Maine Citizens' Handbook on

COASTAL WATER QUALITY ENFORCEMENT

Prepared by
Marine Law Institute
University of Maine School of Law
246 Deering Avenue
Portland, Maine 04102

in cooperation with the
Sea Grant Marine Advisory Program
University of Maine, Orono

December 1992

Marine Law Institute
246 Deering Avenue
Portland, Maine 04102
[207] 780-4474

Published by the University of Maine Sea Grant College Program, University of Maine, Orono, Maine, 1993. A limited number of additional copies are available from the Marine Advisory Program, 30 Coburn Hall, University of Maine, Orono, Maine 04469 [207] 581-1440 and from the Marine Law Institute.

This publication was supported by Grant No. NA16RG0157-01 from the National Oceanic and Atmospheric Administration to the University of Maine/University of New Hampshire Sea Grant College Program. The views expressed herein are those of the author and do not necessarily reflect the views of NOAA or any of its sub-agencies.

MSG-E-[redacted] 250
93-2

Acknowledgements

This handbook was written by Tim Eichenberg, Staff Attorney of the Marine Law Institute, and edited by the Institute's Director, Alison Rieser and Associate Director, Barbara Vestal. It was produced by the Institute's Administrative Manager, Beverly Bayley-Smith.

The Institute is indebted to John Sowles, Maine Department of Environmental Protection, Todd Burrowes, Maine Audubon Society, Esperanza Stancioff, University of Maine Cooperative Extension, and Kathleen Leyden, Maine State Planning Office for their assistance and advice in reviewing drafts of the handbook. Thanks are also due to Douglas Corb, Edward Lavery, and Edward Kim of the U.S. EPA, Region I Office, and Jim Jones and Louise M. Lettre, of the Maine Department of Environmental Protection, for providing helpful information on the federal and state governmental role in water quality regulation and enforcement.

Finally, special thanks is extended to David Dow, Director of the Maine Sea Grant Marine Advisory Program, whose encouragement and support made the production of this handbook possible.

MAINE CITIZENS' HANDBOOK ON COASTAL WATER QUALITY ENFORCEMENT

Table of Contents

I. INTRODUCTION 1

II. POINT SOURCE POLLUTION CONTROLS 3

THE CLEAN WATER ACT 3

FEDERAL NPDES PERMITS 4

Point Sources 5
Duration and Termination 5
Compliance and Discharge Monitoring Reports 6
Public Participation in the Permit Process 10
Penalties 12

STATE DISCHARGE LICENSES 12

When Required 13
Application Procedures 13
Public Participation 14
Administrative Appeals and Judicial Review 15
License Revocations, Modifications and Suspensions 15
State Discharge Standards 16
Prohibited Discharges 16

CITIZEN ENFORCEMENT OF FEDERAL AND STATE DISCHARGE PERMITS 17

Citizen Suits Under the Clean Water Act 18
Requirements for Citizen Suits 19
Enforcement Under State Law 21

PUBLIC PARTICIPATION IN EFFLUENT LIMITATIONS AND STATE WATER QUALITY STANDARDS 23

Federal Effluent Limitation Standards 23
Federal Requirements for State WQSs 24
Maine's Water Quality Standards 26

SEWAGE TREATMENT 29
STORMWATER AND COMBINED SEWER OVERFLOWS 31
STATE CERTIFICATIONS OF FEDERAL PERMITS 34

III. PROGRAMS ADDRESSING NONPOINT SOURCE POLLUTION . . 35

THE MAINE NONPOINT SOURCE MANAGEMENT PLAN 37
COASTAL NONPOINT SOURCE POLLUTION CONTROL PROGRAMS 38
NPS POLLUTION FROM LAND USES AND DEVELOPMENT 39

Mandatory Shoreland Zoning 40
Subdivision Controls 41
Local Ordinances and Comprehensive Plans 43
Local Enforcement Procedures 45

REGULATING AGRICULTURAL ACTIVITIES 45
CREATING WATERSHED DISTRICTS 46
ENFORCING THE STATE PLUMBING CODE 47
REMOVING OVERBOARD DISCHARGES 48

IV. LAWS PROTECTING WETLANDS 51

PUBLIC PARTICIPATION IN FEDERAL WETLAND PERMITS . . . 51

Corps' Jurisdiction over Wetlands 51
Defining and Delineating Wetlands 55
Exempted Activities 55
Federal Wetland Permit Standards 56
Enforcement and Penalties 57

THE MAINE NATURAL RESOURCES PROTECTION ACT 58

Regulated Activities 58
Wetland Rules 59
State Wetland Standards 59

LOCAL WETLAND LAWS 60

V. VESSEL DISCHARGE LAWS 63

MARINE SANITATION DEVICES AND VESSEL PUMP-OUT STATIONS 63
OCEAN DUMPING 64

Federal Dumping Regulations 65
State Dumping Regulations 67

PLASTIC AND NON-PLASTIC GARBAGE 67
OIL POLLUTION 69

Response and Contingency Planning 71
Liability and Compensation 71
Prevention 72

SELECTED REFERENCES: Coastal Water Quality 75

FIGURES AND TABLES

Figure 1: Example of Federal NPDES Permit Conditions 7

Figure 2: Example of Discharge Monitoring Report 8

Figure 3: Example of Quarterly Noncompliance Report. 9

Table 1: Sources of Surface Water Nonattainment In Maine 28

Figure 4: Location of Primary Sewage Treatment Plants in Maine 31

Figure 5: Number of CSO's Entering Marine and Estuarine Waters by Municipality 32

Table 2: Acres of Wetlands by Type in Maine 52

Table 3: MARPOL 68

Figure 6: Major Oil Spills on the Maine Coast 70

APPENDICES

Appendix A: Coastal Water Quality Agencies and Organizations A-1

Appendix B: Sample NPDES Fact Sheet and Public Notice B-1

Appendix C: Marine Water Quality Designations C-1

Appendix D: Marine Pump-Out Services in Maine Waters D-1

Appendix E: Statewide Inventory of Combined Sewer Overflows E-1

I. INTRODUCTION

In greater numbers each year, citizens in Maine and throughout the United States are organizing groups and working with government officials to clean up beaches, monitor water quality and preserve natural resources. Maine alone has at least 39 such programs (listed in *Appendix A*), and a national directory of citizen volunteer environmental monitoring programs lists 133 programs in 1990, up from just 43 in 1988. The proliferation of these organizations, many of which are entitled "Tidewater Watch," "Partners in Monitoring," "Riverwatch," "RiverKeeper" or "BayKeeper," indicates a new willingness on the part of citizens to become more directly involved as stewards and guardians of local water bodies and natural resources.

There are a number of reasons for the burgeoning volunteer monitoring movement. Citizens are concerned that their children may not share the same environmental heritage that they enjoyed, and are eager to become more educated about their environment, their lakes, rivers and streams, estuaries, wetlands and coastal waters. Many are interested in assisting decision makers and regulatory agencies fully implement and enforce environmental regulations. They are motivated by knowing that the data they gather can be used to "red flag" or inventory illegal pipes or discharges and dumping sites, excessive erosion, failed sediment control and septic systems, and monitor compliance with state and federal discharge permits. As the sophistication of these volunteer monitoring groups and the information they gather improves, it will become important for them to understand the nature of the Clean Water Act, and other rigorous state and federal laws that protect the coastal environment.

This handbook explains the legal standards and penalties established by coastal water quality laws, and how citizens can better participate in the implementation and enforcement of these laws. It is intended to inform and educate, but is not a substitute for the sound legal advice of experienced practitioners who should be consulted to provide guidance on technical legal matters (such as courtroom procedures and recent case law precedents) if litigation is contemplated. For this reason we have included in *Appendix A* a list of environmental organizations that have the legal expertise to assist individuals and groups that wish to undertake a more active legal role in the enforcement of environmental laws.

To help citizens interact with the numerous water quality agencies and organizations that operate on many different levels in the coastal environment, *Appendix A* also contains a list of: state and federal agencies responsible for water quality enforcement and permitting in Maine; coastal regional planning agencies that provide assistance in developing local land use ordinances and comprehensive plans; cooperative extension offices and local coastal water quality monitoring and education groups; and offices of the Soil and Water Conservation Districts and Resource Conservation and Development Districts that assist local governments and private individuals in reducing nonpoint source pollution.

The appendices to the handbook also contain a sample EPA fact sheet and public notice for a federal discharge permit (*Appendix B*); Marine Water Quality Designations for Estuarine and Marine Waters in Maine (*Appendix C*); a list of marine pump-out facilities for vessels in Maine waters (*Appendix D*); and a statewide inventory of combined sewer overflows (*Appendix E*). We have also attached a list of selected references for those persons interested in learning more about water quality enforcement through a number of excellent publications and journals.

This handbook, then, describes the state, local and federal laws that apply to the chief sources of coastal water pollution:

(1) point source pollution -- pollution discharged from pipes which require state and federal permits;

(2) nonpoint source pollution -- generally unregulated runoff from agricultural operations and urban land uses, timber harvesting (silviculture) and construction activities;

(3) the dredging, filling and degradation of wetlands; and

(4) discharges from vessels -- including oil pollution, ocean dumping, discharges from marine sanitation devices, and discarded plastic and non-plastic garbage.

Each area of the law has its own unique legal approaches and pitfalls. We hope that after reviewing this handbook citizens will be more informed and better able to participate in the implementation and enforcement of water quality laws. Many significant laws have been adopted to protect the quality of our coastal environment, but without adequate enforcement, these laws have little meaning.

II. POINT SOURCE POLLUTION CONTROLS

THE CLEAN WATER ACT

The Federal Water Pollution Control Act -- also known as the Clean Water Act (CWA) -- is the nation's foremost water quality law.[1] Although the Act's ambitious deadline to eliminate all pollutant discharges by 1985 has been pushed back by Congress a number of times, the Clean Water Act remains citizens' primary legal tool in protecting and cleaning-up our nation's waters.

The Clean Water Act is primarily administered and enforced through the National Pollutant Discharge and Elimination System (NPDES), which requires the licensing of all point sources of pollution.[2] Any operator or owner of an industrial plant or publicly-owned sewage treatment works (POTW) that wishes to discharge wastes into a surface water body must obtain an NPDES permit from the U.S. EPA, or from states with EPA-approved permit programs.[3] Because Maine has not sought permit delegation from the EPA, dischargers must also obtain a state waste discharge license from the Maine Department of Environmental Protection (DEP). State discharge license procedures are described further below.

Public participation is a key element of the CWA. Section 101(e) of the Act states that "public participation in the development, revision, and enforcement of any regulation, standard, effluent limitation, plan, or program established by the Administrator [of the EPA] or any State . . . shall be provided for, encouraged, and assisted."

---

[1] 33 U.S.C. §§ 1251-1387; 40 C.F.R. § 125.

[2] 33 U.S.C. § 1342.

[3] EPA has delegated NPDES permitting authority to 39 states and territories.

Citizens can therefore participate in key aspects of the federal permitting process by:

- ✓ ensuring that effluent limitations imposed on specific dischargers are adequate;
- ✓ helping to enforce specific permit conditions and limitations through the CWA's citizen enforcement provisions;
- ✓ reviewing and commenting on proposed rules on effluent limitations for specific industries; and
- ✓ ensuring that states establish proper water quality classification standards.

The following sections explain Clean Water Act and state water quality requirements, and discuss these and other opportunities for citizen participation.

FEDERAL NPDES PERMITS

Industry and POTW applicants for NPDES permits must submit information on the composition of their wastewater, including metals and other toxicants, manufacturing processes, the point or location of discharge, the flow and frequency of the discharge, the period of discharge (seasonal or year-round), and the responsible party or contact.

The NPDES permit system establishes a two-pronged standard for controlling point source discharges: federal effluent limitations, and state water quality standards.

> ***Effluent limitations (ELs)*** are nation-wide federal technology-based controls for discharges from industrial facilities and publicly-owned sewage treatment works (POTWs). They express the maximum allowable rate of discharge, concentration or amount of a pollutant which may be released depending on the industry and nature of the discharge. ELs for specific industries are specified in EPA regulations at 40 CFR §§ 400-471.

Water quality standards (WQSs) are established by states outlining permissible levels of pollutants and total pollutant loads into surface waters. WQSs are ambient criteria that specify permissible levels of pollution in the water body itself (rather than in a discharge). These standards work in concert with effluent limitations to protect individual bodies of water. Even if allowed under uniform ELs, a discharge will not be permitted if it would cause receiving waters to fall below water body standards.

Point Sources

NPDES permits from the Environmental Protection Agency or delegated states are required only for "point source" discharges of pollutants. Pollution from nonpoint sources, such as runoff from agricultural and construction activities, are exempt from NPDES permit requirements. Chapter III describes CWA programs that apply to nonpoint source pollution.

Point source discharges are defined in the CWA as "any discernable, confined and discrete conveyance" including discharges from pipes, ditches, channels, tunnels, conduits, concentrated animal feeding operations and vessels from which pollutants may be discharged.[4] NPDES permits are required for discharges into navigable waters as well as wetlands, non-navigable tributaries to navigable waters and intermittent streams. After October 1, 1992, NPDES permits must also be obtained for all stormwater discharges associated with industrial activities and municipal separate storm sewer systems (except for non-contact mining and oil and gas facility runoff and agricultural irrigation return flows).[5]

Duration and Termination

NPDES permits are issued for five years after which a new permit must be secured or the discharge must cease unless the discharger submits a new permit

---

[4] 33 U.S.C. § 1363(14).

[5] 33 U.S.C. § 1342(p)(3). NPDES permits for stormwater discharges from municipal storm sewers may be issued on a system or jurisdiction-wide basis, must include requirements to prohibit non-stormwater discharges into storm sewers, and must require controls to reduce the discharge of pollutants to the "maximum extent practicable." Stormwater discharges associated with industrial activities must control pollution through BAT/BCT technologies and water quality-based controls. *See* 55 FR 47990 (November 16, 1990), NPDES Permit Application Regulations for Storm Water Discharges; Final Rule, 40 C.F.R. §§ 122-124.

application at least 180 days prior to the expiration date. A number of NPDES permit renewal applications have been filed in Maine but have not been acted on by the EPA. In such cases the old permit conditions remain valid. When permits expire, the EPA may enforce the terms of expired permits, require a new permit or terminate the permit activity. A permit may also be terminated for noncompliance, misrepresentation of facts, endangerment of human health or the environment, or where changed conditions require reduction or elimination of the discharge.

Compliance and Discharge Monitoring Reports

Citizen groups have a legitimate role in publicizing problems, educating the public and making corrective measures a priority within the community. This may be accomplished by monitoring compliance with NPDES effluent limitations and permit conditions, and actively participating in the NPDES permit process.

The core of an NPDES permit is the effluent limitation, which is the maximum allowable rate of discharge, concentration or amount of a pollutant which may be released into any body of water. For industrial dischargers, ELs may limit the daily or monthly load of discharges expressed in pounds of pollutants permitted per pounds of product manufactured; they may also be described and limited in terms of frequency (e.g. not to occur more than once a week), total weight (e.g. not to exceed 300 pounds per batch discharged), minimum time for completion of discharge (e.g., not to be discharged over a period of more than six hours), or concentration (e.g., not to exceed more than 15 parts per million).

NPDES permitees must regularly monitor their effluent and report the results to the EPA and state permitting authority (Maine DEP). Although the state has separate permitting procedures, compliance information and discharge monitoring reports (DMRs) are shared by the EPA and DEP. DMRs may be reviewed by government agencies or requested by the public under the Freedom of Information Act (FOIA) to determine compliance with effluent limits and permit conditions. However, the FOIA process should be used sparingly as it takes staff away from other duties. If the report is extensive the person initiating the request may be contacted and a fee negotiated. The EPA also maintains Quarterly Non-Compliance Reports (QNCRs) that summarize the enforcement information from the DMRs.

For purposes of illustrating the type of information available to the public, Figures 1, 2 and 3 depict the NPDES permit conditions, DMR and QNCR for a marine terminal in South Portland, one of many NPDES permit holders. The DMR and QNCR show that in March, 1992 the terminal discharged benzene and

Figure 1
Example of Federal NPDES Permit Condition

PART I

[redacted]

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

6. During the period beginning on the 13th month after the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall Serial Number 001B, treated stormwater runoff from diked areas and non-diked areas through the oil/water separator.

a. Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Avg. Monthly	Max. Daily	Measurement Frequency[2]	Sample Type
Flow, gpm[4]	Report	500	See Footnote 4	Avg.Mon/Max Daily
Total Suspended Solids (TSS)	30 mg/l	100 mg/l	1/Month	Grab
Oil & Grease	—	15 mg/l	1/Month	Grab
Polynuclear Aromatic Hydrocarbons (PAHs)[1]				
Single Chemical	60 ug/l[5]	—	1/3 Months	Grab
Volatile Organics				
Benzene	500 ug/l	—	1/3 Months	Grab
Toluene	—	Report Without Limits	1/3 Months	Grab
Ethylbenzene	—	Report Without Limits	1/3 Months	Grab
Xylenes (total 3 isomers)	—	Report Without Limits	1/3 Months	Grab
Whole Effluent Toxicity, LC-50		≥ 50%	1/year[3]	Grab

1 PAHs analyzed in accordance with 40 CFR Part 136, Appendix A, Method 625 or, alternately, Method 610. See Attachment A for list of specific PAHs for analysis.
2 Sample frequency for once per 3 months is defined as a sampling of one (1) significant rainstorm in each calendar month of March, June, September, and November - see Part I.A.9. following, for sampling details.
3 WET test sample will be taken during the months of May-June according to Part I.A.11.
4 See Part I.A.4 for the flow rate control and frequency of monitoring requirements.
5 See Part I.A.7 for reporting requirements for all - single PAHs listed in Attachment A.

b. Report the pH of grab sample(s) of the stormwater discharge, once per month.

c. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: Outfall 001B, after final treatment but prior to discharge into the Fore River.

Figure 2
Example of Discharge Monitoring Report

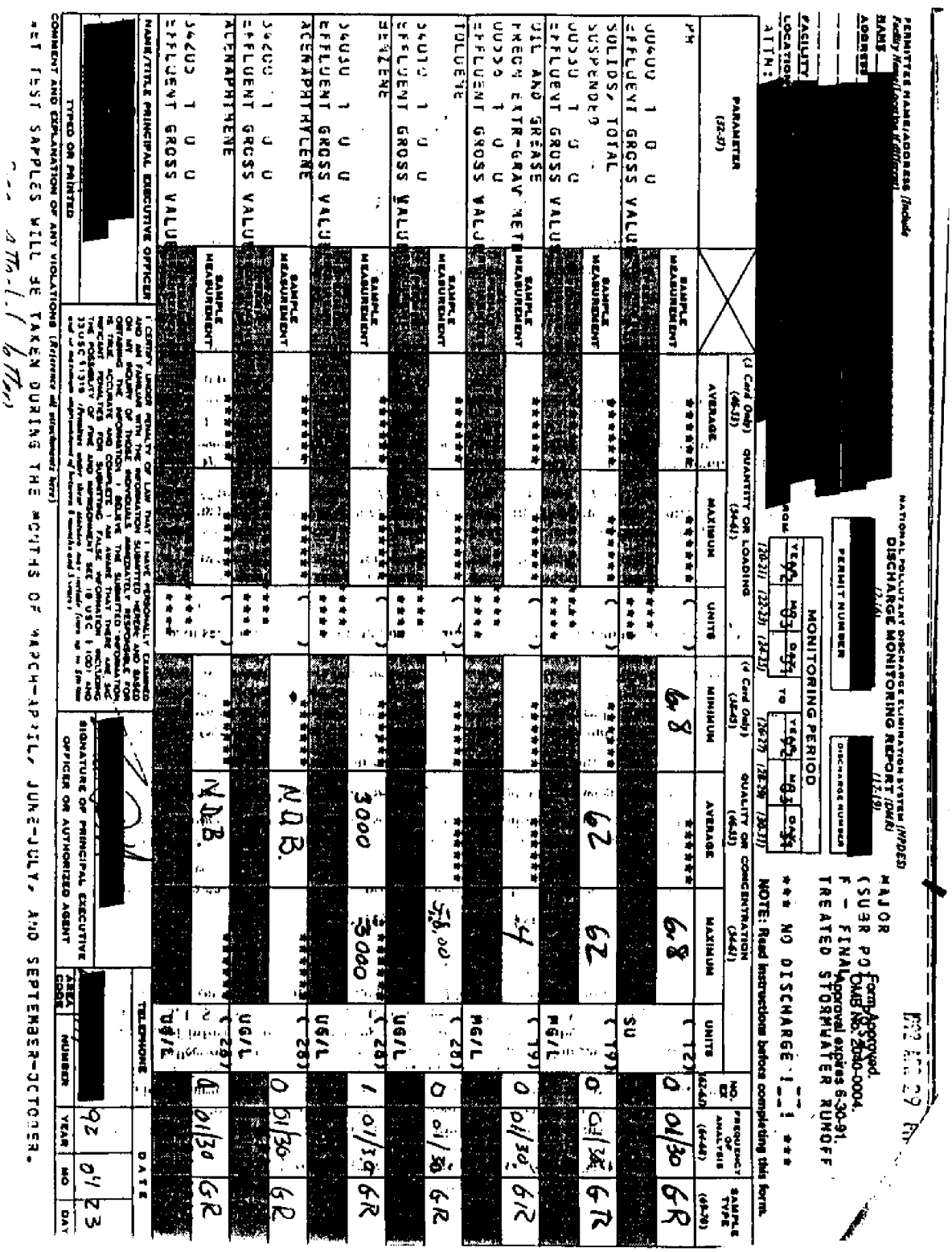


Figure 3
Example of Quarterly Noncompliance Report

DATE: 07/27/92 REGION 01 SELECTIVE QUARTERLY NON-COMPLIANCE REPORT ** QNCR ** PAGE 14
PCS-RETRIEVAL - REGION I DATABASE
(FREEDOM OF INFORMATION ACT RETRIEVAL 1-FOI-12756-92)
NON-MUNICIPALS MAINE FROM: 02/01/92 TO: 04/30/92

LOCATION NAME / NPDES NUMBER / INSTANCE OF NONCOMPLIANCE	GRANT	LIMIT	RNC	VIOLATION DATE	ENFORCEMENT ACTION	ENFORCEMENT DATE	STATUS	STATUS DATE	COMMENTS
[redacted]									
SOUTH PORTLAND					NON-COMPLIANT				
ME0001821		***FINAL***							
SOLIDS, TOTAL		SUSPENDED	001A	TRC 03/31/92			NC	03/31/92	2C PERMIT EFFLUENT VIOLATION
SOLIDS, TOTAL		SUSPENDED	001A	TRC 02/29/92			NC	03/31/92	2C PERMIT EFFLUENT VIOLATION
[redacted]									
SOUTH PORTLAND					NON-COMPLIANT				
ME0021571		***FINAL***							

* * * * * * * * * * SUMMARY SECTION * * * * * * * * * *

DMR OVERDUE TO EPA/STATE 09/30/88 - 06/30/88 NC CONTINUING NONCOMPLIANCE

[redacted]									
SOUTH PORTLAND					NON-COMPLIANT				
ME0021016		***FINAL***							
SOLIDS, TOTAL		SUSPENDED	001A	TRC 03/31/92			NC	03/31/92	2C PERMIT EFFLUENT VIOLATION
BENZENE			001A	TRC 03/31/92			NC	03/31/92	2C PERMIT EFFLUENT VIOLATION
SOLIDS, TOTAL		SUSPENDED	001A	TRC 02/29/92			NC	03/31/92	2C PERMIT EFFLUENT VIOLATION
BENZENE			001A	TRC 02/29/92			NC	03/31/92	2C PERMIT EFFLUENT VIOLATION
[redacted]									
ORRINGTON					NON-COMPLIANT				
ME0000639		***FINAL***							

* * * * * * * * * * SUMMARY SECTION * * * * * * * * * *

LCSO STAT 48HR ACU MENIDIA 001A 09/30/91 NC CONTINUING NONCOMPLIANCE

[redacted]									
WISCASSET /T/					NON-COMPLIANT				
ME0002569		***FINAL***							

total suspended solids in excess of permitted concentrations (62 reported vs. 30 mg/l monthly average permitted for total suspended solids (TSS) and 3000 reported vs. 500 ug/l monthly average permitted for benzene). A letter from the permit holder explaining steps taken to end the noncompliance is also part of the public record.

Citizens can use QNCRs to identify general problems with discharges in their region, but should follow-up by reviewing the DMRs and daily records of the dischargers at DEP offices to determine the length of time the violations have persisted and their potential water quality impacts. Violations occurring sporadically for a month or two may not be a problem, but six months or more of noncompliance may indicate that serious problems exist in the facility. If a facility frequently violates permit limits, the EPA and DEP Compliance Section should be contacted for more information and a meeting may be arranged with the permit holder to air concerns and answer questions.

Not all noncompliance incidents are serious permit violations and, in many cases, the facility, EPA and DEP may already be taking corrective action. Noncompliance with DMRs and effluent limitations due to "upsets" (unintentional failure of waste treatment equipment) are justifiable so long as the facility is being properly operated, requisite reports are filed and required remedial actions are taken. Noncompliance due to intentional "bypass" of wastes around treatment systems to perform maintenance is justifiable if proper notice is filed, there are no "feasible alternatives" and "bypass" is necessary to prevent "loss of life, personal injury or severe property damage."[6]

Public Participation in the Permit Process

Citizens can influence final permit decisions through participation in general public hearings and formal adjudicatory hearings. Under some conditions, they may also appeal regional decisions to the Administrator of the EPA, and seek judicial review of the Administrator's decision.

After an application for a new or renewed NPDES permit has been filed and a draft permit prepared, the EPA provides a public notice in local newspapers and allows for a 30-day public comment period. A copy of the proposed permit and a non-technical fact sheet explaining much of the data upon which citizens may base comments on proposed permits (depicted in *Appendix B*) may be requested from the EPA's NPDES Program Operation Office in Boston. Any interested person may ask to be placed on EPA's mailing list, and may submit written comments or

[6] 33 U.S.C. § 1318; 40 C.F.R. § 122.41.

request a public hearing within the 30-day comment period. The Clean Water Act requires the "opportunity for public hearing" where there is a "significant degree of public interest" or if the EPA finds, at its discretion, that a hearing "might clarify one or more issues involved in the permit decision."[7] The EPA is not required to hold a public hearing if none is requested by an interested party raising a material issue of fact.[8]

The administrator of the EPA regional office may hold two kinds of public hearings: "non-adversary" hearings for initial permit reviews; and evidentiary hearings for permit renewals and subsequent permit actions, such as terminations or modifications. Citizens may wish to be represented by an experienced attorney or environmental organization for the evidentiary hearings during which witnesses may be cross-examined and complex procedural issues may arise. Anyone who seeks to challenge the terms of a proposed permit must "raise all reasonable ascertainable issues and submit all reasonably available arguments supporting their position by the close of the comment period."[9] Failure to do so may bar the participant from raising the issue later on judicial review of EPA's decision.

The public should consider the following when reviewing an NPDES permit:

- ✓ Are limits assigned to all pollutants listed in the application?
- ✓ What are the grounds for the proposed pollutant limits listed in the fact sheet?
- ✓ Would pollutants impair uses designated in state water quality classifications for receiving waters?
- ✓ Would the discharge result in increased pollutant loadings over old permit limits in violation of CWA "antibacksliding" provisions?
- ✓ Have special limitations been required under an Administrative Order or Consent Decree?
- ✓ Do QNCRs and DMRs indicate a history of violations?

---

[7] 33 U.S.C. § 1342(a); 40 C.F.R. § 124.12.

[8] Costle v. Pacific Legal Foundation, 445 U.S. 198 (1980).

[9] 40 C.F.R. § 124.13.

- ✓ Are POTWs required to develop industrial pretreatment or sludge management programs?
- ✓ Are other dischargers contributing adverse cumulative effects that degrade receiving waters?
- ✓ What do the most recent DEP water quality monitoring reports indicate about the overall health of the receiving waters?[10]

At the end of the comment period, EPA will prepare a response to all reasonable comments received, and will make appropriate amendments to the draft permit. If a commenter is still not satisfied after the response is issued, that individual or group may appeal the permit.

Penalties

The EPA is authorized to issue administrative penalties up to $10,000 per day for violation of NPDES permits. The public may comment on and submit for judicial review the terms of these penalties. Injunctive relief may be ordered and civil penalties imposed up to $25,000 per day.[11] The EPA generally discourages alternative penalties, such as requiring environmentally beneficial projects or trust fund donations, unless they serve to mitigate rather than substitute for the amount of the penalty.[12] Criminal penalties are also available for negligently or knowingly violating permit conditions, making false statements or representations in applications or monitoring reports, or introducing pollutants into sewer systems. Criminal penalties include fines up to $50,000 per day and up to one year imprisonment, with double penalties for repeat offenders.

STATE DISCHARGE LICENSES

The Maine Protection and Improvement of Waters Law establishes a separate licensing program for the discharge of pollutants administered by the Maine Department of Environmental Protection (DEP). Maine has chosen not to

---

[10] MASSACHUSETTS DEPARTMENT OF FISHERIES, WILDLIFE AND ENVIRONMENTAL LAW ENFORCEMENT, CITIZEN PARTICIPATION IN THE NPDES PROCESS -- HOW TO PROTECT YOUR RIVER OR STREAM (undated).

[11] 33 U.S.C. § 1319(d) and (g).

[12] STEVER, DONALD W. AND SHELDON H. NOVICK, LAW OF ENVIRONMENTAL PROTECTION, Environmental Law Institute (1987), at § 12.08(1)(d).

apply for EPA approval of its water quality program, so Maine has not been "delegated" authority to issue NPDES permits. Point source dischargers must therefore obtain a state waste discharge license in addition to an EPA NPDES permit. Although state and federal reviews are somewhat duplicative, individuals are provided additional opportunities for public input and state and federal permits often require different conditions.

When Required

State licenses are required for all direct and indirect discharges, including the addition of any pollutant into waters of the State. "Pollutants" are broadly defined as "dredged spoil, solid waste, junk, incinerator residue, sewage sludge, munitions, chemicals, biological or radiological materials, oil, petroleum products or by-products, heat, wrecked or discharged equipment, rock, sand, dirt and industrial, municipal, domestic, commercial or agricultural wastes of any kind."[13] A license is required for the discharge of pollutants into surface and subsurface waters, fresh or saltwater bodies, unless such waters are confined completely upon the property of one person and do not drain into or connect with any other waters.

Exemptions from licensing requirements are provided for several types of uses including certain categories of snow dumps; road sand or salt storage piles; aquatic pesticides applied by the State Department of Inland Fish and Wildlife for purposes of restocking; and licensed marine aquaculture projects.[14]

Application Procedures

Applications for waste discharge licenses are submitted for review to the Bureau of Water Quality Control in the Maine DEP. A complete guide to the DEP permitting process can be obtained from the Department entitled, "The DEP Process: A Guide to the Organization and Application Process of the Maine Department of Environmental Protection." The key elements of the permit process are outlined further below to assist persons who may wish to participate.

After an application for a waste discharge license is submitted to and deemed complete by the DEP, the Board of Environmental Protection has 105 working days to process the application. Projects may also be delegated by the Board to the Commissioner of the DEP for review; such permits have 60-day

[13] 38 MRSA § 361-A(1) and (4-A).

[14] 38 MRSA § 413.

processing periods.[15] During the processing period permit applications are submitted to other state and federal agencies for review and comments, a public notice is issued inviting public comments and offering an opportunity to request a public hearing, and a decision is made whether a public hearing is warranted. All documents submitted with the application must be made available to the public for inspection and copying, except those expressly made confidential by law.[16]

State discharge licenses, like federal NPDES permits, may be issued for up to five years.

Public Participation

Public hearings are discretionary and may be requested by any interested person. They are generally held where there is significant public interest and/or a hearing is considered necessary to gather information needed to process the application. Three kinds of hearings may be held: routine and informal hearings, hearings where there exists "significant public interest," and enforcement hearings.

At informal hearings any interested person may participate, offer testimony and question witnesses. At hearings where there exists "significant public interest," persons interested in participating as a party and cross-examining witnesses must file a petition to intervene, although anyone may make oral or written statements. Subpoenas may be issued to compel production of witnesses and information, and all witnesses must be sworn. Enforcement hearings do not contain provisions for public participation. Procedures for the three types of hearings are outlined in the DEP Rules, Chapters 20, 30 and 40.

Orders recommending approval or denial of the application are prepared by the DEP after any applicable public hearings. Draft orders for applications decided by the Board are sent to persons requesting copies, and made available at the DEP office in Augusta 15 working days prior to final action by the Board.

---

[15] Applications delegated by the Board to the Commissioner of the DEP for review and approval include all applications for: certification of wastewater treatment plant operators; waste discharge licenses with a maximum daily discharge of less than 100,000 gallons per day; cooling water discharges; discharges of less than 1,000 gallons per day of treated sanitary wastewater; discharges of stormwater runoff treated from oil/water separators; the discharge of pesticides; variances and waivers of water pollution abatement schedules; water quality certifications made in conjunction with other delegated applications or where no other Board approvals are required; log storage permits; and permit and license renewals that are in substantial compliance. DEP Rules Ch. 1(8).

[16] DEP Rules Ch. 1(6).

Administrative Appeals and Judicial Review

The Commissioner reports decisions rendered on delegated applications to the Board and the Board may vote to reverse or modify the decision. Persons "aggrieved" by a decision of the Commissioner or the Board -- including the applicant as well as anyone adversely affected by the decision -- have several options: (1) they may appeal the Commissioners' decision to the Board within 30 days of the receipt of the decision; (2) they may request a reconsideration of the Board's decision within 30 days of the receipt of the decision; or (3) they may seek judicial review by filing a petition in Superior Court within 40 days of the Board's decision (30 days of receipt of the decision if the appellant is a party to the proceeding).

The notice of appeal and/or reconsideration to the Board must contain the findings, the basis of the objection or challenge, the remedy sought and the nature of any new or additional evidence to be offered. Decisions to grant or reject appeals and/or reconsiderations are made by the Board within 30 days; if granted, final Board decisions are made within 45 days and may include further public hearings.[17]

License Revocations, Modifications and Suspensions

After permits and/or licenses are granted, the DEP may inspect the project or site to ensure compliance with permit terms and conditions. Authorized representatives of the DEP staff and the Attorney General's Office must be granted access at reasonable times to any property to determine compliance with state laws. The Board or Commissioner may modify, revoke or suspend a permit after written notice and opportunity for a hearing if: (1) conditions of the license have been violated; (2) the license was obtained by misrepresentation or failure to disclose relevant facts; (3) the license activity poses a threat to human health or welfare; (4) the license fails to include any applicable standard or limitation; (5) changed circumstances or conditions require modification, revocation or suspension of the license; or (6) the licensee has violated any laws administered by the Board.[18]

[17] DEP Rules Ch. 1(15).

[18] DEP Rules Ch. 1(16).

State Discharge Standards

The Board or DEP may only approve discharges that, alone or in combination with other discharges, meet the following state discharge standards:

> (1) the discharge will not lower the quality of any classified body of water below such classification or lower the existing quality of any body of water (see discussion of Maine's Water Quality Standards below). Discharges affecting water bodies that do not meet classification standards may be approved so long as the discharge does not cause or contribute to the failure of the water body to meet those standards of classification;
>
> (2) the discharge will not lower the quality of unclassified water bodies below the expected classification; or
>
> (3) the discharge will meet Clean Water Act effluent standards taking into account the existing state of technology, the effectiveness of available alternatives, and the economic feasibility of such alternatives.[19]

Prohibited Discharges

The following types of discharges are expressly prohibited under state law: (1) the direct or indirect discharge (by placement adjacent to water bodies so that it may fall, be washed or drain into state waters) of forest product refuse, potatoes or general refuse and rubbish; (2) log driving (log storage may be allowed with a permit); (3) high phosphorous detergents; (4) tributyltin as an antifouling agent that exceeds acceptable release rates or outright applied to certain types of crafts; (5) mercury and other toxic and hazardous substances not specifically regulated; (6) radiological, chemical or biological warfare agents; (7) discharges that impart color, taste, turbidity, toxicity, radioactivity or other properties that cause waters to be unsuitable for the designated uses and characteristics ascribed to their class; (8) new direct discharges into waters having a drainage area of less than 10 square miles; (9) new direct discharges into tributaries of Class-GPA waters of domestic pollutants or any other discharge that by itself or in combination with other activities cause water quality degradation which would impair the characteristics and designated uses of downstream GPA waters or cause an increase in the trophic state of those GPA waters; and (10) discharges that cause pH of fresh waters to

[19] 38 MRSA § 414-A(1).

fall outside the 6.0 to 8.5 range, or cause the pH of estuarine and marine waters to fall outside of the 7.0 to 8.5 range.[20]

Persons detecting such discharges should report them immediately to the nearest DEP office.

CITIZEN ENFORCEMENT OF FEDERAL AND STATE DISCHARGE PERMITS

The enforcement provisions of the Clean Water Act are summarized below:

Section 308: monitoring and reporting requirements and inspections by authorities;

Section 309: civil enforcement actions for injunctive relief;

Section 309(c): criminal penalties for negligent violations (up to $25,000 per day/1 year imprisonment), knowing violations ($50,000 per day/3 years), knowing endangerment ($250,000/15 years, and false statements ($10,000/2 years);

Section 309(d): civil penalties up to $25,000 per day;

Section 309(e) and (f): requires EPA to join states in suits against municipalities and authorizes suits against POTWs and dischargers for violations of pretreatment standards;

Section 309(g): authorizes administrative penalties by the EPA and states of up to $10,000 per day and gives citizens the right to comment on them;

Section 402(h): authorizes ban on new sewer hookups to POTWs that violate their discharge permits;

[20] 38 MRSA §§ 417-420, 464(4)(A). State law also prohibits discharges that increase the color of any water body by more than 20 color pollution units for individual discharges, up to a maximum 40 color units for total increases caused by all waste discharges into a water body. BPT standards for kraft pulping mills limit maximum discharges to 150-225 pounds of color pollutants per ton of unbleached pulp produced quarterly. 38 MRSA § 414-C.

Section 504: authorizes EPA to sue to restrain any source contributing to pollution "presenting an imminent or substantial endangerment" to public health or welfare; and

Section 508: authorizes EPA to blacklist violators, barring them from federal contracts and loans.[21]

In addition to these provisions, citizens are authorized to sue any person for injunctive relief, civil penalties, court costs and attorneys fees for violating an effluent standard or EPA order under the citizen suit provisions of the Clean Water Act.

Citizen Suits Under the Clean Water Act

Under section 505 of the Clean Water Act, "citizen suits" may be filed by any citizen in federal district court against any individual corporation, association or government body violating an effluent standard or limitation, permit condition or order issued by the EPA.[22] The citizen suit provisions of the CWA enable private individuals to act as watchdogs of both industry and government to ensure rigorous enforcement of federal clean water laws and regulations. Citizen enforcement is less costly than government actions, augments total resources devoted to enforcement of environmental laws, and sharpens the response of public officials.[23]

Citizen suits are inexpensive and efficient enforcement mechanisms because proof of violations may be based upon the defendant's own records and discharge monitoring reports, which act as admissions, and suits can generally be resolved without the necessity of a full trial.[24] Successful litigation may halt the discharge through injunctive relief, or impose appropriate civil penalties up to $25,000 per day, and plaintiffs may recover reasonable litigation costs and attorney's fees.

---

[21] PERCIVAL, MILLER, SCHROEDER AND LEAPE, ENVIRONMENTAL REGULATION: LAW, SCIENCE AND POLICY (1992) at 987-988.

[22] Other federal laws with significant citizen suit provisions include the Clean Air Act, the Toxic Substance Control Act, the Endangered Species Act, the Marine Protection, Research and Sanctuaries Act, the Resource Conservation and Recovery Act, and the Comprehensive Environmental Response, Compensation and Liability Act (Superfund). However, none are more widely used than the Clean Water Act provisions.

[23] RODGERS, ENVIRONMENTAL LAW (1977) at 77.

[24] STEVER, *supra* note 12 at § 12.08(3)(c).

Most citizen suits seek to compel a discharger to install pollution equipment, to require operating procedures to prevent further violations, and to secure penalties and attorney's fees. Many citizen suits are settled when defendants agree to make payments in lieu of penalties to environmental trust funds or similar devices. The parties must serve a consent decree on the EPA and Attorney General for comment forty-five days before settling a citizen suit.[25]

Requirements for Citizen Suits

Persons or organizations filing citizen suits under the CWA must be cognizant of a number of legal prerequisites:

(1) Standing. Persons and organizations must have "standing" to sue, meaning that they must demonstrate that they have been "adversely affected" or suffered some "injury in fact."[26] Standing stems from the Constitutional requirement of a "case and controversy" (Article III, § 2, cl. 1), and has been the subject of considerable litigation. The courts generally require some "concrete indication" that individuals or members of organizations use the water body or would otherwise be affected by its pollution. These requirements may generally be satisfied by the submission of affidavits alleging that individuals or members of an organization have aesthetic, conservation, preservation, recreational or economic interests in the water body. General interests in environmental matters by an environmental organization will not suffice to provide standing.[27]

[25] 33 U.S.C. § 1365(c).

[26] 33 U.S.C. § 1365(g).

[27] In June, 1992, the U.S. Supreme Court ruled in *Lujan v. Defenders of Wildlife* that an environmental organization did not have standing to challenge a rule by the Department of the Interior that it was not required to consult with other federal agencies with respect to the Endangered Species Act for foreign activities. The Court noted that to have standing plaintiffs must shown that: (1) they suffer an injury in fact; (2) that the injury can be fairly traced to the defendants action; and (3) that the injuries are likely to be redressed by a favorable decision by the Court. In *Lujan*, the court ruled that the plaintiff's organization and its members did not suffer an "injury in fact" because they failed to show how damage to species abroad produced an "actual or imminent" injury to its members. The plaintiffs also failed to show "redressiblity," in that other funding agencies operating abroad may not be bound by the decision, and that even if they were, they only supplied a fraction of the funding for the foreign projects. Thus, there was no assurance that action against the Department of the Interior would suspend the projects or do less harm to the species. While the full impact of the decision has yet to be determined, it may further restrict the ability of citizens to bring actions under the Clean Water Act by limiting their standing.

(2) 60-Day Notice. A person intending to initiate a citizen suit against a discharger must give written notice of the alleged violation to the EPA, the state in which the violation occurs, and the alleged violator at least 60 days prior to filing the suit.[28] The 60-day notice letter should contain:

- ✓ a description of the order, effluent limitation or condition that is being violated in the NPDES permit;
- ✓ the activity being conducted that is in violation of the NPDES permit (discharge parameters, testing methods or technologies);
- ✓ the date(s) and location(s) of the violations;
- ✓ persons(s) responsible (manager, supervisor or town officials)
- ✓ the name and address of the person(s) bringing the action; and the name(s) and address(s) of the attorneys representing the persons or group bringing the action.

Citizen suits are barred if the EPA or affected state is already "diligently" prosecuting a civil or criminal action to require compliance with the standard or limitation or if they commence such action during the 60-day period.[29] Citizen suits are not barred so long as they are filed after the 60-notice period expires and before government initiates its action, although other legal defenses (abstention) may be raised by the government.[30] Even where the government is diligently prosecuting an enforcement action, citizens may intervene and comment on the penalties assessed.

In 1987, Congress added a provision to the CWA that precludes the award of civil penalties under the citizen suit provisions if the EPA or a state files an administrative enforcement action prior to commencement of the citizen suit or 120 days after notice is filed by the plaintiff.[31] While settlement agreements and consent decrees negotiated by the EPA may bar pending citizen suits if they

---

[28] About 200 notices of intent to bring citizen suits are filed each year with the EPA.

[29] 33 U.S.C. § 1365(b)(1)(B).

[30] STEVER, *supra* note 12 at § 12.08(3)(b)(ii).

[31] 33 U.S.C. § 1319(g)(6).

address the claims made in the suit, attorneys fees and court costs may still be awarded to the plaintiffs for their role as "private attorneys general."[32]

(3) Past Violations. Citizen suits may not be based exclusively upon past violations, unless such violations are "continuous or intermittent" (i.e. ongoing), or there is a reasonable likelihood that past pollution will continue to pollute in the future.[33] Citizens should therefore be capable of proving such violations at trial by showing that the violations continued after the date the complaint was filed or by producing evidence that there is a continued likelihood of recurring intermittent or sporadic violations.[34] This may require the use of expert testimony to demonstrate that technological improvements made by the facility will not be likely to solve the violations that have been occurring.

(4) Mandatory Duties. Citizen suits may only compel the EPA to perform acts mandated by the Clean Water Act or its regulations, such as meeting deadlines established by law for issuing regulations or enforcing specific effluent limitations. However, taking specific enforcement actions may be deemed discretionary rather than mandatory, and thus may not be within the range of actions the EPA may be compelled to take by citizen suits.[35]

Enforcement Under State Law

Unlike the Clean Water Act, Maine law does not provide for "citizen suits" to enforce waste discharge licenses. Although the State Legislature has considered authorizing citizen suits to enforce the provisions of state environmental laws, the legislation has lacked sufficient political support.[36] It is therefore the responsibility of the DEP and the State Attorney General to "prevent, abate and control the pollution of the air, water and land and preserve, improve and prevent diminution

---

[32] PERCIVAL, *supra* note 21 at 1009.

[33] Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Foundation, 108 S. Ct. 376 (1987).

[34] PERCIVAL, *supra* note 21 at 1008.

[35] 33 U.S.C. § 1365(a).

[36] See "Citizen Environmental Protection Act," L.D. 1551, 115th Maine Legislature, April 16, 1991 presented by Rep. from Harpswell and referred to the Energy and Natural Resources Comm. A similar bill failed to pass in 1984.

of the natural environment of the State,"[37] and citizens must seek enforcement through these agencies.

When the DEP detects a violation it may: (1) resolve the violation through an administrative consent agreement approved by the Board and the Attorney General; (2) refer the violation to the Attorney General for prosecution; (3) schedule and hold an enforcement hearing; or (4) initiate a civil action with the approval of the Attorney General.[38]

The public may make written comments to the Board at the Board's discretion on any administrative consent agreement. Consent agreements are the DEP's most frequently used enforcement tool. Consent agreements generally work out some form of voluntary compliance pursuant to a Board order, and are printed and made public each month by the DEP. If the order is violated an administrative enforcement hearing may be called by the DEP where the alleged violator appears and answers the allegations, files a statement of facts, and presents relevant evidence. If the Commissioner of the DEP finds that a violation exists, an order will be issued requiring immediate compliance.

The Commissioner of the DEP may also issue emergency orders if there is likelihood of substantial and immediate danger to public health, safety or the environment, ordering the person or persons responsible to take immediate action to reduce or alleviate the danger. Hearings before the Board may be held within 48 hours of any request by the violator and a decision on the violation will be rendered within 7 days of the hearing. The Board's decision may be appealed to Superior Court.

The Attorney General may also institute proceedings to enjoin any violation of state water quality laws, DEP orders, regulations, licenses or permits. The DEP must request the Attorney General to initiate immediate injunctive proceedings where it finds that a violation constitutes a substantial and immediate danger. The Attorney General may seek civil and criminal penalties, and restoration of any area affected by the violation.[39] Maximum criminal penalties are $25,000 per day and/or one year imprisonment. Maximum civil penalties are $25,000 per day if the violation relates to hazardous wastes and $10,000 for other violations except for repeat violations within 5 years where the maximum is $25,000 for each day. If the

[37] 38 MRSA § 341-A(1).

[38] 38 MRSA § 347-A.

[39] 38 MRSA § 348.

economic benefit exceeds the otherwise applicable maximum civil penalty, it may be increased to twice the economic benefit resulting from the violation.[40] False statements are subject to fines of $10,000 per day and/or 6 months imprisonment.

PUBLIC PARTICIPATION IN EFFLUENT LIMITATIONS AND STATE WATER QUALITY STANDARDS

Citizens may participate in EPA's development of effluent guidelines and review of state water quality standards through rulemaking procedures under which the EPA provides public notice and solicits comments. A legal challenge to EPA's rules may be brought by "any interested person" in the U.S. Court of Appeals within 120 days of the decision.[41] In practice, however, courts have limited such judicial review to persons who participated in the rulemaking process, and new issues not raised before the EPA may not be contested in court.[42]

It is extremely important for citizens to participate in the rulemaking process for effluent limitations and state water quality standards. The following discussion is designed to assist persons wishing to understand and participate in these rulemaking procedures.

Federal Effluent Limitation Standards

As noted earlier, *effluent limitations* (ELs) are established by the EPA for discharges from industrial facilities and publicly-owned sewage treatment works or facilities. They express the maximum allowable rate of discharge, concentration or amount of a pollutant which may be released, depending on the nature of the discharge, and are enforced through the NPDES permit process.

ELs for particular industries are established by the EPA based upon a number of standards reflecting different pollution control strategies and discharges:

---

[40] *Id.*, § 349.

[41] 33 U.S.C. § 1369(b)(1).

[42] STEVER, *supra* note 12, at § 12.03(1). The Justice Department also provides formal notice and opportunity for public comments for all consent decrees and settlement agreements with violators proposed under the CWA and other EPA litigation. 28 C.F.R. § 50.7.

"Best practicable control technology currently available" (BPT), was applied to all industrial discharges prior to 1977, setting a national floor for effluent treatment roughly equivalent to the average performance of the best facilities in a given category of industry.[43]

"Best conventional pollutant control technology" (BCT) standards are applied to conventional pollutants (such as biochemical oxygen demand, suspended solids, fecal coliform bacteria, oil and grease, and pH).[44]

"Best available control technology economically achievable" (BAT) standards apply to discharges containing toxic[45] and nonconventional pollutants (such as ammonia, nitrates, total phosphorus, chlorides, iron and color);

"Best professional judgment" (BPJ) is applied by the EPA on a case-by-case basis to regulate thermal pollution, primarily heated effluent from electrical generating plants;[46] and

New source performance standards (NSPS) are required to incorporate the most advanced pollution control technologies available (BAT/BCT) for "new sources" of pollution (pollutants from facilities which commenced construction after the publication of EPA regulations).[47]

Federal Requirements for State Water Quality Standards

The CWA requires states to establish water quality standards (WQSs) for all surface waters within their jurisdiction. These standards must specify: (1) designated uses -- also called "use classifications" -- that the water body should be

[43] The effluent limitations for industries regulated under the Clean Water Act, such as paper and pulp mills, timber products processing, feedlots, petroleum refining, hospitals and many others, are set forth in EPA regulations at 40 C.F.R. §§ 400-471.

[44] 33 U.S.C. § 1314(b)(4)(B).

[45] The EPA has also adopted specific effluent standards for six toxic pollutants: aldrin/dieldrin, DDT, PCB, endrin, toxaphene and benzidine. 40 C.F.R. § 129.1-105.

[46] 33 U.S.C. § 1326; 40 C.F.R. § 125.3.

[47] 33 U.S.C. § 1316; 40 C.F.R. Subpart I.

able to support; and (2) water quality criteria or numerical standards to assure that designated uses are maintained. Once established, WQSs are used to calculate a total maximum daily load (TMDL) for the receiving waters from which a "waste load allocation" (WLA) is derived for individual dischargers. TMDL is the total amount of a particular pollutant that sources can discharge without violating water quality standards and may be applied by EPA to impose more rigorous effluent limitations on individuals discharging into certain water bodies.

State WQSs must provide for the "protection and propagation of fish, shellfish, and wildlife and . . . recreation in and on the water." This is the Clean Water Act's so-called national "fishable/swimmable" goal.[48] Water quality standards must also comply with the federal "antidegradation policy" to protect and maintain "existing in-stream water uses and the level of water quality necessary to protect the existing uses."[49] The policy prevents water quality degradation which would, for example, cause a significant reduction in a population of fish located in a particular water body or reduce swimming uses of the water body. The policy also protects waters of exceptionally high water quality.

In some cases, states may downgrade a WQS or remove a designated use if natural factors or pollutants prevent attainment of the use, or if imposition of control measures would result in "substantial and widespread economic and social impact."[50] However, existing uses must be protected and states must first conduct a "use attainability analysis" to demonstrate the necessity for downgrading, subject to public notice and comment. If granted by the EPA, lower use standards must be reviewed every three years and revised if the designated uses have become attainable. TMDLs, WLAs and water quality-based effluent permit limitations are also subject to federal "anti-backsliding" provisions to prevent the reduction of effluent limitation permit standards if water quality standards are lowered.[51]

The Maine DEP must review state water quality standards at least once every three years. These reviews must provide for public hearings and any new or revised standards must be submitted to the EPA for approval. Any person may petition the state for a reclassification of water quality standards, or request

---

[48] 33 U.S.C. §§ 1251(a)(2) and 1313(a); 40 C.F.R. § 131.6(a).

[49] 40 C.F.R. § 131.10(a)(1). "Existing uses are those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards." 40 C.F.R. § 131.3(3).

[50] 40 C.F.R. § 131.10(g)

[51] 33 U.S.C. § 1313(d)(4)(B).

notification from the DEP of proposed rulemakings.[52] The DEP must conduct classification studies and investigations and make the information gathered available to the public. The Board of Environmental Protection holds a public hearing in the affected area to obtain public input and may propose changes to the Legislature. The Legislature has the final authority to make any changes in the classification of the waters of the State, subject to judicial challenges by aggrieved persons.[53]

The public may also participate when the EPA reviews state water quality standards. The Regional Administrator of the EPA is authorized to reject state water quality standards that are inconsistent with the CWA standards listed above. The EPA may also set new water quality standards by issuing proposed regulations after public notice is filed in the Federal Register and an opportunity for comments is provided.[54] Under certain circumstances, final EPA water quality standards may be challenged in federal court by interested persons.

Maine's Water Quality Standards

The Maine Department of Environmental Protection (DEP) has designated uses and standards for the state's groundwater resources, rivers and streams, lakes and ponds, and its estuarine and marine waters. The State must certify compliance with these standards for all federal permits and must enforce these standards in state waste discharge licenses.

Maine's estuarine and marine waters are divided into three classifications:[55]

(1) Class SA Waters. (the highest classification - applied to waters which are outstanding natural resources, and which should be preserved). Waters must be of such quality that they are suitable for recreation in and on the water, fishing, aquaculture, the propagation and harvesting of shellfish, navigation and habitat for fish and other estuarine and marine life. The estuarine and marine life, dissolved oxygen and bacteria content shall be as "naturally occurs." Direct discharges of pollutants are prohibited.

---

[52] 5 MRSA § 8053.

[53] 38 MRSA § 464(2).

[54] 33 U.S.C. § 1313(c).

[55] 38 MRSA § 465-B.

(2) Class SB Waters. Waters must be of such quality to be suitable for all of the SA designated uses plus industrial process and cooling water supply, and hydroelectric power generation; habitat shall be "unimpaired;" DO must be at least 85% saturation; bacteria must not exceed geometric mean of 8 enterococci/100 ml or instantaneous level of 54 enterococci/100 ml between May 15 - September 30; total coliform bacteria in shellfish harvesting areas must comply with U.S. FDA National Shellfish Sanitation Program (NSSP) standards. Discharges must not cause adverse impact to estuarine and marine life; receiving waters shall be of sufficient quality to support all indigenous estuarine and marine species without detrimental changes in the resident biological community; and new discharges that would cause closure of open shellfish beds are prohibited.

(3) Class SC Waters. Waters must be of such quality to be suitable for all of the SA and SB uses, except that shellfish harvesting may be restricted. Designated uses are same as SB, plus restricted harvesting of shellfish. DO, bacteria and total coliform bacterial limits are less restrictive than in SB waters; and discharges may cause some changes to estuarine and marine life provided that CWA fishable/swimmable standards are maintained.

When the actual quality of any classified water exceeds the minimum standards of the next highest classification, that higher water quality must be maintained and protected.

Attainment. The DEP estimates that about 10% of Maine's marine and estuarine waters are in nonattainment or partial nonattainment of designated uses and "fishable" goals (protection and propagation of fish, shellfish and wildlife); less than 1% are in nonattainment of swimmable goals (recreation in and on the water).[56] Nonattainment of marine and estuarine waters is due mostly to bacterial pollution from municipal point source discharges and Combined Sewer Overflows (CSOs). A summary of the sources of nonattainment in Maine waters is contained in Table 1. Marine and estuarine waters in nonattainment are described in *Appendix C*.[57]

As of August, 1992, approximately 33% of shellfish harvesting areas were closed by the Department of Marine Resources. Some of these areas were closed

[56] Maine Department of Environmental Protection, State of Maine 1992 Water Quality Assessment: A Report to Congress Prepared Pursuant to Section 305(b) of the Federal Water Pollution Control Act as Amended, at 2 and 14-15.

[57] 1990 DEP WQA at Appendix II; 1992 DEP WQA at Appendix I, Chapter 5.

Table 1
Sources of Surface Water Nonattainment in Maine

Type of Water Body: Rivers, Streams and Brooks (miles)

Source Categories	Major Impact	Moderate/Minor Impact
Unknown		
Industrial Point Sources	102.0	169.4
Municipal Point Sources	13.5	84.5
Combined Sewer Overflows	1.0	23.7
Agriculture	72.0	63.3
Irrigated Crops		0.5
Feedlots		2.0
Land Development		11.0
Runoff/Storm Sewers	3.0	26.5
Mine Tailings		1.4
Landfills		
Onsite Waste Treatment	50.8	13.0
Flow Regulation[1]	3.0	26.5
In-place Contamination		1.7
Up-stream Impoundment		22.3

Type of Water Body: Lakes and Ponds (acres)

Source Categories	Major Impact	Moderate/Minor Impact
Industrial Point Sources		4,288
Municipal Point Sources	76	4,845
Agriculture[1]	1,402	66,805
Aquaculture	30	
Silviculture	3,820	48,573
Construction	32	1,344
Urban Runoff/Storm Sewers[1]	32,805	89,608
Shoreline Development	32,459	80,144
Residential Development		7,762
General Development		2,321
Urban Runoff		1,907
Land Disposal[1]		1,999
Hazardous Waste		1,420
Hyrdo-modification		8,057
Other[1]		19,275
In Place Contaminants		18,432
Internal P Recycling		18,432
Source Unknown	72,654	

Type of Water Body: Marine and Estuarine Waters (square miles)

Source Categories	Major Impact	Moderate/Minor Impact
Municipal Point Source	117.0	6.2
Combined Sewer Overflows		0.5
Flow Regulation		0.4

[1] General category acreage is inclusive of subcategory acreages.

due to nonattainment of the State water quality standards. Other areas were closed because they were areas presumed to be unsuitable for harvesting under the National Shellfish Sanitation Program since they received treated discharges (even though the waters may have been in attainment). Areas closed to shellfishing change from year-to-year. Local shellfish wardens should be contacted for an updated list of closed areas in any given location and the suspected cause of the closures. Some of the local water quality monitoring groups listed in *Appendix A* might assist in gathering information that may lead to opening new areas to shellfishing.

Nonattainment in Maine's major rivers is mostly due to dioxins from the pulp and paper industries. The DEP has issued fish consumption advisories for large portions of the Androscoggin (124 miles), Kennebec (56 miles) and Penobscot (56 miles) Rivers. A complete list of all water bodies within the State that are in nonattainment is provided in the DEP's 1992 Water Quality Assessment.

Recent findings from researchers have also found elevated levels of toxic contamination in certain marine and estuarine areas within the State. Sediments and fish tissues in Penobscot Bay, Casco Bay and Boothbay Harbor were found to contain high levels of polynuclear aromatic hydrocarbons (PAH), lead, zinc, silver, copper and PCBs. The DEP's Marine Monitoring Program identified six marine and estuarine areas of concern with regard to toxic contaminants:[58]

Piscataqua River Estuary	2,560 acres
Fore River*	1,230 acres
Back Cove	460 acres
Presumpscot River Estuary	620 acres
Boothbay Harbor	410 acres
Cape Rosier	80 acres

However, at this time insufficient data exists to support a nonattainment classification or finding of adverse impacts for these waters by the DEP.

SEWAGE TREATMENT

Sewage treatment plants are major point sources of pollution. The Clean Water Act requires publicly owned treatment works (POTWs) to provide for "secondary" sewage treatment. Secondary treatment must remove organic material

[58] DEP 1992 WQA at 57.

through biological treatment of bacteria and other microbes, or physical/chemical treatment, and meet EPA requirements for biological oxygen demand, suspended solids, and pH.[59] These requirements go beyond "primary treatment," which only provides for the physical removal of suspended solids, such as through screening and settling. Tertiary or advanced wastewater treatment is not required under the CWA but may be imposed under state law or programs if necessary to meet water classification standards.

Waivers of secondary sewage treatment (thereby allowing only the primary treatment of sewage) are permitted under Section 301(h) of the CWA for POTWs that discharge into the "deep" ocean waters or "saline estuarine waters" with strong tidal movement. In these locations, primary treatment is permitted so long as toxics are removed, monitoring is provided, and a number of other requirements are met.[60] Figure 4 shows the location of POTWs in Maine that are permitted to provide only primary treatment.

The CWA also establishes "pretreatment" standards for certain industrial facilities that discharge into POTWs. Although these "indirect" dischargers are not required to obtain NPDES or state discharge permits, they are subject to general standards requiring the treatment and control of wastes prior to discharges into POTWs, so that pollutants will not pass through or interfere with the POTWs treatment system. The EPA and the Maine DEP conduct pretreatment inspections to ensure compliance with federal standards.

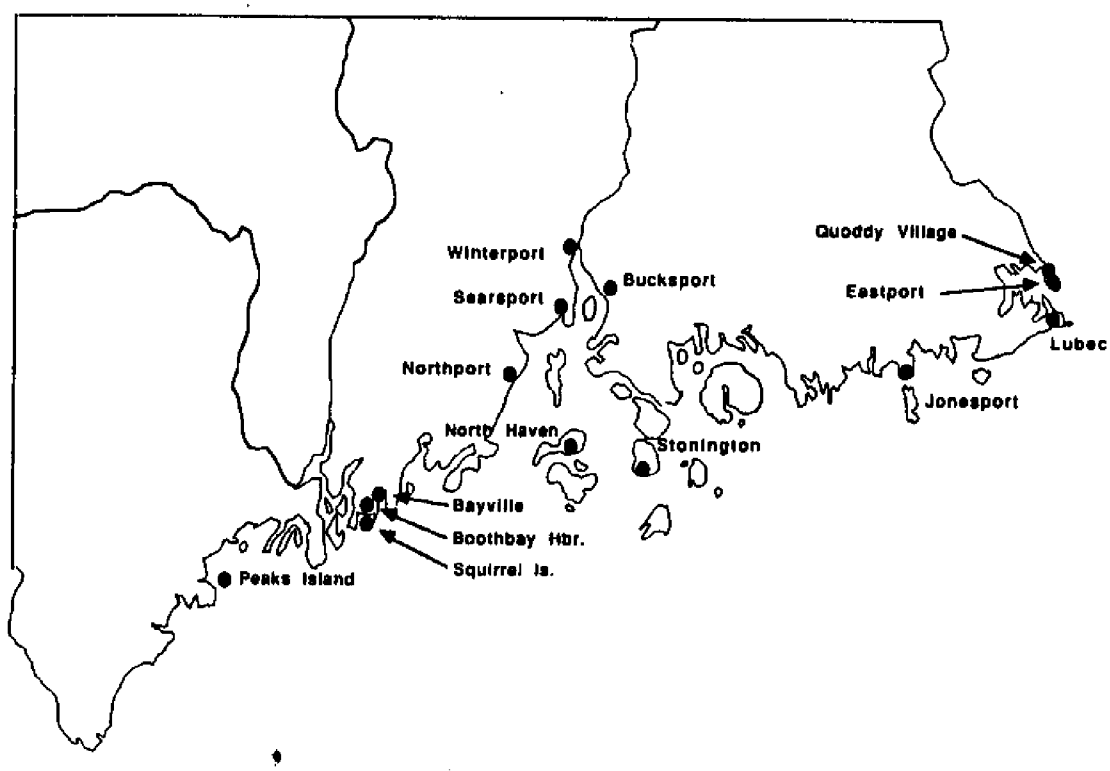
The federal construction grant program for POTWs was phased out in 1990 and replaced with start-up funds for a revolving loan program for use between 1989-1994. Federal and state cost-sharing for the construction of POTWs in Maine is administered by the Maine Department of Environmental Protection based upon a "worst-first" priority basis to communities with sewage treatment problems. The DEP publishes an annual report on the "State of Maine Municipal Construction Grants Program" listing active and proposed construction projects based upon the following priorities: (1) water supply protection; (2) lakes protection; (3) shellfishery protection; (4) water quality concerns; and (5) other facility needs. To supplement the federal construction grant program, Maine has adopted a Small Community Facilities Program which provides for voter approved bonds up to $1 million annually for grants not exceeding $100,000 per town to finance up to 90% of the costs of constructing small wastewater treatment projects. Thus far the program has financed the construction of over 1,500 small systems in 126 towns.

---

[59] 40 C.F.R. § 133.102.

[60] 33 U.S.C. § 1311(h); 40 C.F.R. § 125.56-67.

Figure 4
Location of Primary Sewage Treatment Plants in Maine

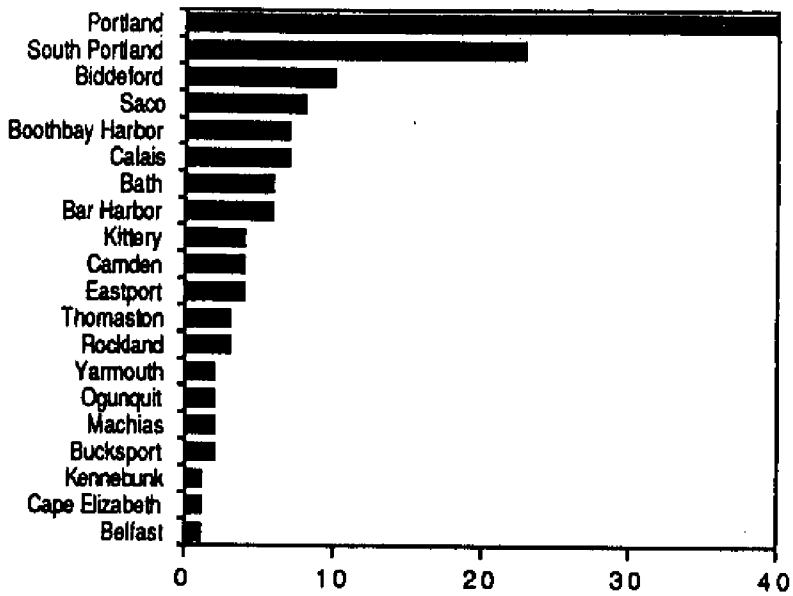


SOURCE: Doggett, Lee and John Sowles, MAINE'S MARINE ENVIRONMENT: A PLAN FOR PROTECTION: A REPORT TO THE 114TH LEGISLATURE, Maine Dept. of Envt'l Protection and Maine Dept. of Marine Resources, Augusta, ME (March 1989) at 37. Since the date of this publication, Peaks Island has begun conversion to secondary treatment.

STORMWATER AND COMBINED SEWER OVERFLOWS

Stormwater poses special water quality problems. Untreated stormwater discharges sediments, oxygen depleting nutrients, and heavy metals into coastal and freshwater bodies. In communities that have combined storm and sanitary sewer systems, stormwater runoff channeled into sewage systems can overwhelm treatment facilities during periods of heavy rains, discharging raw untreated sewage along with stormwater from combined sewer overflows (CSOs). See Figure 5 for number of CSOs on the Maine coast.

Figure 5
Number of CSO's Entering Marine and Estuarine Waters by Municipality



SOURCE: Doggett, Lee and John Sowles, MAINE'S MARINE ENVIRONMENT: A PLAN FOR PROTECTION: A REPORT TO THE 114TH LEGISLATURE, Maine Dept. of Envt'l Protection and Maine Dept. of Marine Resources, Augusta, ME (March 1989) at 25.

The CWA requires that municipalities receiving federal grants design combined treatment systems to accommodate wet weather flows and conduct "infiltration and inflow analyses" to uncover leaks and eliminate inflows that exacerbate wet weather flows. Although CSOs are point source discharges and subject to NPDES permit requirements, they are not subject to EPA's secondary treatment regulations.[61] Many older wastewater treatment facilities constructed prior to the adoption of these rules (such as Portland, South Portland and Westbrook) continue to discharge raw sewage along with stormwater runoff from CSOs during heavy rain events in violation of Clean Water Act requirements.

The DEP is presently planning a rehabilitation program funded by state and local sources to identify and treat the most objectionable CSOs throughout the

[61] Montgomery Environmental Coalition v. Costle, 646 f.2d 568 (D.C. Cir. 1980); EPA National Combined Sewer Overflow Control Strategy, 54 FR 37370 (September 8, 1989).

State. A priority system is being designed and licensing requirements are being established to abate CSOs that: (1) may impair recreation or create public health concerns; (2) discharge into redeemable shellfish areas; (3) are due to infiltration of water into the sewer system; (4) contain significant industrial or high strength wastes; (5) discharge between June and September; and (6) cause nuisance conditions.[62] Each facility/community will be required to submit a comprehensive Facilities Plan to monitor, sample and evaluate CSO discharges and establish a timetable for CSO abatement. The State Combined Sewer Sources Overflow Coordinator, in the DEP's Bureau of Water Quality Control, should be contacted for further information regarding the State's funding program for planning and construction grants to communities.

Citizens can work with the State and local communities on CSO Master Plans to ensure that their community is adequately considered for the CSO priority list and to assist in the implementation of such CSO control measures as: (1) the identification, evaluation, monitoring and sampling of CSO discharge points; (2) ambient water quality monitoring to determine impacts on receiving waters; (3) evaluation of infiltration leaky pipes and inflow from illegal hookups into the sewer system that may be diminishing the system's capacity to deal adequately with stormwater; and (4) implementation of local stormwater best management practices to reduce flows into POTWs.

Citizens can also ensure that permits for CSO discharges require the following minimum "best conventional pollution control technology"/"best available control technology economically achievable" (BCT/BAT) limitations recommended by the EPA: (1) proper operation and regular maintenance programs for sewer systems and overflow points; (2) maximum use of the collection system for storage; (3) review and modification of pretreatment programs to assure CSO impacts are minimized; (4) maximization of flow to the POTW for treatment; (5) prohibition of dry weather overflows; and (6) control of solid and floatable materials in CSO discharges.[63]

---

[62] Maine DEP Water Program, Combined Sewer Overflow Control and Management (March 1991) at 3.

[63] EPA National Combined Sewer Overflow Control Strategy, 54 FR 37370 (September 8, 1989).

STATE CERTIFICATIONS OF FEDERAL PERMITS

Section 401 of the Clean Water Act requires that the state certify that every applicant for a federal permit to discharge into navigable waters is in compliance with state water quality standards and other appropriate state laws.[64] State certifications apply not only to EPA NPDES permits, but to all federal licenses and permits including, for example, permits issued by the Army Corps of Engineers for dredging and filling wetlands, or licensing and relicensing hydro-electric projects by the Federal Energy Regulatory Commission. Public notice and the opportunity for a public hearing must be provided and state certifications may establish additional effluent limitations and other requirements necessary to assure compliance with the CWA. In Maine, most certifications are provided by the Board of Environmental Protection.

The state must also certify that federal NPDES permits, and all federal and federally-permitted activities, are consistent with the state's coastal management program. These reviews are required under the federal Coastal Zone Management Act (CZMA) and generally conducted by the DEP when it is issuing state waste discharge licenses. Citizens should review state coastal policies when participating in state consistency reviews of federal NPDES permits and other federal activities affecting coastal water quality. These policies are available from the Maine Coastal Program of the State Planning Office, which is also available to answer any questions about citizen participation in the CZMA consistency process.

[64] 33 U.S.C. § 1341.

III. PROGRAMS ADDRESSING NONPOINT SOURCE POLLUTION

The EPA describes nonpoint source (NPS) pollution as follows:

> *NPS pollution is caused by diffuse sources that are not regulated as point sources and normally is associated with agricultural, silvicultural and urban runoff, runoff from construction activities, etc. . . . NPS pollution does not result from a discharge at a specific, single location (such as a single pipe) but generally results from land runoff, precipitation, atmospheric deposition or percolation.*[65]

Critical sources of NPS pollution are sediment and soil erosion from agriculture, timber harvesting and construction activities; fertilizers, pesticides and animal wastes from farming activities; insecticides, herbicides and fungicides from golf courses, residential lawns and parks; improperly disposed household chemicals; and motor oil, solvents, fuels, nutrients and heavy metals from stormwater runoff.

The EPA estimates that approximately 60% of all water pollution nationwide is nonpoint source related. In Maine, NPS pollution has contaminated groundwater aquifers and threatens about 185,000 acres of lakes. Although it poses less of a threat to coastal and marine waters than fresh water bodies, NPS pollution from urban runoff and construction has impaired Casco Bay, the Scarborough River Estuary, and portions of the Androscoggin, Kennebec and Presumpscot Rivers.[66]

---

[65] EPA, Office of Water Regulation and Standards, Nonpoint Source Guidance (December 1987) at 3.

[66] DEP, Nonpoint Source Pollution Management Plan 18-19 (1989).

Unlike point source discharges, there are few regulatory programs in place to address the impacts of NPS pollution. Furthermore, government responsibilities are fragmented among a variety of state, federal and local agencies:

- The U.S. Environmental Protection Agency, Region I, supports the Maine Nonpoint Source Management Program, the implementation of Best Management Practices (BMPs), and the development of the State Coastal NPS Pollution Control Program;

- Soil and Water Conservation Districts located throughout the state (see list in *Appendix A*), with the assistance of the Soil Conservation Service and the University of Maine Cooperative Extension, are responsible for reviewing soil erosion and sedimentation plans when required by state and local government laws, reviewing the implementation of BMPs, and promoting nonregulatory programs for cooperative implementation of BMPs;

- Towns and Municipal Governments are responsible for reviewing subdivisions and local development projects that may be major sources of NPS pollution and can implement NPS pollution control measures through zoning, permit reviews and local ordinances enforced by local code enforcement officers (CEOs);

- The Maine Department of Agriculture, Bureau of Production, implements the Rights to Farm and Nuisance Complaints Laws, encourages conservation practices and controls pesticides;

- The Maine Department of Human Services administers the implementation of the State Plumbing Code through local plumbing inspectors;

- The Bureau of Water Quality Control in the Maine DEP is responsible for developing and implementing the Maine Nonpoint Source Pollution Management Plan and BMPs. The Bureau has a NPS Coordinator to oversee and coordinate agency activities;

- The Bureau of Land Quality Control in the Maine DEP is responsible for implementing stormwater runoff and erosion

control requirements under Maine's Shoreland Zoning, Site Location, and Natural Resource Protection Acts; and

- The Maine Coastal Program of the State Planning Office has a Coastal Nonpoint Source Coordinator to prepare amendments to the Nonpoint Source Management Plan to address NPS pollution in the coastal zone.

THE MAINE NONPOINT SOURCE MANAGEMENT PROGRAM

Section 319 of the Clean Water Act requires all states to prepare Nonpoint Source Assessment Reports and Management Programs to identify significant sources of and waters impacted by NPS pollution, establish best management practices (BMPs) to reduce NPS pollution to the maximum extent practicable, and prepare plans and strategies for controlling NPS pollution.[67]

Federal funds administered by the EPA are provided to assist states in preparing NPS Assessment Reports and Management Programs as part of an overall State Clean Water Strategy (SCWS). State NPS Assessment Reports, Management Plans and SCWSs are strategies prepared with EPA oversight, but are not enforceable unless implemented by specific legislation or regulations.

Maine's NPS Assessment Report and Management Plan were approved by the EPA in 1989, and are available from the Maine DEP, Bureau of Water Quality Control. The DEP is assisted by a NPS Advisory Committee in preparing and revising the Assessment Report and Management Plan, developing BMPs, and implementing a comprehensive program for controlling NPS pollution.

The Maine NPS Management Plan identifies four "interim" priority marine water bodies: (1) Casco Bay; (2) Boothbay Harbor; (3) Cobscook Bay; and (4) Piscataqua River Estuary (now expanded from the original designation). The Plan also lists 16 priority streams and 26 lakes. Within these areas, land use inventories will be conducted and plans will be prepared to specify best management practices needed to meet or exceed standards established by the DEP.

[67] 33 U.S.C. § 1329.

Best Management Practices (BMPs)

Best management practices may be used as tools by landowners, and state and local governmental agencies to meet DEP water quality goals or performance standards. BMPs are methods, measures and/or practices that, when installed or performed, will prevent; reduce or correct water pollution.[68] They are not necessarily laws or regulations unless specifically enacted or adopted through rulemaking procedures. The DEP is developing BMPs for each major NPS category: agriculture, silviculture, development, resource extraction, transportation facilities and support, chemical use and storage, solid waste disposal, and marine industries.

Opportunities for Public Participation

Ongoing DEP plans with respect to NPS pollution include: (1) publishing a state manual for BMPs in each NPS category; (2) establishing water quality performance standards; (3) implementing a planning process for the major NPS categories to specify how BMPs will be applied; and (4) monitoring the effectiveness of and modifying BMPs as needed. The public may assist in this process by participating in the DEP's NPS information and education program, taking precautionary steps to avoid NPS pollution, and contacting persons to correct NPS problems. Citizens can also take an active role to ensure that BMPs are implemented at the local level and can participate in the development, implementation and monitoring of BMPs by the DEP. The NPS Coordinator in the Bureau of Water Quality Control at DEP can provide more specific information with respect to public participation in the Maine NPS Management Program.

COASTAL NONPOINT SOURCE POLLUTION CONTROL PROGRAMS

The Maine Coastal Program in the State Planning Office is coordinating the preparation of a Coastal NPS Pollution Control Program for inclusion in the Maine Coastal Management Program which will update and expand the NPS Management Plan developed under the CWA. States that fail to submit approvable Coastal NPS Programs risk federal funding cuts under the Clean Water Act and the Coastal Zone Management Act (CZMA). The 1990 amendments to the CZMA, establish minimum standards for addressing the impacts of NPS pollution

[68] Maine DEP, State of Maine Nonpoint Source Pollution Management Plan (November 1989) at 10.

on coastal waters and require the implementation of substantive and enforceable state and local NPS pollution control strategies.

Coastal NPS Pollution Control Programs must: (1) identify land uses that may cause degradation of coastal waters; (2) identify critical coastal areas within which new or changing land uses are subject to management measures; (3) implement management measures to achieve and maintain applicable water quality standards; (4) provide technical and other assistance to local governments and the public to protect water quality; (5) provide opportunities for public participation; (6) improve coordination among state agencies and state and local officials responsible for land use, water quality, public health and safety, habitat protection and enforcement programs; and (7) modify boundaries of the state coastal zone if necessary to implement recommendations.[69]

In December, 1992, the EPA plans to publish guidance on "management measures" for coastal NPS pollution from agricultural runoff, forestry practices, marinas and recreational boating, urban runoff, hydromodification, vegetated filter strips and wetlands. Management measures are "economically achievable measures . . . which reflect the greatest degree of pollutant reduction achievable through the application of the best available nonpoint control practices, technologies, processes, siting criteria, operating methods or other alternatives."[70] Each state, including Maine, must submit their coastal NPS pollution control program to the EPA for review by mid-1995.

The analysis of the "economic achievability" of these management measures is available from the EPA, Assessment and Watershed Protection Division (WH-553), 401 M Street SW, Washington, DC 20460 [202] 260-7085. The Maine DEP NPS Pollution Coordinator in the Maine Coastal Program of the State Planning Office should be contacted for further information regarding participation in the development of Maine's Coastal NPS Pollution Control Program.

NPS POLLUTION FROM LAND USES AND DEVELOPMENT

Land development and use patterns can cause NPS pollution in many ways including erosion from construction sites, septic system failures, and stormwater runoff. The threat of NPS pollution from these activities can be reduced through

[69] 16 U.S.C. § 1455b(b).

[70] 16 USCA § 1455b(g)(5).

proper management of land use activities. Maine is fortunate to have a number of laws that require various land use mechanisms to reduce or eliminate NPS pollution from development activities.

Mandatory Shoreland Zoning

Under Maine's Mandatory Shoreland Zoning Act, all municipalities must implement and enforce zoning restrictions in shoreland areas that are consistent with state setback, minimum lot size, and other requirements for all new developments within "shoreland areas."[71] Shoreland areas are areas within 250 feet of all coastal waters, coastal wetlands, rivers, great ponds and freshwater wetlands exceeding 10 acres, and 75 feet from streams as those terms are defined in the Act. Within these areas, municipalities must adopt zoning laws that provide for the following measures to address NPS pollution:

Resource Protection Districts. Development and clearing of vegetation for development is severely limited within resource protection (RP) districts. RP districts must be designated within 250 feet of wetlands rated moderate or high value by the Department of Inland Fisheries and Wildlife, 100 year flood-plains, areas with 20% slopes, areas of two or more contiguous acres supporting wetland vegetation and hydric soils not surfically connected to a water body, or other important wildlife areas, natural sites or other significant areas designated by local planning boards or town councils;

Development Setbacks. Principal and accessory structures must be setback at least 100 feet from the high water line of great ponds and rivers flowing to great ponds, and 75 feet from all other water bodies, streams or wetlands except in districts designated for general development and commercial fisheries;

Lot Size, Shore Frontage and Lot Coverage Standards. All development must maintain minimum lot sizes of 30,000 - 40,000 square feet, minimum shoreline frontages of 150 - 200 feet, and maximum lot coverages of 20% except in districts designated for general development and commercial fisheries;

Stormwater Runoff. New development must minimize stormwater runoff in excess of natural pre-development conditions, and

[71] 38 MRSA §§ 435-447; DEP Rules Ch. 1000.

where possible, retain natural runoff features such as swales and gulleys; revegetate disturbed soil; submit soil erosion and sedimentation control plans to local governments; install and maintain temporary runoff and stabilization measures within one week of excavation, and permanent erosion measures within nine months of excavation; and design drainageways to accommodate a 25-year storm.

Persons seeking more information about local shoreland zoning ordinances within their towns, or who believe that development is being conducted in violation of shoreland zoning standards, should contact their local code enforcement officer or town planner. The Shoreland Zoning Coordinator within the DEP's Bureau of Land Quality Control oversees the implementation of the Act and ensures that municipal ordinances meet minimum state standards. The DEP may draft and adopt ordinances on behalf of municipalities that fail to adopt local zoning ordinances that meet minimum state standards. Copies of these standards may be obtained from the DEP. Interested persons may participate in the adoption and modification of local shoreland zoning ordinances to ensure the inclusion of additional mechanisms to protect coastal water quality that exceed the minimum standards.

Subdivision Controls

Maine has three laws that address the NPS pollution impacts of subdivisions and other land development activities: the Site Location of Development Act, the State Subdivision Law (discussed below) and the Natural Resources Protection Act (see p. 50).

Site Location of Development Law (Site Law).[72] Developments that may substantially affect the environment are regulated by the Maine DEP under the Site Location of Development Law. Examples of these legislatively designated developments include: large-scale subdivisions of 20 or more acres, with 5 or more lots offered for sale within a 5-year period; structures exceeding 60,000 square feet in ground area, 100,000 sq. ft. in floor area, or 3 acres in total buildings, parking lots, roads, paved areas, wharves or areas to be stripped or graded and not to be revegetated; developments occupying a land or water area in excess of 20 acres; mining activities; hazardous activities, and multi-unit housing within the shoreland zone. DEP may delegate permit authority for certain structures, subdivisions and gravel pits to local governments, if the local governments have municipal plans with standards at least as stringent as Site Law

[72] 38 MRSA §§ 481-490; DEP Rules Chs. 371-378.

standards, together with the staff and procedures necessary to implement the plans.

The Site Law requires that large-scale subdivisions and development projects incorporate the following measures to mitigate impacts from NPS pollution: (1) comprehensive erosion and sedimentation plans must be prepared by applicants to adequately protect adjacent water bodies from sedimentation and surface runoff; (2) exposed areas must be limited during construction to the shortest period possible, sediment must be removed from runoff before leaving the site, and permanent soil erosion control measures must be completed within 15 days of final grading; (3) no unreasonable increase in flooding risks or alteration of natural drainage ways are permitted; and (4) properly engineered and maintained stormwater management systems, capable of retaining water falling on site during a 25 year storm over 24 hours, must be implemented by the applicant.

Site Law permits are issued by the DEP in Augusta and citizens may participate in hearings by contacting the DEP Bureau of Land Quality Control, and reviewing copies of staff reports and proposed erosion and sedimentation control plans. Citizens may also assist in permit monitoring to ensure proposed sediment control measures and stormwater management systems are properly implemented and maintained.

Subdivision Law. Development which involves the division of a parcel of land into 3 or more lots within any 5-year period is reviewed by the municipality under the State Subdivision Law.[73] Municipalities are required to notify abutting property owners of applications for subdivisions and, although public hearings are not required, most municipal planning boards hold public hearings on subdivision proposals. The State Subdivision Law requires that municipalities make findings that subdivisions will not cause, among other things, unreasonable water pollution, soil erosion, or adverse effects on water quality or the shoreline of adjacent water bodies or wetlands. Subdivision proposals must accurately map freshwater wetlands and rivers, streams and brooks, provide for adequate stormwater management, and be consistent with local land use ordinances and comprehensive plans.

As with the Site Law, citizens may participate in local subdivision reviews, and monitor erosion control devices and stormwater systems required by local governments to alleviate impacts of NPS pollution. Local code enforcement officers (CEOs) and town planners should be contacted for questions regarding the review of subdivision proposals and BMPs, revegetation, and other NPS require-

[73] 30-A MRSA §§ 4401-4406.

ments. Citizen participation can substantially strengthen the enforcement and compliance monitoring capabilities of local CEOs, the DEP, and soil and water conservation districts.

Local Ordinances and Comprehensive Plans

In addition to implementing the laws noted above, municipalities may also adopt special local ordinances to address the impacts of nonpoint source pollution and establish NPS pollution control policies in local comprehensive plans. These ordinances might include supplemental plumbing codes, sedimentation/erosion controls and nutrient controls.

Local Ordinances. An outstanding example of a local ordinance that addresses the impacts of NPS pollution is the Coastal Protection Zone Ordinance adopted by the Town of Brunswick. The Town commissioned a study of the causes of a severe shellfish kill in 1988. The study found that the Bay was vulnerable to a number of nonpoint sources of pollution, including residential septic systems, agricultural and lawn fertilizers, and stormwater runoff. This vulnerability might have contributed to nutrient loadings, oxygen deprivation and algal blooms that resulted in the shellfish kills. The Town responded by adopting an ordinance to "protect coastal embayments from the potential impacts of nutrient loading and other nonpoint source pollution."[74] The Ordinance establishes a coastal watershed protection zone (CWPZ) within which the following controls are implemented to mitigate the impacts of NPS pollution:

- all development proposals must prepare stormwater management plans and ensure that stormwater runoff is not increased from pre-development conditions through the use of detention basins, vegetated buffer strips, grassed swales and recharge/-infiltration. Untreated stormwater from impervious surfaces may not be piped directly into water bodies;

- setbacks of 150-300 feet from adjacent water bodies are established for manure and/or commercial fertilizer storage and spreading, and the type and method of application of fertilizers and pesticides are restricted on lawns, golf courses, playing fields and parks;

- septic system setbacks of 150 feet are established from all water bodies and wetlands, and town inspections of septic systems are

[74] Coastal Protection Zone Ordinance, Brunswick, Maine (August 20, 1991 at § 315.

performed once every three years to ensure proper maintenance; and

- five acres minimum lot sizes are established and lot coverages for impervious surfaces are limited to 5%.

Persons interested in considering the use of similar provisions within their municipality should contact their Town Planner, the local Regional Planning Council and the Town of Brunswick for more information and copies of the Brunswick ordinance.

Comprehensive Plans. Growth management measures, including strategies to address NPS pollution and other water quality issues, may be implemented by local governments through comprehensive plans under the Maine Growth Management and Land Use Planning Law.[75] Although the Growth Management Law no longer requires the adoption and submission of comprehensive plans to the State for review, some state funding is still available and many municipalities are continuing to prepare and update their comprehensive plans.

Comprehensive plans must be consistent with the following state water quality related growth management goals and coastal policies: encouraging orderly growth, protecting the State's rural character and preventing development sprawl; protecting the State's water and other critical natural resources; protecting and managing critical habitats and natural areas; discouraging development in areas subject to storms, flooding, sea-level rise, and other hazards; and restoring and maintaining coastal water quality.

Active citizen participation is critical in developing, implementing or revising comprehensive plans to: (1) help develop inventories of critical natural resources, significant water and marine related resources, recreation and open space and significant points of public access; (2) develop 10-year growth management goals; (3) identify rural and growth areas; (4) identify regional water quality issues; and (5) develop implementation strategies. These strategies may include ordinances enforcing BMPs, improved septic system controls, the promotion of open space, creating buffer zones around wetlands, constructing and improving sewage treatment facilities, improving stormwater management, and controlling nutrient loading.

The Maine Department of Economic and Community Development (DECD) and the Regional Planning Councils are available to provide technical assistance

[75] 30-A MRSA §§ 4311-4344; DECD Rules Chs. 200-202.

to local communities. Citizens can assist with this effort by participating on local comprehensive planning committees and reviewing plan revisions. Interested persons should contact their town planner, CEO or clerk to determine the status of their local comprehensive plan. The following publications provide additional information on the comprehensive planning process: *The Growth Management Handbook: A Citizen's Guide to Community Planning* (1990), by the Greater Portland Council of Governments; *Guidelines for Maine's Growth Management Program* (1988), and *How to Prepare a Land Use Ordinance: A Manual for Local Officials* (1990), by the DECD.

Local Enforcement Procedures

If citizens believe that violations of local shoreland zoning, subdivision, or other local land use ordinances are adversely impacting water quality, their first step should be to contact the local town CEO or local plumbing inspector (LPI). Some towns have one person serving in both capacities. In most cases these local officials will be state certified under Rule 80K of the Maine Rules of Civil Procedure to represent the municipalities and/or the state in civil actions in District Court for violations of land use ordinances and state regulations.

Local officials may enter any property at reasonable hours with the consent of the owner or occupant to conduct inspections for compliance with local or state laws and ordinances, issue a summons to any person in violation of such laws, and represent the municipality in court when specifically authorized by the municipal officers and properly certified.[76] Maximum civil penalties for construction without a permit or a specific violation is $2,500, or twice the economic benefit resulting from the violation. Penalties may be levied up to $25,000 if there has been a previous conviction of the same party within the past two years. Violators may also be ordered to correct or abate the violation and the municipality may be awarded reasonable attorney fees, expert witness fees and costs.

REGULATING AGRICULTURAL ACTIVITIES

Agricultural activities that cause NPS pollution, such as from animal wastes, fertilizers, pesticides, sand, dirt and other pollutants, may require erosion and sedimentation control plans prepared by the Soil and Water Conservation District. If required, these plans must contain measures to reduce soil losses, prevent surface and groundwater contamination from animal wastes, and describe procedures for the proper use of fertilizers as prescribed by the University of

[76] 30-A MRSA § 4452.

Maine Cooperative Extension. Agricultural operations resulting in a discharge but conducted without SWCD erosion and sedimentation control plans are in technical violation of state waste discharge licensing requirements.

Although the DEP may conduct on-site inspections to determine whether activities are in compliance with SWCD plans, the DEP does not generally enforce these plans unless complaints are issued. In such cases, agricultural operators are encouraged to reduce discharges through the implementation of agricultural BMPs. The Maine NPS Agricultural Task Force issued agricultural BMP guidelines in October 1991 for sediment controls, manure management, pesticide use, and nutrient and fertilizer management.

Questions about specific agricultural activities should be directed to the code enforcement officer and nearest SWCD office. The Maine Department of Agriculture Food and Rural Resources, Bureau of Production, conducts on-site inspections when complaints are received from homeowners, farmers, municipalities or other state agencies. The agricultural compliance officer will determine if appropriate BMPs are being used on the farm, in which case the farm is protected under Maine's Right to Farm Law.[77] If appropriate BMPs are not being used, the officer or a Department response team will make recommendations to the farmer. If these recommendations are not adopted, enforcement actions may be initiated by: (1) the Maine Attorney General's Office through a nuisance action for failure to adopt appropriate BMPs; (2) by the DEP for violation of state waste discharge laws and standards; or (3) by the Board of Pesticide Control for pesticide use and label violations.

CREATING WATERSHED DISTRICTS

Effective NPS pollution control strategies generally require a watershed approach. Lake and coastal watershed districts may be established as regional, quasi-municipal, government agencies by municipalities, residents of unorganized territories, or by local referendum, to protect, improve, conserve and manage water quality and land and water resources.[78] Applications to form watershed districts must be filed with and approved by the Board of Environmental Protection after a public hearing, and must demonstrate the need for a coordinated approach to watershed management within the proposed district area. BEP approval must be ratified by a vote within the municipalities forming the District.

[77] 17 MRSA § 2805.

[78] 38 MRSA §§ 2001-2022.

Only one watershed district has thus far been established in Maine -- the Cobbossee Watershed District -- consisting of the towns of Mount Vernon, Readfield, Winthrop, Wayne, Monmouth, Manchester, Litchfield, West Gardiner, Gardiner and Richmond, and all the lakes, ponds, and other major water bodies within these municipalities.

Watershed districts are run by a board of trustees appointed by member towns. Districts are funded by member towns and may acquire and hold property, conduct research on water quality issues, adopt restoration and management plans, lobby state and local governments, and adopt programs to manage water uses. Districts may hire professional staff to help secure grants, assist municipalities prepare comprehensive plans, help draft and review stormwater management plans, monitor water quality and erosion control devices, review development proposals, subdivision plans and shoreland permits, assist local water quality enforcement efforts, provide technical assistance to property owners and farming operations, and encourage the use of BMPs.

For more information on watershed districts, contact the Cobbossee Water District and the DEP Bureau of Water Quality Control.

ENFORCING THE STATE PLUMBING CODE

There are approximately 230,000 septic systems in the State of Maine, many of which were installed prior to the adoption of the State Plumbing Code. Substandard and malfunctioning septic systems pose a threat to public health and ground, surface and marine water quality.

The Maine Department of Human Services (DHS) is responsible for adopting and revising the State Plumbing Code which regulates the operation and installation of "subsurface waste water disposal systems" (commonly known as septic systems).[79] Municipalities and local plumbing inspectors, certified by the DHS, are responsible for enforcing the Plumbing Code and issuing licenses for the installation of septic systems.

The Plumbing Code requires that test pits be bored to ensure that suitable soils and site conditions exist. New systems may not be installed within 10-year flood plains, on slopes exceeding 20%, on lots with less than 20,000 square feet, or on lots with less than 100 foot frontage on any lake, pond, stream, river or tidal area. Systems with design flows of less than 2,000 GPD must be set back at least

[79] 22 MRSA § 42; 30-A MRSA §§ 4201-4223; DHS Rules Ch. 241 (State Plumbing Code).

100 feet from potable water supplies and perennial water bodies, and 50 feet from intermittent water bodies. Disposal of residential septage on private property must be located at least 300 feet from property boundaries and fresh or tidal waters. Municipalities are free to adopt more stringent plumbing regulations. Variances may be granted by the local plumbing inspector (LPI) and the DHS for new systems and seasonal conversions where water quality will not be lowered and the public health will not be endangered. Changes in use and expansions of existing dwellings require that a notice be recorded and filed with the town stating that the disposal system could be replaced in conformance with Plumbing Code and local rules in the event of a malfunction.

Malfunctioning septic tanks, cesspools, sewers or drainage beds are considered to be a nuisance under State law.[80] In response to a complaint about a malfunctioning septic system, municipalities must serve an order upon the owner to remedy the problem. If the nuisance is not abated within 10 days, the plumbing inspector may enter the premises and have the malfunction remedied. The municipality may seek to recover any expenses, including attorney fees upon filing a civil action against the owner. Persons should report failing septic systems or cesspools to their PIs. Where local governments fail to take appropriate action, the DHS is authorized, on its own initiative or pursuant to a complaint, to instruct the municipality to comply with and enforce minimum state standards.

REMOVING OVERBOARD DISCHARGES

Overboard discharges (OBDs) are defined as a direct discharge of domestic pollutants to the surface waters of the state, without prior treatment in municipal of quasi-municipal sewage treatment facilities. Typically these discharges are partially treated in a system which consists of a septic tank, sand filter, chlorinator and discharge pipe which releases the "treated" effluent into surface waters. They are frequently used because soils in the area don't meet the requirements of the state plumbing code. The State of Maine has over 3,000 licensed, and an unknown number of unlicensed, overboard discharges. Overboard discharges are directly responsible for many shellfish closures because the U.S. Food and Drug Administration National Shellfish Sanitation program prohibits harvesting shellfish adjacent to sewage outfalls and other waste discharges.

Although the State prohibits the licensing of new overboard discharges, existing OBDs are conditionally licensed until six months after the DEP makes

[80] 30-A MRSA § 3428.

funds available to the applicant for their removal.[81] Licensed overboard discharges must be inspected at least twice a year by the DEP or a private contractor. The DEP will provide up to 90% of the costs to remove year-around residential OBDs, 50% to remove commercial OBDs, and 25% to remove seasonal residential OBDs. The State Legislature has appropriated about $1 million for the Overboard Discharge Assistance Fund to assist homeowners in removing overboard discharges in 1990. The DEP recently began establishing priorities for the distribution of funds based upon a DMR study of redeemable shellfish areas. These funds are currently (as of August 1992) being offered to 26 coastal towns, some of which have indicated that they will assist the DEP in examining OBD systems, selecting design and construction options and distributing the funds to homeowners. Some towns have declined to participate or respond to DEP inquiries.

Questions regarding OBDs should be directed to the Overboard Discharge Coordinator in the DEP's Bureau of Water Quality Control. The local CEO and/or plumbing inspector should also be able to provide information about the status of local participation in the DEP's OBD removal program. Towns should be encouraged to participate in the removal of OBDs through the OBD Assistance Fund or through Small Community Systems Grants which may provide small grants to fund the construction of community septic systems.

[81] 38 MRSA §§ 414(3-A) and 414-A(1-B).

IV. LAWS PROTECTING WETLANDS

Wetlands perform many valuable functions including reducing pollutant inputs into receiving water bodies by trapping sediments and nutrients, storing floodwaters, controlling shoreline erosion, and providing spawning and nursery habitats for commercially important fisheries and rare and endangered species. If wetlands are converted to other uses, these productive uses are not only lost, but they are often replaced by polluting activities such as residential development, marinas and agricultural operations. It is estimated that Maine has lost 20% of its original wetlands since colonial times.

Activities within and adjacent to coastal and freshwater wetlands in Maine are regulated by the U.S. Army Corps of Engineers and EPA, the Maine Department of Environmental Protection, and by local town councils, planning boards and code enforcement officers. In addition, the Maine Bureau of Parks and Recreation and the State Planning Office have prepared a Maine Wetlands Conservation Priority Plan which categorizes and inventories wetlands within the state (see Table 2).

PUBLIC PARTICIPATION IN FEDERAL WETLAND PERMITS

Corps' Jurisdiction Over Wetlands

The Army Corps of Engineers jurisdiction over wetlands stems from three different federal laws: the Clean Water Act; the Rivers and Harbors Act; and the Ocean Dumping Act.

- Section 404 of the Clean Water Act requires Corps permits for the designation of disposal sites and the discharge of fill material and alterations within coastal and freshwater wetlands,

Table 2
Acres of Wetlands by Type in Maine

Wetland Types	Acres	Source	State Estimate
Saline Wetlands			
Tidal Flat	28,837	NWI	35,000
Rocky Shore	21,521	NWI	2,000
Beach/Bar	2,897	NWI	4,000
Reef	108	NWI	500
Aquatic Bed	6,202	NWI	7,000
Salt Marsh	18,960	SMI	19,000
Total			**87,500**
Brackish Wetlands			
Tidal Flat	41,700	NWI	45,000
Rocky Shore	2,911	NWI	3,000
Beach/Bar	1,089	NWI	2,500
Reef	138	NWI	500
Aquatic Bed	2,729	NWI	4,000
Fresh/Brackish Marsh	12,861	NWI	15,000
Total			**70,000**
Palustrine Wetlands			
Floodplains/Flats	10,249	MWI	27,700
Inland Fresh Meadows	58,772	MWI	158,843
Inland Fresh Marsh	57,602	MWI	155,140
Shrub Swamp		SCS	1,000,000
Wooded Swamp		SCS	3,000,000
Bog	700,000	OER/DEP	700,000
Total			**5,041,683**
TOTAL Estimated Wetlands			
Saline	87,500		
Brackish	70,000		
Palustrine	5,041,683		
TOTAL	**5,199,183**		

SOURCE: STATE OF MAINE 1992 WATER QUALITY ASSESSMENT, Maine DEP, Bureau of Water Quality Control (1992) at 60.

streams, ponds, mudflats or wet meadows. Corps jurisdiction is exercised subject to EPA guidelines and veto authority.[82]

- Section 10 of the Rivers and Harbors Act requires Corps permits for structures or work in or affecting "navigable" waters, including wharves, jetties and breakwaters, bank protection activities, boat ramps, dredging or disposal of dredged material, excavation and filling or other modifications affecting navigable waters.

- Section 103 of the Marine Protection, Research and Sanctuaries Act, also called the Ocean Dumping Act, authorizes the Corps to regulate the transportation of dredged material for the purpose of disposal in the ocean. Disposal of dredged or fill material into territorial seas also requires authorization under Section 404 of the CWA.

The following discussion describes the procedures, standards and enforcement of Corps wetland permits under the CWA and Rivers and Harbors Act. Corps procedures under the Ocean Dumping Act are described further in Chapter V.

Corps' Permit Procedures

When a permit application is received, the Corps issues a notice to solicit information from the public, adjacent property owners, interested groups, and state, local and federal agencies. Public notices normally include the name of the applicant, an identification number, the date the notice was issued, the last day public comments will be accepted, the name of the contact person at the Corps, the authority under which the permit is sought, and a brief description of the project which includes drawings showing the extent of the proposed activity, wetland fill, the nature of the fill material and mitigation measures.

Public notices should be carefully reviewed to determine: (1) comment deadlines -- 30 days is typical but shorter periods may be listed and extensions may be requested; (2) applicable regulations -- copies are available from the Corps; (3) project description -- additional information will be critical to determine alternative upland locations; and (4) environmental impacts -- often additional information will be necessary to determine the ecological value of the wetland and

[82] 33 U.S.C. § 1344; 40 CFR § 232.

potential growth inducing impacts. Such information may be available from other federal, state or local agencies.

Public hearings are discretionary and are held when the Corps determines that issues raised by the public are "substantial." Public comment to the Corps on individual permit applications within the comment period can therefore greatly affect the extent of public review given to individual permits. Public notices for Section 404 permit applications may be obtained from the Corps' Regulatory Division in Waltham or Maine Project Office in Manchester (See *Appendix A*).

Since Section 404 permits are "federal actions," the Corps must also prepare an environmental assessment for each permit action under the National Environmental Policy Act (NEPA). The assessment is a brief document used to determine if the impacts of a project, including indirect impacts, are significant enough to warrant preparation of an environmental impact statement (EIS). All NEPA documents are available for public review at the Corps' office and the public may comment on environmental assessments and EISs. Projects which result in a "significant impact to the human environment" require an EIS under NEPA. If the EIS or environmental assessment indicates that the project would "cause or contribute to significant degradation of waters of the U.S.," the Corps must deny the permit.

Maine must certify that Section 404 permits will not violate state water quality standards,[83] and are consistent with the State's coastal management program and coastal policies.[84] State water quality certifications are performed by the Maine DEP, Bureau of Land Quality Control. However, Maine has not established state water quality standards designating use classifications and discharge criteria for wetlands, nor has it promulgated regulations specifying how water quality certifications are processed. Nevertheless, state certifications are required under the Section 401 of the CWA (see Chapter II) and the public may participate and comment on state certifications before the DEP. The water quality certification is considered as part of the state's review of projects under the Natural Resources Protection Act; the certification requirement has been waived for activities not requiring an NRPA permit.

Section 404 permits issued by the Corps may be "vetoed" by the EPA under Section 404(c) of the CWA. EPA may prohibit, withdraw or restrict wetland discharges and the designation of disposal sites if the discharge would have

[83] 33 U.S.C. § 1341.

[84] 16 U.S.C. § 1465(c)(3)(A).

unacceptable adverse effects on water supplies, shellfish beds and fishery areas, wildlife, or recreational areas. Although EPA's authority may be used before, during or after Corps permit actions, it is most likely to be exercised following a Corps' permit decision with which it disagrees.

Defining and Delineating Wetlands

"Wetlands" regulated by the Corps include areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs and similar areas.[85]

The Corps and the EPA issued a "Federal Manual for Identifying and Delineating Jurisdictional Wetlands" in 1989 that provides guidance for identifying and delineating wetlands that fall within the Corps' Section 404 jurisdiction. The manual is also used by the State of Maine to delineate wetlands. It outlines the technical criteria used to determine whether three basic wetland conditions exist: hydrophytic plants adapted to life in saturated soil conditions; hydric soils; and wetlands hydrology indicating the presence of water at or near the surface. Wetlands delineations are complicated, and usually require professionals familiar with wetlands hydrology and plant and soil identification. Critical reference materials include: the National Wetlands Inventory of the U.S. Fish and Wildlife Service; the Salt Marsh Inventory completed by the University of Maine and the Maine Geological Survey; the Maine Wetland Inventory completed by the Maine Department of Inland Fisheries and Wildlife in 1973; a Maine soils map produced by the U.S. Department of Agriculture, Soil Conservation Service; and a peatland ecosystem survey conducted by the Maine Office of Energy Resources and the DEP. These sources were utilized by the DEP to create the information contained in Table 2 (page 52). There are also 1987 and 1991 versions of the manual for delineating wetlands which are substantively different from the 1989 manual. Debate is continuing over which manual should be used.

Exempted Activities

Activities adjacent to wetlands and draining wetlands are not subject to Section 404 permit requirements, although they may be regulated by the State DEP under the Natural Resources Protection Act (see page 58). The CWA also exempts normal farming, silviculture (timber harvesting) and ranching activities; normal maintenance and emergency repair of dikes, dams, breakwaters, bridges

[85] 40 CFR § 230.3 and 33 CFR § 328.3.

and transportation structures; construction or maintenance of farm or stock ponds or irrigation ditches; temporary sedimentation basins on construction sites; and farm, forest or temporary mining roads constructed in accordance with best management practices.

The Corps has also issued 26 different nationwide permits, for specific activities such as minor road crossings, utility bedding and backfill, and small hydropower projects, and for general discharges into "headwaters" and isolated waters." Although these nationwide permits are not exemptions, they allow wetland activities without an individual permit if certain conditions are met. For example, discharges into headwaters and isolated wetlands under one acre are permitted so long as the fill is properly maintained to prevent erosion and other nonpoint sources of pollution, endangered or threatened species are not affected, and indigenous aquatic life is not disrupted. The public may intercede in particular situations and ask the Corps to override nationwide permits by requesting individual permit review or special conditions if the standard conditions will not be sufficient to mitigate adverse impacts.

Federal Wetland Permit Standards

Individual wetland permits are evaluated by the Corps to determine if they comply with Corps' "public interest review" criteria and Section 401(b) guidelines.

The Corps' public interest review balances the "benefits which reasonably may be expected to accrue from the proposal . . against its reasonably foreseeable detriments." The Corps considers all relevant factors including cumulative effects, conservation, economics, aesthetics, general environmental concerns, floodplain values, land use, navigation, shore erosion, recreation, water supply, water quality, energy needs, property ownership and, in general, the needs and welfare of the people.[86] In so doing, the Corps also considers all public comments received in the permit process; of particular importance are those comments provided by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service with respect to the protection and conservation of wildlife resources.

Corps review is also governed by EPA guidelines prepared under Section 404(b)(1) of the CWA. The guidelines require the Corps to consider the following criteria when evaluating wetland permits: (1) wetland discharges are not permitted where feasible, less environmentally damaging alternatives are available -- projects that are not water dependent are presumed to have less environmentally damaging alternatives available; (2) discharges must not cause or contribute to

[86] 33 CFR § 320.4(a).

significant adverse impacts, including direct, indirect and cumulative impacts to wildlife, ecosystem integrity, recreation, aesthetics, economic values, and the aquatic environment; (3) discharges must not violate state water quality standards or jeopardize endangered species; and (4) potential adverse impacts on the aquatic ecosystems must be minimized to the extent appropriate and practicable. Unavoidable impacts may require compensatory mitigation (e.g., restoration, enhancement or creation or wetlands) after avoidable impacts are fully minimized.

The Corps and the EPA entered into a Memorandum of Agreement (MOA) in 1990 that sets forth mitigation measures to avoid, minimize and compensate wetland losses. The MOA sets an overall goal of "no net loss" of wetlands, although it notes that mitigation measures in individual permit decisions may not always achieve that goal.[87]

Enforcement and Penalties

If citizens believe that wetlands are being filled without a permit or in violation of federal laws they may want to contact the local code enforcement officer first to request any information the CEO may have. Then the citizen may opt to call the nearest Corps or EPA office (listed in *Appendix A*) with the following information: a description of filling activities on the wetland site including the type and location of the wetland, the historic and present use of the wetland, site plans and photographs; ownership or controlling interest of the site; names and addresses of the parties; dates of the work involved; adjacent water bodies; state or local permits issued; and persons who ordered or performed the work involved. If the Corps and the EPA fail to take action, citizens may file enforcement actions under the citizen suit provisions of the Clean Water Act. (See Chapter II for citizen suit requirements.)

Both the EPA and the Corps can investigate, inspect and bring enforcement actions against unpermitted discharges and violations of permit conditions under Section 404 of the CWA. The EPA generally begins enforcement actions by requesting information by letter about suspected illegal discharges, and inspecting sites where discharges have occurred or are occurring.[88] Subsequently, the agencies may issue administrative compliance orders to require that illegal discharges are halted, impose a variety of remedial requirements, and require removal of illegally placed fill and restoration of the affected wetlands. The CWA authorizes the EPA and the Corps to impose administrative penalties for

[87] 55 Fed. Reg. 9210 (March 12, 1990).

[88] 33 U.S.C. § 1318.

discharging without a permit or violating permit conditions from $25,000 to $125,000. Violators have the right to an administrative hearing before the final penalty is imposed.

The Act also authorizes civil and criminal penalties. Injunctive relief, removal of unauthorized fill, restoration of wetlands, and civil penalties up to $25,000 per day per violation are available.[89] Criminal penalties may also be imposed including $25,000 per day and/or 1 year imprisonment for negligent violations; up to $50,000 per day and/or 3 years imprisonment for willful violations; $10,000 and/or two years imprisonment for false statements; and $250,000 and/or 15 years imprisonment for knowing endangerment.[90] Civil and criminal actions are filed by the U.S. Attorney, in the Department of Justice, in behalf of the EPA and the Corps (see *Appendix A* for list of U.S. Attorney offices in Maine).

THE MAINE NATURAL RESOURCES PROTECTION ACT

Wetlands are also regulated by the Maine DEP, Bureau of Land Quality Control, under the Natural Resources Protection Act (NRPA).[91] Public participation and enforcement procedures under the NRPA are similar to those of the DEP Water Bureau under the waste discharge licensing law. (See Chapter II)

Regulated Activities

DEP permits are required for certain activities within and adjacent to all coastal wetlands and freshwater wetlands exceeding 10 acres, and within "any protected natural resource," which include freshwater and coastal wetlands as well as all sand dune systems, rivers, streams, and significant wildlife habitats mapped by the Maine Department of Inland Fisheries and Wildlife. Activities regulated include dredging, bulldozing, removing or displacing soil, sand, vegetation or other material within wetlands; filling, draining or dewatering wetlands; any construction, repairs or alterations; and locating any permanent structures within wetlands. Under specified conditions, the Act exempts from permit requirements, the maintenance and minor repair of existing structures, repair and maintenance of

[89] 33 U.S.C. § 1319.

[90] 33 U.S.C. § 1319.

[91] 38 MRSA § 480A-S; DEP Rules Chs. 310, 343-345, 355.

existing road culverts and accessways to residential dwellings, and aquaculture activities, among others.

Permits are required for any grading or deposition of fill adjacent to a coastal or freshwater wetland, river, stream or brook, that could cause exposed material to be washed into such water body. DEP permit by rule procedures require that activities adjacent to wetlands provide the following mitigation measures: a 25 foot undisturbed vegetated buffer (100 foot buffers are required on slopes exceeding 20%); no disturbance of saturated soils; installation of erosion control measures prior to construction activities; completion of work within one month; stabilization of disturbed soils immediately upon completion; and maintenance of erosion control measures until the site is permanently stabilized.

Wetland Rules

In June, 1990, the Board of Environmental Protection adopted new rules for wetlands protection pursuant to the Natural Resources Protection Act. The new rules are designed to provide greater protection of wetlands regulated under the NRPA, but include flexibility to consider activities which will not harm wetlands functions and values.

The rules establish three classes of wetlands. Class I wetlands are generally highest in value due to their biological functions. They provide habitat for threatened or endangered plants, unique natural communities, or significant wildlife habitat. Class II wetlands are important largely because of their hydrologic functions such as protection of water quality and control of flood waters. These are wetlands that include, or are located near, open water bodies or water courses. Class III wetlands are usually of the lowest value. They would typically include forested wetlands and wet meadows not located near open water.[92]

State Wetland Standards

Anyone proposing to alter a regulated wetland must follow the standards in the rules. These standards require that wetland alterations be avoided where possible. An alternatives analysis will usually be required of an applicant at the beginning of the permit process. If it can be demonstrated that no practicable alternative exists, then the applicant must show that the amount of wetland affected has been minimized, and that compensation has been provided for any lost

[92] Adapted from the State of Maine, "Wetlands Rules--Summary," Department of Environmental Protection, (undated).

functions and values of the wetland. Compensation might take the form of restoration of existing degraded wetlands, enhancement of the functions of an existing wetland, preservation of wetlands or adjacent uplands which have similar functions and are vulnerable to development, or creation of wetlands from upland areas. The burden is on the applicant to demonstrate that the proposed compensation work will effectively off-set the functions of the altered wetland.

The class designation of a wetland dictates which type of activity may be allowed to alter it, and how much compensation will be required. For instance, a housing development would not be allowed in a Class I wetland. A highway improvement project may be allowed, but will require compensation at a 2:1 ratio.

The rules also contain a provision for mitigation banking. Under this provision, an applicant can propose to do compensation work in advance of an alteration project in order to receive credit which can then be applied to the future alteration work.

Additional information regarding the wetland rules may be obtained from the DEP staff in the Bureau of Land Quality Control at offices located in Portland, Augusta, Bangor and Presque Isle.[93]

LOCAL WETLAND LAWS

In addition to receiving federal permits from the Corps and state permits from the Maine DEP, activities affecting wetlands also need to comply with local site review, subdivision and zoning requirements, as well as local ordinances specifically addressing wetland development.

An example of a local wetland ordinance is the Town of Cape Elizabeth's zoning ordinance which creates and maps two wetland zones: a Wetland Protection Zone, and a Critical Wetland Zone. Critical wetlands are freshwater wetlands exceeding one acre in size that contain predominantly poorly drained hydric soils or obligate wetland vegetation.[94] Construction activities are prohibited within critical wetland zones (except utilities, footbridges and stormwater detention basins with special permits), as well as within 100-250 foot buffer zones around such wetlands. Development is permitted within wetland protection zones, but only with a special permit from the town planning board subject to performance

[93] Id.

[94] Town of Cape Elizabeth, Zoning Ordinance, Ch. 19-2-08-01.

standards designed to prevent adverse impacts to water quality and habitat. A soils report is also required for development within wetland protection zones.

Other options for local action include:

- ✓ creating local wetland maps and inventories;
- ✓ providing public education about wetland values;
- ✓ reviewing local public works projects for wetland impacts;
- ✓ including wetland protection policies in local comprehensive plans;
- ✓ protecting wetlands in local subdivision ordinances and requiring other local regulatory techniques such as floodplain management, stormwater management plans, erosion and sedimentation controls, and others;
- ✓ acquisition programs and conservation easements;
- ✓ voluntary wetland registries; and
- ✓ property tax abatements.

Persons interested in obtaining more information about local wetlands programs within their community should contact: their local town planner, regional planning councils, the Maine Department of Economic and Community Development, the DEP Bureau of Land Quality Control, local soil and water conservation districts, the Maine Coastal Program, the EPA Region I Office, or the Corps' Augusta office.

V. VESSEL DISCHARGE LAWS

Discharges from vessels can threaten coastal water quality in a number of ways. Sewage from marine sanitation devices is frequently discharged directly into ocean waters; dredge spoils and other wastes are dumped directly into ocean waters at disposal sites; vessels discard plastic and other forms of persistent marine debris; and accidental releases of oil pose a serious threat to the marine environment. Each of these forms of vessel discharges are discussed further below.

MARINE SANITATION DEVICES AND VESSEL PUMP-OUT STATIONS

Although untreated sewage discharged from vessels and marine sanitation devices (MSDs) are unlikely to have substantial adverse impacts on open ocean water quality, within semi-enclosed or poorly circulating water bodies such discharges can have substantial direct and cumulative impacts on recreational uses and shellfisheries. Section 312 of the Clean Water Act prohibits the discharge of untreated sewage from installed toilets or marine heads (MSDs) within three miles of shore. Federal design standards have been established to regulate MSDs that hold wastes for shore-based disposal (Type III) and for treating wastes (Type I and II).[95] Boats longer than 65 feet require Type III holding tanks or Type II treatment, while vessels under 65 feet can use any Coast Guard approved MSD. Persons operating a vessel within navigable waters without an operable MSD are subject to civil fines of $2,000 per offense.

Wastes treated in Type I and II MSDs may be discharged into coastal waters even though treated wastes still pose a threat to water quality and marine habitat from nutrient loading, chemicals used for treatment (chlorine) and malfunctioning MSDs. States may create "no discharge zones" by prohibiting the discharge of all sewage, treated or untreated, into certain waters if the EPA certifies that adequate

---

[95] 33 U.S.C. § 1322.

facilities for the safe and sanitary removal and treatment of sewage are reasonably available.

Maine requires that all commercial marinas serving coastal waters that provide slips or moorings for 18 or more vessels which exceed 24 feet in length must provide pumpout facilities to remove sanitary wastes from the holding tanks of watercraft.[96] However, legal mechanisms do not presently exist to ensure that such facilities are properly utilized and, thus far, the state has not established "no discharge zones" within Maine State waters. *Appendix D* contains a list of pumpout facilities in Maine coastal waters, and all vessels should be encouraged to use pumpouts regardless of their MSD design.

MSD requirements and standards are enforced by the U.S. Coast Guard, and to a lesser extent by the Maine Marine Patrol and local harbormasters. Unfortunately, the enforcement capabilities of these agencies are limited, and active citizen participation can greatly assist their effectiveness.

OCEAN DUMPING

Ocean dumping activities do not contribute the same level of pollutants delivered from point and nonpoint source discharges. Nevertheless, the ocean disposal of sewage sludge, material dredged from estuaries and coastal waters, and industrial wastes has had adverse impacts in selected areas of the country. Sewage sludge can be relatively innocuous, or it can contain toxic heavy metals, pesticides and pathogens depending on its source. Uncontaminated material dredged from harbors, ports and rivers may have a number of beneficial uses such as beach nourishment, shoreline protection, construction aggregate, fill and construction material and cover for sanitary landfills. However, even clean dredged material can damage marine life, bury marine organisms and increase the level of suspended sediments. Furthermore, material dredged from channels may also contain heavy metals, PCBs, toxins and other pollutants. Ocean dumping of high and low level radioactive wastes, and medical wastes, once permitted, is now banned.

As of 1991, 79 coastal towns in Maine had some degree of dredging by the Army Corps of Engineers, and numerous other coastal towns have private dredging projects, most of which dispose their material at offshore locations. Official

[96] 38 MRSA § 423-B.

disposal sites have been designated off Cape Arundel, Portland and Rockland, and numerous other sites along the coast are used on a project-by-project basis.[97]

Federal Dumping Regulations

Ocean dumping is directly regulated under Title I of the Marine Protection Research and Sanctuaries Act of 1972, commonly known as the Ocean Dumping Act. The Clean Water Act, as noted earlier, also regulates the dumping of dredged and fill material in coastal waters.

The Ocean Dumping Act. The Ocean Dumping Act prohibits the dumping of material into the ocean that would unreasonably degrade public health and the marine environment.[98] Material is defined as wastes except effluent discharged through an outfall, oil, or sewage from vessels, all of which are regulated under the CWA.

The Ocean Dumping Act authorizes the EPA to designate specific ocean disposal sites, issue permits for the use of such sites, and establish ocean dumping criteria. This criteria requires the evaluation of the effects of dumping on: human health and welfare, including economic and recreational values; fisheries, wildlife, and the marine ecosystem; alternative uses of the ocean; need; and appropriate land-based alternatives. The EPA administers an ocean dumping permit system for all materials except for dredged material, which is jointly administered by the EPA and the Corps of Engineers. The Corps issues permits for the dumping of dredged material and applies EPA guidelines in offshore waters. EPA has the authority to review applications before the Corps approves dumping permits and also has the authority to approve site designations. Citizens may participate in EPA and Corps ocean dumping permit decisions as under NPDES permit procedures (see Chapter II above).

The Ocean Dumping Act has essentially phased out all ocean dumping except dredged and fill material. The dumping of sewage sludge and industrial wastes must be discontinued after 1992 except where the EPA finds that "emergency measures are needed to protect human health and there are no other feasible solutions."

---

[97] John G. Catena, Maine Coastal Program, Policy Options for Maine's Marine Waters: A Report to the Marine Policy Committee of the Land and Water Resources Council (Draft, September 1991) at II-8.

[98] 33 U.S.C. §§ 1401-1445; 33 CFR § 324; 40 CFR § 227.

Clean Water Act/Rivers and Harbors Act

The Ocean Dumping Act has phased out the disposal of most waste material in the oceans except dredged and fill material at disposal sites designated by the Corps and the EPA. The Corps of Engineers also regulates the "discharge" of dredged material within the territorial sea under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. Permit applicants and project sponsors are responsible for finding appropriate disposal sites, and permit applications are evaluated by the Corps using guidelines developed jointly by the Corps and the EPA. The guidelines allow the disposal of dredged and fill material so long as it does "not unreasonably degrade or endanger human health, welfare, or amenities, or the marine environment, ecological systems or economic potentialities." The EPA may override Corps' permit approvals where dumping results in "unacceptable adverse impacts." Where Corps' jurisdiction under the Ocean Dumping Act and Clean Water Act overlap in the territorial sea, the Corps usually issues ocean dumping permits.[99]

Citizens may participate in the designation of official disposal sites under the Ocean Dumping Act. Public notices must appear in the Federal Register and in local newspapers. Individual dredging projects will also be noticed in local newspapers and citizens may request that their names be placed on a mailing list at the regional Corps office. The public may comment on Corps' permit applications and participate in public hearings if and when they are held. Citizens should question where the dredged material is being disposed, request information on the location and composition of material disposed at unofficial sites, and determine whether adverse impacts are being properly mitigated. The Corps can limit the type and amount of material to be disposed, the location and length of time such dumping may occur, and may require monitoring or other conditions as deemed necessary.

Citizens may also participate in state certifications of federal dumping activities under the federal consistency provisions of the Coastal Zone Management Act.[100] State review of EPA site designations and Corps dumping activities and permits is coordinated by the Maine Coastal Program. The CZMA requires that the state certify that these federal permits and activities are consistent with the enforceable policies of Maine's Coastal Program.

---

[99] Office of Technology Assessment, Wastes in the Marine Environment (1987) at 238.

[100] 16 U.S.C. § 1456(c).

State Dumping Regulations

The dumping of dredged material by the Corps at approved sites does not require a state waste discharge license. Nevertheless, dredging and disposal activities must comply with the requirements of the Maine Natural Resources Protection Act.[101] Notices of the proposed transportation route for disposal activities must be published in local newspapers, and the DEP consults with the State Departments of Marine Resources and Inland Fisheries and Wildlife to help evaluate the impacts of disposal activities on the fishing industry. The Bureau of Water Quality Control in the Maine DEP generally conducts tests of sediments prior to dredging to determine whether they are contaminated. However, little monitoring of dump site locations and permit conditions are conducted to ensure compliance with state and federal dumping requirements. Persons detecting unauthorized dumping activities should contact the Maine DEP, the Maine Marine Patrol, the U.S. Coast Guard or the Army Corps of Engineers.

PLASTIC AND NON-PLASTIC GARBAGE

The 1978 MARPOL Protocol, adopting the International Convention for the Prevention of Pollution from Ships, created an international agreement to ban the discharge into ocean waters of plastic and other forms of solid wastes from vessels. The U.S. implements MARPOL through the Marine Plastics Pollution Research and Control Act of 1987 (MPPRCA), a federal law that prohibits dumping plastic and limits dumping certain non-plastic garbage generated from vessels.[102] The Act applies to U.S. vessels anywhere in the world, and to all commercial, recreational and fishing vessels, and fixed and floating platforms in the 200 mile U.S. exclusive economic zone, except U.S. warships and naval vessels.

All manned vessels 26 feet or more, and manned fixed or floating platforms, must display placards indicating that it is unlawful to discharge any plastic material; non-plastic dunnage, lining and packing materials that float may not be discharged within 25 miles of shore; that other unground nonfloating refuse and food may not be discharged within 12 miles; and that garbage ground to less than one inch may not be discharged within 3 miles (see Table 3 on the following page).

[101] 38 MRSA § 480-D(9).

[102] 33 U.S.C. §§ 1901-1912; 33 CFR Parts 151, 155 and 158; 46 CFR Parts 25 and 33.

Table 3
MARPOL Requirements

1.	The discharge of plastic or garbage mixed with plastic into any waters is prohibited
2.	The discharge of all garbage is prohibited in the navigable waters of the United States and, in all other waters, within three nautical miles of the nearest land.
3.	The discharge of dunnage, lining, and packing materials that float is prohibited within 25 nautical miles of the nearest land.
4.	Other unground garbage must be discharged beyond 12 nautical miles from the nearest land.
5.	Other garbage ground to less than one inch may be discharged beyond three nautical miles of the nearest land.
6.	A person who violates the above requirements is liable for a civil penalty of up to $25,000, a fine of up to $ 50,000, and imprisonment for up to five years for each violation.
7.	Regional, State and local restrictions on garbage discharges also may apply.

SOURCE: *Federal Register*, May 2, 1990, 18578.

The MPPRCA does not prohibit the disposal of fresh fish parts or garbage picked up at sea not generated by that vessel, discharges necessary for the safety of a ship or its passengers, the accidental loss of synthetic fishing gear, or the escape of garbage due to damage to a ship provided that all reasonable precautions have been taken to prevent such loss or escape. Violations are subject to civil penalties up to $25,000 per day, and criminal penalties of up to $50,000 and/or 5 years imprisonment.

The Act also requires that waste management plans be prepared for all manned oceangoing vessels 40 feet or longer, and that adequate garbage reception facilities be provided by all U.S. ports and terminals for ships having commercial transactions, commercial fishing facilities that receive more than 500,000 pounds of fish annually, and recreational boating facilities for 10 or more vessels. Ships

may be denied entry into certain ports or terminals that do not have a certificate of adequate reception facilities from the U.S. Coast Guard.

Citizens with concerns about illegal dumping activities should contact the nearest U.S. Coast Guard office (see *Appendix A*). The Coast Guard is authorized to investigate violations and inspect vessels. The Maine Marine Patrol and local harbormasters may also be contacted if trash is deposited nearshore or within local harbor areas. The MPPRCA encourages citizen education and involvement through the development of a public outreach program and formation of volunteer citizen pollution patrols.[103] These patrols can be effective in cleanup efforts, monitoring vessel activities and reporting violations. Successful patrols may also be eligible for awards provided under the MPPRCA of up to one-half of any fine levied against a vessel to persons giving information leading to convictions.

OIL POLLUTION

The potential for oil spills in Maine derives from the existence of a number of oil terminals in Casco Bay and Penobscot Bay (Portland, South Portland, Yarmouth, Harpswell, Wiscasset, Searsport, Bucksport and Bangor/Brewer), as well as tanker traffic bound for ports in Portsmouth, New Hampshire and St. John, New Brunswick. This traffic generates about 1,275 oil tanker and barge visits to Maine and neighboring ports yearly, bearing millions of gallons of oil per vessel.[104] Nevertheless, the Coast Guard Marine Safety Office in Portland estimates that, at best, the local response capacity is capable of cleaning up only 200,000 gallons of a 26 million gallon worst-case spill in Casco Bay. Since 1963, there have been four major spills of 100,000 gallons or more and 13 others in the 1,000 to 25,000 gallon range (See Figure 6 for the location of the largest spills).

The 1990 Oil Pollution Act (OPA) was adopted by Congress in response to the *EXXON Valdez* spill.[105] It creates new federal liability and financial responsibility standards, and a new federal oil spill fund to pay for removal costs and uncompensated damages. It greatly improves federal oil spill response capabilities by establishing a new National Planning and Response System to coordinate private and public spill responses. The OPA requires the preparation of Area Contingency Plans to respond to worst case spills and establishes a National

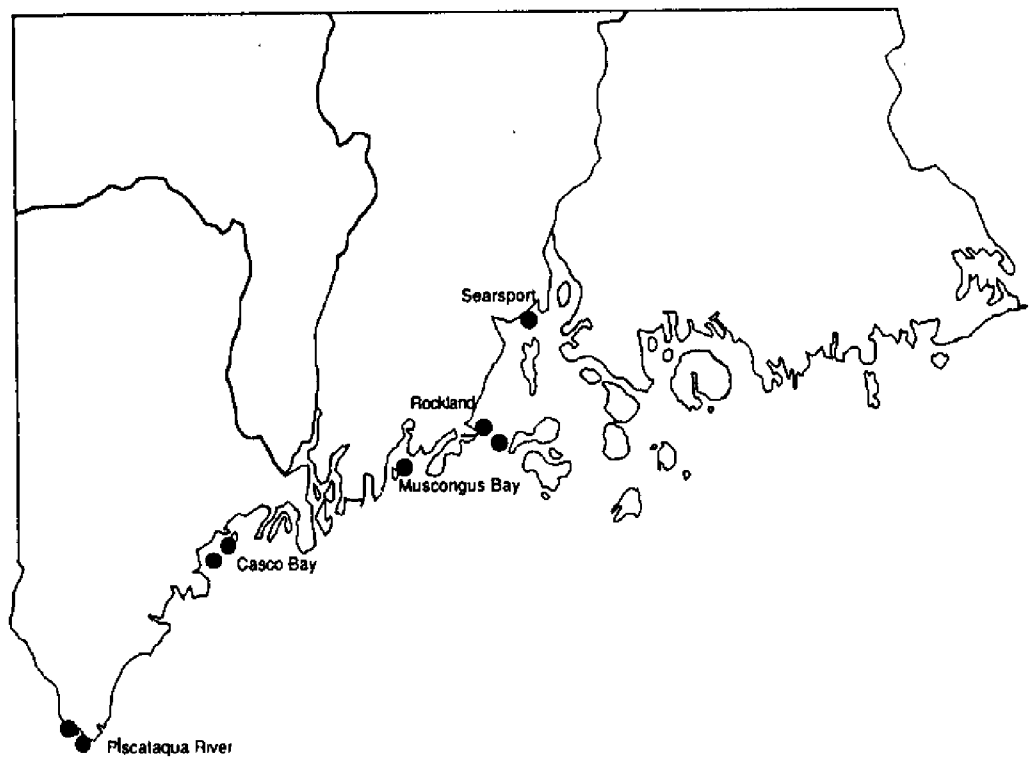
---

[103] 42 U.S.C. § 6981n.

[104] Report of the Commission to Study Maine's Oil Spill Cleanup Preparedness, Office of Policy and Legal Analysis (November 1990) at 4-7.

[105] 33 U.S.C. §§ 2701-2761; 33 U.S.C. §§ 1642, 1651, 1653; 26 U.S.C. §§ 4612 and 9509.

Figure 6
Major Oil Spills on the Maine Coast



SOURCE: Doggett, Lee and John Sowles, MAINE'S MARINE ENVIRONMENT: A PLAN FOR PROTECTION: A REPORT TO THE 114TH LEGISLATURE, Maine Dept. of Envt'l Protection and Maine Dept. of Marine Resources, Augusta, ME (March 1989) at 28.

Response Unit in Elizabeth City, North Carolina, to coordinate the removal of worst case spills, administer Coast Guard strike teams and review Area Contingency Plans.[106] The Act also requires the preparation of Tank Vessel and Facility Response Plans by all owners or operators of tank vessels or facilities by 1993.

The federal OPA supplements Maine's Oil Discharge Prevention and Pollution Control Act, administered by the Maine DEP, Bureau of Hazardous

[106] 33 U.S.C. § 1321(j)(2).

Materials and Solid Waste.[107] The Department licenses all oil terminal facilities and vessels used to transport oil, requires the preparation of local oil discharge contingency plans, and administers the Maine Coastal and Inland Surface Clean-Up Fund.

Response and Contingency Planning

The Maine Legislature authorized a study to evaluate the ability of the State to respond to a major spill in 1990. The resulting report by the Commission to Study Maine's Oil Spill Preparedness concludes that Maine is not prepared to adequately respond to a major spill and recommends that the State take a number of actions to improve preventive measures and response capabilities. Some of these recommendations are already being implemented, such as the formation of an oil spill cooperative (Clean Casco Bay, Inc.), and the location of additional vessels, personnel and equipment to reduce the response shortfall.

Persons interested in participating in the preparation of Area Contingency Plans and Vessel and Facility Response Plans should contact the U.S. Coast Guard Marine Safety Office in Portland and the Maine DEP. The Coast Guard is responsible for forming Response Groups and Area Committees to help prepare Area Contingency Plans. These Plans will coordinate terminal plans and establish procedures for asserting federal control of oil spill responses; list equipment and personnel available to owners, operators, and governmental agencies to provide for the effective removal of oil discharges and mitigate damages; and inventory sensitive resources, species and habitats to protect in the event of a spill. The DEP is developing the State of Maine Oil Spill Contingency Plan. Citizens can assist these agencies in identifying sensitive resource and habitat priorities and volunteering for training programs for wildlife rehabilitation.

Liability and Compensation

The OPA creates a uniform federal system of strict liability and compensation for the owners and operators of vessels and facilities for all removal costs and damages in the event of a spill. It raises the maximum liability of vessels and offshore facilities, and provides unlimited liability for gross negligence, willful misconduct, the violation of federal standards, and the failure to report a spill or cooperate in cleanup activities. If damages or removal costs exceed liability limits, additional funds may be made available up to $500 million per incident from a $1 billion federal oil spill liability trust fund, supported by a 5-cent per gallon tax on oil. Compensation may be provided for damages to natural resources, real or

[107] 38 MRSA §§ 541-560.

personal property, subsistence use, revenue losses, profits and earning capacity, and public services. Cleanup and restoration costs and third party damages may also be paid under the Maine Coastal and Inland Surface Oil Clean-Up Fund, which is limited by statute to a maximum of $6 million.

The OPA does not preempt Maine's or any state's unlimited liability law. Maine holds vessel and terminal operators liable for all costs for removal and remedial measures, payments to third parties and reimbursement for state cleanup costs.[108] Terminals may be held liable for spills caused by vessels within 12 miles of shore destined to their facilities and negligence need not be proven. Maine law also requires terminal contingency plans to provide a comprehensive plan to cleanup spills, a list of available abatement equipment, and a procedure to notify the state and affected persons and disposing of recovered wastes. These plans are supplemental to the new federal requirements and are coordinated through the DEP's Bureau of Hazardous Material and Solid Waste Control. The DEP is authorized to hold unannounced drills to determine the adequacy of response plans.

Under Maine law, persons who provide assistance in mitigating the effects, preventing or cleaning up an actual or threatened discharge of hazardous material may not be subject to civil liability unless he or she receives compensation other than out-of-pocket expenses or is guilty of gross negligence, wanton or intentional misconduct.[109]

Prevention

The OPA requires that most newly-built tank vessels have double hulls when operating in U.S. waters, and single hulled vessels must be phased out of service by the year 2015. The Coast Guard is authorized to conduct background checks, random drug checks, and limit the number of hours a licensed individual may work on a tanker within a 24-hour period. Currently, the Coast Guard requires that tankers entering and departing Portland Harbor be escorted by at least two tugboats and, during periods of heavy congestion and adverse weather conditions, Coast Guard escorts may also be required.

State regulations prohibit tankers not equipped with radar, or propelled by vessels with radar, from entering or leaving port when visibility is less than one nautical mile. The Coast Guard requires one-half mile visibility in the inner

[108] 38 MRSA §§ 541-560; DEP Rules Chs. 600-680.

[109] 38 MRSA §§ 1401-1404.

harbor of Portland. However, municipalities may require more stringent rules for speed or visibility. The State also requires that boom devices be deployed encircling vessels engaged in oil transfers to catch and contain any spilled oil.

SELECTED REFERENCES: Coastal Water Quality

Agenda for Action, Maine Department of Environmental Protection (1989).

And Two If By Sea: Fighting the Attack on America's Coasts, Beth Millemann, Coast Alliance (1986).

Assessing U.S. and Canadian Laws and Program Affecting the Marine and Coastal Environment of the Gulf of Maine, Tim Eichenberg, Marine Law Institute, for the Gulf of Maine Council on the Marine Environment (1992).

Citizen Participation in the NPDES Process -- How to Protect Your River or Stream, Massachusetts Department of Fisheries, Wildlife and Environmental Law Enforcement (undated).

Citizens' Guide to Clean Water, Izaak Walton League of America (June 1973).

Citizen Volunteer Monitoring, a Tool for Estuarine Management, Thomas Armitage, Ellen Baptiste and Kathleen Ellett, Proceedings for Coastal Zone '89, American Society of Civil Engineers (1989).

Citizen Volunteers in Environmental Monitoring: Summary Proceedings of the 2nd National Workshop, U.S. EPA and Rhode Island Sea Grant College Program (December 1989).

Clean Water Deskbook, Environmental Law Institute (1988).

Clean Water: A Guide to Water Quality Monitoring, for Volunteers Monitoring Coastal Waters, Esperanza Stancioff, University of Maine Cooperative Extension (November 1992).

Clean Water: Citizen's Handbook on Water Quality Standards, Natural Resources Defense Council (May 1987).

Coastal Management Techniques: A Handbook for Local Officials, Maine Department of Economic and Community Development (October 1988).

Coast-Links: A Resource Guide to Maine's Coastal Organizations, Maine Coastal Program (Spring 1990).

Combined Sewer Overflow Control and Management, Maine Department of Environmental Protection Water Program (March 1991).

Controlling Nonpoint-Source Water Pollution: A Citizen's Handbook, The Conservation Foundation (1988).

Dumping of Plastics Prohibited: Requirements of MARPOL Annex V, A Citizens' Guide to Ocean and Coastal Law, Marine Law Institute, for the Maine Sea Grant Marine Advisory Program (October 1990).

Environmental Guide for New England Mariners, Coalition for Buzzards Bay (1989).

Environmental Law, William H. Rodgers, Jr., West Publishing Co. (1986).

Environmental Regulation: Law Science and Policy, Robert V. Percival, Alan Miller, Christopher H. Schroeder, and James P. Leape, Little, Brown and Company (1992).

The Estuary Book, Maine Coastal Program/State Planning Office (January, 1991).

Estuary Profile Series, Maine Coastal Program/State Planning Office (February, 1991).

Field Testing Manual for Water Quality, Fisheries Education Unit #18, The Education Division of the Maine Department of Marine Resources (1989).

Great Bay Watch: A Citizen Water Monitoring Program Manual, Sharon Meeker, Ann Reid, Jeff Schloss, Anita Hayden (July 1990).

Growth Management Handbook (The): A Citizen's Guide to Community Planning, Greater Portland Council of Governments (1990).

Guide for Permit Applicants: Information on Applying for Permits for Work in Waterways or Wetlands, U.S. Army Corps of Engineers, New England Division (February 1991).

Federal Wetlands Protection Program in New England: A Guide to Section 404 for Citizens and States, U.S. EPA Region 1 (August 1991).

Lake Book (The): Actions You Can Take to Protect Your Lake, Congress of Lake Associations (January 1991).

Law of Environmental Protection, Sheldon M. Novick, Donald W. Stever and Margaret G. Mellon, Environmental Law Institute (1987).

Maine Clean Water Strategy, Department of Environmental Protection (June 1990).

Maine's Marine Environment: A Plan for Protection: A Report to the 114th Legislature, Lee Doggett and John Sowles, Maine Department of Environmental Protection and Department of Marine Resources (March 1989).

Maine Wetlands Conservation Priority Plan, Lissa Widoff, Maine Bureau of Parks and Recreation, Maine State Planning Office, Maine Land and Water Resources Council (July 1988).

Managing Troubled Waters: The Role of Marine Environmental Monitoring, National Research Council, National Academy Press (1990).

National Directory of Citizen Volunteer Environmental Monitoring Programs, Third Edition, U.S. EPA and Rhode Island Sea Grant College Program (April 1990).

Nutrient Loading in the Marine Environment: A Brief Overview, Edward Gilfillan, Cecile Krejsa, Bowdoin College (October 1990).

Policy Options for Maine's Marine Waters (Draft), John Catena, Maine State Planning Office (September 1991).

Poison Runoff: A Guide to State and Local Control of Nonpoint Source Water Pollution, Paul Thompson, Natural Resources Defense Council (April 1989).

Protecting Maine's Shellfish: A Status Report on Maine's Overboard Discharge Program, Lisa M. Fitzgibbon, Maine Audubon Society (Summer 1992).

Regulation and Management of Casco Bay (The), Tim Eichenberg, Marine Law Institute, for the Casco Bay Estuary Project (August 1992).

Report of the Commission to Study Maine's Oil Spill Cleanup Preparedness, Maine Office of Policy and Legal Analysis (November 1990).

Review of Comprehensive Plans and Water Quality Issues for Municipalities Located Within the Lower Casco Bay Watershed, Tamara Risser and Francine Rudoff, Maine Department of Economic and Community Development, for the Casco Bay Estuary Project (May 19, 1992).

Review of the Oil Pollution Act of 1990, David Slade, The Coastal States Organization (March 1991).

Review of Water Quality Planning Programs Relative to Casco Bay, Metcalf and Eddy, for EPA Region I (1992).

State of Maine Nonpoint Source Pollution Assessment Report, Maine DEP, Bureau of Water Quality Control (1989).

State of Maine Nonpoint Source Pollution Management Plan, Maine DEP, Bureau of Water Quality Control (November 1989).

State of Maine 1992 Water Quality Assessment, Maine DEP, Bureau of Water Quality Control (1992).

Stemming the Tide of Marine Debris Pollution: Putting Domestic and International Control Authorities to Work, Donald C. Baur and Suzanne Iudicello, Ecology Law Quarterly, Vol. 17, No. 1 (1990).

Strategy for Managing Nonpoint Source Pollution for Agricultural Sources and Best Management System Guidelines, State of Maine NPS Agricultural Task Force (October 1991).

Toward Clean Water: A Guide to Citizen Action, The Conservation Foundation (1976).

Troubled Waters: Report on the Environmental Health of Casco Bay, Conservation Law Foundation and Island Institute (October 1988).

Volunteer Water Monitoring: A Guide for State Managers U.S. EPA, Office of Water (August 1990).

Wastes in Marine Environment, Office of Technology Assessment, U.S. Congress (April 1987).

Water Quality Standards for Wetlands: National Guidance, U.S. EPA (July 1990).

Water Pollution and Water Quality in Massachusetts' Coastal Zone: A Municipal Official's Primer, Dr. Madeleine Hall-Arber, MIT Sea Grant College Program (1991).

Watershed: An Action Guide to Improving Maine Waters, Maine Coastal Program (April 1990).

Wetlands: Mitigating and Regulating Development Impacts, David Salvesen, The Urban Land Institute (1990).

Wetlands: Their Use and Regulation, U.S. Congress, Office of Technology Assessment (March 1984).

APPENDIX A

Coastal Water Quality Agencies and Organizations

FEDERAL AGENCIES
[Law Enforcement and Permitting]

Coast Guard

Marine Safety Office
312 Fore Street
Portland, Maine 04112-0108
[207] 780-3251
[207] 767-0303 (boating emergencies)
1-800-424-8802 (National Response Center: to report oil and chemical spills)

Group Southwest Harbor
P.O. Box 5000
Southwest Harbor, Maine 04679
[207] 244-4236

. . . . . .

Army Corps of Engineers

Maine Project Office
RR 2, Box 1855
Manchester, Maine 04351
[207] 623-8367
1-800-343-4789 or 362-4367

New England Division
424 Trapelo Road
Waltham, MA 02154
[617] 647-8335(38) or
1-800-343-4789

. . . . . .

Fish and Wildlife Service
Law Enforcement Division
PO Box 7342
Portland, Maine 04112-7342
[207] 780-3235

National Marine Fisheries Service
Law Enforcement Division
156 Federal Street
Portland, Maine 04101
[207] 780-3241

Interstate Shellfish Sanitation Conference
National Shellfish Sanitation Program
Maine contact: Dr. Applin, Seafood Tech. Supervisor [207] 624-6550

U.S. Environmental Protection Agency

Region I
JFK Federal Building
1 Congress Street
Boston MA 02203
[617] 565-3420

Emergency Planning and Response Branch, Environmental Services Division
[oil and chemical spills]
[617] 223-7265 (backup to National Response Number)

Water Quality Branch [617] 565-3531

Marine and Estuarine Protection Section [617] 565-4420

Wetland Section [617] 565-4421

Water Quality Management
[617] 565-3538

[617] 565-4870 (Vessel Sewage Laws and Regulations)

1-800-832-7828 (Wetlands Protection Hotline)

. . . . . .

U.S. Attorneys' Office
Department of Justice

100 Middle Street Plaza
6th Floor, East Tower
Portland, Maine 04101
[207] 780-3257

99 Franklin Street, Second Floor
Bangor, Maine 04401
[207] 945-0373

STATE AGENCIES
[Enforcement; Permitting; Monitoring]

Cobbossee Watershed District
PO Box 418, 53 Main Street
Winthrop, Maine 04364
[207] 377-2234

District Attorneys' Offices

Cumberland County: [207] 871-8384
Hancock County: [207] 667-4621
Kennebec County: [207] 623-1156
Knox County: [207] 594-0424
Lincoln County: [207] 882-7312
Penoboscot County: [207] 942-8552
Sagadahoc County: [207] 443-8204
Washington County: [207] 255-4425
York County: [207] 324-8001

Department of Environmental Protection
State House Station 17
Augusta, Maine 04333-0017
1-800-452-1942 (Citizens' Environmental Assistance)

Bureau of Water Quality Control
[Waste Discharge Licensing; NPS Pollution Management Plan; Sewage Treament; CSOs; Overboard Discharges]

Augusta: [207] 287-3901
Portland: [207] 879-6300
Bangor: [207] 941-4570
Presque Isle: [207] 764-0477

Bureau of Land Quality Control
[Site Law; Wetlands; Shoreland Zoning]
Augusta: [207] 287-2111
Bangor: [207] 941-4570
Portland: [207] 879-6300
Presque Isle: [207] 764-0477

Bureau of Hazardous Materials and Solid Waste Control
[Terminal Licensing; Oil Spills]
Portland: [207] 879-6300
Augusta: [207] 287-2651
1-800-482-0777 (emergency number to report spills)

Maine State Planning Office
State House Station 38
Augusta, Maine 04330-0038

Maine Coastal Program
[Coastal Clean-Up; Federal Consistency; Gulf of Maine Program; Coastal Policy Coordination; Coastal NPS Program]
[207] 287-3261

Shore Stewards Partnership
[Volunteer Water Quality Monitoring; Public Education; Grants Program]
[207] 287-3144

Maine Department of Conservation
State House Station 22
Augusta, Maine 04333-0022
[207] 287-4900

Bureau of Public Lands
[Submerged Lands Management]
[207] 287-3061

Bureau of Parks and Recreation
[Public Boat and Park Facilities]
[207] 287-3821

STATE AGENICES... (CONT.)

Maine Geological Survey
[Shoreland Erosion]
[207] 287-2801

Maine Department of Economic and Community Development
[Comprehensive Planning]
State House Station 130
Augusta, Maine 04330
[207] 287-2656

Maine Department of Human Services Division of Health Engineering
[State Plumbing Code Enforcement]
State House Station 10
Augusta, Maine 04333
[207] 287-5690

Maine Department of Inland Fisheries and Wildlife
[Freshwater Wetlands; Wildlife Management; Vessel Laws; Game Wardens]
284 State Street
State House Station 41
Augusta, Maine 04333
[207] 287-3371

Maine Department of Marine Resources
[Marine Fisheries and Resources; Marine Patrol; Aquaculture Regulation]
State House Station 21
Augusta, Maine 04330-0021
[207] 624-6550

Marine Patrol Division Offices

South Portland: [207] 799-3380
Rockland: [207] 596-2262
Ellsworth [207] 667-3373

Maine Emergency Management Agency
[Spills and Emergency Response]
State House Station 72
Augusta, Maine 04333-0072
[207] 287-4080
1-800-452-8735

Maine Office of the Attorney General Natural Resources Division
[Enforcement]
State House Station 6
Augusta, Maine 04333
[207] 626-8800

Saco River Corridor Commission
P.O. Box 283
Cornish, Maine 04020
[207] 625-8123

ENVIRONMENTAL ORGANIZATIONS

[Enforcement; Education; Restoration]

Casco Bay Estuary Program
312 Canco Road
Portland, Maine 04103
[207] 828-1043

Casco BayKeeper
Box 7758
Portland, Maine 04112
[207] 799-8574

Conservation Law Foundation
3 Joy Street
Boston, Massachusetts 02108
Headquarters: [617] 742-2540
Maine: [207] 594-8107

Island Institute
60 Ocean Street
Rockland, Maine 04841
[207] 594-9209

Maine Audubon Society
Gilsland Farm
118 U.S. Route One
Falmouth, Maine 04105
[207] 781-2330

Maine Coast Heritage Trust

PO Box 426
Northeast Harbor, Maine 04662
[207] 276-5156

167 Park Row
Brunswick, Maine 04110
[207] 729-7366

Maine Island Trail Association

Box 8, Union Wharf
Portland, Maine 04101
[207] 761-8225

60 Ocean Street
Rockland, Maine 04841
[207] 594-9209

Natural Resources Council of Maine
271 State Street
Augusta, Maine 04330
[207] 622-3101

The Nature Conservancy
Maine Chapter
14 Maine Street, Suite 401
Brunswick, Maine 04011
[207] 729-5181

Private Oil Spill Clean-Up Services

Clean Casco Bay, Inc.
[oil spill cleanup]
48 Union Wharf, PO Box 387
Portland, Maine 04112
[207] 828-4511

Clean Harbors of Maine, Inc.
[oil spill cleanup]
17 Main Street
South Portland, Maine 04107
[207] 799-8111

Seacoast Ocean Services
[oil spill cleanup]
37 Custom House Wharf
Portland, Maine 04101
[207] 774-2111

COASTAL REGIONAL PLANNING AGENCIES

[Comprehensive Planning; Local Government Assistance; Ordinance Development]

Androscoggin Valley COG
125 Manley Road
Auburn, ME 04210
[207] 783-9186

Eastern Mid-Coast Planning Commission
9 Water Street
Rockland, Maine 04841
[207] 594-2299

Greater Portland COG
233 Oxford Street
Portland, Maine 04101
[207] 774-9891

Hancock County Planning Commission
RR 4, Box 22
Ellsworth, Maine 04605
[207] 667-7131

Municipal Resource and Planning Office of Lincoln County
Lincoln County Courthouse
P.O. Box 249
Wiscasset, Maine 04578
[207] 882-6358

Southern Kennebec County PDC
89 Western Avenue
Augusta, Maine 04330
[207] 622-7146

Southern Maine RPC
255 Main Street, P.O. Box Q
Sanford, Maine 04073
[207] 324-2952

Washington County RPC
67 Main Street
Machias, Maine 04654
[207] 255-8686

COOPERATIVE EXTENSION OFFICES

[Water Quality Monitoring and Education; NPS Pollution; Fisheries Information]

University of Maine CE
110 Libby Hall
Orono, Maine 04469
[207] 581-3181
1-800-287-0274

Androscoggin/Sagadahoc Counties CE
133 Western Avenue
Auburn, Maine 04210
[207] 786-0376
1-800-287-1458

Cumberland County CE
96 Falmouth Street
Portland, Maine 04103
[207] 780-4205
1-800-287-1471

Hancock County CE
Boggy Brook Road, RFD 5
Ellsworth, Maine 04605
[207] 667-8212
1-800-287-1489

Kennebec County CE
290 Eastern Avenue
Augusta, Maine 04330
[207] 622-7546
1-800-287-1481

Knox/Lincoln County CE
375 Main Street
Rockland, Maine 04841
[207] 594-2104
1-800-244-2104

Penobscot County CE
Court House Annex
105 Hammond Street
Bangor, Maine
[207] 942-7396
1-800-287-1485

Waldo County CE
RFD 2, Box 641
Belfast, Maine 04915
[207] 342-5971
1-800-287-1426

Washington County CE
11 Water Street
Machias, Maine 04654
[207] 255-3345
1-9800-287-1542

York County CE
P.O. Box 347
Alfred, Maine 04002
[207] 324-2814
1-800-287-1535

COASTAL SOIL AND WATER CONSERVATION DISTRICTS, AND RESOURCE CONSERVATION AND DEVELOPMENT DISTRICTS

[NPS Pollution and Best Management Practices; Stormwater Management; Erosion Controls; Technical Assistance; Inventory and Monitoring; Watershed Projects; Soils Surveys]

Cumberland County SWCD
1A Karen Drive
Westbrook, Maine 04092
[207] 871-9247 or 871-8651

Downeast RCDD
P.O. Box 210
Cherryfield, Maine 04622
[207] 546-2368

Hancock County SWCD
RFD 5, Box 508W
Ellsworth, Maine 04605
[207] 667-8663

Kennebec County SWCD
Federal Building, Room 408C
Western Avenue
Augusta, Maine 04330
[207] 622-8250

Knox-Lincoln Counties SWCD
RR 2, Box 3750
Warren, Maine 04864
[207] 273-2005

Penobscot County SWCD
970 Illinois Avenue, Suite 2
Bangor, Maine 04401
[207] 947-6622

Threshold to Maine RCD
67 Shaker Road
Gray, Maine 04039
[207] 657-3131

Time and Tide RCDD
US Route One, Box 12
Waldoboro, Maine 04572
[207] 832-5348

Waldo County SWCD
69 Northport Avenue
Belfast, Maine 04915
[207] 338-2320

Washington County SWCD
49 Court Street
P.O. Box 121
Machias, Maine 04654
[207] 255-3995

York County SWCD
160 Cottage Street
Sanford, Maine 04073
[207] 324-7015

VOLUNTEER WATER QUALITY MONITORING GROUPS

Bowdoin College
Ed Gillfillan
Environmental Studies Program
Brunswick, Maine 04011

Boyden Stream Group
Durwood Gray/Louis Bassano
Washington County Cooperative Extension
11 Water Street
Machias, Maine 04654

Brunswick Shore Stewards
Alan Houston
Marine Resource Warden
28 Federal Street
Brunswick, Maine 04011
[207] 729-6050

Castine Conservation Trust
Don Blomquist
PO Box 421
Castine, Maine 04421

Cumberland Shellfish Conservation Commission
Jim Higgins
PO Box 128
Cumberland, Maine 04021

Damariscotta River Tidewater Watch
Bill Mook
HC 64, Box 041
Damariscotta, Maine 04543

Deer Isle/Stonington Partners in Monitoring
Dud Hendrick
Pilgrims Inn
PO Box 69
Deer Isle, Maine 04627

Freeport Conservation Commission
David N. Whitten
Flying Point Way
Freeport, Maine 04032

Friends of Acadia
Tammis Coffin
PO Box 725
Bar Harbor, Maine 04609

Friends of Casco Bay
Joe Payne
PO Box 7758
Portland, Maine 04112
[207] 766-2147

Friends of Royal River
Jim Barker
PO Box 934
Yarmouth, Maine 04096
[207] 846-0507

Georges River Tidewater Watch
Lee Humphries
Box 2281
Warren, Maine 04864

Georgetown Shellfish Committee
Hallam Bonner/Betty Cole
SR 2, Box 583
Bath, Maine 04530

Islesboro Island Trust
Steve Miler
PO Box 182
Islesboro, Maine 04848
[207] 734-6907

Kittery Conservation Commission
Conrad Quimby
104 Goodwin Road
Kittery Point, Maine 03905

Maine Audubon Society
Maureen Oates
118 U.S. Route One
Falmouth, Maine 04105
[207] 781-2330

Medomak/Waldoboro Conservation Committee
Bill Crouss
PO Box 789
Waldoboro, Maine 04572

VOLUNTEER WATER QUALITY MONITORING GROUPS (CONT.)

Mount Desert League of Towns
Dick Vander Zanden
PO Box 248
Northeast Harbor, Maine 04662

Old Orchard Beach Conservation Commission
Glenn Evans
PO Box 0
Old Orchard Beach, Maine 04064
[207] 934-4064

Phippsburg Shellfish Committee
Richard LeMont
HC 31, Box 157
Phippsburg, Maine 04562

Presumpscot River Watch
Susan Webster
PO Box 3733
Portland, Maine 04104
[207] 892-4497 or 865-3446

River Union Group
Ben Baxter
RFD 4, Box 169B
Mariaville, Maine 04605
[207] 584-2313 or 276-5156

Scarborough Pollution Control Committee
Dennis Netto
Town Hall
Route One
Scarborough, Maine 04074
[207] 883-5683

Wells National Estuarine Reserve
Michele Dionne
RR2, Box 806
Wells, Maine 04090

Woolwich Shellfish Committee
William Soule
RFD 3, Box 825
Wiscasset, Maine 04878

LOCAL AGENCIES

Municipal Planning Boards and Boards of Selectmen/Town Councils
[Shoreland Zoning; Comprehensive Plans; Subdivision Ordinances; Wetlands Ordinances]

Municipal Code Enforcement Officers and Local Plumbing Inspectors
[Building Codes; Local Permit and Zoning Compliance; Septic Systems and State Plumbing Code Violations]

Local Harbor Commissions and Harbor Masters
[Vessel Laws and Zoning Violations]

Local Shellfish Wardens/Conservation Officers

OTHER LOCAL COASTAL WATER QUALITY/EDUCATION GROUPS

Arrowsic Conservation Commission
Jeff Mann
Arrowsic Town Hall
Arrowsic, Maine 04530
[207] 443-6174

Bath City Planner
Matthew Eddy
55 Front Street
Bath, Maine 04530

Brooklin Shellfish Comission
Dr. F. Goodale
Town Office
Brooklin, Maine 04616
[207] 359-2786

Chewonki Foundation/Maine Coast Studies Semester
Don Hudson
RR2 Box 1200
Wiscasset, Maine 04578
[207] 882-7323

Environmental Studies Center
University of Maine
11 Coburn Hall
Orono, Maine 04469
[207] 581-1490

Frenchman Bay Conservancy
Ellen Lehto
PO Box 152
Hulls Cove, Maine 04644
[207] 208-5039

Friends of Merrymeeting Bay
Kurt Rauscher
PO Box 233
Richmond, Maine 04357

Friends of Taunton Bay
Steve Perrin
RFD 1, Box 338
Franklin, Maine 04634

Great Works Regional Land Trust
Tin Smith
PO Box 151
South Berwick, Maine 03908
[207] 626-2209 or 439-2837

Kennebec County Cooperative Extension
Ira Ellis
290 Eastern Avenue
Augusta, Maine 04330
[207] 622-7546

Knox-Lincoln County Cooperative Extension
Esperanza Stancioff
375 Main St.
Rockland, Maine 04841
[207] 594-2104

Pemaquid Watershed Association
Doris Balant
PO Box 552
Damariscotta, Maine 04543
[207] 563-1216 or 529-5349

Saco Land Trust
Susan Sladen
PO Box 1581
Saco, Maine 04072
[207] 284-5359

University of Maine/University of New Hampshire Sea Grant College Program
Marine Advisory Program
30 Coburn Hall
Orono, Maine 04469
[207] 581-1440

Waldo County Extension Water Quality Coalition
Rick Kersbergen
RFD 2, Box 641
Belfast, Maine 048915
[207] 342-5917

APPENDIX B

Sample NPDES Fact Sheet and Public Notice

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203

FACT SHEET

DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES.

NPDES PERMIT NO.: ME01_____

NAME AND ADDRESS OF APPLICANT:

Town of _____
_____
_____, Maine 04

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

_____ Wastewater Treatment Facility
_____
_____, Maine

RECEIVING WATER: _____ River

CLASSIFICATION: __

I. Proposed Action, Type of Facility, and Discharge Location.

The above named applicant has requested that the U.S. Environmental Protection Agency reissue its NPDES permit to discharge into the designated receiving waters. The facility is engaged in collection and treatment of wastewater. The discharge is from the effluent of a MGD secondary wastewater treatment plant. The Draft Permit includes sludge testing requirements consistent with 405 (d) of the Clean Water Act.

II. Description of Discharge.

The monitoring data for the wastewater treatment plant is summarized in Attachment A.

III. Limitations and Conditions.

The effluent limitations of the draft permit, the monitoring requirements, and implementation schedule (if required) may be found in the draft permit.

IV. Permit Basis and Explanation of Effluent Limitation Derivation

Effluent limitations for monthly and weekly average Biochemical Oxygen Demand (BOD_5) and Total Suspended Solids (TSS) are based on requirements under Section 301(b)(1)(B) of the Clean Water Act (CWA), 40 CFR 133.102. Daily maximum effluent limitations for BOD_5, TSS, SS, Fecal coliform bacteria as well as the range in pH are based upon State certification requirements for Publicly Owned Treatment Works (POTW) under Section 401(d) of the CWA, 40 CFR 124.53 and 124.55, and Water Quality Considerations. In addition, effluent limits for daily maximum total chlorine residual (TRC) are based on available dilution and the in-stream chronic criteria limit for residual chlorine from the EPA Quality Criteria for Water, 1988. (Gold Book).

The effluent monitoring requirements have been established to yield data representative of the discharge under authority of Section 308(a) of the CWA as required by 40 CFR §122.41, §122.48 and §122.44.

Section 405(d) of the Clean Water Act requires that sludge conditions be included in all municipal permits. The sludge conditions in the permit satisfy this requirement. The permittee is required to comply with applicable state and federal regulations pertaining to composting of sewage sludge. The permittee currently

The Region's current policy is to include toxicity testing requirements in all municipal permits. Section 101(a)(3)of the Clean Water Act specifically prohibits the discharge of toxic pollutants in toxic amounts. The permittee is required to perform annually, chronic and acute toxicity tests. The very low dilution available during 7Q10 low flow conditions increases the possibility of detrimental impacts on the receiving waters from toxic discharges. The permit contains a LC50 limit of ___% . The results of these tests will demonstrate compliance with the no toxics provision. If toxicity is found, more frequent testing and monitoring may be required.

The remaining general and special conditions of the permit are based on the NPDES regulations 40 CFR Parts 122 through 125 and consist primarily of management requirements common to all permits.

V. State Certification Requirements

EPA may not issue a permit unless the State Water Pollution Control Agency with jurisdiction over the receiving waters certifies that the effluent limitations contained in the permit are stringent enough to assure that the discharge will not cause the receiving water to violate State Water Quality Standards. The staff of the Maine Department of Environmental Protection has reviewed the draft permit and advised EPA that the limitations are adequate to protect water quality. EPA has requested permit certification by the State and expects that the draft permit will be certified.

VI. Comment Period, Hearing Requests, and Procedures for Final Decisions.

All persons, including applicants, who believe any condition of the draft permit is inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period, to the U.S. EPA, Wastewater Management Branch, Mail Code WCM, JFK Federal Building, Boston, Massachusetts 02203. Any person, prior to such date, may submit a request in writing for a public hearing to consider the draft permit to EPA and the State Agency. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public hearing may be held after at least thirty days public notice whenever the Regional Administrator finds that response to this notice indicates significant public interest. In reaching a final decision on the draft permit the Regional Administrator will respond to all significant comments and make these responses available to the public at EPA's Boston office.

Following the close of the comment period, and after a public hearing, if such hearing is held, the Regional Administrator will issue a final permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice. Within 30 days following the notice of the final permit decision any interested person may submit a request for a formal hearing to reconsider or contest the final decision. Requests for formal hearings must satisfy the requirements of 40 CFR 124.74, 48 Fed. Reg. 14279-14280 (April 1, 1983).

VII. EPA Contact

Additional information concerning the draft permit may be obtained between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday, excluding holidays from:

CT & ME Permits & Grants Section
Mail Stop WMC
John F. Kennedy Federal Building
Boston, MA 02203
Telephone: (617) 565-____

_____
Date

David A. Fierra, Director
Water Management Division
U.S. Environmental Protection Agency

FACT SHEET ATTACHMENT A

DESCRIPTION OF DISCHARGE:

_____Months of data analyzed
From _____, 19__ to _____, 19__.

DISCHARGE: 001 - Treated Sanitary Wastewater

AVERAGE EFFLUENT CHARACTERISTICS AT POINT OF DISCHARGE:

Parameter	Average of Monthly Averages	Maximum of Daily Maximums*
Flow- MGD	_____	_____, _____, _____
BOD-lbs/day	_____	___, ___, ___, ___
BOD-mg/l	_____	__, __, __, __
TSS-lbs/day	_____	___, ___, ___, ___
TSS-mg/l	____	__, __, __, __
TRC-mg/l	____	____, ____, ____, ____
Fecal Coliform-#/100 ml**	__	__, __, __, __

* More than one value represents the second and third highest values.

Fact Sheet Attachment A (Page 2)

Dilution Calculations for _____, Maine

Plant Design flow = ___ MGD = _____ CFS

Receiving Waters = _____ River

$$\frac{\text{\_\_\_\_ CFS (7Q10) + \_\_\_\_ CFS (plant flow)}}{\text{\_\_\_\_ CFS (plant flow)}} = \text{\_\_\_:1}$$

Chronic No Observable Effects Concentration (C-NOEC)

$$\frac{\text{\_\_\_\_ CFS (plant flow) X 100\%}}{\text{0.70 CFS (plant flow) + 3.04 CFS (7Q10)}} = \text{\_\_\_\_\%} \approx \text{\_\_\%} \text{ C-NOEC}$$

Total Residual Chlorine

____ (dilution) X 0.0075 mg/l (Marine Chronic Water Quality Criteria) = _____ mg/l ≈ ____ mg/l

BOD and TSS Mass Loading Calculations

Month Ave. [30] X 8.345 (Constant) X ____ (design flow) = ___ lb/day

Week Ave. [45] X 8.345 (Constant) X ____ (design flow) = ___ lb/day

Day Max. [50] X 8.345 (Constant) X ____ (design flow) = ___ lb/day

Month Ave. [30] X 3.795 (Constant) X ____ (design flow) = ___ Kg/day

Week Ave. [45] X 3.795 (Constant) X ____ (design flow) = ___ Kg/day

Day Max. [50] X 3.795 (Constant) X ____ (design flow) = ___ Kg/day

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATER QUALITY CONTROL
STATE HOUSE
AUGUSTA, MAINE 04333

U.S. ENVIRONMENTAL PROTECTION AGENCY
WATER MANAGEMENT DIVISION
WASTEWATER MANAGEMENT BRANCH
REGION I
BOSTON, MASSACHUSETTS 02203

JOINT PUBLIC NOTICE OF A DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE INTO THE WATERS OF THE UNITED STATES UNDER SECTION 301 AND 402 OF THE CLEAN WATER ACT (THE "ACT"), AS AMENDED, AND REQUEST FOR STATE CERTIFICATION UNDER SECTION 401 OF THE ACT.

DATE OF NOTICE:

PERMIT NUMBER: ME0I0XXXX

PUBLIC NOTICE NUMBER:

NAME AND MAILING ADDRESS OF APPLICANT:

ABC Company
Somewhere Street
Any Place, ME 04000

NAME AND ADDRESS OF THE FACILITY WHERE DISCHARGE OCCURS:

ABC Company
Somewhere Street
Any Place, ME 04000

RECEIVING WATERS: No Such River

RECEIVING WATER CLASSIFICATION: C

The applicant has requested that the U.S. Environmental Protection Agency reissue the NPDES permit to discharge into the designated receiving waters. The facility is engaged in the collection and treatment of municipal sanitary wastewater. The discharge is from a 0.3 million gallon per day secondary treatment facility. The Draft Permit contains sludge conditions consistent with Section 405(d) of the Clean Water Act. The permit will expire five years from the date of issuance.

PREPARATION OF THE DRAFT PERMIT:

The U.S. Environmental Protection Agency, (EPA) and Maine Department of Environmental Protection have cooperated in the development of a draft permit for the above identified facility. The effluent limits and permit conditions imposed have been drafted to assure that State Water Quality Standards and provisions of the Clean Water Act will be met. EPA has formally requested that the State certify the draft permit pursuant to Section 401 of the Clean Water Act and expects that the draft permit will be certified.

INFORMATION ABOUT THE DRAFT PERMIT:

A fact sheet or a statement of basis (describing the type of facility; type and quantity of wastes; a brief summary of the basis for the draft permit conditions; and significant factual, legal and policy questions considered in preparing the draft permit) may be obtained at not cost by writing or calling EPA's contact person named below:

John Q. Permit Writer
EPA Wastewater Management Branch
Mail Stop WMC
JFK Federal Building
Boston, Massachusetts 02203
Telephone: 617/565-3519

The administrative record containing all documents relating to the draft permit is on file and may be inspected at the EPA Boston office mentioned above between 9:00 a.m. and 5:00 p.m., Monday through Friday, except holidays.

PUBLIC COMMENT AND REQUEST FOR PUBLIC HEARING:

All persons, including applicants, who believe any condition of the draft permit is inappropriate, must raise all issues and submit all available arguments and all supporting material for their arguments in full by , to the U.S. EPA, Compliance Branch, JFK Federal Building, Boston, Massachusetts 02203. Any person, prior to such date, may submit a request in writing to EPA and the State Agency for a public hearing to consider the draft permit. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public hearing may be held after at least thirty days public notice whenever the Regional Administrator finds that response to this notice indicates significant public interest. In reaching a final decision on the draft permit the Regional Administrator will respond to all significant comments and make these responses available to the public at EPA's Boston office.

FINAL PERMIT DECISION AND APPEALS:

Following the close of the comment period, and after a public hearing, if such hearing is held, the Regional Administrator will issue a final permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice. Within 30 days following the notice of the final permit decision any interested person may submit a request for a formal hearing to reconsider or contest the final decision. Requests for formal hearings must satisfy the requirements of 40 C.F.R. §124.74, 48 Fed. Reg. 14279-14280 (April 1, 1983).

STEPHEN GROVES, DIRECTOR
BUREAU OF WATER QUALITY CONTROL
MAINE DEPARTMENT OF ENVIRONMENTAL

DAVID A. FIERRA, DIRECTOR
WATER MANAGEMENT DIVISION
ENVIRONMENTAL PROTECTION AGENCY

APPENDIX C

Marine Water Quality Designations

MARINE WATER QUALITY DESIGNATIONS*

ESTUARINE AND MARINE WATERS

234M Penobscot River Estuary, from Reed Brook in Hampden to the south end of Verona Island and tidal portions of tributaries entering between the confluence of Reed Brook and the south end of Verona Island. NOTE: Although located in USGS hydrologic unit 01020005, this waterbody is to be grouped with estuarine and marine waters, not with the Penobscot River Basin.

Classification assigned in waterbody - SC
Total area of estuarine/marine waters in waterbody - 12.2 mi^2

ATTAINMENT STATUS

Past water quality sampling indicated that the northerly 0.5 square miles segment of this waterbody reach does not attain the Class SC bacteria standard for water contact recreation. Water quality sampling also indicates that all these estuarine/marine waters not attain the Class SC bacteria standards for shellfish harvesting. The cause of nonattainment is discharges of untreated municipal wastewater from combined sewer overflows in Bangor and Brewer.

506M St. Croix River Estuary, from head of tide to Robbinston, those estuarine and marine waters lying in Maine. NOTE: Although located in USGS hydrologic unit 01050001, this waterbody is to be grouped with estuarine and marine waters, not the St. Croix River Basin.

Classifications assigned in waterbody - SC & SB
Surface area of estuarine/marine waters in waterbody - 5.8 mi^2

ATTAINMENT STATUS

Water quality sampling indicates that all these estuarine/marine waters do not attain the Class SC bacteria standards for shellfish harvesting. The cause of nonattainment is discharges of treated and untreated municipal/industrial wastewater.

523M St. George River estuary from head of tide to Thomaston.

Classification assigned - SB
Surface area of estuary waters - 3 mi^2

ATTAINMENT STATUS

Water quality sampling in 1990 and 1991 found nonattainment of dissolved oxygen standards for a three mile segment of this estuary.

---

* STATE OF MAINE 1992 WATER QUALITY ASSESSMENT, MAINE DEP, BUREAU OF WATER QUALITY CONTROL, Appendix I (1992) at 121-122. (Note: These water quality designations are reviewed and revised every two years.)

620M Saco River estuary, from head of tide to Camp Ellis. NOTE: Although located in USGS hydrologic unit 0106002, this waterbody is to be grouped with estuarine and marine waters, not the Saco River Basin.

Classification assigned in waterbody - SC
Surface area of estuarine waters in waterbody - 0.9 mi^2

ATTAINMENT STATUS

Past water quality sampling indicated that the northerly 0.4 square mile of this waterbody does not attain the Class SC bacteria standard for water contact recreation. Water quality sampling also indicates that all these estuarine and marine waters do not attain the Class SC bacteria standards for shellfish harvesting. The cause of nonattainment is discharges of treated and untreated municipal/industrial wastewater and hydrologic modification. Water quality sampling also indicates that this waterbody does not attain the dissolved oxygen standard of its classification and is not supporting the protection and propagation of fish, shellfish, and wildlife.

628M Saco River estuary, those waters downstream of Route 9 in Saco.

Classification assigned in waterbody - SC
Total length of waterbody - 4 miles.

ATTAINMENT STATUS

This area of estuarine and marine waters does not attain the dissolved oxygen standard of its classification modelling analysis indicates that the dissolved oxygen deficit is a result of stream flow modification for hydropower operation.

900M Territorial estuarine and marine waters lying within three miles of Maine except for estuarine/marine waters with USGS hydrologic units 0102005, 01050001 and 01060002.

Classifications assigned in waterbody - SA, SB, & SC
Total area of estuarine/marine waters in water body - 1614.1 mi^2

Water quality sampling indicates that 1.4 square miles (0.1 in Eliot, 1.0 around Portland & 0.3 in Yarmouth) of this waterbody do not attain the bacteria standard of its assigned classification for water contact recreation. Water quality sampling also indicates that 115.2 mi^2 of this do not attain bacteria standards for shellfish harvesting.

Further, 35.7 mi^2 of this waterbody partially attains its designated use of shellfish harvesting because it is classified as restricted or conditional under the National Shellfish Sanitation Program.

Water quality sampling also indicates that 0.4 square mile (0.2 in the Fore River Estuary, 0.1 mi^2 in the Goosefare Brook Estuary and 0.1 mi^2 in the Ogunquit River Estuary) of this waterbody do not attain the dissolved oxygen standard of their assigned SC classification and is not supporting the protection and propagation of fish, shellfish, and wildlife.

APPENDIX D

Marine Pump-Out Services in Marine Waters

MARINE PUMP-OUT SERVICES IN NEW ENGLAND COASTAL WATERS

MAINE

Mt. Desert Island:			
●	Harbor Place Bar Harbor	Stationary/Float $5 portable/$10 holding tank	7-7 Daily Channel 16 & 80 or (207) 288-3346
●	NE Harbor Municipal Dock Northeast Harbor	Stationary/Float Free	24 Hours/Day Channel 16 & 68 or (207) 276-5737
●	SW Harbor Municipal Dock Manset (SW Harbor)	Stationary/Bulkhead Free	Variable Hours Channel 16 or (207) 244-7913
●	Great Harbor Marina Southwest Harbor	Stationary/Float Fee to be determined	Due 1993 Channel 16 or (207) 244-0117
Penobscot Bay:			
●	Bangor Town Dock Bangor (Penobsot River	Stationary/Float Free/Patrons, $2 Public	8-5 Daily, On Demand Channel 9 or (207) 947-5251
●	Rockland Public Landing Rockland	Stationary/Float $5	8-9 Daily Channel 16 or (207) 594-0312
●	Wayfarer Marine Corp. Camden	Stationary/Fuel Dock $10	7-5 M-S, 8-1 Sunday (207) 236-4378
●	Eaton's Boatyard Castine	Portable/Dock $6 & Labor	7-5 Daily (207) 326-8579
Muscongus Bay:			
●	Broad Cove Marina Medomac	Portable/Dock Free/Patrons, $10 Public	9-5:50 Daily (207) 529-5196
Sheepscot Bay:			
●	Robinhood Marine Center Robinhood Cove	Stationary/Fuel Dock Free	Variable Hours Channel 16 or (207) 371-2525
●	Eddy Yacht Sales and Marina North Edgecomb	Stationary/Fuel Dock Free	8-6 Daily Channel 16 or (207) 882-7776
●	Carousel Marine Ltd. Boothbay Harbor	Portable/Dock $20	8-7 Daily Channel 16 or (207) 633-2922
Casco Bay:			
●	Paul's Marina Brunswick	Portable/Dock Free (Self-Service)	8-8 Daily, At High Tide Channel 16 or (207) 729-3067

●	Brewer's South Freeport Marina Freeport (Harraseeket River)	Portable/Dock $5-$10	7:30-6 Daily, On Demand Channel 9 or (207) 865-3181
●	Handy Boat Service Falmouth	Portable/Dock Free w/coupon, $10/Public	8-8 Daily Channel 9 or (207) 781-5110
●	Spring Point Marina South Portland	Portable/Dock Free/Patrons, $10/Public	9-5 Daily Channel 9 & 16 or (207) 767-3213

APPENDIX E

Statewide Inventory of Combined Sewer Overflows

STATEWIDE INVENTORY OF COMBINED SEWER OVERFLOW*

Municipality	#CSO's	Receiving Waters	Status		
			Lic (w/POTW)	Lic (indep)	Not Lic
Anson-Madison	2	Kennebec River	X		
Auburn S.D.	4	Androscoggin River	X		
	7	L. Androscoggin River	X		
Augusta S.D	23	Kennebec River	X		
	2	Whitney Brook	X		
	3	Kennedy Brook	X		
	3	Bond Brook	X		
	1	No Name Brook	X		
	1	Riggs Brook	X		
Bangor	8	Penobscot River	X		
Bar Harbor	4	Frenchmans Bay	X		
Bath	6	Kennebec River	X		
Belfast	1	Penobscot River	X		
Biddeford	10	Saco River	X		
	3	Thatcher Brook	X		
	1	West Brook	X		
Boothbay Harbor	7	Boothbay Harbor			X
Bucksport	2	Penobscot River	X		
Calais	7	St. Croix River	X		
Camden	4	Camden Harbor	X		
	2	Megunticook River	X		
Cape Elizabeth	1	Peables Cove			X
Caribou U.D.	5	Aroostook River	X		
	3	Caribou Stream	X		
Corinna S.D.	5	Sebasticook River	X		X
Dover-Foxcroft	1	Piscataquis River	X		
Eastport	4			X	
Fairfield	3	Kennebec River		X	
Gardiner	1	Cobbosee Stream			X

* COMBINED SEWER OVERFLOW CONTROL AND MANAGEMENT, MAINE DEP, MAINE WATER PROGRAM, Appendix A (March 1991).

Municipality	#CSO's	Receiving Waters	Status		
			Lic (w/POTW)	Lic (indep)	Not Lic
Hallowell S.T.D.	1	Kennebec River		X	
Kennebunk S.D.	1	Mousam River			X
KSTD P.S.	1	Kennebec River		X	
Lewiston	12	Androscoggin River	X		
Lincoln	1	Androscoggin River	X		
	3	Sabattus River	X		
Lincoln S.D.	1	Penobscot River			X
	4	Japson Brook	X		
	2	Gully Brook	X		
Livermore Falls S.D.	2	Androscoggin River	X		
Machias	2	Machias River			X
Mars Hill U.D.	2	Prestile Stream	X		
Mechanic Falls S.D.	3	L. Androscoggin	X		
Oakland	2	Messalonskee Stream			X
Old Town	1	Stillwater River	X		
Orono	3	Penobscot River	X		
Portland	18	Back Cove	X		
	9	Fore River	X		
	10	Casco Bay	X		
	3	Brooks Stream	X		
Presque Isle S.D.	1	Presque Isle Stream			X
Richmond U.D.	4	Kennebec River	X		
Saco	7	Saco River			X
	1	Bear Brook			X
Sanford	3	Mousam River	X		
	1	Great Works River	X		
Sanford	4	Mousam River	X		
Skowhegan	9	Kennebec River	X		