# ILLINOIS POLLUTION CONTROL BOARD April 1, 1982

IN THE MATTER OF:	)	
	)	
REVIEW OF EXISTING REGULATIONS,	)	R81-17
RULE 602 OF CHAPTER 3: WATER POLLUTION	)	
COMBINED SEWER OVERFLOW	)	

#### PROPOSED RULE. FIRST NOTICE.

INITIAL OPINION OF THE BOARD (by J. Anderson):

On April 17, 1982 the Illinois Institute of Natural Resources, now The Department of Energy and Natural Resources (ENR), submitted to the Board its study of the "Economic Impact of Combined Sewer Overflow Regulation [Rule 602] in...Illinois IINR Doc. No. 81/18 (EcIS). This EcIS concerns existing rule Rule 602 of Chapter 3: Water Pollution, which in part addresses Combined Sewer Overflows (CSO). It was the first undertaken, pursuant to Ill. Rev. Stat., Ch. 96½, §7404(a), which requires the ENR through its Economic Technical Advisory Committee (ETAC) to review Board rules which were in existence prior to the time economic impact studies were first required in 1975 as part of the regulatory process.

Pursuant to the statute and Board Procedural Rule 215, the Board conducted inquiry hearings in 1981 on July 14 in Peoria, on July 16 in Alton, on July 29 and 30 in Chicago, and on July 31 in Decatur. Numerous individuals, associations, and municipalities participated in these hearings. During the course of the twice-extended comment period, the Board received several comments.

In this initial Opinion in this rulemaking, pursuant to Ch. 96½, §7404(c), the Board must consider whether, based on this record, Rule 602 should be modified, eliminated or remain unchanged. The Board has concluded that it is necessary that Rule 602 be modified. Following discussion of the Board's findings and conclusions, this Opinion explains and details the new criteria and procedural modifications to Rule 602 which it is today proposing. Hearings shall be held concerning this proposal as required by Ch. 96½, §7404(c), and by Title VII of the Environmental Protection Act.

## THE ECIS

While the EcIS refers to Rule 602\*, generally, the primary focus of the EcIS was on the combined sewer overflows portion of Rule 602, in particular the treatment requirement of Rule 602(c)(1) and (2) (EcIS p. 1).

Rule 602 provides in its entirety

# 602 Combined Sewers and Treatment Plant Bypasses

- (a) The expansion of existing or establishment of new combined sewer service areas is prohibited, except where the Agency has determined from the permit application the following:
  - 1. The combined sewer service area has adequate treatment or retention capacity to ensure that the effluent limitations of Part IV of this Chapter and the provisions of the Act are not violated;
  - 2. Any anticipated increased flow will not overload connecting segments of the combined sewer system;
  - 3. Increased flow shall not aggravate combined sewer overflow problems; including, but not limited to, combined sewer surcharges, basement back-ups and street flow;
  - 4. The new combined sewer service area will be tributary to an existing combined sewer system.
- (b) Excess infiltration into sewers shall be eliminated, and the maximum practicable flow shall be conveyed to treatment facilities. Overflows from sanitary sewers are expressly prohibited.
- (c) All combined sewer overflows and treatment plant bypasses shall be given sufficient treatment to prevent pollution or the violation of applicable water quality standards. Sufficient treatment shall consiste of the following:
  - 1. All dry weather flows, and the first flush of storm flows as determined by the Agency, shall meet the applicable effluent standards;
  - 2. Additional flows, as determined by the Agency but not less than ten times the average dry weather flow for the design year, shall receive a minimum of primary treatment and disinfection with adequate retention time;

## Footnote from page 2 continued

- 3. To the extent necessary to prevent accumulations of sludge deposits or depression of oxygen levels, flows in excess of those described under paragraph (c)(2) above shall be treated by retention and return to the treatment works or otherwise. When the Agency finds it necessary, part or all of such excess flows shall be treated to substantially remove floating debris and solids.
- (d) Compliance with paragraph (c) of this Rule 602 shall be achieved on or before the following dates:
  - 1. All treatment plant bypasses, by the applicable date for improvement of treatment works under Part IV of this Chapter;
  - 2. All combined sewer overflows within the Metropolitan Sanitary District of Greater Chicago, by December 31, 1977;
  - All other combined sewer overflows, by December 31, 1975.
  - 4. The compliance dates set by (d)(2) and (d)(3) shall be met unless:
    - (aa) The discharger's combined sewer overflow is eligible for a construction grant under Section 201(g) of the FWPCA; and,
    - (bb) The discharger has filed an application for a construction grant on or before March 1, 1977; and,
    - (cc) The discharger has timely taken all appropriate pre-grant and post-grant actions necessary to abate pollution of waters of the State, when the Board has found, as the result of an enforcement or variance case initiated under Titles 8 or 9 of the Act, that the discharger is causing a violation of the Act or regulations.
  - 6. Deleted.
  - 7. The exemption provided by (d)(4) above shall terminate upon completion of construction under the grant provided and compliance with the provisions of this Rule shall thereafter be required.

In general, Rule 602(c) requires treatment of CSO sufficient to prevent water quality violations. It specifically requires, as a minimum, storage and secondary treatment of the first flush (i.e. capacity to hold and treat BOD or suspended solids concentrations in excess of the normal dry weather level) plus retention for primary treatment and disinfection of ten times normal dry weather flow.

In its prefatory Opinion to the EcIS, ENR's Economic and Technical Advisory Committee (ETAC) notes the belief of the report author Linda L. Huff of Huff and Huff, Inc. that "until site specific evaluations provide sufficient data, there exists no water quality information upon which to evaluate the importance of CSO control" (p. v), leading Huff to the conclusion that "[w]ithout an accurate assessment of environmental conditions, the benefits of Rule 602 cannot be properly addressed" (p. 141).

ETAC found "no economic justification for the continued existence of Rule 602, even with the caveats regarding the benefits of Rule 602 on water quality" (p. v.). Given the inflexible Rule 602 requirements that "all communities must meet the same treatment standards, regardless of stream size, water quality impacts or economic hardship", ETAC concluded that "there is no economic, environmental or other substantive evidence that would support the treatment requirement under Rule 602 in its present form".

In the study itself, the need for CSO treatment was identified in the study for 132 municipalities, serving 1.2 million people or 22% of the state's population outside Cook County.\* However, Huff expressly acknowledged that:

<sup>\*</sup>The study did not include Cook County, part of which includes the TARP (Tunnel and Reservoir Plan) area within Cook County. This area, based on population, is approximately twice as large as the population of the CSO communities outside of Cook County. The Metropolitan Sanitary District of Greater Chicago's (MSD) service area (encompassing most of Cook County). TARP includes over 600 overflow points from sewers owned by 33 communities (a few of the CSO communities are not part of the TARP), as well as the overflows from interceptors owned by the Metropolitan Sanitary District of Greater Chicago. This omission in the EcIS was challenged at the hearings in Chicago. omission was explained as being based on several factors: a) The level of justification and analysis of TARP by the Federal and State Governments has been intensive, b) MSD is unique in the concentration of industrial and residential activities, c) MSD activities have an impact on Lake Michigan, d) control of the CSO's are a primary factor in controlling the water quality violations of the Illinois River, e) any modification of Rule 602 would not affect TARP, f) TARP should not obscure the situation in other Illinois communities where the level of environmental protection is often unknown and the economic impact can be severe, and q) there was no intent to exclude Cook County communities from the funding issue (R. 507-511, 530, 531, 541, EcIS).

"The evaluation of treatment costs and environmental effects of combined sewer overflow control is dependent upon the data base and accuracy of estimating methodologies. The factors representing the major limitations to the analysis are lack of data regarding sewer system characteristics, general cost estimating procedures, methods for determining annual and event CSO loadings and specific water quality impact assessments (EcIS p. 139)".

Review of Illinois Environmental Protection Agency (Agency) and United States Environmental Protection Agency (USEPA) information made the lack of an adequate data base apparent, with the result that "even the 132 municipalities [here] specified... probably do not represent the entire data base". Compliance costs from engineering reports were available for only 55 of these communities. Detailed field CSO water quality evaluations were available for none of the dischargers, and general ones for less than half (ECIS p. 140-41).

#### Huff stated that:

"The estimation of pollutant loadings contributed by combined sewer overflows represents the area of greatest inaccuracy. Two methods are utilized to calculate annual CSO loadings. The variation in values provided by these methods is two-fold range for suspended solids and three-fold range for BOD. This variation is an indication of the uncertainty regarding the magnitude of CSO loadings. Depending upon the land use characteristics, interval between storm events, size of the drainage area and the intensity of the rainstorms, the runoff characteristics will vary. The USEPA conducted detailed site studies of CSO characteristics and the results of these studies also indicated a range in discharge characteristics for different sized communities. The CSO loading of any individual community cannot be accurately described without specific knowledge of the system; however, the general aggregated loadings represent an indication of the problem. The importance of BOD, and suspended solids loadings attributed to CSO cannot be fully evaluated when such a range is possible (EcIS p. 140)".

In short, as Huff pointed out at hearing, the impact of CSO's varies with the "size of the receiving stream, sewer system characteristics, such as drainage area, percent combined, and sewer capacity; the rainstorm intensity and duration; runoff rate; and the number of days between storm events" (R. 39), and accurate data concerning many of these factors is yet to be gathered.

The study nonetheless found CSO's to be a significant factor in Illinois. Well over half of the population in Illinois (including TARP) is served by combined sewers, which can cause both stream pollution and basement backup. The loading problem is severe:

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"The annual BOD<sub>5</sub> loading attributed to untreated CSO's is comparable to that of wastewater plants. The annual suspended solids contribution of untreated CSO's is 7 to 13 times greater than that discharged from the wastewater treatment plants. This proportion is considered representative of the overflow contribution for all 132 plants" (ECIS 7).

The cost outside of Cook County is estimated to be \$476 million. 31% of this total relates to projects with priority numbers below 806, a category with questionable access to federal or state funds beyond Step I planning (EcIS p. 13).

Statewide, the EcIS estimates indicate a significantly higher cost per pound BOD and suspended solids removed than for typical sewage treatment plant costs (EcIS, p. 12), and a 16-fold variation among communities (EcIS, p. 14). The local share for capital CSO outlay can, at a minimum, represent one year's typical outlay for all annual costs. For about 47% of the communities studied, the annual increase for operating costs is less than \$20/person, for a third, the costs rise to \$10 to \$40/person, and for the remaining one-fifth, between \$41 and \$300/person (EcIS p. 17).

The study attempted to establish, admittedly without success, alternatives to Rule 602 based on a range of treatment requirements, and, thus, discharger categories or classes. The categories included requiring less than 10 times dry weather flow, elimination of disinfection, exemption for discharges to major streams, exemption for communities served of fewer than 3,000 population, use of Best Management Practices (BMP) such as sewer flushing for towns with priority numbers above 806, and elimination of Rule 602 (EcIS p. 2).

As a general statement, the study concluded that categories or classes by Rule is unworkable because the factors affecting CSO's are so numerous. Huff recommended that, since each discharger should be assessed on a case-by-case basis, and that the focus of the hearings should be not upon the issue of CSO pollutant loadings but rather finding a method to assess CSO treatment goals (R. 41).

## HEARING AND COMMENTS

The hearings and subsequent comments elicited a thoughtful assessment of the scope, the complexity, and the "uniqueness" of the problems for each community.\* It was apparent however that the stumbling block was how to establish procedures to resolve the problems in a cost-effective, timely manner and, at the same time, how not to undermine the overall pollution abatement commitment and the public participation in each process.

<sup>\*</sup>As these were inquiry hearings, participants were encouraged to make informal "off the cuff" suggestions. Record citations are made only where formal statements are specifically referenced.

The Agency noted that CSO events are not part of their monitoring or intensive survey activities (R. 208). The hearing participants noted, in agreement with the EcIS, that it was difficult even to get a sure count on the number of communities with combined sewer overflows. Indeed, a number of participants noted that the data on which the EcIS relied for the percent of combined sewers in their particular town was incorrect.

It was also pointed out that many communities, as they expand, have continued to attach new separate sanitary sewers to an existing combined sewer for delivery to the treatment plant, thus creating a "moving target" for data analyses. Data estimating the discharge problem can be incorrect if a community does not properly dam the overflow outlets to assure maximum delivery to the treatment plant, especially where there would be a risk of basement backups.

Participants concurred with ETAC's statements concerning lack of water quality information upon which to evaluate the importance of CSO control. The Agency, however, believes that "what little there is points undeniably to the conclusion that such overflows are a constant threat to the health of the streams of this state" (Agency comments, 11/2/81, p. 2).

Finally, some information was presented concerning the USEPA grant fund process. It was noted that the USEPA addresses grants on a case-by-case basis. USEPA a) funds only construction projects, b) computes on the basis of pounds of pollutant removed rather than water quality effects, and c) applies unrealistically low interest rates for all treatment strategies, thus placing BMP strategies at a disadvantage (Huff comment 11/2/81). According to USEPA policy the marginal costs of CSO must not be substantial compared to the marginal benefits. The hearings did not elicit testimony from anyone who had been rejected by the USEPA because of the application of Rule 602, although, as the ECIS pointed out, "only a few municipalities have applied for construction funds" (ECIS, p. 34).

With the exception of MSD and its constituent communities, almost all who participated in the proceedings agreed that Rule 602 was unacceptably rigid, even with the relief available through the Board's existing variance and site specific rulemaking proceedings. However, there was great disagreement as to how the Rule should be changed, especially when its substantive provisions were addressed. Suggestions were made to:

- 1. Abolish Rule 602, and then on a case-by-case basis, control CSO only in those instances where it is shown it is needed after all other treatment stragegies fail to accomplish pollution abatement. Alternatively, rely on the USEPA approach.
- 2. Phrase the rule in general terms, focusing solely on a water quality and/or stream use criteria "goal".

- 3. Retain the requirement for full treatment of "first flush", eliminate the absolute requirement for retention of 10 times dry weather flow, and require further controls in those instances where water quality and/or stream use so justifies.
- 4. Allow more time for compliance (10-12 years). This would be preferable when CSO's can be eliminated by being made part of a community's redevelopment program, using best management practices where applicable, or where, for example, partial compliance at 5 year intervals would spread out the economic burden.
- 5. Modify Rule 602, but only after studying broad scale (or basin-wide) benefits of various levels of control. Then determine treatment strategies (CSO, advanced waste treatment, agricultural runoff, etc.).
- from the "retention for treatment" strategy will result in a retreat from the pollution abatement commitment. This would be similar to a retreat from the commitment to capture and treat normal flows at the treatment plants. Use only the traditional site specific approach if there are cost effective methods unique to the community for achieving the same results, after a study of the whole stream segment.

Understandably, the discussions reflected an underlying concern that either a) the loss or lessening of federal grant funding will place an impossible economic burden on the community or b) the priorities placed on grant funding will inevitably leave many communities out in the cold. There was also some concern that abandoning Rule 602 might lessen the amount of federal grant funds allocated to CSO projects.

Much of the discussion focused on ways of tailoring the rules to the "unique" circumstances for individual communities and new procedural methods that might be used to deal with this. The reasons ran the full gamut from objections based on lack of affordability, especially as regards the absolute requirement of retention of 10 times dry weather flow to perceived existence of better methods to achieve equivalent CSO pollutant discharge controls, to the belief that the nature of some stream segments is such that CSO control would make no, or only marginal, water quality differences, even where the water quality impact was great. However, regardless of the reasons, the participants—as did the EcIS—concluded that classification was not the answer. Even the case—by—case approach, no matter what the "goal" (i.e. water quality, stream use, etc), was thought to present formidable problems.

# THE BOARD'S DELIBERATIONS

In considering the courses of action available to it, the Board need be mindful of the purposes of the Act which it implements

"to restore, maintain and enhance the purity of the waters of this state in order to protect health, welfare, property, and the quality of life, and to assure that no contaminants are discharged into the waters of the state, ...without being given the degree of treatment or control necessary to prevent pollution, or without being made subject to such conditions as are required to achieve and maintain compliance with state and federal law; ..."

The Board's water pollution regulations represent a multi-faceted approach to a complex pollution control problem. In evaluating the problems presented and tentative conclusions reached by ETAC, the Agency, and all other participants in this proceeding, the Board has observed that frustration with existing Rule 602 makes it easy to lose sight of the fact that CSO control is but one "brick" in this total water pollution control strategy "wall", a "brick" which cannot be reduced in size or displaced without consideration of the effects on the whole. Bearing this in mind, the Board will comment on the various problems and possible solutions.

#### The Data Problem

The dearth of data measuring and against which to measure CSO effects acknowledged in the EcIS is not a problem new to the Board. Ten years ago, when Rule 602 was adopted [R70-8, R71-14, R71-20 (consolidated), 3 PCB 755, March 7, 1972], one Board Member explicitly addressed just this problem.

"The water quality standards recently adopted do the best job that can be done when one is faced with the burden of adopting statewide regulations.. [But] as we were told time and time again, the only real "way to go" is by looking at the pollution problem on a stream by stream basis—that is, basin study and planning ...Basin study and planning gives regulators the opportunity to look at how pollution can be stopped in the "real world", because the stream is monitored for flow rate contamination of the water, contamination of bottom sediments, discharges to the stream, etc. With this specific information on hand, we will know what must be, or need not be done to protect the waters of the stream for the designated use" (Sep. Opinion R. Kissel, R71-14, 4 PCB 3,4, April 4, 1972).

In reference to adoption of Rule 602, the Board as a whole determined  $\underline{not}$  to require treatment of  $\underline{all}$  CSO flows to meet effluent standards. In so doing, it noted that

"both the degree of treatment and the percentage of flow that should be treated are matters that we cannot determine on the present record without regard to the needs of individual streams, and therefore we have modified the proposal" (3 PCB 774-775).

There is still not full agreement on the criteria, type of events, and stream reach to be used. This is in part because the existing Rule 602 addresses degree of treatment, not water quality, so there has been no incentive to do so. Also, as the EcIS noted, gathering water quality and CSO discharge data can be expensive, time consuming and difficult to quantify. Even a modeling approach requires difficult-to-get data if it is to be useful.

Stream use information, while theoretically easier to gather, requires, like water quality effects, a system-wide focus. But even with a local stream use focus, CSO can be a special problem. For example, it was pointed out that, while a treatment plant discharge is often located on the edge of town and discharges treated effluent, CSO outlets commonly discharge raw-sewage-contaminated storm water at a number of locations in the residential, commercial and recreational areas of the discharging town, so that even its short term effects on water quality and stream use can be most unpleasant.

Factoring in rainfall events--frequency, intensity, location, duration, and pollution load--is complex. For example, a light rain may dump a greater and more concentrated pollution load than a heavy rain, expecially when it does not scour the sewers before they start to overflow.

## The Interdependency Problem

Any facet of an interdependent, multifaceted strategy to reach a broad goal (i.e. cleaning up our streams) can be isolated and further segmented to allow a conclusion to be drawn that a non-cost-effective result has been reached. It should be no surprise that, for intermittent overflows that do not reach the treatment plant, separate primary treatment plant facilities usually are a less cost-effective component when compared to treating normal and first flush flows that reach the existing secondary treatment plant in the first place.

In the same manner one could separate out, or trade-off most any discharge control--secondary treatment, nutrient removal, sewer rehabilitation--to find a diminishing "payback" when compared with something else. This is especially so when only the discharger's cost effectiveness is considered. In fact, it was noted that, when benefits are not factored in, the most "cost-effective" solution for a discharger is to do nothing--particularly if complaints from those downstream can be and are ignored. Especially in an urban setting, even a small percent decrease resulting from a particular control segment, when combined with similar efforts of other dischargers on the same stream, can produce significant collective results.

## The Flexibility Problem

This is closely related to the data problem, discussed earlier. For example, why not create classes such as those in Rule 404, which addresses deoxygenating wastes and where the effluent standards fluctuate according to discharger size, size of receiving stream, and level of treatment, thus "tied into" water quality impacts? Unfortunately, CSO does not accommodate itself to such an approach.

No one has been able to determine how to formulate such a flexible rule for CSO. Varying CSO impacts are found for all sizes of dischargers on all sizes of receiving streams, and no other unifying grouping "pattern" was found.

Even if classification were possible, what should the Rule instruct each class, or the Agency, to do differently than Rule 602 without water quality or stream use data on the whole stream segment? What would be substituted, even if subclasses were established?

Classification is much more easily addressed when dealing with a single waste type, in a known setting (i.e. a treatment plant of known design), where the discharge is easily monitored, and where the solution can be "packaged" (i.e. adjust effluent standards). CSO's do not follow this pattern. The location of two similar overflow sewers in the same town, but one discharging near a childrens playground and the other near a barge dock, can require different remedies. Should the classification address outfalls rather than the discharger?

Should the reduction of BOD and suspended solids only from the sanitary waste portion be considered, or should the effect of the volume of the rainwater be included, especially if it causes flooding? Those directly affected by flooding from combined sewer overflows are much more likely to focus on the flooding factor. They do not necessarily "appreciate" the wisdom of ignoring the fact that both sewage and storm water are coming out of the same pipe.

## The Site Specific Rulemaking Problem

The Board's site specific rulemaking procedure is, of course, an option that has and will continue to be used to achieve the long term relief which a variance cannot lawfully provide. (Variances additionally anticipate ultimate compliance with existing rules). As hearing participants who have availed themselves of this procedure have pointed out, the substantive and procedural rulemaking requirements established by the Act and by the Administrative Procedures Act require a substantial expenditure in time, effort, and expense on the part of the proponent of a site specific rule.

In the usual case, a consultant is hired to prepare a report to include data concerning the environmental impact, technical feasibility and often economic reasonableness of compliance, and to develop a concrete proposal for rulemaking. An attorney is hired to prepare and submit a petition for rulemaking to the Board, and to present the proponent's case at the hearings required by the Act.

At the initial technical hearings, even assuming that the Agency not only does not challenge a discharger's site specific proposal but also helps "up front" in developing data, each site specific proponent bears the responsibility of presenting and proving at public hearing the extensive justifications for partial or total non-compliance with Rule 602 (as it exists or as modified). The process is then usually suspended pending the Board's receipt of ENR's site specific economic impact study, after which an economic impact hearing must be participated in.

If the Board at some point accepts the proposal as its own after review of the record, it must write a proposed opinion and order, publish the proposal in the Illinois Register (first notice), after at least a 45-day comment period submit the proposed opinion and order to the Legislative Joint Committee on Administrative Rules, (second notice), wait up to 45 days for a reply and then file final rules with the Secretary of State (and then repeat the process as each new rule is added as a modification of Rule 602). Only then can a rule change recipient's grant process proceed, if the modification is grant eligible.

Using the site specific approach for CSO problems is a time consuming, expensive, and cumbersome process, especially for smaller communities. In addition, a site specific approach, which focuses on a single facility, is not particularly suited to issues that can involve whole stream or multi-stream segments or drainage basins, as well as other dischargers. Even if there were some way to consolidate into groups all individual dischargers who have determined to request relief, none could probably go the full distance until all did. It is a fair guess that the grant process will not wait for this. Indeed, whole facility grants could be held up for those proposed modifications that affect the design of any particular treatment plant or its interceptors.

Abolishing Rule 602, or changing its goals to, say, to a water quality or stream use standard, would likely still require use of the site specific rulemaking procedure, assuming that the Board does not abandon its strategy for CSO control as a high priority.

## The "Delegate to the Agency" Problem

Even if the Board could lawfully delegate to the Agency the major discretionary responsibility of providing relief through the permit process, for instance, there are problems with having the Agency do so. Most important, the affected public is denied 13

participation and certainly rights of appeal. For example, permit conditions that include an ongoing municipal sewer flushing program as an alternate to a "structural solution" in a permit granted to an overlying sanitary district whose service area is greater than the municipality should be subject to public review. This is so because the former option commits a small population to expensive ongoing maintenance from operating funds, while the latter option spreads the costs of a bond issue over a larger population, and the subsequent maintenance costs are less. This can be an especially "dicey" issue if the citizens of the municipality had, at an earlier time, paid most of the cost of the existing treatment plant before their unincorporated brethern had even built their homes. Such issues involve not only the "who pays" issue but also the cost effectiveness issue.

Even where the permit "package" is thought to be non-controversial by the Agency and the discharger, the Board knows from experience in its permit appeal hearings that public scrutiny of permit decisions can produce surprises. However, even if public hearings were held at the Agency level, they are not a substitute for those held within a regulatory framework.

Finally, apart from the public hearing issue, the discharger would have to submit to the Agency at least as much justification as would be required through a site specific mechanism.

#### THE PROPOSAL FOR MODIFICATION

In considering the CSO problem, the Board finds itself in a classic "which comes first, the chicken or the egg" situation. Because Rule 602 has been in existence and accepted for the last 10 years, little data has been gathered concerning the environmental and economic effects of CSO and its control. Because little data has been gathered, the rule's existence is challengable on economic grounds because its benefits cannot be quantified. Because there is no economic support for application of Rule 602 to all dischargers, the rule arguably should be modified. Because there is little data, no concrete proposals for modification can be made.

The record before the Board amply butresses the EcIS' recommendation that "[a] case-by-case-analysis provides the only mechanism for CSO control in a cost-effective manner with the necessary improvement in water quality" (ECIS p. 19). The current economic climate renders it imperative that the "fine-tuning" of Rule 602 envisioned in 1972 be done. However, the record before the Board does not justify the elimination of Rule 602 while the data gathering necessary for such "fine-tuning" is accomplished. It could well prove to be false economy to provide hasty, quantifiable economic relief to all dischargers, only to allow for the later, leisurely measurement of the adverse economic impact of lack of CSO control on those downstream of such discharges. The right to protection of water quality should not be made dependent on a community's relative position on a stream.

The Board therefore proposes to amend Rule 602 by adding an "exception" procedure. As outlined in detail below, the essential element of this procedure is to attempt to establish a partnership between the discharger seeking relief and the Agency. In cooperation, the two are to develop the necessary data concerning a) what level of CSO control is environmentally necessary, and b) what control strategies, including but not limited to retention and treatment, are economically and technically feasible. If the Agency and the discharger are in agreement on these points, a jointly proposed "stipulated" control package shall then be submitted to the Board, public hearings held, and the resulting record reviewed by the Board. If agreement is not reached, the discharger may singly file a petition containing its proposed control package, and present justification for it at public hearing for subsequent Board review.

The new exception procedure at the very least ameliorates the flexibility, expense, and time problems of the site specific rulemaking, while preserving the essential elements of public participation and environmental protection. And, equally important, it permits the level of data required to be gathered to vary, depending on the relative complexity of the situation. In some cases, a "quick reading" is all that may be needed to determine whether, at what level, and what kinds of CSO controls are needed, within what time frame. Those communities that, as a result, obviously need to comply with Rule 602 need not use the exception procedure, and can proceed with their programs.

This exception procedure does not forclose other existing procedural avenues, such as the site specific rule approach. It is instead an additional method for allowing greater flexibility in a statewide rule when and only when the gathering of rule-required data justifies such flexibility, when the public has had an opportunity to participate, and when the Board approves the exception proposed.

The question can and doubtless shall be asked: Is the proposed rule legal under both the Environmental Protection Act and the Administrative Procedures Act? Can a substantive rule, using stated criteria, include its own procedures for future modification without specific legislative authorization? The Board believes the answer to both questions is "yes".

The Board feels that the proposed exception procedure does not offend the system embodied in the statutes, as it protects the due process rights of the affected public and the discharger at the same time it eliminates procedural complexities. The proposed rule establishing the procedure itself will go through the Board's formal rulemaking processes for public hearings and comments. Once the rule is adopted, any exception petition will itself be subject to comment at public hearings, prior to the Board's review of the proposal in a formal Opinion. In short, the Board thinks that this proposed procedure is an appropriate

and proper exercise of the Board's statutory authority, one which allows the Agency to exercise its best technical judgment but avoids the problem of over-delegation to the Agency of ultimate decisionmaking responsibility.

Nevertheless, the Board, during its first notice hearings, requests comments on the legality question, recognizing that the exception procedure is a novel approach to an old problem.

# THE PROPOSAL AND RULE NUMBERING

The Board has recently codified Chapter 3: Water Pollution Control Regulations, which changed the numbering of the rules which underlie this regulatory proceeding. Therefore, the remainder of this Initial Opinion and the accompanying Order will refer to Chapter 3 rules using their codified numbers rather than their old numbers. The following table is provided to aid in referencing old Board rule numbers to section numbers pursuant to codification:

Chapter 3: Water Pollution Rule Number	35 Ill. Admin. Code Number	Rule Name
602(a)	306.302	Expansion of Combined
602(b)	306.303 and	Sewers Excess Infiltration
002(2)	306.304	Overflows
602(c)	306.305	Treatment of Overflows
		and Bypasses
602(d)	306.306	Compliance Dates

Some provisions of the proposed amendments to Rule 602 deserve individual explanation.

306.305 Opening paragraph. This language has been included in order to authorize, through the exception procedure, a modification of the otherwise applicable water quality standards. Permitting any relaxation, however, requires a high level of justification (see 306.361).

306.305(c) There is no intent to change the current meaning of this rule. It has been rephrased because the language as it presently exists is somewhat confusing. The first sentence does not say who determines what is "to the extent necessary", while the second sentence says that the Agency makes the determination. Also a problem, the phrase "shall be treated by retention and return to the treatment work or otherwise". The "or otherwise" language renders the retention and return language advisory only.

306.305(d) This provision makes clear that 306.305(a-c) shall be complied with unless an exception has been granted authorizing a different "package".

306.306(4) This frees the discharger from the compliance dates set by 306.305 for an additional reason, namely, that an exception has been granted, is pending, or the discharger is waiting for an Agency answer. This keeps the discharger from being in violation of the compliance dates during this process. Note, however that 306.306(5) still applies.

## Subpart D Exception Procedure.

- 306.350 First, this makes clear that economic considerations will be included and that the interests of both the discharger and those affected by the discharge are taken into consideration by the Board. (The Agency already considers costs in the facility grant review.) Second, this makes explicit that exceptions can be made to the water quality standards, the sufficient treatment provisions and the compliance provisions. The water quality standards inclusion will provide more flexibility, but will have to be carefully justified (see 306.361).
- 306.351 The categories and evaluation requirements enunciated in 306.351 and 306.361 are drawn from the Agency's comments, as well as comments of various other participants. The Agency is required to establish categories "early on" in order to apply consistent degrees of justification for public and Board consideration, and to determine as quickly as possible those entities that the Agency feels should comply with 306.305 and 306.306 without exception. The Board anticipates that the discharger and the Agency will work together during this classification process, and will engage in any informal contacts necessary for information gathering, evaluation, etc., prior to the Agency's formal determination required by this rule.
- 306.352 First sentence. This assumes that, by the time the Agency makes a proposal with conditions that define the limits of any adjustment of the general rules, the Agency and the discharger have worked together, and that the proposal is justified pursuant to 306.361. The second sentence requires the Agency to give any discharger a negative answer promptly, so that the discharger can plan to comply with the statewide rule or proceed to singly petition for an exception or for a site specific rule.
- 306.360 This allows the Agency or the discharger to initiate the exception procedure. Participation by the Agency is discretionary with the Agency and participation by the discharger is discretionary with the discharger. A joint approach "up front" can save both time and money. However, if both do not participate, the exception procedure is usable by the discharger alone.
- 306.361(a) This assures, even where there is minimal discharge impact, that certain essential information will be made available to the public at hearing and to the Board for determination as to whether the proposal is sufficiently justified.

- 306.361(b) It is intended that, where the impact is not minimal or where the otherwise applicable water quality standards are recommended for change, the level of justification available for the public at hearing and to the Board for deliberation shall be substantially increased.
- 306.361(c) This provision attempts to provide some assurance that any mathematical models used will be based upon enough information so that the model will bear as close a resemblance as possible to actual conditions. The Agency itself, in its comments, warned of the dangers of over-reliance on modeling.
- 301.362 Obviously, a discharger proceeding singly must provide the higher level of justification information.
- 301.363(a-c) These provisions are, hopefully, self-explanatory.
  - 306.364 This also appears to be self explanatory.
- 306.371 This language reflects the "stipulation" approach. The last sentence is an attempt to assure that no significant revisions in which the public may have an interest escape their scrutiny.
- 306.370 and 306.372 This language regarding transcripts is a restatement of existing Board practice policy.
- 306.373 The purpose of this deadline is essentially two-fold. First, there must be a "fish or cut bait" deadline to prevent a destablizing "rollover effect". Secondly, while the Agency may be motivated to push ahead in order to take advantange of, by its estimate, a maximum of five years of grant availability, the dischargers could be tempted to use this procedure to indefinitely postpone compliance. On the other hand, the discharger and the Agency have less time to make up their minds, since the process before the Board will consume some of the available time.
- 306.374 The first sentence clarifies that this procedure is an addition to, but does not replace, other existing remedies. The Agency's decision not to recommend an exception proposal or join in the filing of an exception petition has been rendered non-appealable for practical reasons of administrative economy. Board review of these determinations would only involve the Board in consideration of environmental issues which would be more appropriately addressed in the context of a discharger's single petition for exception.

This Initial Opinion constitutes the Board's initial compliance with Chapter 96½, §7404, and Procedural Rule 215. Hearings on this proposed modification of former Rule 602 will be expeditiously scheduled and held, in recognition of the urgency of this matter.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion was adopted on the \_\_\_\_\_\_\_\_, 1982 by a vote of \_\_\_\_\_\_\_\_\_.

Christan L. Mof*ter*t, Clerk

Illinois Pollution Control Board