

Reauthorization of the Clean Water Act

The Dawn of Environmental Legislation under the Clinton Administration

Craig A. Bromby

An examination of the apparent leading bill before the United States Senate to reauthorize the Clean Water Act, entitled the "Water Pollution Prevention and Control Act of 1993", or Senate Bill 1114 (herein referred to as "S. 1114" or the "Bill"), reveals legislation consistent with many of the provisions of the Clean Air Act Amendments of 1990. The Clean Air Act Amendments appear to be viewed, at least by the authors of S. 1114, Senators Baucus (D-MT) and Chafee (R-RI), as a precedent for a number of approaches to environmental legislation. These precedents include an extremely detailed permitting program, concentration on the elimination of toxic constituents of discharges or emissions, pollution prevention, and a schedule of permit fees intended to shift the burden of funding the regulatory program to the regulated community and away from the taxpayer.

S. 1114 would impose on dischargers to surface waters (and indirect dischargers to publicly owned treatment works) many requirements to which permittees under the National Pollutant Discharge Elimination System (NPDES), established in the Federal Water Pollution Control Act amendments of 1972, were never subject. These new-generation regulatory devices include provisions for forcing technological advance in wastewater treatment without necessarily considering the economic impact on the industry, and prohibiting the use of certain substances in an industry's processes, irrespective of the industry's ability to treat and remove the substances

from its effluent. There is a great deal of emphasis, directly or indirectly, on pollution prevention or source reduction of pollutants. Such an emphasis has led to the perception in the regulated community that this bill is far more intrusive into business decisions and process than its regulatory forebears.

The Clean Air Act Amendments were a radical departure from the traditional means of industrial pollution control. Many of its more controversial provisions are now being tried out in S. 1114, for water, the other principal environmental medium for waste transport.

What are the provisions which have regulated community observers standing up to take notice? This piece selects and summarizes several of the components of S. 1114 which would be sweeping in their effect on regulated industries. It proceeds through S. 1114, describes some of those sections which will have an significant effect on regulated industries, and explains the impact of the selected provisions.

Section 201

Technology-based controls for point sources: Since 1972, federal clean water legislation has been technology-forcing. For example, the Clean Water Act has required the Environmental Protection Administration's (EPA) administrator to determine for categories of industries the Best Available Technology (BAT) economically achievable to treat wastewater discharged by plants within the industrial category. EPA has promulgated these technology-based effluent guidelines by examining wastewater treatment technology in use in the better-performing plants within the industry, and determining how much pollution would be expected on a production-unit basis if that technology were used. For instance, an industrial BAT guideline might be expressed as 5.0 pounds of a pollutant for each 10,000 "widgets" produced. If a lesser performer in the industrial category

Craig A. Bromby received a J. D. in 1975 from the University of North Carolina at Chapel Hill and is currently an attorney with Hunton & Williams in Raleigh, North Carolina, focusing primarily on water issues. Bromby previously served on the legal staff of the U.S. Environmental Protection Agency, Region IV in Atlanta and at the North Carolina Department of Natural Resources and Community Development.

were discharging 7.0 pounds of the pollutant for each 10,000 widgets it produced, it would be required, by a statutorily-imposed date, to improve its wastewater treatment to achieve 5.0 pounds/10,000 widgets by retrofitting the appropriate technology. In making its determinations, EPA was required to assess the economic effects of compelling the technological advance, and would not, for instance, use as the basis of BAT a cutting edge technology which was in use only in pilot scale and had not yet been installed in a competitive plant. Other technology-forcing provisions applied to the effluent standards for new sources. In promulgating these standards, EPA assumed that incorporating into the design of new plants state-of-the-art technology was more reasonable than attempting to impose that technology on older, existing plants. Another type of technology-based limitation was the "pretreatment standard", which required indirect dischargers to meet certain technological wastewater treatment minimums before they sent their wastewater to publicly-owned treatment works (POTWs) for treatment prior to discharge to the surface waters. There were pretreatment standards promulgated for existing sources and new sources.

Section 201 of the bill directs the EPA to issue regulations, "effluent guidelines", and "pretreatment standards", specifying "best available technology economically achievable". The proposed amendments would further ratchet down technology-based controls by requiring EPA to establish effluent guidelines, new source performance standards, and pretreatment standards that:

- reflect source-reduction techniques, including changes in production processes, products, and raw materials that reduce, avoid, or eliminate the generation of toxic and hazardous byproducts;
- require elimination of discharges where technologically and economically feasible;
- require elimination of releases to other media, where technologically and economically feasible; and
- prohibit use of technologies that EPA determines will have an unacceptable adverse impact on other environmental media, such as groundwater.

It should be noted that, in determining technological and economic achievability, the EPA may consider such factors as costs of achieving the limitation or prohibition, age of equipment and facilities involved, processes employed, and engineering aspects of the application of control techniques and process changes, but it is not required. Under the present Clean Water Act, and its predecessors, consideration of these factors were mandatory. Also deleted by S. 1114 is the requirement that EPA consider non-water quality impacts (including energy impacts) of technology-based requirements.

Finally, S. 1114, using a concept borrowed from the Clean Air Act Amendments of 1990, requires EPA to assess fees on direct and indirect (those pretreating prior to discharge to a POTW) dischargers fees to offset the cost of development of effluent guidelines and pretreatment standards. Dischargers would be assessed a "proportional share" of the estimated cost. The basis for determining individual proportions is not dictated but promises to be among the more vigorously contested rulemaking exercises the EPA and states might face in implementing the provisions of S. 1114.

Section 202

Sediment standards, antidegradation, and mixing zones: The Clean Water Act imposed on dischargers certain technology-based effluent limitations and standards through the device of the NPDES permit. It also required states to adopt instream water quality standards for all surface waters. Each state had to inventory all its surface water bodies, determine the best uses of the water, and classify the waterbody accordingly. The minimal criterion for waters was that the quality in the stream had to protect aquatic life. That is, even if the present quality made the stream unfit for a balanced, indigenous population of aquatic organisms, it had to be classified for that use nevertheless. Most states determined several classes of waters ranging, for instance, from a default class to a class with quality high enough to be used for drinking water supply and body-contact recreation. In North Carolina, this is Class "C", with the uses of aquatic life propagation and survival, fishing, wildlife, secondary recreation, and agriculture. The water quality standards were designed to protect and enhance the classified uses of the waterbodies. So, for instance, the quality standards applicable to a drinking-water supply would differ somewhat from a default-class stream which was not expected to be used as a source of drinking water or a swamp, which would not, for natural reasons, have among its "uses" drinking water.

Once a state adopted water-quality classifications and standards, they were submitted to the Administrator of EPA. The Administrator reviewed the submittal to determine whether the state's proposal satisfied the objectives of the Clean Water Act. If it did not, the Administrator would object and the state would have a certain period of time to respond with revised classifications or standards. If the response was not forthcoming or insufficient, the Administrator was empowered to adopt standards and classifications for the state.

S. 1114 makes instream "uses", previously designated by states for their waters, automatically applicable to sediments, which were not covered by the original Act. Obviously, some pollutants will migrate directly to sediments and can have a significant impact on the aquatic organisms who dwell or feed in the sediments. The more

difficult concept is determining the uses of sediment beyond habitat or feedstock for aquatic organisms. Section 202 further authorizes the EPA to establish criteria for sediment quality and specifies that those criteria (as well as a host of other criteria for protection of ground waters, habitat, lakes, and other specific values) shall automatically become applicable nationwide upon their adoption, unless a state objects within 120 days.

The EPA also requires that states adopt "antidegradation statements." These "statements" are regulations limiting or prohibiting the degradation, by permitted discharges, of streams which have a higher water quality than the standards set by the classifications applied to streams. The bill also includes a stringent "anti-degradation" provision that, while similar in some respects to EPA's existing antidegradation rule, goes much farther. Specifically, the amendment would (1) apply antidegradation restrictions to both water and sediments, and (2) require states to designate a broad range of waters as "outstanding national resource waters" (ONRWs), for which no degradation of any kind would be permitted.

Equally important, the bill requires the EPA to issue a mixing-zone policy that, at a minimum, prohibits mixing zones in ONRWs. The policy must prohibit acute toxicity at any point in the zone, require any allowed area of dilution to be in a shape that facilitates monitoring, and require that the zone be calculated on an assumption of minimum stream flow. States would be required to adopt a mixing zone policy no less stringent than the national policy.

Section 203

Toxic pollutant phase-out: Toxic pollutants have been handled in a number of ways under the existing Clean Water Act. One provision allows the EPA to adopt toxic effluent standards, which may set an absolute limit on the amount of a particular toxic pollutant that can be discharged to a stream without regard to treatment technology, production, industry-type, etc. Very few of these standards have been adopted, and most pertain to persistent pesticides, which are no longer commonly used for agricultural purposes. More commonly, an effluent guideline, a BAT guideline, a new source performance standard, or other technology-based limitation, is developed to address the treatment of toxic substances discharges by a particular industry. States have also promulgated water quality standards for toxic substances. Water quality standards form a baseline for any permitted discharge to a waterbody. If a plant discharging a certain mass or concentration of a toxic substance in compliance with the BAT guideline would nevertheless result in an instream concentration of the substance in excess of the water quality standard, the discharger would be limited to the amount of the substance that could be assimilated by the stream and still

stay within the water quality standard. This is known as a "water quality limited" permit.

Section 203 would require the EPA to publish a list of highly toxic, or toxic and highly bioaccumulative pollutants that occur in surface waters predominantly as a result of discharges. Discharge of listed pollutants would then be prohibited within one year of publication of the list. Certain provisions for exemptions by source category and extension of compliance periods are provided. Regulation of this type--absolute prohibitions, irrespective of technology and economics--has heretofore been eschewed by Congress. The proposal to abandon that approach is one reason why this provision is extremely controversial. Some view this means of the otherwise more benign concept of pollution prevention as unacceptably draconian.

Section 204

Pretreatment programs: The most significant portion of this provision is a proposal to eliminate the domestic sewage exclusion under the Resource Conservation and Recovery Act (RCRA). The pollutant and source contributing solid and dissolved material in domestic sewage must be in compliance with a pretreatment standard or local limit. For areas where none exists, the EPA has begun the process of developing a pretreatment standard; the solid or dissolved material will be considered to be a solid waste subject to regulation under RCRA.

Section 205

Pollution prevention: This provision requires the EPA to identify no fewer than twenty pollutants for which discharge reductions would benefit human health and the environment. Dischargers of these pollutants would be required to submit pollution-prevention plans designed to reduce direct and indirect discharges of these and other pollutants. Plans would have to establish goals, address water-use efficiency, and include onsite plans for goal attainment. Annual reports would be required. These, together with the pollution prevention plans prepared pursuant to this provision, would be publicly available. The reports required under the Emergency Planning and Community Right to Know Act, recording the total hazardous pollutant "releases" from a facility, have resulted in headlines about the "dirtiest" industrial facilities that would make any public relations officer quiver. This is another example of a publicly available report that could be used to the detriment of a plant's public image. One criticism of this provision is that it may punish those facilities which have done the most to achieve pollutant reductions voluntarily because they may already have done most of what is technologically possible to reduce pollutants in their plants. Thus, their plans may look less aggressive and their goals appear comparatively modest.

Section 302

Comprehensive watershed management: This provision establishes a voluntary, comprehensive program of watershed management. While it has many positive features, this section enables the Clean Water Act to begin to intrude in local land use planning. The provision is not mandatory on the states. There are, however, incentives for participation by states and once the threshold is crossed, each state will have to take certain actions to implement the management program--actions which inescapably take on a degree of federal control or, at the very least, influence. Having crossed this particular Rubicon, the participating state will have engaged, on some scale, in a form of statewide land use controls.

The impact on North Carolina is unclear, however, as much has already been done to address watershed management. For example, rules are already in place concerning water supply watersheds. The General Assembly directed the Environmental Management Commission (EMC) to embark on a statewide program of water supply watershed management and protection by, among other things, controlling development density or implementing performance-based controls on storm-water runoff as alternatives to development density controls or some combination of both. Interestingly, the provision expressly identifying development density controls as a tool for watershed protection was quietly added as an amendment to the law in the 1992 session. The law previously required "protection of surface water supplies through minimum performance-based water-supply watershed management requirements." By adding express references to development density controls, the General Assembly vested the EMC with statewide land use planning authority rivalled in scope only by that exercised by the Coastal Resources Commission under the Coastal Area Management Act. The EMC responded by setting forth a wide range of land use and density restrictions applicable in the watersheds draining to four classifications of water supply watersheds, involving hundreds of water supplies, and tens, if not hundreds, of thousands of acres in the State of North Carolina. The local governments having jurisdiction in these watersheds were required to adopt local water supply watershed protection ordinances which incorporated the use and density restrictions as minimum requirements. There was surprisingly little fanfare about this unprecedented incursion into local land use planning by the state environmental agency.

The Clean Water Act provision invites intrusion into heretofore local land use planning decisions by the state environmental agencies, responding to a mandate in federal legislation. This could well be a landmark, or, if you will, watershed, event in the surrender of local authority in land use planning.

Section 303

Impaired waters: This provision requires states to submit lists of "impaired waters." Impaired waters are defined as waters that cannot be expected to achieve water or sediment quality standards unless there is further action to control nonpoint source pollution. Nonpoint source pollution is comes from sources other than point sources. A point source is a discrete conveyance or channel. The classic point source is a pipe, but point sources can be canals or channels of various types, and have even been construed to be barrels or dumptrucks. States must also identify the watershed of each impaired water and the sources within the area of the watershed that contribute to the impairment.

Section 304

Nonpoint source pollution control: States would be required by this provision to submit a nonpoint source pollution management program.

Plans will have to include "management measures" which must be implemented within three years of approval, except that management measures must be implemented "as expeditiously as practicable" in the watersheds to impaired waters.

This provision is another invitation for the widespread imposition of statewide land use management controls and could lead to direct federal involvement in land use decisions. The management measures would be based on EPA guidance reflecting the "best available" nonpoint pollution control practices, technologies, and the like.

The BAT management measures appear to replace best management practices (BMPs).

States would have to develop nonpoint source pollution control programs, which establish the legal authority necessary to implement management measures.

Section 501

Permit fees: States must provide for an annual permit fee assessment program under this provision.

Fees must cover at least 60 percent of the cost of administering the regulatory programs under the Clean Water Act.

The costs to be covered by the fees include the cost of processing permits, enforcement, monitoring, development of standards, modelling analysis and demonstrations, preparation and maintenance of public information systems, and evaluation of approved laboratory performance.

In the event the state fee program does not meet EPA criteria or the EPA is the permit issuer, the EPA may collect fees under a federally administered permit fee program.

Section 502

Permit program modifications: This provision changes the NPDES program in a number of significant ways.

- Authority is granted to modify NPDES permits during their term to reflect new or revised effluent guidelines or standards.
- EPA is given authority to take over permits which have not been renewed by the issuing state within 180 days of expiration of the previous permit.
- Consideration of aquatic biological conditions is mandated for permit issuance decisions.
- EPA may identify "sensitive aquatic systems" in consultation with the Fish and Wildlife Service and the National Marine Fisheries Service.
- The Fish and Wildlife Service or the National Marine Fisheries Service would be required to review any proposed permits for discharge to such systems.
- Discharges to coastal or ocean waters, or to sensitive aquatic systems which would "prevent the protection and propagation of a balanced population of fish, shellfish and wildlife" would be prohibited.
- The EPA would be required to establish biological monitoring methods, practices, and protocols and methods for quantifying acute and chronic whole effluent toxicity.
- NPDES permits would be required to have numeric limitations regarding whole effluent toxicity.
- States would also have to provide for judicial review of challenges to permits by third parties.

Section 503

Enforcement: This provision expands the types of actions that can be taken and the amounts of penalties that EPA may seek.

The bill also expands the rights of citizens to proceed against permittees for past violations where there is

evidence that a violation has been repeated, apparently irrespective of the likelihood of further violations.

Federal courts are empowered to order that all, or a portion of, a penalty imposed in a citizen suit be used for projects to enhance the waterbody in which the violation occurred, making citizen suits an even more attractive vehicle for environmentalist groups.

The bill authorizes federal courts to order restoration of natural resources damaged or destroyed by a violation, the cost of which is limited by the maximum amount of civil penalty assessable under the Act.

Pretreatment standard violations are made expressly enforceable by EPA or through citizen suits. A "field citation" program, allowing designated EPA employees to administratively assess penalties of up to \$25,000 per violation, is authorized. Dischargers who have been assessed civil penalties on three occasions within a five year period may be debarred from contracting with the federal government for an indefinite period. Finally, an increase is proposed in the maximum amount of civil penalties that may be assessed administratively, from \$125,000 to \$500,000.

Conclusion

The Water Pollution Prevention and Control Act of 1993 is an imposing proposal that will almost certainly be subject to intense debate and numerous changes before its adoption or the adoption of some substitute. However, the bill does set a tone for the direction in which Congress, or at least the authors of the bill, seem to be headed. The new direction of water pollution control seems to be source reduction and pollution prevention for point sources and land use type controls aimed at watershed management and protection for nonpoint sources. Each approach is revolutionary in the water pollution regulation field. The Clean Air Act Amendments have pointed the way for the point source type of control. This bill breaks new ground with respect to federal and state involvement in heretofore local land use control decisions as a means of water quality protection. CP