



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

AWWU activities focus on compliance with the Clean Air 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 to ensure AWWU operations comply with all federal, state, and local regulations. The Federal Clean Air Act (CAA) was enacted by Congress “to control air pollution on a national level.” The CAA provides the statutory basis for air emissions requirements, establishing comprehensive programs for air pollution control which is “one of the most comprehensive air quality laws in the world.” Emissions discharges to the airshed are controlled through regulations and a permitting system for major sources of air pollutants. The Clean Water Act (CWA) part 503 “Biosolids Rule” Subpart E, (Requirements for Sewage Sludge Fired in a Sewage Sludge Incinerator), also has requirements for controls and pollutants that could be introduced into the airshed. CWA part 503 Subpart E is separate from the CCA and requires separate standards, monitoring and reporting for seven metals, and total hydrocarbons air pollutants limits required under Subpart E.

Title V of the Clean Air Act requires major sources of air pollutants, and certain other sources, to obtain and operate in compliance with an operating permit

Title V is to ensure compliance and enhance the EPA’s ability to enforce the CAA. Title V Permittee’s are required by the CAA to certify compliance with the applicable requirements of their permits at least annually.

The Title V program established by the CAA allows discharges of air pollutants to the airshed 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 Title V program through the Alaska Department of Environmental Conservation (ADEC), operating as the Division of Air Quality Air Permit Program.

AWWU has one Title V Permit for John M. Asplund Water Pollution Control Facility (Asplund) at Point Woronzof. The Title V permit for Asplund covers the entire facility although the sewage sludge incinerator is the reason for the permit and a large focus of the permit.

A number of requirements in Asplund’s permit and any new requirements that are not in the permit remain under the federal authority due to the EPA retaining authority. The permit presents unique and challenging situations due to the dual authority for the enforcement agency’s requirements associated with multiple sections of the Clean Air Act. Permits are valid for five years, although the ADEC with permission from the EPA, may extend a permit for their convenience, provided renewal is submitted on time and that there are no substantive changes to the process or emissions.

Title V Permit for each point source of air discharge dictate requirements for levels of maintenance, work practices, operating limits, process, air pollution control devices, air effluent limitations, source testing and monitoring to ensure compliance, and documentation. AWWU is required to file monthly, semiannual, annual, biennial, and quinquennial reports for Asplund, in addition to these Clean Air Act reports. An annual report is required by the Clean Water Act part 503 Subpart E.

Sewage Sludge Incineration Units (SSI) rule adds New Source Performance Standards (NSPS) and Emission Guidelines (EG)

EPA was required to develop and adopt standards for Sewage Sludge Incinerator units (SSI) from wastewater treatment facilities that treat domestic sludge related to the combustion of sludge. Limits were set for: cadmium, carbon monoxide, hydrogen chloride, lead, mercury, nitrogen oxides, particulate matter, ash emissions, polychlorinated dioxins/furans, sulfur dioxide.

The rule is based on solid waste incineration unit standards from which the 2016 SSI regulations were written for new and existing sewage sludge incinerators. The John M. Asplund Water Pollution Control Facility operates a multiple hearth incinerator which incinerates approximately 530 dry tons of sludge per month. This process reduces sludge volumes by 85 percent and results in substantial cost savings for the Utility and ratepayers.

Clean Air Act protects public health and the environment

Six common air pollutants (also known as *criteria pollutants*) are identified below:

Particle Pollution (often referred to as *particulate matter*), Ground-Level Ozone, Carbon Monoxide, Sulfur Oxide, Nitrogen Oxides, and Lead.

These pollutants can harm your health and the environment. EPA refers to these pollutants as “*criteria air pollutants*” because it regulates them by developing human health-based and/or environmentally-based criteria (science-based guidelines) for setting permissible levels.

The set of limits based on human health is called primary standards. Another set of limits intended to prevent environmental and property damage is called secondary standards. A geographic area with air quality that is cleaner than the primary standard is called an “attainment” area; areas that do not meet the primary standard are called “nonattainment” areas.” The Municipality of Anchorage has been an attainment area since 2013.

Monitoring reports provide assurance that the Utility’s John M. Asplund Water Pollution Control Facility air discharges provide for the maintenance of air quality standards suitable to protect public health and the environment in the Cook Inlet airshed.

Extensive monitoring and testing is required to document compliance.

AWWU collects thousands of analytical process data, air quality data and analytical results during source testing as required by the CAA. In order meet multiple reporting requirements, data is collected by minute, fifteen minute, hourly, three and twelve hour intervals on a daily, monthly, seasonal, and yearly basis.

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