

**Forest Service Manual
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Forest Service Manual 7400 – Public Health and Pollution Control Facilities

Chapter 7440 - Effluents

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Responsible Staff:

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Digest: Following is an explanation of the changes throughout the directive by section.

Posting Instructions: This is a technical amendment that converts the format and style of this FSM title from Applixware to the current corporate word processing application. Since this amendment replaces all text except Interim Directives (ID's), do not check for the last transmittal received for this title; instead place this transmittal sheet at the front of the title. DO NOT remove ID's when posting this amendment. ID's are not being reformatted at this time.

Please read the new posting instructions (above) carefully.

7400: The entire amendment text has been reformatted and replaced, so that the amendment text on the Service-wide Directives Home Page in the Forest Service Web/Intranet (<http://fsweb.wo.fs.fed.us/directives/index.html>) corresponds with the amendment text on the Forest Service Directives Home Page in the Forest Service World Wide Web/Internet (<http://www.fs.fed.us/im/directives>).

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Although some minor typographical and technical errors have been corrected, substantive direction has not been changed.

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7440.1 - Authority

1. Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500), October 18, 1972. FSM 7430.1 describes the objective of this act.

2. Federal Compliance With Pollution Control Standards (E.O. 12088), October 13, 1978. FSM 7430.1 describes the purpose of this Executive Order.

3. Water Quality Standards (40 CFR 120), November 25, 1971. This regulation provides information about procedures for the adoption of State water-quality standards, and it identifies and describes those State-adopted standards the Administrator of the Environmental Protection Agency (EPA) has determined meet the criteria of the Federal act (P.L. 92-500).

4. National Pollutant Discharge Elimination System (40 CFR Part 125), May 22, 1973. This provides the policy and procedures for issuing National Pollutant Discharge Elimination System (NPDES) permits that authorize discharges into the navigable waters, the waters of the contiguous zone, and the oceans. These policy and procedures apply during the periods that the Administrator is authorized to issue such NPDES permits, pursuant to sections 402 and 405 of P.L. 92-500.

5. Oil Pollution Prevention (40 CFR 112), December 11, 1973. This regulation establishes procedures, methods, and equipment, and other requirements for preventing the discharge of oil, from nontransportation-related onshore and offshore facilities, into or upon the navigable waters of the United States or adjoining shorelines.

6. Guidelines Establishing Test Procedures for Analysis of Pollutants (40 CFR 136), April 1, 1977. This prescribes procedures for performing the measurements specified in an approved NPDES waste discharge permit.

7. Clean Water Act of 1977 (P.L. 95-190) November 16, 1977. This amends the Federal Water Pollution Control Act. Among other items, it requires Federal agencies to comply with all Federal, State, and local requirements, administrative authorities, and with processes and sanctions regarding the control and abatement of pollution. It also directs Federal agencies to consider alternative wastewater treatment methods that utilize, recycle, and reuse land treatment processes and techniques for any construction.

Several other parts of section 40 of the Code of Federal Regulations also apply to this subject. See 40 CFR Subchapter "D," Water Programs and Subchapter "N," Effluent Guidelines and Standards, for details.

7440.2 - Objective

The objective of this program is to plan, design, construct, operate, and maintain wastewater disposal facilities and other related effluent-disposal activities to ensure that discharge and/or infiltration of pollutants do not create health hazards or nuisance conditions, nor alter the quality

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or characteristics of either groundwater or surface water beyond applicable Federal and/or State water-quality and effluent-discharge standards. (FSM 2540.)

Where no standards exist, the quality of characteristics of surface and groundwaters shall:

1. Be maintained as near to their existing condition as measurable.
2. Not be degraded to adversely affect either present or projected beneficial uses (FSH 7409.11, ch. 20).
3. Not be allowed to degrade the quality of subsequent ground or surface receiving waters beyond the standards when such have been established.

7440.3 - Policy

The Forest Service shall adopt all measures consistent with applicable environmental laws, regulations, and orders to prevent or control the discharge of pollutants into waters on National Forest lands. The Forest Service shall cooperate with other Federal agencies, State and local agencies, and municipalities having jurisdiction over waters into which the Forest Service may discharge pollutants. However, it is a Forest Service responsibility to prepare and implement programs for management, quality control methods, and agency standards for pollution, prevention, and control.

Give consideration to wastewater effluent reclamation and recycling for water conservation, as well as to the reuse of organic matter and nutrients through the use of land treatment processes.

Recognize that while planning and design precautions are necessary, reliable wastewater disposal processes that utilize land treatment concepts to recycle resources through agriculture, silviculture, and aquaculture practices are available (FSM 1910, 1920, 1950, 2110).

Do not initiate construction for facilities for treatment of wastewater at any Forest Service property or facility unless full consideration has been given to alternative methods utilizing innovative treatment processes and techniques including methods utilizing recycle and reuse techniques and land treatment processes.

Further, ensure the operation of all wastewater treatment facilities in a manner that produces an optimum-quality effluent that meets or exceeds the treatment requirements and effluent limitations established by P.L. 92-500, as amended; E.O. 12088; and NPDES permit or State discharge requirements for each permitted facility; established water-quality standards; and oil discharge regulations.

7440.4 - Responsibility

7440.41 - Regional Foresters and Station Directors

These personnel shall:

1. Delegate responsibility for preparation of engineering reports, operation and maintenance manuals, and design to those engineers qualified in treatment and disposal.
2. Review and interpret State legislative or administrative actions that affect effluent disposal. Provide information that promotes full awareness and understanding of disposal requirements throughout the Region.
3. Sign NPDES permit applications for wastewater point source discharges. Monitor any resulting compliance schedules to ascertain they are implemented as required.
4. Review and approve project criteria, engineering reports, design drawings, and construction specifications for all effluent-disposal projects.
5. Monitor effluent disposal system construction activities to ensure competent performance for the duration of the project.
6. Monitor operation, maintenance, and testing results for disposal systems. They shall develop any necessary corrective measures to achieve the objectives of FSM 7440.2. They may delegate to Forests, if review/approval authority is maintained.
7. Prepare Regional Spill Prevention Control and Countermeasures (SPCC) and contingency plans direction and provide for periodic review of such plans.

Stations without qualified engineers shall obtain the necessary professional and technical expertise from Regional Offices to carry out these responsibilities.

Regional Foresters may delegate the responsibility for review and approval of minor effluent disposal projects, if the requirement for qualified independent engineering review of design drawings and specifications can be achieved at the Forest level.

7440.42 - Forest Supervisors and Project Leaders

These personnel shall:

1. Prepare applications for existing and new Forest Service wastewater discharge permits (NPDES and State) as required.
2. Ensure filing of effluent point source discharge permit applications for special-use facilities through special-use permit administration procedures.

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3. Provide for adequate inspection and supervision of construction by qualified personnel for all Forest Service effluent disposal projects. Through special-use administration procedures, ensure that the permittee provides for adequate construction supervision of permitted projects.

4. Monitor, operate, and maintain all Forest Service effluent disposal systems in accordance with standards, NPDES permits, and regulations. They shall also ensure proper operation and monitoring of Forest Service permitted facilities through special-use permit inspections.

5. Prepare engineering reports and environmental analyses for Forest Service-owned effluent disposal systems. They shall also monitor owner/permittee-prepared reports to ascertain adequacy.

6. Perform design on minor Forest Service-owned effluent disposal facilities as may be delegated by the Regional Forester. They shall also ensure completion of permittee-prepared designs in accordance with EPA/State requirements.

7. Prepare SPCC plans for applicable Forest Service-owned facilities and notify special-use permittees of requirements and procedures.

8. Perform required notification and prepare necessary reports for oil-spill events from Forest Service facilities.

9. Provide for periodic review and evaluation of Forest Service SPCC plans and make the necessary administrative reviews for permittee-prepared plans.

10. Prepare contingency plans for all applicable Forest Service facilities.

7440.5 - Definitions

1. Act. The Federal Water Pollution Control Act, as amended, P.L. 92-500.

2. Applicable Effluent Standards and Limitations. All State and Federal effluent standards and limitations to which discharge of pollutants is subject under P.L. 92-500.

3. Applicable Water Quality Standards. All water quality standards to which discharge of pollutants is subject under the Act and which have been approved, permitted, or promulgated by the Administrator of EPA.

4. Effluent Limitations. Any restriction established by a State or the Administrator of EPA on quantities, rates, and concentrations of chemical, physical, biological, and other constituents discharged from point sources into navigable waters, the waters of the contiguous zone, or the ocean, including schedules of compliance.

5. Oil. Oil of any kind or in any form, including but not limited to petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil. The definition also includes gasoline and similar type products.

6. Permit. Any NPDES permit or equivalent document or requirement issued to regulate the discharge of pollutants.

7. Point Source. (FSM 7430.5).

7441 - Wastewater Disposal

All wastewater disposal activities must comply with applicable State and/or Federal water-quality and effluent-limitation standards. The Forest Service is responsible for monitoring and maintaining operations on National Forest lands within established standards. This includes those disposal facilities that have no point source discharge but that utilize land disposal methods involving both surface and subsurface installations. Technical details are in FSH 7409.11.

7441.1 - National Pollutant Discharge Elimination System Waste Discharge Permits

Any discharge of pollutants or combination of pollutants from a point source into the navigable waters, the waters of the contiguous zones, or the ocean, must be authorized by a National Pollutant Discharge Elimination System (NPDES) waste discharge permit, unless specifically relieved by law or regulation. Unauthorized discharges or discharges in violation of NPDES permit terms or conditions are subject to the penalties provided by the Act.

7441.11 - Discharge Exclusions

See 40 CFR 125 for a detailed listing of discharge exclusions. However, these exclusions may be subject to other Federal or State regulations and permit requirements.

7441.12 - Permit Application Procedures

Forest Supervisors and Station Directors shall prepare an application for each Forest Service project on the applicable Environmental Protection Agency (EPA) form. Upon completion, the Regional Forester must sign the application. The Regional Office Engineering Staff shall forward the original form to the EPA for processing.

Public Law 92-500 authorizes States to assume the operating responsibilities for the National Pollutant Discharge Elimination System (NPDES) permit program once they have met the requirements of the law.

Many States have assumed NPDES permit program responsibilities for Federal agencies. Send applications for NPDES permits for Forest Service-owned facilities either to the EPA or to the applicable State, if the State has assumed NPDES permit program responsibilities.

Applications for NPDES discharge permits for privately owned facilities permitted on National Forest lands are the responsibility of the owner or permittee. The owner or permittee shall send applications either to the EPA or the applicable State, if the State has assumed NPDES permit program responsibilities. As part of the special-use permit administration, Forest Supervisors shall ensure that applications are filed for all discharges as required.

7441.2 - Operation and Maintenance

Ensure proper operation and maintenance of all wastewater treatment facilities and all other sanitation activities that may produce a discharge of pollutants as necessary to achieve the objectives cited in FSM 7440.2.

7441.21 - Operator Certification

Operators of Forest Service wastewater treatment facilities shall meet the levels of proficiency consistent with the operator certification requirements for the State in which the facility is located, or if State certification is mandatory, operators must be certified.

Operators of special-use permit wastewater treatment plants shall meet all requirements of the certification program for the applicable State.

7441.22 - Monitoring

The operation and maintenance plan establishes the frequency of operational and control tests. The minimum frequency of effluent quality tests shall be as specified in the NPDES permit or as necessary to provide optimum performance of the facility.

The operator shall record the test results of all control and effluent quality tests on applicable Environmental Protection Agency (EPA), State, or Forest Service forms. Ensure these forms are maintained as a record to show compliance with regulations or standards.

Ensure sampling and testing procedures for waste constituents specified in a NPDES permit are performed in accordance with approved test procedures (Guidelines Establishing Test Procedures for the Analysis of Pollutants (40 CFR 136), April 1, 1977).

When test results or maintenance checks indicate noncompliance or inadequate performance, ensure immediate measures are taken to correct the situation.

7441.23 - Reporting

Summarize monitoring information required by NPDES permits on the applicable Environmental Protection Agency (EPA) form as prescribed in the individual NPDES permit. Distribute completed copies of discharge monitoring reports for Forest Service-owned facilities in accordance with Regional direction.

Maintain one copy at the plant site. The Regional Forester (principal executive officer) must sign the EPA form.

Submit copies of operation and maintenance forms and monitoring records in accordance with the permit and the operation and maintenance manual.

Monitoring test reports for special-use wastewater facilities is the responsibility of the owner or permittee. The owner or permittee should submit reports to EPA or directly to the States, if the State has assumed the NPDES permit program responsibility.

Forest Supervisors, through special-use administration, must ascertain that permittees or owners are operating and monitoring special-use wastewater facilities adequately.

7441.3 - Nonpoint Pollution and Dredge and Fill Activities

Waste disposal activities not having a point source discharge must comply with Area wide Waste Treatment Management plans formulated under section 208 of the Act. Discharge of dredged or fill material into navigable waters may require a permit as described under Section 404 of the act (FSM 2530).

7442 - Oil Discharges

Discharges into or upon the navigable waters of the United States or adjoining shorelines of quantities of oil determined to be harmful to the public health or welfare, include discharges that either:

1. Violate applicable water quality standards.
2. Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause the deposit of sludge or emulsion beneath the surface of the water or upon adjoining shorelines.

All oil handling activities must comply with applicable State and/or Federal regulations and standards. This includes preparation of oil removal contingency plans (FSM 7443) and Spill Prevention Control and Countermeasure (SPCC) plans. See 40 CFR 112 for requirements for preparation, implementation, and amendments of SPCC plans.

7443 - Contingency Plans

Prepare emergency condition contingency plans for any facility where an accidental discharge could produce a health hazard or result in pollution of surface or groundwaters.

Complete emergency plans and procedures for wastewater facilities as a section of an operation and maintenance manual (FSH 7409.11, ch. 70).

Include direction and information on planning for and responding to accidental discharges of oil and hazardous substances on or threatening National Forest land in accordance with the National Contingency Plan.