



# Protecting **PUBLIC HEALTH** and the **ENVIRONMENT**

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## **AWWU activities focus on compliance with the Clean Water Act**

*The Anchorage Water & Wastewater Utility is committed to safeguarding the health and welfare of the public and the environment. Part of that commitment is ensuring that our operations comply with all federal, state, and local regulations. The federal Clean Water Act (CWA) was enacted by Congress “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” The CWA provides the statutory basis for wastewater treatment requirements, establishing comprehensive programs for water pollution control. Wastewater discharges to surface waters are controlled through a permitting system specifying treatment requirements and effluent limitations.*

*The CWA further requires controls on pollutants that could be introduced into wastewater treatment plants, and calls for pretreatment programs and standards to ensure treatment processes are effective.*

### **Wastewater discharges to surface water are controlled by the National Pollutant Discharge Elimination System (NPDES)**

The NPDES program established by the CWA allows discharges of wastewater to surface waters only as specified within a permit issued by the U.S. Environmental Protection Agency (EPA), or a state agency with authority delegated by EPA. The State of Alaska has authority to implement the NPDES program through the Alaska Department of Environmental Conservation (ADEC), operating as the Alaska Pollution Discharge Elimination System program (APDES). AWWU holds permits for three wastewater facilities: Eagle River, Girdwood, and the John M. Asplund Water Pollution Control Facility (Asplund) at Point Woronzof. The wastewater treatment facilities in Eagle River and Girdwood are under APDES authority. Asplund remains under the federal NPDES authority, as its permit includes some unique requirements associated with Section 301(h) of the Clean Water Act. Permits are valid for five years, although the EPA or ADEC may extend a permit for their convenience, provided that there are no substantive changes to treatment practices or performance.

Permits for each point source of wastewater discharge dictate requirements for levels of treatment, treatment performance, effluent limitations, effluent and environmental monitoring to ensure compliance, and documentation. AWWU is required to file monthly Discharge Monitoring Reports (DMR’s) for each of its facilities, in addition to an annual report of Asplund plant performance and the comprehensive monitoring of ambient receiving waters of Cook Inlet as required by the 301(h) permit.

### **Industrial Wastewater Discharges into Utility Sewer System are Subject To Permitting through AWWU’s Industrial Pretreatment Program**

Goals of the AWWU Industrial Pretreatment Program:

- Prevent the introduction of industrial pollutants into a treatment facility that would interfere with its operation or pose a hazard to personnel; and
- Prevent the pass-through of such pollutants through the treatment works resulting in NPDES permit violations or contamination of biosolids.

The Industrial Pretreatment Program focuses on “indirect dischargers,” those that discharge wastewaters into a collection system for treatment, rather than directly into ambient surface waters. AWWU issues permits to industrial (non-domestic) users that produce wastewaters which may be contaminated with toxic or objectionable substances.

The Program compiles and tracks permittee monitoring data as required by each permit, and performs outreach to non-domestic users regarding compliance with the municipal code requirements for proper use of AWWU's sewer systems. Pretreatment regulations also identify discharges that are prohibited and certain categories of discharges that have specific regulatory constraints.

## **Handling and disposal of sewage sludge is subject to the “Biosolids Rule”**

Sewage sludge is residue removed from sewage as a result of physical or biological treatment. Biosolids result from processing to thicken, dewater, or digest the sludge to reduce volume and improve handling. The federal “Biosolids Rule” stems from Section 405 of the CWA, and outlines requirements to use sewage sludge for a beneficial purpose; for surface disposal in a landfill; or for incineration. AWWU processes and incinerates its sewage sludge from all three of its plants at its Asplund facility.

## **Water Quality Standards protect the nation's waterways**

NPDES permit effluent limitations are designed to ensure that water quality of ambient receiving waters is not degraded by the discharge. Water quality standards exist in the form of a criterion, such as a specific concentration of a chemical in solution, at a level that will support a certain type of use for that water body. For example, a lake identified for “contact recreation” - i.e., swimming - must not have bacteria in the water above a certain threshold level. Hundreds of such water quality criteria exist for various kinds of water body uses, as adopted by states or authorized tribes and approved by EPA. Some substances in the water can have toxic effects on fish and wildlife exposed to levels above water quality criteria for a given duration. Discharge Monitoring Reports provide assurance that AWWU wastewater plant discharges provide for maintenance of water quality standards suitable to support fish and wildlife in Eagle River, Glacier Creek (in Girdwood), and Cook Inlet.

## **Stormwater must also meet NPDES permit requirements**

AWWU's sanitary sewers are not designed to carry stormwater runoff. The Municipality has a separate storm drainage system, and it must adhere to separate NPDES Stormwater permit requirements. Compliance with the Municipal Stormwater NPDES permit is managed by the MOA Department of Public Works Watershed Management Section. In addition, construction sites and activities at industrial facilities exposed to rainfall and runoff are subject to coverage under NPDES, and may require individual stormwater NPDES permits.

## **Extensive laboratory testing is required to document compliance**

The Utility collects thousands of water quality samples and analytical results as required by wastewater treatment plant discharge permits. Samples are derived from sites throughout the collection system to document Industrial Pretreatment Program activities. Daily, weekly, monthly, seasonal, and annual sampling regimes underscore AWWU's commitment to provide reliable and responsible wastewater services now and into the future.

### ***For more information contact:***

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Anchorage Water & Wastewater Utility



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