

9 AUGUST 1996



Civil Engineer

**EIELSON AFB WASTEWATER SYSTEMS
COMPLIANCE**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

NOTICE: This publication is available digitally on the AFDPO WWW site at:
<http://www.e-publishing.af.mil>

OPR: 354 CES/CEVC (P. Fowler)
Supersedes 354 FWR 19-2, 23 May 1993

Certified by: 354 SPTG/CC (Col Holt)
Pages: 6
Distribution: F;X (HQ PACAF/CEVC - 1)

This instruction implements AFPD 32-70, *Environmental Quality*. It is used in conjunction with AFI 32-7041, *Water Quality Compliance*. It establishes base procedures and assigns responsibility for wastewater system oversight and operation and for accomplishing monitoring and reporting requirements of the Clean Water Act and associated publication. It applies to domestic and nondomestic wastewater systems, including but not limited to collection systems, lift stations, septic tanks, oil/water separators, and grease traps. It also applies to all discharges and emphasizes eliminating, reducing, and controlling nondomestic wastewater. It applies to all units, organizations, and building occupants on Eielson AFB.

SUMMARY OF REVISIONS

Aligns instruction with AFPD 32-70, converts into instruction format, and eliminates redundancy.

1. General. The emphasis on environmental pollution prevention and abatement requires all base activities, including housing occupants, contractors, and tenants who generate nondomestic wastewater, to review their processes that generate wastewater and their disposal procedures. Efforts must be taken by all to reduce or eliminate the pollutant at the point of generation, control its discharge, recycle or reuse the pollutant, and/or properly dispose of the pollutant. An effective base program for eliminating and controlling nondomestic wastewater requires the full support and cooperation of all activities that generate the wastewater.

1.1. This instruction:

- Outlines a scoping process for identifying and characterizing wastewater from point sources on base and implementing a waste minimization, control, and permitted treatment program to reduce and prevent pollution.
- Prescribes segregation, control, and discharge procedures for domestic and nondomestic wastewater.

- Outlines procedures for monitoring, testing, and reporting to regulatory agencies.
- Designates offices of primary responsibility for various tasks.

1.2. Scope. This instruction is consistent with and augments the following base plans:

- Hazardous Material and Waste Management Plan
- Oil and Hazardous Substance Discharge Prevention and Contingency Plan
- Storm Water Pollution Prevention Plan
- Pollution Prevention Management Plan
- Solid Waste Management Plan

2. Eielson AFB Responsibilities:

2.1. Comply with federal, state, and local requirements pertaining to permitting, management, treatment, and discharge of wastewater. These requirements take precedence if they conflict with this regulation. Assure timely review and submission of monitoring reports to regulatory agencies to avoid regulatory noncompliance.

2.2. Ensure and implement best management practices for collection of wastewater and operation of wastewater treatment systems.

2.3. Conduct wastewater characterization, toxicity reduction evaluations, and other studies to determine the nondomestic pollutant characteristics at each waste generation point.

2.4. Develop consistent base-wide approaches to nondomestic wastewater management which apply to all base and tenant organizations.

2.5. Enforce wastewater discharge policies through the use of point source monitoring, shop surveys, and administrative action to prevent treatment system interruptions and discharge violations. Compliance problems with nondomestic discharges will be addressed and resolved.

2.6. Utilize waste minimization and source reduction techniques through material substitution, process change, and/or administrative change at or near the waste generation point. This should be done as needed to protect collection and treatment facilities from damage, upset, or discharge violations.

2.7. Develop, implement, and manage an operator certification program in compliance with all applicable regulations. This program applies to water plant, wastewater plant, and distribution personnel.

3. Organizational Responsibilities:

3.1. Base Civil Engineer (BCE):

3.1.1. Establishes and publishes technical guidance through this instruction to base organizations for collection, treatment, storage, and disposal of domestic and nondomestic waste. Restrictions will be specified on what can be discharged, including volumes and concentrations.

3.1.2. Approves requests from organizations that generate nondomestic wastewater. Reviews the wastewater constituents and volume in coordination with the Environmental Flight to determine if the discharge should be prohibited or have restrictions or controls prior to discharge to the collection system.

- 3.1.3. Establishes an operator certification program.
- 3.1.4. Maintains oil/water separators and keeps log of maintenance activities.
- 3.2. Environmental Flight:
 - 3.2.1. Serves as the contact for all activities concerning discharges to the sanitary system. Coordinates with water systems superintendent as needed.
 - 3.2.2. Works with all generators to control and eliminate, where possible, all nondomestic waste discharge to the sanitary sewer system.
 - 3.2.3. Assures wastewater facilities are in compliance with regulatory and base requirements; initiates corrective actions where needed.
 - 3.2.4. Coordinates negotiations for discharge limits, monitoring locations, and reporting requirements with regulators. Maintains permit and reporting records.
 - 3.2.5. Ensures compliance monitoring and reporting is conducted, reviewed, and submitted in a timely manner.
- 3.3. Bioenvironmental Engineering Services (BES):
 - 3.3.1. Conducts sampling and analysis to identify and characterize wastewater discharges to ensure regulatory compliance.
- 3.4. Generating Activities:
 - 3.4.1. Organizational commanders appoint facility managers who are responsible for controlling all nondomestic waste discharges in their area.
 - 3.4.2. Contact the Environmental Flight for approval, guidance, and nondomestic discharge restrictions prior to initiating any discharge.
 - 3.4.3. Contact the Environmental Flight for approval, guidance, and restrictions prior to initiating any pretreatment of discharge to the STP.
 - 3.4.4. Prevent any nondomestic discharge not specifically approved by the Environmental Flight. Take a proactive approach to reducing the volume and concentration of discharges through the pollution prevention program. The Environmental Flight can provide guidance on waste elimination, product substitution, recycling, and process changes.
 - 3.4.5. Notify the Fire Department and the Environmental Flight of any spills or unauthorized discharges of nondomestic waste to the sewer system.
 - 3.4.6. Ensure all personnel working in the generation area are aware of the discharge restrictions. Current general nondomestic discharge restrictions are listed in [Attachment 2](#).

RICHARD E. BROWN III, Brig Gen, USAF
Commander

Attachment 1**GLOSSARY OF TERMS*****Terms***

ADEC—Alaska Department of Environmental Conservation

BCE—Base Civil Engineer

BES—Bioenvironmental Engineering Services

BOD—Biochemical Oxygen Demand

CFR—Code of Federal Regulations

EPC—Environmental Protection Committee

HAZMAT—Hazardous Material Handling and Recycling Facility

HMWMP—Hazardous Material and Waste Management Plan

MSDS—Material Safety Data Sheet

POL—Petroleum, Oils, Lubricants

RCRA—Resource Conservation and Recovery Act

STP—Sewage Treatment Plant

TSS—Total Suspended Solids

Domestic Wastewater—Liquid wastes from the domestic laundry, food preparation, and sanitary facilities in housing, commercial and administrative buildings, and industrial facilities.

Hazardous Waste—As defined under RCRA in 40 CFR 261.

Interference—The inhibition or disruption of the STP treatment processes or operations which may contribute to violation of the ADEC wastewater discharge permit.

Nondomestic Wastewater—Any storm water and any wastewater other than that covered under the definition for domestic wastewater. Examples include wastewater from paint stripping, metal plating, maintenance and repair, aircraft and vehicle cleaning, power or heat plant operations, photographic processing, boiler and cooling water discharges, and oil and solvent recovery operations.

Pass-through—The presence of any pollutant in the STP effluent which is not permitted to be discharged. This occurs when pollutants are sent to an STP that is not designed to remove them.

Point Source—Any discernible, confined and discrete conveyance, including any pipe, ditch, channel, tunnel, well, conduit, container, or vessel from which pollutants are or may be discharged.

Pollutant—Any substance, often regulated by environmental protection standards, that may have an adverse impact on the environment. Examples include chemical and biological constituents of sewage, garbage, sewage sludge, chemical wastes, other biological materials, radioactive materials, heat, oil, grease, solvents, heavy metals, organic compounds, suspended solids, surfactants, or any toxic or hazardous material discharged into water.

Pretreatment—Treatment of pollutants prior to discharge to the STP. May involve methods to reduce

concentrations or alter the chemical/physical properties of the pollutant.

Sanitary Sewer—A sewer intended to receive primarily domestic sewage and some nondomestic wastewater as permitted by this regulation.

Storm Sewer or Storm Drain—A sewer which carries storm or surface waters and drainage, but excludes sewage and industrial wastes.

Attachment 2**GENERAL RESTRICTIONS FOR ALL ACTIVITIES**

(Restrictions can be from permits or self-imposed)

A2.1. Discharge of any petroleum product, in any amount. Examples include gasoline, jet fuel, diesel fuel, lubrication oils, solvents, etc.

A2.2. Continuous discharge of any liquid or vapor at temperatures higher than 150 degrees Fahrenheit unless authorized by the BCE.

A2.3. Any water or waste having a stabilized pH lower than 6.0 or higher than 10.0, or having other corrosive properties. Material subject to this provision include, but are not limited to, acids, sulfides, concentrated chloride and fluoride compounds, and substances which will react with water to form acidic products.

A2.4. Improperly shredded garbage.

A2.5. Insoluble oils, fats, and greases, including grease from base facility kitchens, or any solid or viscous substances which may cause obstructions to the flow in the sewer system or other interference with operation of the STP.

A2.6. Any liquids, solids, or gases which, by reason of their nature or quantity, may pose a fire or explosion hazard.

A2.7. Ashes, wax, paraffin, cinders, sand, mud, straw, metal, glass, rags, dirt, feathers, tars, plastics, wood and sawdust, hair and fleshings, entrails, grindings, chemical residues, acid residues, and food processing bulk solids.

A2.8. Septic tank sludge.

A2.9. Noxious, or malodorous materials or substances.

A2.10. Any radioactive materials.

A2.11. Any waste pollutants in sufficient quantity, either singularly or by interaction with other pollutants, which will interfere with the wastewater treatment process or cause a violation of the ADEC Wastewater Discharge Permit.

A2.12. Spent solvents, heavy metals, or any hazardous waste as defined in 40 CFR 261.

A2.13. Aircraft, AGE, and vehicle washing shall be performed in wash racks connected to an oil/water separator.

A2.14. Groundwater contaminated with petroleum products or storm water cannot be discharged in sanitary sewers.