# BY ORDER OF THE SECRETARY OF THE AIR FORCE

AIR FORCE INSTRUCTION 32-7041
13 MAY 1994



Civil Engineering
WATER QUALITY COMPLIANCE

#### COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

**NOTICE:** This publication is available digitally on the SAF/AAD WWW site at: http://afpubs.hq.af.mil. If you lack access, contact your Publishing Distribution Office (PDO).

OPR: HQ USAF/CEVC Mr Jayant Shah Certified by: HQ USAF/CEV Col Peter Walsh

Pages: 17

Distribution: F

This AFI 32-7041 implements AFPD 32-70, *Environmental Quality*. It provides details of the Air Force Water Quality Compliance Program. It applies to generating, collecting, treating, reusing, and disposing of: domestic and industrial wastewater, storm water, non-point-source runoff, sewage sludge, and water treatment residuals. It explains how to assess, attain, and sustain compliance with: the *Clean Water Act*; other Federal, state and local environmental regulations; and related Department of Defense (DoD) and Air Force directives. This instruction does not apply to *Safe Drinking Water Act* compliance. (See AFI 32-7006, *Environmental Program in Foreign Countries*, for water quality compliance requirements at installations outside the United States and its territories.) **Attachment 1** lists the abbreviations, acronyms, and terms used in this instruction.

## Chapter 1

#### HOW TO USE THIS INSTRUCTION

- **1.1. Background.** The Air Force Water Quality Compliance Program identifies essential Air Force actions to achieve and maintain compliance with the *Water Quality Act of 1987* (Public Law 100-4), and applicable Federal, state, and local water quality standards. Adhere to applicable State and local water quality standards when they are more stringent than Federal standards.
  - 1.1.1. The *Clean Water Act* and US Environmental Protection Agency (EPA) regulations form the basis of the Water Quality Compliance Program, which requires Air Force compliance with permit standards under the National Pollutant Discharge Elimination System and other applicable Federal, state, and local water quality regulations.

### 1.2. Concept:

- 1.2.1. This instruction sets up a framework for major commands (MAJCOM) to use in complying with water quality requirements and AFPD 32-70.
- 1.2.2. MAJCOMs provide additional implementing guidance in their supplemental publications to this AFI. The MAJCOM supplement must:
  - Identify specific "actors" who have implementing responsibility.
  - Include any "how to" implementing guidance necessary to comply.

## 1.3. Responsibilities:

- 1.3.1. The Assistant Secretary of the Air Force for Manpower Reserve Affairs, Installations, and Environment (SAF/MI) promulgates and oversees policy for water quality compliance.
- 1.3.2. The Civil Engineer, HQ USAF (HQ USAF/CE) develops policy, allocates resources, and oversees execution of water quality compliance programs throughout the Air Force.
- 1.3.3. MAJCOMs provide execution guidance and oversee implementation of water quality compliance programs at their installations. All references to MAJCOMs in this AFI include the Air National Guard Readiness Center and other agencies that Headquarters US Air Force (HQ USAF) designates as "Major Command equivalent."

## Chapter 2

# WASTEWATER GENERATION, COLLECTION, AND COMPLIANCE

## 2.1. Water Quality Compliance Program:

2.1.1. A water quality compliance program must be established at Air Force installations to assess, attain, and maintain compliance with applicable Federal, state and local water quality regulations. See **Attachment 2** for brief descriptions of the applicable Federal regulations.

## 2.2. National Pollutant Discharge Elimination System Permits:

- 2.2.1. Personnel must strictly comply with all National Pollutant Discharge Elimination System permit conditions. Failure may result in fines, civil or criminal penalties, or other legal enforcement actions.
- 2.2.2. All wastewater and the following storm water runoffs require a National Pollutant Discharge Elimination System permit for discharge into US waters:
  - Transportation facilities that have vehicle maintenance, equipment cleaning, or airport deicing operations, such as parking ramps, motor pools, and flight line activities.
  - Hazardous waste treatment, storage, or disposal facilities.
  - Landfills, land application sites, and open dumps that receive or have received any industrial
    wastes.
  - Facilities involved in recycling of materials, including metal scrap yards, battery reclaimers, salvage yards, and automobile junkyards.
  - Steam electric power generating facilities, including coal handling sites.
  - Works used in storing, treating, recycling, and reclaiming domestic sewage, including land dedicated to the disposal of sewage sludge within the confines of the facility (for facilities with a design flow of more than 1.0 million gallons per day or facilities required to have an approved pretreatment program under Title 40, Code of Federal Regulations (CFR), Part 403).
  - Construction activity, including clearing, grading and excavating. *EXCEPTIONS*: Operations that disturb less than 5 acres of total land area and are not part of a larger common development or sale plan.
  - Mineral facilities such as mining of metals, nonmetals, coal, sand, stone, and oil and gas exploration activities. (Standard Industrial Classifications Code 10 through 14).
  - Facilities under Standard Industrial Classification codes specified in 40 CFR 125.
- 2.2.3. Wastewater National Pollutant Discharge Elimination System permits typically require:
  - Compliance with discharge standards.
  - Self-monitoring and reporting.
- 2.2.4. National Pollutant Discharge Elimination System storm water permits require preparation of and compliance with the Storm Water Pollution Prevention Plan (see **2.12.1**.paragraph 2.12.1).
- 2.2.5. Track permit renewal dates to prevent permit expiration. In addition:

- When first applying for or renewing a permit, review the requirements imposed by the regulatory agency to ensure they are reasonable and achievable.
- If a draft permit contains unacceptable or unachievable conditions, negotiate acceptable conditions with the regulatory agency.
- 2.2.6. Resolve all National Pollutant Discharge Elimination System permit violations within the regulatory agency's time frame. In addition:
  - Maintain records of written correspondence and oral communication with the regulators.
  - Report water quality enforcement actions (e.g., permit noncompliance) according to AFI 32-7047, *Compliance Reporting and Tracking*.
  - Develop a plan to promptly resolve outstanding deficiencies.

# 2.3. Federal Facility Compliance Agreements:

- 2.3.1. Negotiate Federal Facility Compliance Agreements with realistic interim discharge standards and an achievable schedule for short-term corrective measures and long-term compliance.
- 2.3.2. Signing a compliance agreement does not eliminate current noncompliance; it only temporarily allows discharges to exceed certain permit conditions.
- 2.3.3. Failing to comply with an Federal Facility Compliance Agreements may lead to additional enforcement actions.

## 2.4. Wastewater Systems, Plant Construction, and Maintenance:

- 2.4.1. Program new construction and maintenance work to prevent failure of wastewater system operations.
- 2.4.2. Projects to upgrade, modify, or replace wastewater treatment plants must include on-the-job operator training and amended operation and maintenance manuals.
- 2.4.3. Obtain applicable construction, wetlands, and National Pollutant Discharge Elimination System permits before starting construction and maintenance work.
- 2.4.4. Design construction and modification work to satisfy current and probable future discharge standards. Retain the flexibility of adding tertiary treatment.
- 2.4.5. Connect to a regional wastewater treatment system if the costs of connecting to the existing system will not be more than 25 percent above the cost of modifying or building a facility.
- **2.5.** Wastewater Lift Stations. Lift stations must continue to operate during power failures and have redundant pumps to provide adequate pumping capacity for handling the maximum wastewater flow when one pump is out of service.
  - 2.5.1. For major lift stations, provide stand-by power generators, portable power generators, or two independent power sources at each station.
  - 2.5.2. For smaller lift stations, provide a connection for a portable generator.
  - 2.5.3. Install sound and visual alarms at each pump station to alert maintenance staff of pump failures. Include equipment to transmit alarm signals to a central monitoring point, if possible. Install backup batteries or other emergency power sources to retain alarm data during power failures.

- 2.5.4. Repair or replace failed pumps immediately to maintain redundancy.
- **2.6. Prohibition on Bypasses.** Federal regulations prohibit piped connections, overflow devices and intentional bypasses that directly discharge untreated wastewater into waters of the United States.
  - 2.6.1. Wastewater collection systems and pumping stations must not bypass or permit overflow into storm sewers or surface water.
  - 2.6.2. Combined-Sewer Overflows and unauthorized connections of industrial wastewater and floor drains from industrial shops to domestic wastewater collection systems shall be eliminated. Federal regulations forbid building new Combined-Sewer Overflows. Air Force installations must:
    - Obtain National Pollutant Discharge Elimination System permits for all existing combined-sewer overflows.
    - Immediately notify regulatory authorities when manholes or pump stations overflow (see AFI 32-4002, *Hazardous Material Emergency Planning and Response Compliance*).
    - Eliminate or minimize storm water cross-connections, infiltration, and inflow to wastewater collection systems.
- **2.7. Certifying and Training Operators.** Train and certify wastewater treatment plant operators according to Federal, state, and local requirements.
- **2.8. Industrial Wastewater.** Regulations forbid discharging flammable or explosive materials or regulated hazardous waste into domestic wastewater collection systems.
  - 2.8.1. Pretreat other industrial wastewater, such as toxic and corrosive wastes, before discharging it into a domestic wastewater system.
  - 2.8.2. Strictly control the discharge of industrial wastewater by:
    - Minimizing industrial wastewater discharge.
    - Keeping prohibited waste from entering domestic wastewater and other nonindustrial sewer systems.
    - Pretreating regulated industrial wastewater to acceptable levels before discharge to a domestic wastewater or other nonindustrial sewer systems.
  - 2.8.3. Collect and manage industrial wastewater as a hazardous waste per AFI 32-7042, *Solid and Hazardous Waste Compliance*, if:
    - Regulations forbid discharging such wastewater into domestic wastewater or other nonindustrial sewer systems.
    - Pretreatment is impossible.
  - 2.8.4. See 40 CFR 405 through 471 for categorical effluent limitation guidelines.
- **2.9. Fire Training Facilities.** Operate new fire training facilities as zero-discharge facilities.
  - 2.9.1. New facilities must:
    - Protect groundwater.

- Include a groundwater monitoring system and double-lined basins with leak-detection systems.
- Obtain regulatory approval before awarding the construction contract.
- Use uncontaminated fuel in all fire training exercises.
- **2.10.** Oil/Water Separators. Normal operation and maintenance activities, such as aircraft refueling operations, must not release fuel, oil, grease, and other contaminants. Apply these criteria:
  - Perform regular inspections and maintenance of all oil/water separators to maintain water quality compliance.
  - Use adequately sized oil/water separators to remove incidental releases of residual fuel, oil, grease, and other oily wastes when you cannot use dry cleanup or other cleanup methods.
  - Obtain a wastewater discharge permit for an oil/water separator when discharge to a wastewater treatment plant is not possible.
  - Do not discharge collected fuel, oil, grease, oily waste, solvents, cleaning compounds, or corrosion-control facility waste or other contaminants into oil/water separators.
- **2.11. Aircraft Maintenance.** Many routine aircraft maintenance operations (such as paint stripping, solvent cleaning, and metal finishing) produce hazardous wastes classified under the Resource Conservation and Recovery Act (see AFI 32-7042). Either:
  - Pretreat wastewater from these operations before discharging them to wastewater treatment plants according to Federal, state, and local requirements, or
  - Manage these substances as hazardous waste (see AFI 32-7042).

#### 2.12. Storm Water:

- **2.12.1. Preparing Storm Water Pollution Prevention Plan.** Develop and implement a Storm Water Pollution Prevention Plan within Federal and state regulatory time limits. In addition:
  - Storm Water Pollution Prevention Plans must identify potential sources of pollutants in runoff from industrial activities that could affect the quality of storm water that an installation discharges.
  - Develop and implement best management practices to eliminate/reduce pollutants.
  - For Storm Water Pollution Prevention Plan preparation guidance, see EPA 832-R-92-006, Storm Water Management For Industrial Activities--Developing Pollution Prevention Plans and Best Management Practices, and EPA 832-R-92-005, Storm Water Management for Construction Activities--Developing Pollution Prevention Plans and Best Management Practices.
- **2.12.2. Storm Water Best Management Practices.** Include at least these eight baseline storm water Best Management Practices in each Storm Water Pollution Prevention Plan:
  - Good housekeeping.
  - Performing preventive maintenance.
  - Making visual inspections.
  - Prevention and response to spills.
  - Sediment and erosion control.

- Managing runoff.
- Training personnel, keeping records, and reporting.
- Any other activity-specific and site-specific storm water Best Management Practices that apply.
- **2.13. Spill Prevention, Control, and Countermeasures Plans.** Implement Spill Prevention Control, and Countermeasures Plan requirements according to AFI 32-4002, *Hazardous Emergency Planning and Response Compliance*, and AFI 32-7080, *Pollution Prevention Programs*.

### **2.14.** Nonpoint-Source Pollution Control:

- 2.14.1. Develop Nonpoint Source Control Programs to comply with applicable Federal, state, and local requirements.
- 2.14.2. Identify Nonpoint Source pollution compliance requirements for forestry, agricultural, and silvicultural (timber growth) land management, construction, and uncontrolled runoff activities.
- 2.14.3. Use Best Management Practices, modify designs, and manage natural resources to control Nonpoint Source pollution from all potential nonpoint sources.

### 2.15. Sludge Disposal Requirements:

- 2.15.1. Comply with 40 CFR 503, *EPA Standards for the Use or Disposal of Sewage Sludge*, including obtaining permits for land application, surface disposal or incineration of sewage sludge. *Note: See paragraph A2.* 1.8. for definition of sewage sludge.
- 2.15.2. Title 40 CFR 503 does not apply to treated industrial wastewater sludge or sludge disposed in a municipal solid waste landfill if these sludges comply with 40 CFR 258, *EPA Criteria for Municipal Solid Waste Landfills*.
- **2.16.** Water Treatment Residuals Disposal. Do not discharge swimming pool filter backwash water and water treatment residuals, including sludge and process wastewater, from drinking water treatment plants into United States waters without a National Pollutant Discharge Elimination System permit.
- **2.17.** Wetlands Permits. Obtain a permit from the US Army Corps of Engineers for discharging dredged or fill material in wetlands and other bodies of water.
- **2.18. Subsurface Discharge.** Obtain permits under the Federal Underground Injection Control program and applicable state programs for subsurface wastewater discharges. Regulated discharges include:
  - Injection wells.
  - Infiltration basins.
  - Common septic systems serving multiple housing units or large remote buildings.

### 2.19. Reusing Wastewater:

- 2.19.1. Encourage wastewater reuse for aquifer recharge and irrigation.
- 2.19.2. Permits must be obtained under the Federal Underground Injection Control Program or state programs to discharge wastewater into the subsurface.

2.19.3. tions.	Other	wastewater	r reuse ap	plications	must comply	with applic	cable Federa	l and state regul

### Chapter 3

#### ASSESSING THE PROGRAM

#### 3.1. General:

- 3.1.1. Assess Water Quality Compliance Program status by:
  - Reviewing National Pollutant Discharge Elimination System and other permits.
  - Monitoring data including:
  - Discharge Monitoring Reports.
  - Inspection reports.
  - Environmental Compliance Assessment and Management Program reports.
  - The Work Information Management System-Environmental Subsystem database.

#### 3.2. Permits:

- 3.2.1. Review permits semiannually to ensure that installations comply with permit requirements.
- 3.2.2. Ensure that personnel:
  - Meet noncompliance reporting requirements.
  - Acquire construction permits on time.
  - Begin permit renewal process 180 days before permits expire.
- **3.3. Data Quality.** Review data generated by monitoring activities monthly to ensure that collected data meets permit requirements.
  - 3.3.1. Ensure that personnel:
    - Use laboratories certified by the appropriate regulatory agency.
    - Use analytical methods that the permit specifies.
    - Collect samples using approved procedures within specified holding times.
    - Maintain accurate records.
- **3.4. Discharge Monitoring Reports.** Review Discharge Monitoring Reports monthly to ensure correct preparation and timely submittal of reports.
  - 3.4.1. Compare Discharge Monitoring Reports with the discharge standards and other requirements that the discharge permit specifies.
  - 3.4.2. Explain cause(s) and take corrective action for noncompliance with the permit standards.
  - 3.4.3. Promptly submit Discharge Monitoring Reports to the permitting authority according to the schedule that the discharge permit specifies.
  - 3.4.4. Deliver Discharge Monitoring Reports to the permitting authority by registered mail to guarantee a record of on-time arrival.

- 3.4.5. Certify Discharge Monitoring Reports using the responsible official defined in the National Pollutant Discharge Elimination System permit.
- **3.5. Regulatory Agency Inspections.** Review Federal, state, and local regulatory agency inspection findings monthly to ensure that corrective action plans resolve the outstanding Open Enforcement Actions within the required time frames.
- **3.6. The Environmental Compliance Assessment and Management Program.** Use Environmental Compliance Assessment and Management Program audits to assess compliance with water quality requirements according to AFI 32-7045, *Environmental Compliance Assessment and Management Program*.
- **3.7. The Work Information Management System--Environmental Subsystem.** See AFI 32-7002, *Environmental Information Management System*, for information on Work Information Management System--Environmental Subsystem and AFI 32-7001, *Environmental Budgeting*, for a description of the A-106 process. Use Work Information Management System--Environmental Subsystem to:
  - Accomplish an inventory of wastewater treatment facilities, permits, and regulatory requirements.
  - Track and report budget requirements for water quality compliance in the A-106 report.

JAMES E. McCARTHY, Maj General, USAF The Civil Engineer

#### Attachment 1

## ABBREVIATIONS, ACRONYMS, AND TERMS

# Abbreviations and Acronyms

**AFB**—Air Force Base

**AFI**—Air Force Instruction

**AFM**—Air Force Manual

**AFP**—Air Force Pamphlet

**AFPD**—Air Force Policy Directive

**AFR**—Air Force Regulation

**DoD**—Department of Defense

**EPA**—US Environmental Protection Agency

**HQ USAF**—Headquarters, US Air Force

HQ USAF/CEV—Headquarters, US Air Force, Civil Engineering, Directorate of Environmental Quality

**OSAF**—Office of the Secretary of the Air Force

**OSD**—Office of the Secretary of Defense

**SAF/MI**—The Assistant Secretary of the Air Force for Manpower, Reserve Affairs, Installations, and Environment

**SAF/MIQ**—The Deputy Assistant Secretary of the Air Force for Environment, Safety, and Occupational Health

**SG**—Surgeon General

**USAF**—US Air Force

#### **Terms**

**Best Management Practices**—Measures or practices to reduce amounts of pollutants entering surface water, air, land, or groundwater. Best Management Practices can be a process, activity, or physical structure.

**Bypass**—A pipe or structure that allows direct discharge of untreated or partially treated wastewater into waters of United States, including overflows of lift stations to nearby streams or oil/water separator overflows to storm sewers.

**Categorical Effluent Limit**—Effluent limit using technology-based discharge standards developed by the EPA for categories of industries (40 CFR 405 through 471).

Categorical Waste—An EPA waste category under 40 CFR 405 through 471.

**Closed Enforcement Actions**—An open enforcement action for water quality compliance closes when:

• The regulatory agency sends a letter confirming that the enforcement action was resolved, rescinded, or superseded.

• When the Regional Compliance Office determines that the regulators are not carrying out the open enforcement action.

**Combined Wasteload Formula**—A formula based on categorical discharge limits that sets discharge limits for categorical wastes mixed with other wastewater.

Combined Sewer—A wastewater collection system that collects storm water and wastewater.

**Combined-Sewer Overflow**—Direct discharge of untreated wastewater from a combined sewer.

**Cross-Connection**—Interconnecting separate wastewater collection systems, such as:

- Industrial wastewater collection systems to domestic or storm sewers.
- Storm water collection systems to domestic or industrial sewers.
- Domestic wastewater collection systems to storm or industrial sewers.

**Delegated State**—A state with authority from the EPA to administer the National Pollutant Discharge Elimination System program in that state.

**Direct Discharge**—A discharge to waters of United States, as opposed to a discharge to a publicly owned treatment works or other treatment system.

**Discharge Limit**—The maximum pollutant concentration that a discharge permit allows.

**Discharge Monitoring Report**—Form for reporting self-monitoring data to a state regulatory agency or to the EPA.

**Discharge Permit**—A permit that authorizes discharging wastewater or storm water to the waters of the United States or to a publicly owned treatment works.

**Domestic Sewer**—A conveyance system for domestic or pretreated industrial wastewater collection.

**Domestic Wastewater**—Wastewater that contains human wastes and wastewater from food preparation, laundry, bathing, and similar activities. Domestic wastewater typically includes wastewater from housing units and wastewater from commercial or industrial facilities that is similar to that from housing units. Domestic wastewater does not include industrial process wastewater.

**Exfiltration**—Flow out of a sewer to the subsurface.

**Facility Response Plan**—A plan that establishes a facility's specific responses to an oil spill.

**Industrial Sewer**—A conveyance system for collecting industrial wastewater.

**Industrial Wastewater**—Wastewater from industrial activities such as electroplating, metal finishing, aircraft maintenance, corrosion control, vehicle maintenance, and other industrial processes at Air Force installations.

**Infiltration**—Groundwater from leaking sewers that flows into wastewater collection systems.

**Inflow**—Storm water flow into wastewater collection systems.

**Interference**—Disrupting a publicly owned treatment works operation or treatment by discharging an incompatible pollutant or waste stream to the publicly owned treatment works.

**Lift Station**—A wastewater collection system that pumps wastewater from a gravity sewer to a sewer or treatment plant at a higher elevation.

National Pollutant Discharge Elimination System—EPA program under the Clean Water Act that

regulates the discharge of pollutants from point sources into the waters of the United States and imposes effluent standards and enforces pretreatment requirements under *Clean Water Act* sections 307, 402, 318, and 405.

National Pollutant Discharge Elimination System State—See Delegated State.

**Nonpoint Source**—A pollutant source that does not meet the definition of "point source." Nonpointsource pollution generally results from land runoff, atmospheric deposition, drainage, or seepage.

**Open Enforcement Actions**—Written notices indicating one or more violations of environmental regulations issued by a host nation, Federal, state, local, or other regulatory agency, including:

- Warning letters.
- Notices of violation or noncompliance.
- Administrative orders.
- Consent orders.

**Outfall**—A structure through which treated or untreated storm water or wastewater is discharged to the waters of the United States.

**Pass-Through**—A discharge of pollutants to a publicly owned treatment works collection system which passes untreated through the publicly owned treatment works into United States waters.

**Point Source**—Any discernible confined and discrete conveyance from which pollutants are or may be discharged, excluding agricultural storm water discharges and return flows from irrigated agriculture. Point sources include:

- Pipes.
- Ditches.
- Channels.
- Tunnels.
- Conduits.
- Wells.
- Discrete fissures.
- Containers.
- Rolling stock.
- Concentrated animal feeding operations.
- Landfill leachate collection systems.
- Vessel or other floating crafts.

**Pretreatment**—Treating industrial wastewater before their discharge to an federally owned treatment works or a publicly owned treatment works.

**Pretreatment Permit**—Authorization to discharge pretreated wastewater to a publicly owned treatment works.

**Publicly-Owned Treatment Works**—A treatment plant belonging to a state, county, regional agency, or municipality that treats domestic wastewater or pretreated industrial wastewater.

Pump Station—See Lift Station.

Sanitary Wastewater—See Domestic Wastewater.

**Spill Prevention, Control, and Countermeasures Plan**—A plan that establishes procedures to prevent any accidental release of materials that might harm the environment.

**Storm Water Discharge Associated With Industrial Activity**—The discharge from any conveyance used for collecting and conveying storm water directly related to manufacturing, processing, or storing raw materials at an industrial plant. EPA has categories of industrial activities that apply to Air Force installations, including:

- Transportation facilities.
- Steam electric power generating facilities.
- Treatment works treating domestic sewage.
- Construction sites.

**Storm Water Pollution Prevention Plan**—A series of steps and activities to identify sources of storm water pollution at a site and select and implement actions that prevent or control storm water contamination.

**Technology-Based Effluent Limit**—A discharge standard based on EPA review of common treatment technologies for treating a type of wastewater. Technology-based effluent limits are the same for each type of wastewater, regardless of the location or quality of the receiving water.

Water-Quality-Based Effluent Limit—Discharge limit to ensure that discharging the pollutant will not exceed the water quality standard for that pollutant. Water-Quality-Based Effluent Limits are site-specific and pollutant-specific. As opposed to technology-based limits, Water-Quality-Based Effluent Limits can differ in different locations for the same type of wastewater.

Water Quality Criteria—EPA criteria for maximum in-stream concentrations of specific pollutants.

**Water Quality Standards**—Maximum in-stream concentrations of specific pollutants adopted by each State based on EPA's Water Quality Criteria.

Water Treatment Residuals—Solids (sludge) and waste process water such as sludge dewatering decant water generated at water treatment plants.

**Waters of the United States**—Generally, all surface water bodies of the United States, including all rivers, streams, lakes, wetlands, estuaries, and territorial seas. See ¶502(7) of the Clean Water Act and 40 CFR 122.2.

Wetlands—Areas inundated by surface or groundwater that support plants and animals that need saturated or seasonally saturated soil to grow and reproduce. Wetlands include swamps, marshes, bogs, sloughs, mud flats, and natural ponds.

# Attachment 2WATER QUALITY COMPLIANCE REGULATIONS, EXECUTIVE ORDERS, AND DOD DIRECTIVES

- **A2.1.** Clean Water Act. The Clean Water Act is the principal Federal legislation addressing water pollution. **A2.1.** This paragraph describes the major components of the Clean Water Act. Pertinent Clean Water Act requirements include:
  - Section 301 of the *Clean Water Act* (Title 33, United States Code [U.S.C.] 1311), which prohibits discharging pollutants into the waters of the United States.
  - The National Pollutant Discharge Elimination System, section 402 of the *Clean Water Act* (33 U.S.C. 1342) which requires permits to discharge point source wastewater and storm water.
  - The *Clean Water Act* requirements for discharges into publicly owned treatment works, disposal of sewage sludge, construction in wetlands areas, and control of pollution from nonpoint sources.
  - **A2.1.1. National Pollutant Discharge Elimination System Permit Program.** National Pollutant Discharge Elimination permitting controls point-source discharges, including storm water. See 40 CFR 122.
  - **A2.1.2. Oil Pollution Prevention.** Section 311 of the *Clean Water Act* (33 U.S.C. 1321) establishes requirements for preventing discharge of oil and other hazardous substances and requires certain actions for spills. The regulations implementing these requirements are in 40 CFR 110, 112, 116, and 117. These regulations:
    - Require the development of Spill Prevention Control and Countermeasure Plans.
    - Establish actions required in the event of a spill.
    - Designate hazardous substances.
    - Specify reportable quantities.
    - Provide reporting procedures.
  - **A2.1.3.** Water Quality Standards. Clean Water Act, section 303, Water Quality Standards and Implementation Plans (33 U.S.C. 1313), requires the development of water quality standards to protect bodies of water. The regulations implementing these standards are contained in 40 CFR 130 and 131.
  - **A2.1.4. Federal Facilities.** Section 313 of the *Clean Water Act*, *Federal Facilities Pollution Control*, requires Federal facilities to comply with all Federal, state, interstate, and local water pollution requirements in the same manner as nongovernmental entities. The President may issue regulations exempting equipment or other property of the Armed Forces that is uniquely military in nature.
  - **A2.1.5. Wetlands.** Section 404 of the *Clean Water Act*, *Permits for Dredged or Fill Material* (issued by the US Army Corps of Engineers), establishes permit requirements for discharging dredge or fill material in wetlands and other bodies of water. The regulations implementing these requirements are in 33 CFR 320 through 330 and 40 CFR Part 230.
  - **A2.1.6. Pretreatment Standards.** Some pollutant discharges interfere with the operation of Publicly Owned Treatment Works. Sections 307, 204, 208, 301, 304, and 309 of the *Clean Water Act* (33 U.S.C. 1317,1284, 1288, 1311, 1314, 1318, and 1319) prohibit the discharge of some pollutants and requires the pretreatment of other pollutants along with increasing opportunities to recycle and

reclaim wastewater and sludge. The regulations implementing these standards are in 40 CFR 403, *Pretreatment Standards*.

- **A2.1.7.** Categorical Effluent Limits. Section 306 of the *Clean Water Act* (33 U.S.C. 1316) *National Standards of Performance*, requires effluent standards for several categories of industries. The regulations implementing these standards are contained in 40 CFR 405 through 471. You can find parts corresponding to Air Force activities in:
  - 40 CFR 413 for electroplating.
  - 40 CFR 423 for steam electric power generating.
  - 40 CFR 433 for metal finishing.
  - 40 CFR 459 for photography.
  - 40 CFR 460 for hospitals.
  - Section 307 (33 U.S.C. 1317), *Toxic and Pretreatment Effluent Standards*, requires limits on toxic pollutants. See 40 CFR 129 for regulations that implement these limits.
  - Section 304(l) (33 U.S.C. 1314(l)) requires identifying waters that do not meet quality standards for toxic pollutants.
- **A2.1.8. Sewage Sludge.** Section 405 of the *Clean Water Act* (33 U.S.C. 1345), *Disposal of Sewage Sludge*, requires guidelines for sewage sludge. The regulations establishing the standards for the final use or disposal of domestic sewage sludge are in 40 CFR 503.
- **A2.1.9.** Citizen Suits. Section 505 of the *Clean Water Act* (33 U.S.C. 1365), *Citizen Suits*, allows citizens to sue for violations of effluent standards or limits.
- **A2.1.10.** Nonpoint Sources. Section 208 (33 U.S.C. 1288) and Section 304(l) (33 U.S.C. 1314(l)) deal with nonpoint sources.
- **A2.1.11. Monitoring and Reporting.** Section 308 of the *Clean Water Act* (33 U.S.C. 1318) requires records and reports on point sources. The regulations implementing these standards are contained in 40 CFR 122 as part of the National Pollutant Discharge Elimination System regulations.
- **A2.2. Other Federal Regulations.** Although the *Clean Water Act* is the most significant legislation for the control of water quality, other legislation contains requirements for water quality compliance, including:
  - The Federal Facilities Compliance Act.
  - The Resource Conservation and Recovery Act.
  - The Safe Drinking Water Act.
  - Part C of the *Safe Drinking Water Act* (42 U.S.C. 300f through 300j-11), which regulates underground injection. The regulations implementing the *Safe Drinking Water Act* are contained in 40 CFR parts 141 through 149.

## **A2.3. State and Local Regulations:**

- **A2.3.1. State Permit Programs.** Air Force installations must comply with all state permit programs.
  - A2.3.1.1. States may administer the National Pollutant Discharge Elimination System permit program for wastewater discharges.

- A2.3.1.2. The EPA and state often jointly issue National Pollutant Discharge Elimination System permits to satisfy both Federal *Clean Water Act* and state legislation.
- A2.3.1.3. Sometimes the state does not administer the National Pollutant Discharge Elimination System Program. It may issue a separate state permit even though the EPA issued a National Pollutant Discharge Elimination System permit.
- **A2.3.2.** Local Limits. Air Force installations must comply with all local water quality requirements, including those of counties and cities relating to wastewater discharge limits to an off-base publicly owned treatment works.
- **A2.4. Executive Order 12088.** Executive Order 12088, *Federal Compliance with Pollution Control Standards*, requires the Air Force to:
  - Take all necessary actions to prevent, control, and abate environmental pollution at all Air Force installations.
  - Comply with applicable Federal environmental regulations and correct noncompliance.
  - Submit annual pollution control plans (the A-106 report) to the EPA and the Office of Management and Budget.
  - Request sufficient funds for environmental compliance.

**A2.5. DoD Directive 5100.50.** DoD Directive 5100.50, *Protection and Enhancement of Environmental Quality*, May 24, 1973, with Changes 1 and 2, directs the Air Force to comply with the spirit and the letter of Federal environmental laws, executive orders, and regulations. The directive also directs the Air Force to demonstrate leadership in environmental pollution abatement and environmental enhancement.