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National Water Quality Goals: An Overview of the 1977 Clean Water Act Amendments

from *Environment Reporter**

Note: The 1977 Clean Water Act represents a major mid-course assessment of the nationts water quality goais, as expressed by Congress in the Federal Water Poilution Control Act Amendments of 1972 More than two years in the making, the nevv law makes significant changes in several important areas, although the 1972 environmental legislation is kept basically intact. These modifications include the following:

- effluent limitations and guidelines
- compliance deadlines
- pretreatment standards
- innovative sewage treatment processes
- Section 208 areawide treatment management plans
- sewage treatment construction grants
- discharge permits for dredged or fill materials
- water reuse iand treatment and wastewater reduction
- cornbined sewer overflows and sludge utilization
- toxic pollutant effluent limitations
- best conventional pollutant control technology
- EPA review of NPDES permits
- federal facilitiest cornpliance with state laws

The following section-by-section explanation of the law is reprinted from the *Environment Reporter* to faciliiate a better understanding by those who are concerned with modifications to the existing legislation. Readers are cautioned that any one section of the law should not be read apart from the others. An understanding of congressional intent as manifested in the legislation has barely begun, and the courts ultimately will be instrumental in interpreting the national policy on water quality standards

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Water Pollution
Clean Water Act Establishes New Deadlines for Effluent Control

The Clean Water Act of 1977 amends key provisions of the Federal Water PolilJtion Control Act to include an environment impact type test that could be used by dischargers to seek rnodifications of best available technology controls for conventional and nonconventional pollutants. No modifications apply to designated toxic pollutants.

Clean Water Act Section 43 amends Section 301 of the Water Act, adding a new subsection (g) which gives the Environmental Protection Agency authority to issue BAT modifications.

EPA, in deterrnining whether a modification is warranted has to determine if a discharger has achieved best practicable effluent control or is meeting effluent iimitations established for toxic substances listed under Section 307, whichever is applicable.

The modification provision requires dischargers to show that a modified treatment requirement will not result in the imposition of more stringent effluent controls on other point or nonpoint sources of pollution.

Dischargers also must demonstrate that modified requirements will not interfere with attainment or maintenance of water quality necessary for the protection and propagation of a "balanced population of sheilfish, fish and wildlife."

Discharye modifications under the new Section 301 (g)(1) are prohibited if ground water would be endangered, or if the rnodification would result in

restrictions on recreational activities "in and on the water."

No Health Risk Standard

Modifications also would be prohibited if relaxed effluent controls result in the discharge of additional pollutants "in quantities which may reasonably be anticipated to pose an unacceptable risk to human health or the environment" because of bio-accumulation, toxicity, or synergistic characteristics.

Dischargers are eligible to apply for modifications when they submit requests for new or second-round National Pollutant Discharge Elimination System permits. NPDES permits ordinarily will contain compliance dates and effluent controls mandated by new control deadlines in the Clean Water Act.

Section 42 of the 1977 Clean Water Act amends Section 301(b) of the Water Act, extending compliance dates for toxic and conventional pollutant controls and adding a new deadline for regulating nonconventional pollutants.

Section 42 of the Clean Water Act requires controls adequate to meet effluent limitations established by EPA for all toxic substances listed by the agency under Section 307. Congress included in the amendments a list of 65 priority pollutants established through court order in *Natural Resources Defense Council v. Train.*

The best available technology deadline for controlling toxic pollutants listed in the amendments by Congress is July 1, 1984. EPA is authorized to add to or subtract from the section 307 toxics list. Additional toxics added to the list by EPA must achieve BAT controls within three years after EPA issues effluent limitations.

The Water Act also was amended by Section 42 to delay until July 1, 1984, the deadline for controlling conventional pollutants. EPA is required to define and list conventional pollutants, and dischargers are required to install best conventional pollutant control technology.

EPA's list of conventional pollutants is to be published by March 27. Congress said the list should include substances that are classified as biological oxygen demanding, suspended solids, fecal coliform, and pH. Congress specifically excluded thermal discharges from the conventional pollutant list, leaving them under Section 316 of the 1972 law. EPA is considering adding oil and grease to its list of conventional pollutants.

The new class of nonconvertional pollutants is expected to inc!ude those "grey area" substances that cannot readily be classified as toxic. Section 42 of the Clean Water Act requires best practicable effluent controls on nonconventional pollutants by July 1, 1984, or within three years of issuance of effluent limitations, whichever is later. The final compliance date established in Section 42 is July 1, 1987.

Water Pollution
New Water Act Section 56 Provides Industriai Extensions on '77 Deadline

The Clean Water Act of 1977 authorizes the Environmental Protection Agency to issue enforcement orders requiring a "reasonable" time for compiiance by industries violating the July 1, 1977, best practicable technology deadline.

Under the Federal Water Pollution Control Act of 1972, EPA was limited to initiating a civil action or extending compliance for up to 30 days, a period recognized as impractical in terms of achieving compliance.

Under the 1977 amendments, an EPA enforcement order can specify a "reasonable" time for compliance, but the 30-day limit still can be used for achieving operation and maintenance requirements.

Section 56 of the 1977 amendments amends Section 301 of the Water Act to specify thata person, other than a violator, who is not in compliance with the time requirements of the Act, may have a time extension of up to April 1, 1979.

For this extension, EPA must find that the discharger has acted in good faith, that a serious commitment to achieve compliance will occur no later than January 1, 1979, that the extension will not lead to additional controls on other sources, that an application for a discharge permit had been filed before December 31, 1974, and that necessary facilities are under construction.

If EPA decides that the most appropriate way for an industrial discharger to come into compliance is for it to discharge into a municipal sewage treatment works, the agency can issue an enforcement order, after application by the industry, calling for it to tie-in to the treatment works no later than July 1, 1983.

An industry tying-into a public treatment works may request an extension of the 1977 deadline when it will not achieve the requirements and if its discharge

permit issued before July 1,1977, is based on its discharging into a publicly owned treatment works, or if it had, before July 1,1977, a contract enforceable against it to discharge into a public works;or if an application made before July l,1977, for a construction grant for the POTW, or engineering or architectural plans or work drawings made before that date show the source was to discharge into the treatment works and that the plant cannot accept the waste without construction. in addition, the POTW itself must have an extension of its 1977 requirement.

For industries discharging into POTWs, the new law specifies an application deadline 180 days after enactment of the new amendments or 180 days after the treatment works' filing of a request for an extension, whichever date is later.

For industries tying-into a POTW and qualifying for this extension, the deadline can be as late as July 1, 1983, for best practicable technology requirements.

In addition, the extension can be granted only if the treatment works can complete construction by July 1, 1983; only if it can meet secondary treatment and water quality standards when the waste from the contributing industry is received; only if the industry and the POTW have entered into a binding contract for the industry to discharge its wastes to the POTW, and the treatment plant agrees to accept and treat the waste by a certain date; only if the industry agrees in the contract to pay all user charges and industrial cost recovery charges required under Section 204; and only if the industry meets all toxic and pretreatment standards during the time extension.

Sewage Treatment
Pretreatment Enforcement Mechanism Provided by Clean Water Act of 1977

The Clean Water Act of 1977 provides a mechanism to enforce pretreatment standards for toxic pollutants and for the first time makes sludge contamination one of the criteria for setting pretreatment standards.

The pretreatment rules are aimed at toxic pollutants discharged into municipal treatment plants that could pass through or interfere with treatment processes or contaminate sewage sludge.

Sections 54 and 55 of the Clean Water Act of 1977 amend Section 307(b)(1) of the Federal Water Pollution Control Act to allow municipal treatment plant owners or operators to ease pretreatment requirements for a toxic pollutant if the treatment plants "remove all or any part of that toxic pollutant and the discharge from that works is not in violation of the effluent limitation or standard which would apply to that toxic poilutant if it were discharged by such source other than a publicly owned treatment works and does not prevent sludge use or disposal by such works . . . "

Enforcernent Mechanism

Section 309 of the Federal Water Pollution Control Act was amended to provide for enforcement of the pretreatment standards by the Environrnental Protection Agency.

If the EPA Administrator finds that an owner or operator of any source is illegally introducing a toxic pollutant into treatment works "the administrator may notify the owner or operator of such treatment works and the state of such violation. If the owner or operator of the treatment works does not commence appropriate enforcement action within 30 days of the date of such notification, the administrator may commence a civil action for appropriate relief, including but not limited to a permanent or temporary injunction against the owner or operator of such treatment works."

Such civil actions are to be brought in the U.S District Court where the treatment plant is located.

The enforcement authority will not "limit or prohibit any other authority the administrator may have" under the Water Act.

State Programs

Section 402(b)(8) of the Federal Water Pollution Control Act was amended to require state programs to "insure the identification in terms of character and volume of pollutants of any significant source introducing pollutants subject to pretreatrnent standards," and to assure compliance with tne standards by each source.

States that aiready have permit programs are given one year to modify them, and are given two years to make the required modifications if legisiation is necessary.

Section 405 of the Water Act is amended to require the EPA Administrator" to develop and publish regu lations providing guidelines for the disposal of sludge and the utilization of sludge for various purposes. These regulations shall identify uses (including disposal), specify factors to be taken into

account in determininy measures and practices applicable to each such use of disposal (including information on costs) and identify concentration of pollutants which interfere with each such use or disposal."

The determination of how to dispose or use sludge is left at the locai levei "except that if a guideline has been established for a use it is thereafter unlawful for the owner or operator of a publicly owned treatment works to dispose of sludge from such works for that use except in accordance with the guideline."

Sewage Treatment
Clean Water Act Authorizes Funds For Innovative Treatment Systems

Grants for construction of privately owned sewage treatment works are available under an amendment to Section 201 of the Clean Water Act.

The amendment is to be used to provide for construction of alternative or unconventional treatment works for individual residences or clusters of residences, and it does not cover the construction of secondary treatment package plants.

Grant applications must be made by a public body on behalf of one or more principal residences or small commercial establishments constructed and inhabited before the December 28, 1977, date of enactment of the 1977 amendments to the Act.

Pubbc bodies seeking the grants must be eligible to receive the funds and must agree with the Environmental Protection Agency to ensure that the individual systems will be properly operated and maintained. They must agree also to establish a system of user charges for both residential and commercial systems.

In addition, the grant applicant is to establish, for commercial users, a system to recover the federal share of the capital costs of the treatment system attributable to commercial users.

Alternative Systems
The use of innovative and alternative sewage treatment processes is encouraged by amendments to the Clean Water Act.

An amendment to Section 202 of the Act allows the Environmental Protection Agency to increase to 85 percent the federal share of construction costs for treatment works using innovative or alternative treatment processes in fiscal 1979, 1980, and 1981.

For such facilities, however, the state contribution to the non-federal share of costs must be equal to or greater than the state contribution to other treatment works in the state.

If the innovative processes fail to meet EPA performance specifications and result in significant capital or operation and maintenance costs, grants are available to modify or replace the facilities.

Innovative and alternative treatment processes must be consistent with EPA guidelines for alternative treatment systems and techniques, and the life cycle costs of the treatment works must not exceed the costs of the most cost-effective alternative by more than 15 percent. Those requirements are specified in amendments to Sections 201 and 202 of the Act.

Conservation Encouraged
In addition, the EPA Administrator is to encourage sewage treatment management processes which will reduce total energy requirements.

EPA also is to consider conservation efforts in determining the amount of reserve capacity to allow in facilities built with federal funds as specified in amendments to Sections 202 and 204 of the Act.

EPA is required, by those amendments, to take into account efforts to reduce total sewage flow and unnecessary water consumption.

Reserve capacity eligible for federal construction grants is to be determined by EPA evaluation of the projected population and associated commercial and industrial establishments with the grant applicant's jurisdiction, the areawide plan developed under Section 208 of the Act for the area to be served, or municipal master plan of development, the amendment says.

Population projections are to be drawn from the latest information available from the Departmentof Commerce or the states at EPA's discretion.

Water Pollution
Water Act Amendments Extend 208 Plan Deadline; Some Activities Require BMP

The Amended Clean Water Act allows up to three years after receipt of the initial grant award by states or designated planning agencies for submittal of areawide waste treatment management plans under Section 208.

Section 208 plans are required by the 1977 amend-

ments also to include application of best management practices in any programs to control the discharge of dredged or fill material, to identify and control the effects of return flows from irrigated agriculture, and to identify recreation opportunities resulting from improved water quality.

Plan Submittal Time Extended

The Water Act amendments extend the time allowed for development and submittal of areawide waste treatment management plans untii up to three years after the 208 agency receives the first grant for planning purposes after 1975.

A state government which acts as the planning agency for any portion of the state also may have three years after receipt of the initial grant before its plan must be submitted to EPA.

The amendments provide that EPA grants to agencies under Section 208 shall be 100 percent of the cost of developing and operating a continuing areawide waste treatment management planning process for two years after the initial grant, if the grant was made before October 1, 1977.

The federal share of grants made after the two-year period, or of grants to agencies where the first grant is made after October 1, 1977, cannot exceed 75 percent of the cost of developing and operating the continuing planning process of each one-year period.

Congress authorized up to $150 million for grants under Section 208 for each of fiscal years 1977, 1978, 1979, and 1980.

Best Management Practices Required

The amendments added new subparagraph (b)(4)(B) to Section 208 requiring plans to include a process to assure use of best management practices (BMP) for the discharge of dredged or fill material.

Any state plan containing a program to control dredged and fill material discharges also must include a consultation process with the state fish and wildlife agency, a process to coordinate the control of such activities with the state permit program under Section 404 where applicable, and a process to assure that any dredged or fill material activities which violate any condition of BMP program can be terminated or modified.

If an areawide waste treatment plan controlling discharge of dredged and fill material is approved by EPA, and if the state is operating a Section 404 permit program, no permit will be required for any activity for which the state hasan EPA-approved BMP program in its plan.

EPA may withdraw approval of a state Section 208 program if it determines after a public hearing that the state has failed to administer the program in accordance with the approved plan, and if the state does not correct the deficiencies within 90 days of notice given by EPA.

But for approved dredged and fill material discharge programs, EPA can withdraw approval only for "substantial failure" of a state to administer its program in accordance with Section 208(b)(4), which includes the BMP program.

Other Plan Requirements

The 1977 amendments add a requirement that Section 208 areawide waste treatment plan identify open space and recreation opportu nities that may result from better water quaiity and must include consideration of potential uses of lands near treatment works and increased access to water-based recreation.

The amendments also require Section 208 plans to contain a process to identify and control return flows from irrigated agriculture, but return flows are exempted from the requirement for a National Pollutant Discharge Elimination System permit under Section 402 of the Act.

Irrigation return flows are excluded expressly from the definition of "pointsource” in Section 502(14).

The Conference Report on the Clean Water Act of 1977 indica+es that the purpose of the irrigation return flows exemption is to prevent EPA from requiring NPDES permits, or from requiring states to require NPDES permits, for such activities. But states are not precluded from regulating irrigation return flows as a part of their approved NPDES programs.

Agricultural Cost Sharing

The amendments add new subsection 208(j) which provides for federal sharing of the costs of soil conservation practices in agricultural activitiesdesigned to improve water quality.

The Secretary of Agriculture is authorized to administer and fund this program.

The program authorizes the Secretary, with EPA approval, to enter into contracts of five to ten years with farm owners and operators to install measures to control agricultural runoff.

Only measures identified as best management practices in the state's Section 208 loan are eligible for such funding.

The Secretary may fund up to 50 percent of the cost of such programs, but the subsidized practices must have water quality improvement, not production, goals.

Water Pollution
Amended Water Act Allows Relaxation of Treatment Rules for Marine Discharges

The 1977 amendments to the Federal Water Pollution Control Act provide for a modification of the secondary treatment requirement for conventional pollutants discharged into marine waters from existing municipal deep marine discharge.

Another feature is an authorization for the Environmental Protection Agency to publish regulations for ancillary industrial activities which contribute toxic or hazardous pollutants to navigable waters.

The municipal marine discharge provision is in Section 44 of the amendments, which adds a new subsection to Section 301 of the Federal Water Pollution Control Act.

The new subsection stipulates that the secondary treatment requirement may be modified only if it can be shown that:

- Applicable water quality standards which are specific to the pollutant for which the modification is requested will be met;
- The modified requirements will not harm public water supplies or adversely affect fish or wildlife or recreational activities in the water;
- An adequate monitoring system exists and the applicant for the modification has established a program to prevent toxics from industrial sources entering the treatment works;
- The modification will not require additional controls on any other point or nonpoint source, and there will be no new or substantially increased discharges from the treatment works above the volume specified in the permit; and
- Any construction grant funds available to the owner of the treatment works will be used for recycling and reclaiming water or to carry out the requirements of the section.

The amendment was part of the Senate bill which went to the House-Senate conference. There was no comparable provision in the House bill.

"This subsection is the result of recognition that there are some coastal areas of the United States and its territories where natural factors provide significant and in some cases sufficient elimination of traditional forms of pollution from publicly owned treatment works to avoid the necessity of providing secondary treatment," the report of the conference committee said.

Ancillary Activities

The authorization for EPA to control ancillary industrial activities contributing toxic pollutants to navigable waters was another provision of the Senate bill not in the House version.

The conference committee adopted as Section 50 of the amending Act what was essentially the Senate bill provision. The toxic and hazardous pollutants which are the target of the amendment—to Section 304 of the Federal Water Pollution Control Act—are those designated under Sections 307(a)(1) and 311 of the Act

According to the conference committee report, the intention of the amendment "is to control runoff of toxic and hazardous materials from industrial sites resulting from poor housekeeping procedures."

<u>Sewage Treatment</u>
Water Act Provides Allotment Formula For 1978-1981 Construction Grants Program

An allotment formula to fund states under the sewage treatment construction grants program for fiscal years 1978 through 1981 is provided in the 1977 amendments to the Federal Water Pollution Control Act.

Under Section 205 of the amended Act, the allotment formula provides that sums allotted to states for a fiscal year are available for obligations for 24 months. They will be reallotted among the states according to the formula in effect that fiscal year. A state which failed to obligate any of the funds being reallotted could not share in the reallotment. [See the *Appendix* for] the allotment formula, with percentages of the total to be awarded each state.

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For fiscal 1978, 1979, 1980, and 1981, no state will receive less than 0.5 percent of the total allotment. The U.S. Territories together cannot receive more than 0.33 percent of the total allotment. A separate authorization of u p to $75 million per year for fiscal 1978 through 1981 is included to carry out these allotments. However, that $75 million has not been appropriated yet this year.

Funds first made available between January 1,1975, and March 1, 1975, will be available for obligation until September 30, 1978.

The Act authorized $24.5 billion over five fiscal years for the construction grants program, $4.5 billion in fiscal 1978 and $5 billion annually for 1979 through 1981.

In addition, President Carter March 7 signed the 1978 supplemental appropriations bill, which includes $4.5 billion for the fiscal 1978 construction grants program.

State Management Assistance
Section 205 also authorizes the Environmental Protection Agency to reserve each fiscal year up to 2 percent of a state's allotment, or $400,000, whichever is greater.

The state may use these funds in administering any aspects of the construction grants program delegated to it by E PA (such as Sections 201, 203, 204, and 212).

EPA can increase the grant also to assist states in administering an approved Section 402 National Pollutant Discharge and Elimination System program, an approved Section 404 dredge and fill permit program, a Section 208 areawide waste treatment management planning program, and managing construction grants for smail comrnunities.

Set Asides For Small Communities
Under the amended Section 205 of the Act, beginning on October 1, 1973 (fiscal 1979), EPA will set aside 4 percent of sums allotted to any state with a rural population of at least 25 percent.

Upon request from a governor of a nonrural state, EPA may also set aside up to 4 percent of that state's allotment. The set aside funds can be used only for alternatives to conventional sewage treatment works for municipalities with a population of 3,500 or less.

Water Pollution
New Water Act Enables States to Run Section 404 Discharge Permit Programs

States may reguiate the discharge of dredged or fill materials under an amendment to Section 404 of the Clean Water Act.

The new amendment, part of the Clean Water Act of 1977, enables states to obtain federal approval to issue individual or general discharge permits for waters and wetlands other than traditionally navigable waters and adjacent wetlands.

Excluded are "waters which are presently used, or are susceptible to use in their national condition or by reasonable improvement as a means to transport interstate or foreign commerce shoreward to their ordinary high water mark, including all waters which are subject to the ebb and flow of the tide shoreward to their mean high water mark, or mean higher high water mark on the west coast, including wet lands adjacent thereto."

The amendment gives the Federal Government oversight authority to ensure states operate the program within the bounds of the Water Act.

The Environmental Protection Agency must withdraw the permit authority if it finds a state is operating the program improperly and fails, after federal notice, to correct deficiencies.

EPA [will] be sent copies of permit applications and proposed general perm its for possible review, and [will] provide copies to the U.S. Army Corps of Engineers and Fish andWildlifeService. EPA can block permits it considers environmentally unacceptable.

The amendment provides further flexibility by allowing the corps to issue dredge and fill permits "on a state, regional, or nationwide basis." The permits will be subject to guidelines set by EPA in conjunction with the corps.

Basically, the corps can approve general permits for a category of activities if "the activities are similar in nature, and cause only minimai adverse environ mental effects when performed separately, and will have only minimal cumulative adverse effect on the environment," according to a congressional staff summary of the conference bill.

Exemptions from Section 404 permits are allowed for normal farming, silvicultural, and ranching activities, repair of dikes and similar structures, and construction of temporary mining roads for moving mining equipment.

Exemptions are provided also for federal projects specifically authorized by Congress. To qualify, projects must be evaluated in an environmental impact statement prior to congressional action on the authorization of appropriation of construction funds

The 1977 amendment also includes a number of measures to expedite permit processing and to cut red tape.

Sewage Treatment
Recycling, Reuse of Wastewater, Sludge, Land Treatment, Water Conservation Stressed

The 1977 amendments to the Clean Water Act increase the emphasis on the recycling and reuse of wastewater, including sludge, the use of land treat ment, and methods for reducing wastewater volume.

Specificaily, the amendments provide the foliowing:

- Construction grants for the cost of land used for storing treated wastewater in land treatment systems before land application;
- A mandate to develop information and education programs on wastewater and sludge reuse and recycling land treatment and methods for reducing wastewater volume;
- Authority to states for determining the priority of categories of treatment works construction projects;
- Authority to the Environmental Protection Agency to remove from states' priority lists any construction projects which would not comply with the requirements of the Act; and
- A requirement that states direct at least 25 percent of allocated funds in any fiscal year to sewer projects on the state's priority list, if they are otherwise eligible for funding for that year.

Construction Grants
Section 212(2)(A) makes the cost of land used to store treated wastewater in land treatment systems before land application eligible for a 75 percent construction grant.

Previously, the cost of land for the temporary storage of effluent was ineligible.

Two approaches for providing storage are cost eligible. First, the cost of land is eligible for all ponds constructed to meet storage needs resulting from climate or seasonal imbalances between wastewater supply and application schedules.

Water Pollution
Combined Sewer Overflow, Sludge Problems To Be Studied Under New Water Act Provisions

Among the provisions of the new Clean Water Act are requirennents that the Environmental Protection Agency carry out a number of stuclies of specific sewage problems.

Under Sections 70, 71, and 72 EPA must:

- Prepare and submit by October 1, 197S, a study on combined sewer overflows in municipal treatment works;
- Prepare and submit by October 1, 197S, a study on "the status ol the use of municipal secondary effluent and sludge for agricultural and other purposes that utilize the nutrient value of treated wastewater effluent"; and
- Subrnit by the end of 1979 a study on a program to require coordnation between water supply and wastewater control plans as a condition ol treatment works construction grants.

Under an amendment to Section 516 of the Federal Water Pollution Control Act the combined sewer overflow study must include the status of any projects funded under the Act to deal with the combined sewer overflow problem, a listing by state of combined sewer overflow needs identified in the 1977 state priority lists, and an estimate for each applicable municipality of the number of years necessary, assuming an annual authorization and appropriation for the construction grants program of $5 billion, to correct combined sewer overflow problems.

Other features of the study are to be: an analysis of the annual discharges of pollutants from overflows in combined sewer overflows by comparison with treated effluent discharges; an analysis of "technological alternatives available to municipalities to correct major combined sewer overflow problems"; and any recommendations of the EPA Administrator for legislation to deal with the problem of combined sewer overflows.

The sludge study is to cover research results, estimates of the amount of sludge generated by public treatment works, an analysis of sludge utilization technology, impediments to the use of sludge, and EPA recommendations for legislation to encourage or require the greater use of sludge.

Second, all or part of the land is eligible for ponds constructed for combination treatment and storage purposes on the following basis:

- If the volume provided for storage is equal to or less than the volume provided for treatment in any cell of the pond, the eligible area will be determined as the ratio of the storage volume to the total volume of the cell.

Public Information
Section 214 mandates the development of a public information and education program on wastewater and sludge reuse and recycling, land treatment, and methods of reducing wastewater volume.

Determination of Priority
Section 216 gives each state authority to determine the priority of categories of projects for the construction of publicly owned treatment works.

The categories include: secondary treatment, treatment more stringent than secondary in order to meet water quality standards, correction of infiltration, inflow, major sewer system rehabilitation, new collector sewers and appurtenances, new interceptor sewers and appurtenances, and correction of combined sewer overflows.

If, after a public hearing, EPA determ ines that a specific project will not comply with the law's requirements, the project is to be removed from the priority list.

The section further provides that at least 25 percent of the funds allocated to a state in any fiscal year should be directed For sewer projects if they are on the state's priority list and are eligible for funding in that year.

Sewage Treatment
Water Act Authorizes Extensions For Municipal Pollution Abatement

The 1977 amendments to Section 301 of the Clean Water Act authorize case-by-case extensions of the July 1, 1977, pollution abatement deadline for publicly owned treatment works.

The secondary treatment abatement deadline novv can be extended by EPA or authorized states to July 1, 1983. The amendments authorize the extension of municipal pollution abatement deadlines in cases where a municipality failed to complete required construction by the 1977 deadline because federal funds were unavailable.

Municipalities have until June 26,1978 to apply for extensions of the 1977 pollution abatement dead line. EPA or state agencies administering the National Pollutant Discharge Elimination System permit program are authorized to extend compliance deadlines to the earliest date for which construction will be completed. Extensions are not authorized beyond July 1, 1983.

Treatment Requirements
Extensions for completing construction are authorized, but postponements of pollution controls on toxic substance discharges are not. Extension orders on permits issued under amended Section 301 authorizations can include compliance schedules and "such other terms and conditions" determined necessary by EPA or authorized state agencies. Extension orders can contain effluent limitations and pretreatment requirements.

Section 301 also authorizes abatement compliance extension orders for industrial point sources that can demonstrate a commitment to tie in to an in complete publicly owned treatment system.

Industrial point sources are eligible for the extension upon a showing that they had a commitment and made all preparations necessary to tie into an incomplete public treatment system. Each discharger must show either that his NPDES permit is based upon discharge into a publicly owned system or that he had an enforceable contract with the incomplete public system authorizing the tie-in.

Failing these tests, an industrial discharger still would be eligible for the extension if a publicly owned system intends to receive the discharger's waste and has applied to EPA for a construction grant prior to July 1, 1977. The publicly owned system's inability to accept the discharger's wastes because of inadequate facilities must be shown. The industrial discharger also must show that treatment of his wastes is planned for in the publicly owned system's expansion plans.

Innovative Technology
Section 301, as amended, prohibits extensions for purposes of postponing compliance with effluent limitations unless there "is a likelihood that the applicant will succeed" on the merits of his extension application.

The Clean Water Act also authorizes extensions of the July 1, 1977, deadline to July 1, 1987 for dischargers intending to install innovative production processes or treatment technologies that have potential for industry-wide application. To be considered for this extension, dischargers must demonstrate that their innovative treatment methods could result in significant effluent reductions at significantly lower costs than conventional treatment systems.

Water Pollution
Water Act Amendments Include Toxic Pollutants List

The 1977 amendments to the Clean Water Act establish July 1, 1980 as the deadline for the Environ mental Protection Agency to publish toxic pollutant limitations

By that date EPA is required to publish information and effluent limitations for toxic substances included in a consent agreement reached in *Natural Resources Defense Council v. Train.*

Section 307(a) of the Clean Water Act, as amended, establishes a three-year review for toxic pollutant effluent limitations, and authorizes additions to the list of toxic pollutants. Additions to or deletions from the toxics list are authorized by the amendment. EPA, in determining to add or remove substances is required to examine toxicity, persistence, degradability, presence of affected organisms in any waters, the importance of affected organisms and how specific organisms react to pollutants under examination.

EPA's decision on toxic pollutants is final, unless determined by judicial review to be arbitrary or capricious.

Once effluent limitations are set for toxic substances, amended Section 307(a) authorizes a 60-day comment period. If within 30 days a public is requested, EPA is required to provide an opportunity for oral and written presentations, including cross-examination on disputed facts.

Within 270 days of a public hearing or the end of a comment, EPA is required to publish an effluent standard applicable to the toxic pollutant.

Water Pollution
Water Act Sets Deadline For List of Conventional Pollutants

The Clean Water Act as amended in 1977 sets a March 27,1978 deadline for the Environmental Protection Agency to publ ish a list of conventional pollutants.

The list, which can be revised under authority of amended Section 304, does not have to be limited to substances classified as oxygen demanding. It can include more than traditional pollutants such as suspended solids, percent hydrogen, or fecal coliform.

The thermal component of any discharge, however, is excluded for inclusion on the conventional pollutant list.

Section 304 of the amended Clean Water Act also orders EPA to publish information on factors necessary for the protection of public water supplies, and for the protection and propagation of a "balanced indigenous population" of shellfish, fish and wildlife.

EPA is required to publish annually information on all water quality standards, including pollutants associated with specific standards and the particular waters covered by the standards.

Section 304 also requires an analysis of pollutant characteristics and the degree of effluent reduction attainable through application of best conventional pollutant control technology.

In determining the factors defining best conventional pollutant control technology, EPA is to compare the costs incurrecl by both a municipality and an industrial discharger for achieving similar effluent reductions.

Water Pollution
Water Act Amendments Allow EPA To Override State-Issued NPDES Permits

The 1977 amendments to the Clean Water Act give the Administrator of the Environmental Protection Agency clear authority to override a state's issuance of a National Pollutant Discharge Elimination System permit if EPA properly objects to the state issued permit.

The amendments require EPA to hold a public hearing on its objections at the request of a state before deciding whether to issue a federal permitto replace the state-issued one.

In objecting to the issuance of any state NPDES permit, EPA is required to include the reasons for the objection and the effluent limitations and conditions which EPA would have included in the permit.

Upon failure of the state to resubmit a revised NPDES permit satisfying EPA's objection within 30 days after conclusion of the public hearing, or within 90 days of the date of the written objection if no hearing is requested, EPA may issue the permit under Section 402(a) as if no state NPDES permit program existed.

The conference report on the Clean Water Act of 1977 indicates the amendments were designed to provide a remedy for situations where a state and EPA reach an impasse over the contents of a permit.

In past situations where states and EPA could not resolve their differences, EPA has initiated enforcement actions against the discharge sources, according to the conference report.

The conferees expressed hope that by providing EPA with authority to issue a permit in the event of an impasse, any litigation over the degree of effluent limitation will be in the form of judicial review of an EPA-issued NPDES permit rather than an enforcement action.

Water Pollution
EPA Review of Effluent Guidelines Required by 1977 Clean Water Act

The Environmental Protection Agency has until March 28 to review effluent guidelines for most point sources of water pollution, but is expected to miss that deadline.

The 1977 amendments to the Clean Water Act give EPA 90 days from enactment to review effluent guidelines that were final or interim final on the December 28, 1977, enactment date. For certain industrial categories, EPA has until July 1,1980 to review the effluent guidelines (These industrial sources are listed in *Table 2, Environment Reporter—Current Developments,* December 16, 1977, p. 1289).

The review applies to conventional pollutants identified under Section 304(a) (4) of the Clean Water Act.

"Upon completion of each such review the administrator is authorized to make such adjustments in any such guidelines as may be necessary to carry out Section 304(b)(4)," which requires EPA to identify the degree of effluent reduction attainable through best conventional pollutant control technology, the conference committee report on the 1977 legislation says.

EPA is directed to publish the results of each review, "including, with respect to each such guideline, the determination to adjust or not to adjust," the report says.

The EPA determination will be final unless, on judicial review, it is determined that EPA either did not comply with the requirements for conducting the review, or made the determination "based on arbitrary and capricious action in applying Section 304(b)(4)," the conference report says.

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In such a case, EPA is to make a further review and redetermine the guideline.

Water Pollution
Water Act Amendments Clarify Federal Responsibility to Comply With State Laws

The 1977 amendments to Section 313 of the Clean Water Act clarify the responsibility of federal facilities that discharge pollutants to comply with both the substantive and procedural requirements of federal, state, interstate, and local law.

Specifically, amended Section 313 says that each federal officer and employee is, in the performance of his official duties, subject to the same legal and administrative requirements as private parties.

This responsibility extends even to recordkeeping or reporting requirements mandated by local law.

Section 313 further states that the federal officer's Water Act responsibility to comply with pollution control laws is not mitigated or eliminated by the immunity provisions of any statute or rule of law.

In addition to firmly fixing the federal officer's compliance responsibility, the 1977 amendments modify Section 401(a) of the Water Act to eliminate the federal exemption from state certification requirements.

The amendatory language is modelled on and strongly parallels that of Section 118 of the Clean Air Act. Like that section, it provides for a Presidential exemption from water pollution laws for certain defense facilities upon a determination that such an exemption will serve the "paramount interest of the United States."

Unlike the Air Act model, the Water Act amendment provides that state enforcement actions brought against federal facilities or federal officers may be removed from state courts to appropriate federal district courts.

Water Pollution
Water Act Establishes $10 Million Emergency Assistance Contingency Fund

The amended Clean Water Act establishes a $10 million contingency fund to be used by the Environ-

mental Protection Agency to provide emergency assistance to prevent, limit, or mitigate the release of a pollutant or contaminant into the enviromment.

Under Section 504 of the amended Act, the EPA Administrator is authorized to provide emergency assistance if he deterrnines that:

- The assistance is required immediately to prevent, limit, or mitigate the emergency;
- There is an immediate significant risk to public health or welfare and the environment; and
- The assistance will not be provided otherwise on a timely basis.

The emergency assistance may include measures to abate or remedy the emergency; to perform research on the effects of an emergency on public health, welfare, and the environment; and to provide for participation by agency officers and employees at the emergency site to minimize and mitigate the adverse effects.

If emergency assistance is used to remove the discharge of a pollutant under Section 311 (oil and hazardous substance liability), EPA can add the cost of the removal to the liability imposed under Section 311.

The cost of emergency assistance to clean up a pol lutant discharged in violation of Sections 301 (effluent limitations for point sources), 306 (national standards of performance for new sources), 307 (toxic pollutants), 402 (National Pollution Discharge Elimination System program), or 403 (ocean discharges), can be recovered from the owner or operator of the source of the discharge.

Section 504 does not relieve EPA of any requirement imposed by other federal laws. It also states that nothing shall affect any final action taken under other federal laws or affect the extent to which human health or the environment is protected under other federal laws.

Sewage Treatment
Water Act Specifies Preference For Domestic Construction Materials

Section 215 of the Clean Water Act, added to the law by the 1977 amendments, requires that Amerı-can-made materials be used in constructing treatment works under grant applications made after February 1, 1978.

Environmental Protection Agency policy on the new "buy American" provision says domestic construction rnateriais costing up to 6 percent rnore than foreign materials are to be preferred.

The provision can be waived, however, if EPA deterrnines it is not in the public interest to enforce the policy; if costs are unreasonable; if required materials are not reasonably available in commercial quantities of satisfactory quality; if the policy is contrary to multilateral government procurement agreements; and if agency resources are insufficient to carry out the provisions.

Another section added by the 1977 amendments is Section 216, which gives each state authority to determine the priority of categories of projects for the construction of nublicly owned treatment works.

The categories include: secondary treatment, treatment more stringent than secondary to meet water quality standards, correction of infiltration inflow major sewer system rehabilitation, new collector sewers and appurtenances, new interceptor sewers and appurtenances, and correction of combined sewer overflows.

If EPA, after a public hearing, determines that a specific project will not comply with the requirements of the Clean Water Act, the project is to be removed frorn the priority list and the state is required to submit a revised list.

Section 216 also requires that at least 25 percent of the funds allocated to a state in any fiscal year be allotted to sewer projects if they are on the state's priority list and are eligible for funding in that year.

EPA February 17 issued guidelines to its regional offices on EPA policy on managing fiscal 1978 sewage treatment construction priority lists.

Sewage Treatment
Industrial Cost Recovery Payments May Be Eligible For Cuts, Exemption

Water conservation may mean lower fees for industries hooking up to municipal sewage treatment plants under a 1977 amendment to Section 204 of the Clean Water Act.

The amendment allows a municipality to reduce industrial cost recovery payments if it requires the industrial user to cut the total flow of sewage or unnecessary water consumption.

The reduction is subject to two basic conditions.

First, the municipality must have been a grant recipient prior to enactment of the 1977 amendments. Second, approval of lower fees has to satisfy Environmental Protection Agency regulations, as yet unproposed.

A second amendment to Section 204 allows small dischargers to be exempted from industrial cost recovery charges. Small dischargers are those with a daily flow rate equivalent to 25,000 gallons or less of sanitary waste.

The exemption applies only if the discharger introduces compatible waste. It does not apply if the discharger adds "any pollutant which interferes or is incompatible with, or contaminates or reduces the utility of the sludge of such works," the amended Water Act says.

A third amendment to Section 204 allows publicly owned, multiplant treatment works systems to be treated as a single system for collecting industrial cost recovery payments.

As a result, the conference report says, "several significant economic burdens of industrial cost recovery are avoided "

Water Pollution
Ad Valorem Tax Prohibition Lifted in Water Act Amendment

An ad valorem tax system may be used in lieu of meters for the collection of sewage treatment system user charges under 1~77 amendments to tne Clean Water Act.

Section 204 of the amended Act allows ad valorem taxes collected from residential and "small non-residential" user classes to be applied to the treatment system's operation and maintenance costs.

The Environmental Protection Agency is to define small non-residential users by evaluating the volume and constituent elements of their waste. The new provisions do not apply to industrial users.

To be eligible to use ad valorem systems for operation and maintenance costs, the treatment system owner must have had the tax system in place on December 28, 1977, the date of enactment of the amendments; and EPA must be satisfied that the system results in a distribution of costs proportional to the contribution of each class to the total opera tion and maintenance costs.

In addition, the system owner must earmark the funds collected through ad valorem taxes for operation and maintenance costs and must notify the residential user which portion of tax payments is to be applied to sewage treatment system costs.

Industrial Dischargers

"Impact of the 1977 Clean Water Act Amendments on Industrial Dischargers," by John Quarles, now is available from the Virginia Water Resources Research Center. This 20-page report should be of special interest to industrial users discharging directly into navigable waters and to those planning to tie into municipal systems. Special Report No. 3 was reprinted by special permission from *Environment Reporter.*

Appendix
Allotment Formula for Construction Grant Funds

State	Percentage
Alabama	1.2842
Alaska	0.4235
Arizona	0.7757
Arkansas	0.7513
California	7.9512
Colorado	0.9187
Connecticut	1.1072
Delaware	0.3996
District of Columbia	0.3193
Florida	3.8366
Georgia	1.9418
Hawaii	0.7928
Idaho	0.4952
Illinois	5.1943
Indiana	2.7678
Iowa	1.2953
Kansas	0.8803
Kentucky	1.4618
Louisiana	1.2625
Maine	0.7495
Maryland	2.7777
Massachusetts	2.9542
Michigan	4.1306
Minnesota	1.8691
Mississippi	0.9660
Missouri	2.4947
Montana	0.3472
Nebraska	0.5505
Nevada	0.4138
New Hampshire	0.8810
New Jersey	3.5715
New Mexico	0.3819
New York	10.6209
North Carolina	1.9808
North Dakota	0.3107
Ohio	6.4655
Oklahoma	0.9279
Oregon	1.2974
Pennsylvania	4.3616
Rhode Island	0.5252
South Carolina	1.1766
South Dakota	0.3733
Tennessee	1.5486
Texas	4.3634
Utah	0.4457
Vermont	0.3845
Virginia	1.9602
Washington	1.7688
West Virginia	1.7903
Wisconsin	1.9503
Wyoming	0.3003
American Samoa	0.0616
Guam	0.0744
Puerto Rico	1.1734
Trust Territories	0.1530
Virgin Islands	0.0378
Total	100.0000

Note: Allotments for the states of Alaska, Delaware, District of Columbia, Idaho, Montana, Nevada, New Mexico, North Dakota, South Dakota, Utah, Vermont, and Wyoming are less than ½ of 1 percent of the total allotment of treatment works construction grant funds for a fiscal year. Section 25(e) of the Clean Water Act of 1977 provides that for fiscal years 1978, 1979, 1980, and 1981, no state shall receive less than ½ of 1 percent of the total allotment. An authorization of $75,000,000 is provided for each of these fiscal years to carry out this provision. The following states would share any amount appropriated under this subsection in the following percentages: Alaska, 5.4449; Delaware, 7.1459; District of Columbia, 12.8612; Idaho, 0.3416; Montana, 10.8755; Nevada, 6.1352; New Mexico, 8.4057; North Dakota, 13.4733; South Dakota, 9.0178; Utah, 3.8648; Vermont, 8.2206; and Wyoming, 14.2135.