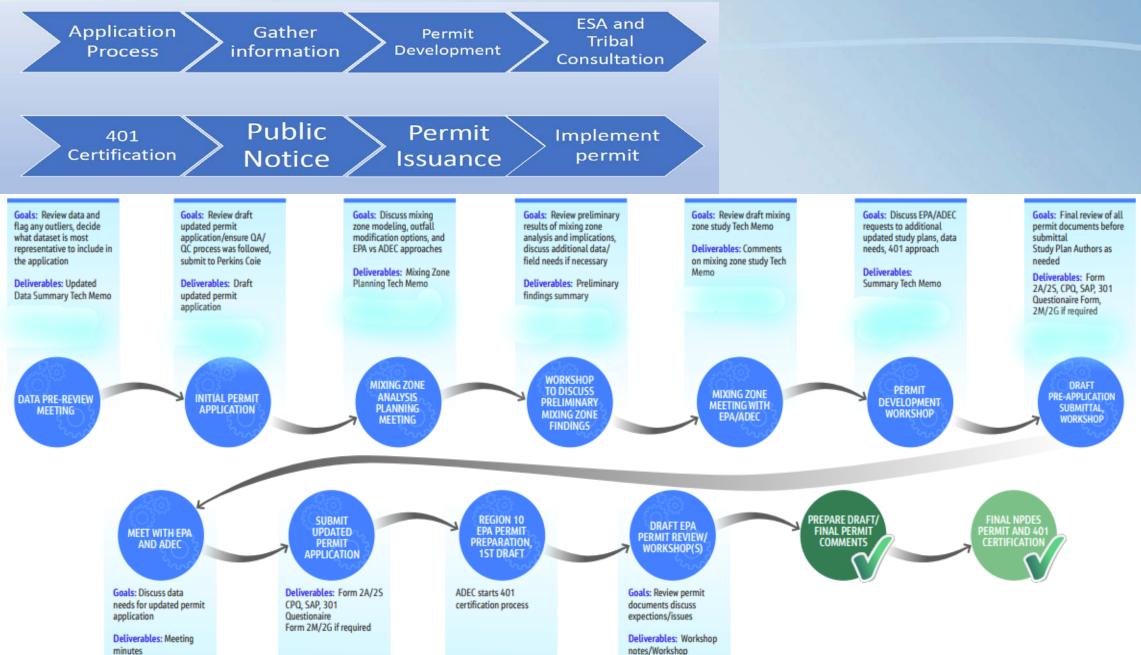
- 4/26/2022 Regular Assembly Agenda
 - AM XXX-2022
- Jacobs Engineering Group Inc.
- Critical Need to Start Phase 1 Basic Services (\$1,000,000)
- Total Services \$3,500,000 (subject to future appropriation)
- *Also requesting approval of Kinnetics Marine Monitoring Amendment No.
 17 in ongoing support of 301(h) permit; a new RFP for these services will be issued once the permit is updated



Scope of Work

- Provide full suite of scientific and engineering expertise for permit renewal and integration activities
- Provide critical gap analysis review, develop plans and conduct work to close gaps
- Assist in short term/long strategies for successful §301h variance renewal
- Coordinate the workings of: AWWU personnel, third party consultants, Federal and State agencies and conduct a public outreach program
- Compile updated information and reports on new studies
- Prepare draft application package for submittal to ADEC for § 401 water quality certifications
- Prepare supplement to the 2005 §301(h) Application for submittal to EPA.

Permit Renewal Process and Proposed Plan



Jacobs Team Selected Based on Qualifications

- Familiar with the Asplund WPCF 120 projects over 40 years
- Supported AWWU in the 2005 §301(h) variance application
- Supported §301(h) variance requests in six major areas from San Diego to Puerto Rico
- Has required expertise in all essential technical and scientific areas
- Staff available to start work immediately
- Currently working with Southeast communities and EPA on continuation of §301(h) variances there
- Has a working relationship with ADEC and EPA personnel.



EPA Action on Permit Renewal is Imminent

- Asplund is still operating under EPA's administrative extension of the §301(h) permit issued in 2000
- Jan. 2020 EPA notified 9 Alaskan Cities with §301(h) variances EPA would be revaluating continuation of these: Anchorage's variance application being last to be acted upon
- AWWU/EPA Meeting March 2022
 - EPA Indicated AWWU can start work on 401 Certification
 - Requires extensive data collection effort

Loss of 301(h) variance would have tremendous financial consequences

- Cost of going secondary treatment estimated to be \$1.0 1.4 Billion (2022 dollars)
- O&M costs would increase about \$4,400,000 per year on top of MUSA
- There are no known federal programs for direct grant participation
- State SRF *loan* program insufficient for major Asplund upgrade
- Federal Infrastructure Act (IIJA) did not provide for this kind of effort.

AWWU ratepayers would bear the cost of required plant upgrades

- AWWU customers would see rate increases to provide ...
 - \$1.2 Billion <u>+</u> for capital upgrades
 - Annual increase in O&M expenses of \$4,400,000
- Meaning
 - A rate increase of 235%
 - An increase in Single Family Home rates
 - From: \$53.91 per month
 - To: \$180.00 per month





AWWU is committed to operating the facility to meet all permit requirements and protect the marine environment of the Cook Inlet



