

PRETREATMENT ISSUES AND THE PUBLIC'S RESPONSE

**AN ANALYSIS OF PUBLIC HEARING TESTIMONY
AND COMMENTS RECEIVED BY EPA ON
A PROPOSED REVISION TO THE GENERAL
PRETREATMENT REGULATION (40 CFR 403)**



**U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF WATER PLANNING AND STANDARDS
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This document was prepared for the U.S. Environmental Protection Agency by a private contractor and does not necessarily reflect the views of the Agency. The document does not imply endorsement of any opinions expressed by the public nor does it indicate any predisposition by the Agency toward any of the four pretreatment strategy options proposed to the public as 40 CFR 403.

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PRETREATMENT PROGRAM ISSUES AND THE PUBLIC'S RESPONSE

Introduction. The Environmental Protection Agency (EPA), in the February 2, 1977 Federal Register, proposed four alternative pre-treatment strategies for the control of industrial wastes discharged to municipal sewer systems. These options attempt to achieve the statutory objectives of preventing interference and pass-through. They differ primarily in terms of 1) the basis on which pretreatment standards would be developed; 2) the degree to which EPA, the States, and local governments would have responsibility for enforcement of the program; 3) the number and type of pollutants and sources that would be covered by national standards; and 4) the number of sources of each pollutant within an industry that would be regulated by national technology-based standards.

To encourage public participation in the rule-making process, EPA held public hearings during the month of April, in the cities of San Francisco, Boston, Washington, D.C. and Chicago. In addition, the public was invited to submit written comment for consideration by EPA by the (extended) May 18, 1977 deadline. EPA noted that the publication of the four strategy options did not preclude interested parties from offering a modification of one option or a combination of two or more options for consideration.

The following analysis of public comment is based on the transcripts of the four public hearings and the 374 letters received to date. A log of these letters is attached.

Major Pretreatment Program Issues.

In developing the analysis, the above documents were carefully studied, and the comments were categorized into eight major issues. Key elements were identified which highlighted each of the major issues. The eight major issues are briefly summarized below:

Degree of Federal Involvement. Essentially two approaches exist for implementation of enforcement programs, (a) maximum (i.e., direct Federal) involvement, and (b) minimum (i.e., indirect) Federal involvement.

Adaptability of the Pretreatment Program. In developing the pretreatment program, it was deemed necessary to include variance provisions to compensate for the extreme variability exhibited by POTW's in the removal of industrial pollutants to avoid the construction of redundant facilities by industry, and the problems resulting from such an approach.

Basis for Pretreatment Standards. This issue focuses on the flexibility of pretreatment standards to adjust to local variations. Two types of standards have been proposed, (a) national technology-based standards; and (b) water quality-based standards.

The type of unit in which the standards would be expressed--mass-based limits or concentration-based limits--was also a matter of consideration.

The Extent of Industrial and Pollutant Coverage. This issue is inextricably related to the other pretreatment issues, i.e., degree of Federal involvement, type of standards, variances, duplication, and also involves the fulfillment, by EPA, of the Consent Decree signed in June, 1976 by the Agency, the Natural Resources Defense Council (NRDC), the Environmental Defense Fund (EDF), and the Citizens for a Better Environment. Six factors have been identified that directly relate to the expressed viewpoints on industrial and pollutant coverage:

- a) the demand for broad industry and pollutant coverage;
- b) the demand for limited industry and pollutant coverage;
- c) compliance with the requirements of the Consent Decree;
- d) the form of coverage: uniform standards or guidelines;
- e) technical feasibility of industry achieving standards;
- and
- f) categorization of pollutants and industry for regulatory purposes.

Sludge Disposal and Treatment Considerations. The type and quantity of industrial discharges and the degree to which industrial pretreatment is practiced will directly influence the character of a POTW's sludge. Where industrial pretreatment is not practiced, or where a POTW is issued a variance, toxic pollutants will be absorbed into, and contaminate the POTW's sludge, thereby limiting the POTW's sludge disposal alternatives.

The resolution of the sludge disposal issue is also contingent on how the recently enacted Resource Conservation and Recovery Act of 1976 will eventually relate to the finalized pretreatment regulations and the ultimate requirements for sludge disposal.

Meeting Statutory Compliance Deadlines. This issue centers on the problems of attaining compliance with the proposed pretreatment program and how the as-yet unpromulgated standards will cause delay in the attainment of the July 1, 1977 and July, 1983, water quality goals and technology control requirements.

Duplication With Existing Pretreatment or Industrial Source Control Programs. A major concern expressed in the comment received is that the proposed regulations would cause duplication of facilities

and conflict with the efforts of existing pretreatment and industrial source control programs. Also recommended for consideration by EPA in determining pretreatment requirements were regulatory and enforcement conflicts, disregard of industrial POTW's, and the additional financial burdens to be imposed.

Economic Impact of Pretreatment Programs. Concern was expressed by municipalities required to design and implement pretreatment programs, and by the industrial dischargers who must absorb pretreatment costs, that EPA had not adequately assessed the economic or energy impacts of the proposed pretreatment program.

A detailed analysis of the major issues is contained on the following pages.

I. DEGREE OF FEDERAL INVOLVEMENT

Under the statutory mandate of PL 92-500, the Federal government must assume through the ministrations of the U.S. Environmental Protection Agency (EPA), the overall responsibility for compliance with pretreatment requirements through an enforcement program. The degree to which this Federal involvement should be exercised has received considerable attention at the four pretreatment public hearings and in the written comments received by EPA on this issue.

Essentially, there exist two approaches for implementing enforcement programs. The Act enables direct Federal enforcement, but also strongly encourages State and local efforts that minimize Federal involvement. Thus, the two choices for enforcement programs are:

- 1) maximum (i.e., direct) Federal involvement and
- 2) maximum State/local (i.e., indirect Federal) involvement

Under a direct Federal enforcement program, EPA and NPDES States would continuously enforce directly against industry (notify indirect dischargers, perform compliance reviews and monitoring, enforce significant violations, etc.). Under an indirect enforcement program, the major responsibility for achieving compliance would be placed on local and other State authorities. In this case

the local/State authorities would notify all indirect discharges, perform compliance reviews and monitoring, and enforce the standards. EPA and the NPDES States would back-up local enforcement efforts only where requested or needed.

Comments supportive of both the direct Federal enforcement program and the State/local enforcement programs are documented on the following pages:

A. Comments Supporting Maximum Federal Involvement and Enforcement

1. The Federal government is the strongest enforcing authority for obtaining industrial compliance with the pretreatment program due to the capability of its varied technical staff and economic resources.

Dr. Gaytha A. Langlois, Clean Air Committee, Ecology Action for Rhode Island, statement at Boston Public Hearing:

"...it should be noted that local enforcement, or even State enforcement procedures in some cases are often inadequate, either through deliberate negligence, or because of insufficient personnel or by particular administrative decision patterns."

John G. Costello, Executive Director, Bergen County Sewer Authority, NJ, Statement at Boston Public Hearing:

"Without strong Federal backup available, most local agencies could simply not afford the financial impact of an effective pretreatment program. Participation by EPA and NPDES States in enforcement actions should be more prominent than those of local authority in order to increase the deterrance value of the actions and to precipitate rapid and uniform resolutions of legal issues of national environmental importance."

William E. Muno, U.S. EPA Enforcement Division, Washington, D.C.:

"One reservation with local enforcement is that those closest to a problem are usually the most reluctant to take enforcement actions."

Roger Sinclair, Director of Public Works, Cottage Grove, OR, Statement at San Francisco Public Hearing:

"The enforcement has to be on a Federal-State level. We have had local level control for years, and this is why the East River used to burn. And it just can't be done. It can't be done in our State. I know that."

Frank Dryden, Head Technical Services Department, Sanitation District of Los Angeles County, Whittier, CA, Statement at San Francisco Public Hearing:

"...there is obviously a concern that the EPA would be considered remiss if it does not oversee every step that a local agency takes in establishing and carrying out a pretreatment program."

I.M. Rice, Association of Metropolitan Sewerage Agencies,
Dallas, TX, Statement at Washington, D.C. Public Hearing:

"While we recommend a high degree of local control, we realize that the Federal government must have undisputed authority to impose nationally uniform standards on some substances, whose effects are especially destructive, and so our proposal is based on three observations."

Thomas R. Glenn, Director and Chief Engineer, Interstate Sanitation Commission, CN, Statement at Washington, D.C. Public Hearing:

"The strategy for pretreatment source control should put the regulatory authority and implementation at the State or the Federal and state level. Public Law 92-500 mandates that there are to be Federal standards. That is from Section 307.

"In general, it contemplates that regulation and enforcement pursuant to such standards be either Federal or State, with Federal action held in reserve. The latter approach is preferable because it is possible to utilize State and interstate agency resources more effectively, and because it makes more practicable some treatment of variation in the programs to meet differences in regional conditions."

Roy E. Martin, National Fisheries Institute, Inc.,
Washington, D.C.:

"The other options (I, II, III) leave too much to the control of local enforcement and management. These local situations are subject to too many variables, i.e.: budgets, personnel, local politics, etc. Our resources have been subjected to this later scheme of management and reasoning for too long with resultant disastrous consequences for seafood."

2. Federal enforcement eliminates "pressures" that could be exerted against a municipality by an industry to establish a local compliance program or to ease enforcement of a standard.

Dr. Gaytha A. Langlois, Clean Air Committee, Ecology Action for Rhode Island, statement at Boston Public Hearing:

"...these (local) governments are particularly vulnerable to economic and political pressures, and often show little continuity of personnel over time."

H. Clay Kellogg, Jr., General Manager, Kellogg Supply, Inc.,
California:

"...(local governments) do not need local pressures from self-interest groups always trying to get special favors. Keep the authority at the federal or state level."

Robert H. Kelly, Forest Preserve District of DuPage County,
Lombard, IL:

"Other options apparently leave too much to local control- and local indecision, confusion, instability, and so on. Even the state can easily back down from pressures."

Roger Sinclair, Director of Public Works, Cottage Grove, OR,
Statement at San Francisco Public hearing:

"Local agencies are very, extremely vulnerable to political and social pressures from the local industries. We have local industries, and I feel that pressure. And even states, if they are not backed by EPA, they are subject to regional industrial organizations, and even the legislatures sometimes lean on the state agencies."

John Saucier, Director, Tennessee, Div. of Water Quality Control, Nashville, TN, Statement at Washington, D.C. Public Hearing:

"...one of the problems that we see with the pretreatment standards is that in some particular small towns, industry has enough local clout, that they can get whatever ordinance they want passed. And this is where the state and federal government has got to insist that strong enough ordinances are passed that they will protect the POTW, as well as the effluent standards."

Larry E. Crane, Executive Director, Iowa Dept. of Environmental Quality, Des Moines, IA:

"...Many cities may not wish to have the responsibility for setting standards due to unreasonable pressures from local industry. Basically cities prefer to have state or federal requirements to follow when dealing with local industry. This is especially true of smaller cities that may not have large technical, legal, or administrative staffs. Many small cities have an industry that provides such a large part of local employment that it is unreasonable to expect the city to take firm enforcement action."

Ethyle R. Blcok, Co-Chairman, Clean Water Committee, Fort Wayne Chap., Izaak Walton League of America, Inc., Ft. Wayne, IN:

"Local enforcement program as supplementary. This is important as they know their community's industries and functions. However, local government is often lax about "hurting" industry for fear of the industries moving out of town, and as a result the public often gets "stuck" with paying part of industry's bill. Municipalities can not play favorites if this is a nationwide requirement."

S.W. Kitzazaki, General Manager, Oconomowoc Electroplating Co., Inc., Ashippun, WI:

"To allow local programs to establish pretreatment standards would not be as effective or uniform. We must remember that POTW's have a vested interest in the community they serve and may bias or delay pretreatment standards."

Richard W. Klippel, Chairman, Industrial Waste Committee, New York Water Pollution Control Assoc.:

"The entire pretreatment program including all of the steps and/or priorities can only be accomplished if it is accompanied by fair and efficient enforcement. In the past, efforts, at enforcement at the local level have met with mixed success. Lack of enforcement has most often occurred in localities which are economically dependent on a small number of primary industries. In such localities, the economic pressure executed by the few primary industries has often delayed and in some cases totally defeated any and all efforts of an enforcement nature."

J. Taylor Banks, et. al., Natural Resources Defense Council, Inc., Washington, D.C.:

"...EPA states that variances from national pretreatment standards based on POTW removal capability may be more or less stringent than the national levels. The impetus to seek variances which would relax pretreatment standards is obvious: indirect dischargers will put tremendous pressure on local authorities to obtain such variances."

3. State and local enforcement agencies may not possess the necessary legal authority and/or enabling legislation to implement and enforce a pretreatment program (e.g., only 28 states have assumed NPDES responsibilities). The existing enabling legislation also may not extend regional enforcement authority to those municipalities that accept industrial wastes from outside their political jurisdiction as a part of a regional treatment system.

John G. Costello, Executive Director, Bergen Co. Sewer Authority, NJ, Statement at Boston Public Hearing:

"It must also be recognized that many regional sewer agencies will require state enabling legislation by all the member municipalities to obtain the legal power necessary for direct enforcement of pretreatment regulations."

Marwan Sadat, Program Director, Office of Sludge Management and Industrial Pretreatment, New Jersey Department of Environmental Protection, Trenton, NJ, Statement at Boston Public Hearing:

"In general, the local authorities lack the technical status and the regulatory experience to make the proper technical decisions in setting up standards in these sophisticated problem areas."

John Saucier, Director, Tennessee, Div. of Water Quality Control, Nashville, TN, Washington, D.C. Public Hearing:

"It is further stated that before any municipality, authority, or treatment and collection agency can control the waste being discharged into its system, it must first have the power of authority to enforce such a regulation. Contractual agreements were used in Buffalo and this approach is a portion of the procedures recommended by the State of Tennessee. Additionally, the Tennessee Division of Water Quality Control believes that indirect discharge permits with State and/or Federal enforcement back up is essential to insure proper enforcement of any pretreatment regulation."

Herbert C. McKee, Ass't. Director for Pollution Control, Health Dept., Houston, TX, Statement at Chicago Public Hearing:

"While it appears that local governments can best develop and implement pretreatment programs, some jurisdictional problems are inevitable because of the multiplicity of local governments in a given metropolitan area. State and Federal programs can perform a useful function in obtaining the necessary coordination and cooperation between different units of government at the local level.

"In Harris County, approximately (sic) two-thirds of the people live in the City of Houston and their domestic sewage is treated in a city-owned system. The other one-third are served by sewer systems operated by smaller cities, or by systems that serve suburban and rural housing in unincorporated areas. No figures are available, but the suburban and rural areas do not contain large concentrations of industry; it would appear that the Houston permit system probably covers between 75 and 90% of the industrial discharges to sewers that should be covered by pretreatment discharges to sewers that should be covered by pretreatment requirements. Nevertheless, as the entire area grows, pretreatment of some of the discharges outside the City of Houston may be desirable. The Texas Constitution denies legislative or ordinance-making power to County governments, so a comprehensive pretreatment program developed and implemented by the Harris County government would be difficult to achieve. State and Federal programs could be of considerable assistance here in devising ways whereby sewer discharges outside the City of Houston could be covered by reasonable pretreatment standards at some future time."

4. Limited economic resources, narrow technical and administrative capabilities, and small staffs are likely to preclude the successful implementation, monitoring and enforcement of pretreatment regulations in municipalities, unless extensive assistance and support through guidance documents is provided by EPA, especially in smaller municipalities.

The Metropolitan District, Hartford, CN, Statement at Boston Public Hearing:

"To establish the organization needed with the type of properly trained employees desirable would impose a serious hardship on a small town. And to suggest it be repeated for every town which has treatment plants seem folly when considering the duplication of effort and administration needed to accomplish this. Even if the review were done by private engineers or the review and inspection done this way the public organization needed to handle these programs at the local level seem still to be unjustified."

William A. Healy, Executive Director, Water Supply and Pollution Control Commission, Prescott Park, Concord, NH:

"The proposed regulations would seem to be more appropriate to large communities which are more likely to have the resources necessary to implement the type of pretreatment program contemplated by EPA. Once again, this is clearly an attempt to apply national standards in an area which has numerous variables and would more properly be dealt with on a case-by-case basis within the broad framework of generalized Federal-State guidelines."

Walter A. Lyon, Director, Bureau of Water Quality Management, Department of Environmental Resources, Harrisburg, PA:

"...There needs to be some guidance for municipalities to allow them to establish pretreatment limits on a case by case basis. This guidance would not be in terms of a nationwide industrial standard of pretreatment but rather a description of the treatment processes available for the various industries and the degree of pollutant removal various treatment processes can achieve. For example, the pretreatment guidelines could for each of the industries of interest define the treatment system necessary to remove 50% of the pollutants, 75% of the pollutants, 90% of the pollutants, and 100% of the pollutants. Then, based on the individual situation at the publicly owned treatment works, the necessary degree of treatment could be established and effluent requirements be set for each industrial discharger to the treatment works. This would give the treatment plant operator the flexibility to develop a pretreatment program to fit its specific needs. The difficulty is that most small municipalities do not have the technical capability nor the money to obtain the capability to develop the pretreatment guidelines. The EPA could develop these guidelines and make them available to publicly owned treatment works."

John Saucier, Director, Tennessee, Div. of Water Quality Control, Nashville, TN, Statement at Washington, D.C. Public Hearing:

"All options, with the exception of four, emphasize the primacy of local enforcement programs. Based on our experience and observation in the State, we are opposed to this concept for enforcement. For the most part, it is believed that these industries contributing significant amounts of incompatible pollutants will have to be forced to pretreat, in that local agencies will not be able to cope with the monitoring and enforcement requirements, in addition to the legal, technical type request for variances and exclusions...

"I think technical assistance is needed at all levels, but much greater with the small municipality. A number of the large municipalities have technical staff that are capable of doing that, although we have worked even with the large municipalities in our State, and provided them technical assistance, as well as the Region 4 EPA has worked with them. And so, yes, technical assistance is needed in developing their guidelines, the ordinances or whatever they control the pretreatment with."

Robert O'Dette, Environmental Engineer, Nashville, TN, Statement at Washington, D.C. Public Hearing:

"Well, I think for most of the large municipalities, they are capable of doing this. I think when it gets to a smaller community, like metropolitan Nashville, certainly it is capable of handling its own system. Smaller systems, like Portland, Athens (Tennessee), they may be able to handle some of the problems, the monitoring and this type of thing, but I think the guidance, the help with ordinance evaluation, variance requests and evaluating all the data that they could be bombarded with, is going to have to go through the State, and with guidance coming to the States from the Federal government."

Peter A.A. Berle, Commissioner, New York State Dept. of Environmental Conservation, Albany, NY:

"Discussions with municipal representatives throughout the State indicate that many of the smaller local systems have neither the desire nor resources to cope with a pretreatment program to the extent envisioned in the proposed regulations. In these situations a local pretreatment program will not achieve its objective and will be wasteful in terms of financial and manpower resources. The use of State/EPA personnel conversant with the program will more effectively utilize limited technical resources in these situations. The incapability or lack of desire of small, local government units to implement a pretreatment program,

however, must be accepted as real and should not be used as a reason for denying certain incentives or variances proposed in the regulations. Aspects of the program dealing with local communities must be simplified, clearly presented, yet be flexible enough to allow local participation where desired. Small communities can least assume the impact of possible industry dislocation. Possible loss of variances, based on an administrative decision triggered by the inability to cope with a pretreatment program, places a double burden on small communities."

Glen H. Fuller, Washington State Dept. of Ecology, Water Quality Division, Olympia, WA:

"We believe the major hurdle to the pretreatment program will be to convince those medium-sized cities with significant industry to undertake the program. This problem should be kept uppermost in mind as deliberations continue. In Washington, we have two cities in the 100-200,000 range which we believe should have such a program, but the remaining cities are smaller and at most have only a handful of industrial dischargers. We believe that the majority of these smaller cities do not have the resources, nor capability, to do a proper job, and the present situation wherein our state agency issues permits to the indirect dischargers is the best solution.

"We would hope a proper mix of incentives will be available to insure that the medium-sized cities (100,000-200,000) do opt for the program, whereas, at the same time, the smaller cities are not penalized for not doing the program, a role they are not well equipped to do."

B. Comments Supporting Maximum State/Local Government Involvement and Enforcement.

1. State/local governments have the most flexibility and sensitivity in dealing with local problems, and are the most familiar with local water quality conditions.

Stephen M. Schwartz, Manager of Environmental Engineering for Keystone Consolidated Industries, Inc.:

"Unquestionably, the local agency knows of its own problems on a day to day basis regarding sewer system problems, treatment plant operational difficulties, quality of the receiving stream, weather consideration, etc...Being in relatively close physical proximity to the POTW, meetings and conferences can be scheduled with a minimum of inconvenience and loss of time. If industry, discharging to a POTW, were to be administered by Federal or even State agencies, this would significantly increase the existing work load of those agencies or require additional funding, or both. Local agencies are already equipped to deal with their contributing industries. If they are not so equipped, State agencies would still find

it much simpler to upgrade a local POTW's enforcement system, than to upgrade a myriad of industrial discharges."

Alvin G. Keene, Superintendent of The Scarborough Sanitary District, ME:

"...local enforcement of those (Federal) standards wherever a local enforcement program is approved, backed up by Federal or State enforcement when necessary, but with a provision allowing publicly-owned sewage treatment plants to develop and enforce locally-derived pretreatment limits in place of the Federal standards, in cases where the receiving waterway already meets in-stream water quality standards."

"They feel this will provide needed Federal involvement in standards development, but will preserve the local communities' role in administering rules and regulations as well as providing an opportunity for local standards when deemed advisable by special conditions or needs."

Richard Wooley of the Metal Finishing Association of Southern California, Statement at San Francisco Public Hearing:

"Local authorities should have the primary responsibility for ensuring compliance with local and federal standards, as provided in Options I through III. Local authorities are most knowledgeable concerning the problems in their areas and have the most immediate stake in the success of the pretreatment program. This is consistent with the policy of the Act to preserve the primary responsibilities of State and local authorities to regulate water pollution."

Robert Ruddock, Director of Metropolitan Affairs, Great Boston Chamber of Commerce, Statement at Boston Public Hearing:

"But, we believe that the local control option provides the greatest degree of flexibility, avoid unfair and inequitable treatment for overly broad regulations and enforcement actions."

Gordon Nelson, Massachusetts Public Interest Research Group, Statement at Boston Public Hearing:

"Since the aim of the pretreatment standards is to protect the integrity of our municipal treatment facilities, it is reasonable to assume that the municipalities themselves are more intrinsically concerned with the enforcement of these standards. It is the local municipality that has to deal with the detriment that water pollution causes to our local waterways. Let's give them the power to control it at its source."

2. State/local governments have established a more intimate working relationship with industry which allows the greatest intercommunication in solving problems.

Don E. Salzman, Office of the City Clerk, The City of Melrose, MN:

"With this option (Option II with part of Option III) you would be putting the enforcement on a local level. It is the local people who deal directly with each industry on a day-to-day basis. I feel that the industries being dealt with would feel that they have some say so in helping control their waste discharges."

"The industries in our particular municipality have been very cooperative. We have gone in explained what we would like to do and then worked together with them to achieve our goals. It has been very effective for us."

"The way things are now, most of the industries are dealt with on a Federal level. They receive a letter stating what should be done, but then they never see a Federal representative. Some of the time they really don't understand what is expected of them. If this situation would be dealt with on a local level they would have someone right there to help them and answer questions about the requirements."

Stephen M. Schwartz, Manager of Environmental Engineering for Keystone Consolidated Industries, Inc.:

"Unquestionably, the local agency knows of its own problems on a day-to-day basis regarding sewer system problems, treatment plant operational difficulties, quality of the receiving stream, weather consideration, etc...Being in a relatively close physical proximity to the POTW, meetings and conferences can be scheduled with a minimum of inconvenience and loss of time."

Rohn and Haas Tennessee Incorporated, Knoxville, TN:

"Our greatest concern is that many plants within each industry group may ultimately be required to pre-treat for the sake of meeting a nationally developed effluent standard rather than meet local conditions necessary to protect publicly owned treatment works. Rational standards which balance effluent limitation with requirements of the receiving facility must be established."

"We cannot stress too strongly that we feel useful limits can be determined most efficiently and effectively by administration at the local and state level. It is virtually impossible for EPA regional offices to be familiar with and properly evaluate prevailing conditions at thousands of locations across the country. Establishment of a working relationship between the people actually involved offers the best hope of accomplishing the desired goals in the shortest possible time. Local and

"The local ordinances developed in accordance with a Federally approved compliance program, would allot the necessary enforcement capabilities to concerned local officials. Thus, there need not be any loss in effectiveness from local enforcement, yet it holds promise of an increase in efficiency."

C.J. Buschkill, Manufacturing Engineer, George Koch and Sons, Inc., Evansville, IN:

"I would wholly support the major responsibility of achieving compliance by authority at the local level. Bureaucracy, when put to the test, can't respond to the flexibility required in this realm."

"A very small plater or other business requiring waste water treatment might be able to survive if it were allowed to pay a surcharge to the local treatment facility to correct its deficiencies. This procedure, placed within the judgment of a local governing body, could respond to individual probabilities. The State and certainly the Federal level could never be adaptable to the flexibility required for this possible approach."

Robert Canham, Executive Secretary, Water Pollution Control Federation, Statement at Washington, D.C. Public Hearing:

"A major limitation of all Federal programs in the water pollution control area centers around the remoteness of the control and the inherent reliance upon written directive from Washington."

"To a large degree, the avoidance of local control relates to concern for competence and trust-worthiness but, regardless to what extent this concern has been justified in the past, local support and initiative remain critical to effective water pollution control."

William H. Busch, Manager, Permit Section, Div. of Water Pollution Control, Illinois Environmental Protection Agency, Springfield, IL:

"Implementation of the pretreatment control program must be at the publicly owned treatment works operating agency level. It is unrealistic to expect the Federal or State NPDES Agencies to ever have adequate resources to directly regulate industrial dischargers into public sewer systems as well as manage a Direct Discharger NPDES Program. Federal and State NPDES Agencies are too far removed from local sewer system control problems to be able to regulate and work with each and every toxic and incompatible waste discharger into a public system."

State authorities are best able to provide this "talking" relationship, and Federal function should be limited to providing this "talking" relationship, and Federal function should be limited to providing backing as needed."

Marwan Sadat, Program Director, Office of Sludge Management and Industrial Pretreatment, New Jersey Department of Environmental Protection, NJ, Statement at Boston Public Hearing:

"Local governments and authorities are much more knowledgeable of the local conditions and of the industries which discharge into their systems. Sewerage treatment plant personnel have developed lines of communication with industrial dischargers and are aware of their peculiarities, characteristics and seasonal variation.

"We feel that any pretreatment strategy must include the local authority. Their exclusion would almost automatically insure the failure of an industrial pretreatment program."

Howard Yerges, Vice President-Engineering, Banquet Foods Corporation, St. Louis, MO:

"We believe that the standards, if there must be standards, should be established by the EPA and enforced by local authorities. The results would be more thorough research, more reasonable standards, and certainly more consistency in the program throughout the country. Local control over standards would subject industry to the whims and fantasies of changing administrations and the lack of consistency under which multi-plant industries could establish corporate-wide programs for treating wastes."

E.L. Powers, Mobay Chemical Corp., Pittsburgh, PA:

"It has been our general experience that local agencies working directly with small manufacturing or production facilities has resulted in relatively beneficial and mutual success."

James B. Bewley, Superintendent-Water Quality Control, South Bayside System Authority, San Carlos, CA:

"...any federal program compatible with the necessary and possibly ongoing local programs. Cordial dialogue between industry and local regulatory agencies is difficult to establish and must not be jeopardized by conflicting requirements or duplicated administrative loads. Local enforcement of federal and local requirements would lessen the likelihood of disrupting progress that is now being made."

Kenneth A. Fenner, Counsel, Masonite Corp., Chicago, IL:

"We recommend the Agency propose a program that is predicated on local development of requirements to meet local conditions as reflected in the POTW's NPDES permit as the logical and most equitable way to implement a pretreatment program. Such a program would allow industrial dischargers and municipal or regional authorities to initiate negotiation of necessary agreements now. These agreements must be made eventually; therefore, such a program should be preferable to one that holds this off until after extensive rulemaking is completed.

"Secondly, we feel that a program rigorously committed to local initiative will be more effective than one directed by agencies located away from affected areas. The FWPCA by virtue of its delegations to local state and regional authorities recognizes the folly of attempting to treat the entire nation as a homogeneous unit. The NPDES permit program and implementing regulations have practically demonstrated this by attempting for example, to impose standards totally unsuited to the various climates and geographic regions of the country..."

Herbert C. McKee, Ass't. Director for Pollution Control, Health Dept., Houston, TX, Statement at Chicago Public Hearing:

"The results of the Houston program suggest that local governments should have the dominant role, both in establishing pretreatment requirements and in implementing a control program. Perhaps some provincialism is evident in this statement, as well as some degree of pride in past accomplishments. Nevertheless, many options were considered before the Houston program was initiated, including the option of sitting back and waiting for state or federal action to solve the problem. However, it is difficult to imagine a federal agency with headquarters in Washington, D.C. trying to understand and control a back yard machine shop, a local research laboratory that is the only one of its kind in the world, or a small four-man shop that repairs automobile radiators. The state agency with headquarters in the state capitol is also far removed from these local operations. However, the city government contacts these people frequently to repair their stopped-up sewer, to stop them from burning trash in their back yard, to patch their streets, or to provide other services essential to any urban community. Extension of these activities to cover pretreatment and control of wastewater discharges into the City sewer is natural and logical."

3. The development of local enforcement and administrative staff through training programs would facilitate the decentralization of bureaucratic inefficiencies and reduce implementation complexities.

Richard A. O'Hare, Manager, Environmental Conservation, Shell Oil Company, Carson, CA:

"...we think the whole pretreatment program can be most effectively and efficiently carried out by maximizing local control and regulation."

"...with regard to local control, we discharge some five million gallons a day into the LA County Sanitation District system. And I think you will recognize that we, as dischargers or the regulated, know best the qualifications of the regulator.

We observed that they have an experienced competent technical administrative staff and are best equipped to handle the control of those people who discharge to their system. If the pretreatment program fails to fully utilize the talent that they have by not providing for maximum local control and regulation, it's certainly a waste of a very valuable and useful resource."

Robert H. Brindley, Division Engineer, the Metropolitan District, Hartford County, CN:

"Very, very briefly, the State of Connecticut has accepted under the existing water quality programs the complete responsibility for all of this review of - all of this installation, overviews as well as the policing program once the pretreatment works have been installed in industry. It has reduced considerably our efforts at the municipal level. And, this is really the way we feel it should be operated...The State is doing all this work with a single large organization at much less cost than to try to accomplish the same program at every local level."

H.A. Golle, Vice-President Operations, General Foods Corporation, White Plains, NY:

"As we interpret Option III, we believe it stresses a comprehensive local program and places the prime responsibility for pretreatment development, control and enforcement at the local level. We contend that this strategy would allow for protection of the publicly-owned treatment works facilities, the receiving waterways, and be the most cost effective alternative for the following reasons:

- It minimizes redundancies in waste water treatment
- It would tend to minimize over-regulation or pretreatment practices without due consideration of cost vs. benefit.

- It deals at the lowest level with those providing service. Hopefully, it minimizes the proliferation of paperwork.
- It provides extensive local flexibility in that it would more effectively deal with the variabilities of publicly-owned treatment works on a case by case basis.
- It provides a more flexible atmosphere for working out treatment problems before going into enforcement action, and brings control closer to the source.

Robert Niles, Director of Environmental Control UniRoyal, and Rubber Manufacturers Association, Statement at Washington, D.C. Public Hearing:

"Local enforcement also minimizes the burden of paperwork. Periodic reports would only be necessary from the industries significantly impacting the operations of the POTW's and causing them to be in non-compliance with their NPDES permits."

Walter Lyons, Director, Bureau of Water Quality, State of Pennsylvania, Statement at Washington, D.C. Public Hearing:

"Guidance to the municipalities, in the form of case history technology transfers, seminars, training is really very urgently needed. We need model ordinances. We need POTW capabilities, in regards to industrial waste removals; some papers, of course, have been published on this subject."

- It optimizes energy utilization.

"We believe that this strategy is most consistent with the intent of the Clean Water Act Amendments of 1972."

Glen Fitzgerald, President, Alco Cad-Nickel Plating Corporation, Los Angeles, CA, Statement at San Francisco Public Hearing:

"As an independent small business corporation in the metal finishing industry, I am very much concerned with the potential economic impact of the proposed general pretreatment standard. It seems in the United States we are constantly proposing less regulation and bureaucratic involvement with free enterprise, but at every opportunity the Federal government is enacting regulations to impose more layers of bureaucratic control."

"We do not need another layer of bureaucracy to create more confusion, duplication, extraneous paperwork, extra costs, excessive regulations and more government involvement."

E.F. Young, Jr., Director Environmental Affairs, American Iron and Steel Institute, Washington, D.C.:

"Any type of enforcement program to be truly effective must involve the municipal agency staff, because they live with the situation, the treatment facility and its operation, every day. The logical program is local control backed up by the State and Federal EPA. Such a system gives maximum coverage. To accomplish this control with either State or Federal EPA directly would require placing staff from the State or EPA in each community on a full time basis."

Frank Dryden, Head, Technical Services Department, Sanitation District of Los Angeles County, CA:

"...there is obviously a concern that the EPA would be considered remiss if it does not oversee every step that a local agency takes in establishing and carrying out a pretreatment program. The answer to this dilemma may lie in establishing a working relationship between EPA and local agencies similar to that involved in delegation of program responsibility to a state."

After a local agency has demonstrated that it has the legal and technical capability to establish and enforce a viable pretreatment program, the EPA should delegate or deputize that local agency to administer in its behalf a pretreatment program that accomplishes the objectives contained in PL 92-500."

Theodore Garrett, Counsel, National Association of Metal Finishers, Statement at Washington, D.C. Public Hearing:

"The alternative (to local programs) is to arbitrarily impose a burden on industry without knowing whether or not it is going to be necessary to achieve water quality standards, just to impose this huge cost, impose this huge administrative framework, to require treatment for its own sake, even where it is not necessary."

Glen J. Hopkins, Deputy City Manager, Knasas City, MO:

"Municipalities cannot escape compliance with established standards for their 'end of the pipe' discharges. We consider consider complex Federal pretreatment standards an unnecessary and costly duplication of governmental effort when a community has the confidence and necessary resources to run its own program. We would strongly urge a strong effort to minimize the Federal bureaucracy wherever possible."

Ralph D. Grotelueschen, Manager-Environmental Control, Deere & Co., Moline, IL, Statement at Chicago Public Hearing:

"We recommend the decentralization of authority to municipalities. This is really an organizational management approach. And decentralization as experienced in operating our own personal control system with the factories is the only one that allows use of human resources effectively, as well as capital resources.

"To make this effective, we believe EPA will have to provide leadership in training and education for the municipalities so they understand how to implement these programs as well as they are going to have to determine the total amount of pollution control equipment available in this country, or manufacturing equipment available in this country so that the proposed guidelines are within the constraints of capability to comply."

II. ADAPTABILITY OF THE PRETREATMENT PROGRAM.

While PL 92-500 does not specifically provide for variations from the promulgated pretreatment standards, it is consistent with the Act to include variance provisions to compensate for the extreme variability exhibited by POTW's in the removal of industrial pollutants. Variability between POTW's results from the vast number of indirect dischargers, the numerous combinations of municipal/ industrial waste treatment facilities, and the differing removal efficiencies experienced by any given type of POTW (or even those within given types).

The issue that variance provisions should be adaptable to a wide variety of unique local conditions (e.g., removal capabilities, types of POTWs, ambient water quality) is complicated by problems resulting from such a flexible approach (e.g., documentation and equity problems).

Comments supportive to including variances to adapt to local conditions and to the problems resulting from such an approach are documented on the following pages:

A. Comments Supporting Adaptability of the Pretreatment Program

1. The consideration of both design and incidental removal of pollutants by a municipal POTW will result in the least duplication of pretreatment efforts and/or pre-treatment facilities by both government and industry.

Alan C. Van DeBoe, Superintendant of Sanitation, Quincy, IL:

"Because Federal standards must be on a national level, certain assumptions must be made, such as removal percentages for a typical secondary treatment facility. The City of Quincy suggests that there are no typical secondary treatment plants, only many secondary treatment

systems, some with high removals of pollutants and some with low, but in the aggregate, by averaging, comprise a typical secondary treatment system. Each treatment system possesses an influent with a different ratio of domestic waste to industrial waste. Furthermore, even the industrial waste portion is different for each treatment facility because it's industrial community is composed of a great variety of industries each with its own particular type of waste. Since removal efficiencies do vary from plant to plant, the Federal standards would, undoubtedly, be based on the lower removals and therefore treatment facilities with higher removal efficiencies would be adversely affected. Since the Federal government cannot develop an individual standard for each facility, it would appear again that the municipalities would be in the best position to consider all local conditions when developing pretreatment standards. The U.S. EPA recognized that there are differences in removal efficiencies from one plant to another and have proposed a variance system. However, the variance procedure is so complex that so much time, effort, and money would be incurred in gaining approval of the variance that many municipalities would not pursue this approach."

Richard R. Man Sicler, Rohm and Haas Tennessee Inc., Knoxville, TN:

"Our greatest concern is that many plants within each industry group may ultimately be required to pretreat for the sake of meeting a nationally developed effluent standard rather than meet local conditions necessary to protect publicly-owned treatment works."

Albert C. Clark, Manufacturing Chemists Assoc., Washington, D.C.:

"Variance provisions are must items for any option adopted. Industrial contractual relationships, POTW characteristics, unique capabilities, and fundamental differences, as well as water quality needs, are important factors which ought to be considered individually. Congressional intent to encourage a vital industrial-POTW partnership contemplated that the system's individuality would have a prevalent role in the actual standards set in each case."

Joseph G. Zainea, City Manager, City of Grand Rapids, MI:

"However, uniform enforcement of standards nationwide within each category does not allow for variations between localities. Uniformly applied standards could require higher levels of pretreatment than is necessary to meet local environmental goals, resulting in unnecessary monetary expenditures or hesitation by local officials to allocate any additional resources."

Richard J. Wooley, President, Spence Electro Plating Co.,
Metal Finishing Association of S. Calif., Burbank, CA, State-
ment at San Francisco Public Hearing:

"The regulations should take into account relevant factors, such as the removal capabilities of well-designed POTW's achieving secondary treatment, the size of the POTW, and the volume of the industrial discharge. The latter factors are variable and thus appropriate subcategories will be necessary. Since particular POTW's will achieve higher levels of removal, a variance provision is essential to assure that pretreatment requirements more stringent than necessary are not imposed where the POTW effluent meets its NPDES permit limits."

Richard O'Hare, Manager, Environmental Conservation, Shell Oil Co., Carson, CA, Statement at San Francisco Public Hearing:

"First of all, the pretreatment program should take into account differences in removal efficiency of different POTW's. However, I notice frequently mentioned the requirement that the POTW be fundamentally different. I see that term used frequently, and it concerns me that that would -- that that is intended to require some fundamental -- some fundamental difference that we think is important is the difference in actual removal efficiency, be it caused by operating conditions, the volume loading in the plant, the nature of the waste received, or in many cases the design or whatever it might be."

"Another program -- Another problem that's associated with a variance or credits or however you want to handle allowances for differences in plant is that, as I think everybody's aware, many POTW's are not going to meet the statutory time limits or time requirements on achieving the secondary treatment requirements. We believe that the pretreatment standards should be based upon an optimistic evaluation of what the POTW will ultimately achieve by the time it does come into compliance with the statutory requirements."

"And it's possible to establish those. The LA County Sanitation District has provided us with estimates based on pilot plant studies of what those removal efficiencies will be. So it can be done. To do otherwise would result in industry and ourselves installing facilities which, in a few years or so, would not be required. I think this is obviously an example of poor cost effectiveness."

Frank Dryden, Head, Technical Services Dept., Sanitation District of Los Angeles, Co., CA, Statement at San Francisco Public Hearing:

"The proper approach may be different for different municipal situations. If national standards are adopted for these materials, then some type of local variation should be allowed for to account for these differences."

S. Norman Keston, ASARCO, Inc., NY, NY:

"Each POTW is different in many respects, including operating characteristics, from each other plant and no two plants have the same mix of wastes discharged to them, with the result that the ease or difficulty of plant operation and the characteristics of plant wastes vary widely. Consequently, it is essential that each POTW operator have the maximum flexibility to determine the quantity and characteristics of the wastes that are compatible with that plant."

Gordon Nelson, Massachusetts Public Interest Research Group, Statement at Boston Public Hearing:

"However 'incidental removal' in biological treatment systems must also be taken into consideration. Redundancies in treatment must be avoided to make the pretreatment scheme as cost-effective as possible."

Marsha Gordon, Southeastern Regional Planning Economic Development District, Marion, MA, Statement at Boston Public Hearing:

"We would certainly hope that you would add variances that would fit. We do not believe that New England is uniform. We do not believe that Massachusetts is uniform. We believe that water standards should play a role just as all the industrial inputs are not uniform, all material costs are different in New England as they are in other areas. So are energy costs. So, we don't believe that growth is uniform. We would like the variances."

John Saucier, Director, Tennessee, Div. of Water Quality Control, Nashville, TN, Statement at Washington, D.C. Public Hearing:

"Additionally, the unit operations of the POTW must be considered. The development of Federal pretreatment standards for industrial subcategories does not take either one of these aspects into proper consideration."

"Furthermore, regardless of what national technology based standards are developed and/or adopted, the unit operations and effluent standards at the POTW will have to be considered if the intent of the Act is to be upheld."

B. Comments Noting Problems with an "Adaptable Program" Approach

1. Excessive documentation may be required of municipalities in justifying variances to EPA and in complying with monitoring-reporting procedures. As yet, the degree of comprehensiveness of this requisite documentation has not been addressed by EPA.

Frank Dryden, Head, Technical Services Department, Sanitation District of Los Angeles Co., Whittier, CA, Statement at San Francisco Public Hearing:

"Any option which incorporates complicated review and approval procedures to obtain variances for specific constituents is doomed, in my opinion, to founder in an administrative quagmire."

Art Vondrick, Water and Sewers Dept., Phoenix, AZ:

"Each and every needed modification of the Federal requirements would have to be justified to EPA. From past experience, this justification would entail the submission of voluminous and comprehensive reports, and long delays in obtaining approvals."

Carmen F. Guarino, Commissioner, Water Dept., Philadelphia, PA:

"Too much of the burden of proof for the water quality aspects is solely on the municipality. There would be too much pressure for the EPA to simply state that the municipality did not present sufficient proof and, therefore, no variance would be granted. Also, there would be too much potential variation between Regions regarding what is sufficient evidence for a variance. Likewise, there is too much potential for suits and hearings regarding the granting or the not granting of variances."

Timothy L. Morris, Texas Water Quality Board, Austin, TX:

"Program requirements so onerous as to make it very difficult for the local government to gain program approval will defeat the purpose of the entire program. We feel quite strongly that the administrative requirements of the regulations must be minimized. In particular, provisions that would require measurable levels of local resources to report local program activity or to justify local program features to Federal reviewers ought to be

omitted. Accordingly, we recommend that to justify local program features to Federal reviewers ought to be omitted. Accordingly, we recommend that the following paragraphs in the proposed rules ought to be omitted: 403.10(B), 403.10(C), 403.11(B) through 403.11(N) with appropriate modifications to 403.11(O), and 403.12."

Seymour Lubetkin, Chief Engineer, Passaic Valley Sewerage Commissioners, Newark, NJ, Statement at Washington, D.C. Public Hearing:

"The big problem we saw in this option (III) was the records, red tape and reports."

John A. Tiepel, Chairman, Environmental Services Task Force, Public Technology Inc., Washington, D.C.:

"The most common concern expressed by the U.S. cities is that the program may become unduly burdensome and costly due to extensive analytical and reporting requirements. Many cities already find themselves heavily burdened by paperwork and are reluctant to assume more responsibilities for federally enacted laws; this reasoning was cited by the communities which opted for Option IV."

Gene B. Welsh, Chief-Water Protection Branch, State of Georgia Dept. of Natural Resources, Atlanta, GA:

"In general, the procedures required to obtain variances are far too complicated and time consuming and should be greatly simplified. In addition, the requirements proposed for municipalities to receive authority to administer the pretreatment program are so complex and tied up with typical EPA red tape that we anticipate no more than ten of the 450 municipal authorities operating wastewater treatment."

Bill B. Dendy, Executive Officer, State of California, Water Resources Control Board, Sacramento, CA:

"The volume of paper that would be generated through implementation of the proposed regulations is staggering. We suggest an annual summary of all indirect dischargers to be submitted by the POTW operator."

2. Lack of "Adaptable Variance" provisions or excess documentation to qualify for variances would discourage municipalities from implementing local compliance programs.

Richard J. Wooley, President, Spencer Electro Plating Co., Metal Finishing Assoc. of S. Calif., Burbank, CA, Statement at San Francisco Public Hearing:

"Now, the problem that I have with variances is I read and reread that Federal Register, and I just wonder with the what seems to me to be a very complicated variance procedure, how many variances would be granted, if it might not be so time consuming and require so much money to go through the variance procedure that very few, in fact, would be applied for, and maybe even fewer granted, and that this might seriously affect areas where, in fact, a variance was warranted and justified under water quality standards."

Carmen F. Guarino, Water Commissioner, Philadelphia, PA:

"Also, there is no real incentive for local agencies, except pride and professionalism, to take responsibility for local programs. 75 percent of planning and start-up costs are not really an incentive since 25 percent of these expenses plus the on-going expenses would have to be borne by the local agencies. In addition, applying and accounting for the 75 percent grant may cost almost as much in paper work expenses. In fact, option I is really a masochist's dream - work like 'heck' to get approval for a program to enforce Federal Regulations and then, based upon experience in other matters, receive 308 letters at any time and have reports 'rubber-stamped' as being incomplete."

J.F. Cormack, Supervisor - Water Programs, Crown Zellerbach Environmental Services, Camas, WA:

"It is essential to have the regulation administered on a local basis. The proposed regulations are complex and difficult to understand and I feel that many local authorities will not be interested in the job if the rules remain in their present form. The procedures for variances and for developing local standards must be simplified and the EPA must be very sure to provide adequate assistance and guidelines for the necessary local standard setting. The focus on close regulation of only those industries and compounds of real importance is encouraging and should help in simplifying the administration of the regulation."

Robert Canham, Executive Secretary, Water Pollution Control Federation, Statement at Washington, D.C. Public Hearing:

"However, owing to manpower and priority constraints, it is possible that the POTW may not submit such a detailed variance request, and I would submit that because of the program -- it is complicated, it is going to be difficult, that you will find that cities, maybe below 100,000 or 50,000 in population are not going to be very interested and active

in picking up this program. And as a result of that, the POTW's that are located in those municipalities could be put at a disadvantage, through no fault of their own."

Gene B. Welsh, Chief, Water Protection Branch, Georgia State Dept. of Natural Resources, Atlanta, GA:

"We certainly prefer that the major responsibility for industrial pretreatment lie with local governments; however, your proposed regulations appear to serve as a deterrent. Practically speaking, the State of Georgia and probably most other states in the country would be faced with administering the vast majority of the compliance programs under any of the four strategy alternatives proposed, since relatively few municipalities will have the capability and the desire to administer the program themselves."

3. An "adaptable program" approach could cause equity problems by allowing certain municipalities to offer easier standards than others.

Albert C. Clark, Manufacturing Chemists Assoc., Washington, DC:

"In reviewing submittals of compliance programs by POTW, care should be taken to reflect on overconservative limitations, e.g., heavy-handed or one sided modes of application of local authority. Some POTW may view the burden of this program as resolvable only by "getting rid" of industrial contributors. That would serve neither Congress' intention under section 208 of the Federal Water Pollution Control Act nor the Agency's purposes; ultimately it would work against inequities in compliance program design."

David DiGuseppi, Assoc. Regional Planner, Central Mass. Regional Planning Commission, Worcester, MA:

"Regarding the issue of local credit for incidental removal of pollutants in secondary biological treatment facilities and water based standards; this agency expresses reservation. Non-uniform pretreatment standards will tend to concentrate industries in those areas where relaxed standards are available, leading to a further degradation of water quality. Varying pretreatment standards within an industry represents an inequitable situation, where those industries will be at a financial disadvantage if they discharge to a POTW with no local credit, or where their receiving water's quality results in stringent water quality based standards. Further, varying standards within an industry will pose a disadvantage to those communities where no relaxed standards can be granted."

Such communities will suffer by being somewhat less attractive to wet industries, which those municipalities may want to attract."

Albert J. Slap, National Water Committee, Sierra Club, Statement at Washington, D.C. Public Hearing:

"Water quality-based pretreatment standards is a good idea, if they are more stringent than the ever, industries will relocate on rivers and will relocate on rivers and streams where water quality standards are weak, and in towns where public officials are compliant."

Larry E. Crane, Executive Director, Iowa Dept. of Environmental Quality, Des Moines, IA:

"Few Iowa municipalities have the fiscal resources to develop local standards. Development of standards on a local basis would not encourage development of uniform state or national standards. Municipalities would be put in a position of competing with each other to attract industry by lowering local standards. Much the same problem would also occur in local enforcement programs. Industry would shun those cities with tough enforcement and standards in favor of cities with lax enforcement or standards..."

Richard Woods, Counsel, Ocean County Sewerage Authority, Toms River, N.J.:

"While the Authority feels there will be no significant difference in either Options I or II, we favor the implementation of Option I because we believe it would be easier to develop technology-based standards for the various pollutants in lieu of water quality standards for the various pollutants in lieu of water quality criteria-based standards; and Option II could conceivably provide an economic advantage for locating industries in certain parts of the country or states which are industrialized and thus where the water quality criteria could be less stringent than in other parts of the country or states."

III. BASIS FOR PRETREATMENT STANDARDS

The issue of pretreatment standards focuses on the flexibility of such standards to adjust to local conditions. However, the statutory mandates of PL 92-500 did not specify the mechanism to accomplish this task and as a result different types of standards have been proposed:

- 1) National technology-based standards,
- 2) Standards based on water quality considerations.

National technology-based standards would be determined by the degree of effluent reduction attainable through the application of the best effluent control technologies. Water quality based standards entail establishing specific numeric limits for pollutants that would be incorporated into a POTW's effluent permit.

In addition, PL 92-500 did not specify the units in which the national standards would be expressed. The two proposed approaches to this problem are:

- 1) concentration-based limits,
- 2) mass-based limits.

Both approaches have distinct advantages and disadvantages. Concentration-based limits are easiest to enforce, but dilution could be a problem with some pollutants or where water supplies are scarce, e.g. in the drought situation presently being experienced in the western half of the U.S. Mass-based limits, though more difficult to enforce, encourage water conservation by industries.

Both of these major issues regarding pretreatment standards were addressed at the four public hearings and in the written comment received by EPA. Documented comments addressing these key issues are presented in this section.

A. Comments Supporting Water Quality-based Standards.

1. Water quality-based standards provide the most flexibility to adapt to local conditions, and are the most cost-effective approach to pretreatment.

John A. Lambie, Chief Engineer-General Manager, Ventura Regional County Sanitation District, CA:

"Pretreatment standards should be nationally established based on water quality concentration of substances which are environmentally and "public health" wise safe."

Timothy L. Morris, Texas Water Quality Board, Austin, TX:

"...Water quality-based standards, and by that I mean standards that are derived from water quality considerations and not just standards derived from existing water quality standards, provide an opportunity to greatly reduce the number of monitoring points, but at the same time to effectively regulate the pollutant emission to the environment."

Charles A. Geisler, Sanitation Engineer, Department of Public Works, Omaha, NB:

"The arbitrary adoption of pretreatment effluent standards does not take into consideration local conditions or water quality standards of the area."

Alan C. Van De Boe, Superintendent of Sanitation, Quincy, IL:

"The City of Quincy feels that the Federal and/or State Environmental Protection Agencies should be concerned only with the quality of the discharge from municipal wastewater treatment facilities into the receiving stream and should not become involved in the individual discharges that make up the influent to the treatment plant. After all, it is the municipal discharge and not the individual discharges that directly effect the environment of the receiving stream..."

"Any pretreatment standard based on strict numeric limits cannot address itself to local conditions and the type and quantity of flow associated with a certain concentration of pollutants. As an example, if numeric limits are established, a particular industrial discharge may be in violation even if it had a very low flow rate and a concentration above the numeric limits."

Such industry would then be required to construct and install an expensive pretreatment system to remove a very small quantity of pollutant simply to comply with a numeric limit even though the concentration prior to pretreatment is not detrimental to the municipal treatment facilities. An expensive pretreatment system would pose a hardship on most industrial dischargers. Therefore, any standards developed should not be based on numeric limits, but rather on water quality."

Andrew Aiken, Environmental Engineer, Narragansett Electric Company, Providence, RI, Statement at Boston Public Hearing:

"Strict national standards would be inflexible, would fail to take into consideration the needs and capabilities of the local POTW and, in many cases, would result in treatment for treatment's sake."

Marwan Sadat, Program Director, Office of Sludge Management and Industrial Pretreatment, New Jersey Department of Environmental Protection, Trenton, NJ, Statement at Boston Public Hearing:

"These options (I and III) would rely on the local authorities to determine some of the industrial pretreatment standards. This presupposes that existing water quality standards include limitation on industrial pollutants, heavy metals and toxics. This, in fact, is not the case. Many water quality standards today have no limitations on these materials. Furthermore, the development of water quality standards to include such substances would require the solution of technical problems which are, as yet, unresolved.

"In some cases, for example, the analytical techniques necessary to determine the concentration levels have not been fully evaluated. We see considerable difficulty in the feasibility of allowing local authorities to determine their own standards."

Charles J. Henry, Director, Water Pollution Control, Metropolitan Seattle, WA:

"Pretreatment standards should be established on the basis of cost effectiveness. Although such analyses are recognized in the regulations, there has been an historic tendency to establish treatment requirements on the technical basis of capability rather than needs. Full consideration of energy and other resource consumption, water quality needs and economic impacts should be strongly stressed to prevent unnecessarily restrictive standards and treatment requirements."

John Saucier, Director, Tennessee, Div. of Water Quality Control, Nashville, TN, Statement at Washington, D.C. Public Hearing:

"The State of Tennessee has always considered water quality of the receiving stream when evaluating and/or establishing discharge standards, and strongly believes that the same basic philosophy should be followed through in establishing pretreatment standards.

"It is important to note that the Tennessee Division of Water Quality Control believes that water quality standards and/or criteria are the foundation of water pollution control. Without these standards and criteria, there is nothing upon which to aggressively control water pollution."

L.A. Grosmaire, Chairman, Tennessee Manufacturers Assoc., Nashville, TN:

"Technology based standards are least to be preferred over water quality based standards. A technology based standard equally assigned for compliance to the industry categories completely ignores the needs of the receiving stream, the POTW and the effluent being subjected to treatment. These standards based upon best available technology (BAT) require in-depth technical studies with supporting data, something which has not been without problems in the past. Such technology would be subject to very rapid change (Section 307 (b) 2) as new developments were brought into the program providing no stability for practical treatment facilities."

Ward H. Nay, Vice President for Engineering, Upjohn Co., Kalamazoo, MI:

"Certainly the goal of the many years of the nation's water pollution control efforts is to maintain the applicable water quality standards in each locality. Thus, we believe that pretreatment requirements should be set only as necessary to maintain water quality standards. For this reason, we encourage that local agencies be given the option of deriving and enforcing pretreatment standards in order to meet the limitations of their discharge permits. EPA, or an approved state, should administer pretreatment standards only when the local agency chooses not to do so or when the discharge permit is violated. Pollutants not inhibiting the operation of the treatment plant, or otherwise causing violation of water quality standards, should not be regulated by pretreatment standards at all."

B. Comments Supporting Technology-based Standards.

1. Technology-based standards provide an overall framework and guidance to municipalities that can best achieve the goals of PL 92-500.

Gordon Nelson, Massachusetts Public Interest Research Group,
Statement at Boston Public Hearing:

"Water quality based standards are not coherent with the technology based standards of the direct dischargers. They do not encourage uniform effluent requirements for treatment works discharging into different bodies of water. And, most importantly, water quality based standards do not make for maximum progress toward the goal of eliminating the discharge of pollutants into navigable waters, the basic goal of the Act."

Wayne A. Schmidt, Staff Ecologist, Michigan United Conservation Clubs, Lansing, MI:

"MUCC supports strong waste water pretreatment standards. We do not believe that the public should subsidize removal of industrial toxic pollutants, such as heavy metals and halogenated hydrocarbons, at publicly-owned treatment works (POTW). Most municipal treatment plants in Michigan are not designed to remove such toxicants and the introduction of such chemicals creates serious problems affecting public resources."

Timothy L. Morris, Texas Water Quality Board, Austin, TX:

"It would be our recommendation that technology-based standards be developed and applied for the extremely hazardous pollutants about which there is limited technology. These pollutants would include pesticides, herbicides, and the various carcinogenic pollutants."

Richard W. Klippel, Chairman, Industrial Wastes Committee,
New York Water Pollution Control Assoc.:

"Since many of the incompatible pollutants are conservative in nature and not subject to degradation (sic) in the receiving waters, the use of a technology standard has some merit, from the standpoint of protecting the downstream user from cumulative concentrations of incompatible and/or cumulative pollutants."

"The use of a water quality variance would have meaning in such a case only if the water quality of the downstream waters were fully evaluated to assess the total effect of the accumulation of pollutant concentrations from all direct discharges as well as the non-point discharges."

"Many of the conservative pollutants such as heavy metals concentrate in the bottom sediments of the receiving waters and are not visible by direct water quality measurements. However, they still affect the aquatic environment. Other conservative pollutants such as Mirex, PCB's, Kepone and Mercury are cumulative in nature and are concentrated in the food chain. Thus the effect of these pollutants would not necessarily be reflected in measurement of receiving water quality.

"In light of these facts, it is doubtful if water quality can be successfully utilized as a basis to factually determine the level of treatment required in the immediate future.

"It is therefore recommended that technology based standards be utilized for conservative pollutants from indirect discharges, and that technology variances be granted for municipal systems which can document removals higher than those assumed in the regulations.

"However, since it is recognized that such complexities preclude the use of a water quality basis for establishing pretreatment requirements, any such regulation should at the same time, preclude a state or local authority from justifying levels of treatment higher than the technology level on the basis of water quality for a given period of time, i.e., 5 - 10 years, except in extreme cases where the state or local government can offer overwhelming justification.

"In other words, each affected industry will design treatment facilities to meet the known technology standard. Each industry will have a stationary target to reach and some assurance that the target level will remain stationary for a fixed period of time.

"With a known treatment requirement, accompanied by the assurance that the sludges and concentrates can be efficiently and economically disposed of, we feel that industry would be in a position to implement the requirement pretreatment facilities within a rather short time span. To put it in other words: 'with the uncertainties removed, progress can be accelerated.'"

A.B. Early, Environmental Action, Washington, D.C.:

"It is well known that one of the major departures of the 1972 amendments to the FWPCA from the previous law was to establish technology based standards instead of water quality based standards, except where the latter were found to be more stringent. The Congress found that the data needed to establish water quality standards and to establish the relationship

between such standards and individual discharges was too complex to provide a predictable means of water pollution control. It would be wholly inconsistent for the Congress to have established a technology based system of control for direct dischargers under section 301 and 304, and authorize a water quality based system of control for indirect dischargers under Section 307(b)."

Peter A.A. Berle, Commissioner, New York State Dept. of Environmental Conservation, Albany, NY:

"The State of New York favors a State/EPA technology based program with strong positive (non-punitive) incentives and permissive mechanisms allowing capable local governmental units to assume administration of a pretreatment program.

"The State of New York concurs with the proposed methodology for the development of national standards. The national standards must maintain environmental equity through application of appropriate pretreatment technology (APT). APT should maintain a minimum overall (industry & POTW) treatment removal equivalent to the BPCTCA limitations of an individual industry discharge, and in the case of toxic substances, approaches or is equivalent to BATEA. During the development of APT, consideration should be given for regional and size categorization. Significant impacts due to the implementation of the standards may be masked by technical and economic assessments averaged on a national scale."

Louis J. Breimhurst, Director-Div. of Water Quality, Minnesota Pollution Control Agency, Roseville, MN:

"Pretreatment standards based on water quality may not sufficiently take into consideration inhibitory/interference effects of a pollutant on the operation of a POTW. The conditions of granting a water quality variance did not address this major concern.

"Water quality standards are difficult to develop and more difficult to enforce."

Glen H. Fuller, Washington State Dept. of Ecology, Water Quality Div., Olympia, WA:

"The most important thrust of option two is that it provides for variances to allow cities to enforce limits on indirect dischargers based on the sewage treatment plant's ability to meet the receiving water quality standards rather than technology based effluent standards. We recommend against this approach. If it were to be used, we foresee long delays, as studies are undertaken to ascertain whether water quality standards are indeed violated for the many toxic pollutants. The extremely low concentrations in question could very likely result in uncertain conclusions."

J. Taylor Banks, et.al., Natural Resources Defense Council, Inc., Washington, D.C.:

"The Settlement Agreement specifically provides that the pretreatment standards shall be technology based... FWPCA does not authorize municipalities to grant water quality based variances from national pretreatment standards as proposed...Sections 307(b) and (c) require that indirect dischargers meet uniform standards designed to prevent the discharge into POTWs of incompatible pollutants. In compatibility must be determined with reference to design assumptions regarding POTW removal capability and interference or upset considerations, and cannot be dependent upon receiving water quality in individual stream segments...

"Congress chose to require the development and implementation of effluent limitations and standards (including national pretreatment standards) independent of the water quality based restrictions contained in Section 303 of the FWPCA precisely because it had been demonstrated during years of experience prior to 1972 that dependence upon a water quality approach would not achieve the needed water cleanup. The immense practical problems associated with relating effluent levels to receiving water quality dictated that a technology-forcing approach be taken. Long periods of costly and detailed information gathering and analysis, including development and implementation of water body modelling data, are necessary for effective application of a water quality program."

2. Uniform Technology-based standards would provide equity between municipalities.

Joint Municipal Authority of Wyomissing Valley, West Reading, PA:

"Uniform standards equally applied are imperative. Otherwise, industries will be subjected to stringent regulations in one vicinity, while their competition may be generating large profits due to their being located in a vicinity where enforcement is lax. If enforcement is not uniform, industries could be driven out of business or forced to immigrate to areas of lax enforcement."

Carmen F. Guarino, Commissioner, Water Department, Philadelphia, PA:

"...Strict standards regardless of sludge disposal and effluent discharge needs...provide a degree of uniformity regarding competitive economics within industrial grouping."

Eugene Booth, President, John Inglis Frozen Food, Modesto, CA:

"It seems to me that it is most important in the food business that we have uniform standards throughout the country on waste pretreatment since the industry is extremely competitive and it would be unfair for any one segment to gain advantage over another segment by this means."

C. Comments Supporting the use of mass-based limits for the expression of pretreatment standards.

Albert C. Clark, Manufacturing Chemists Association, Washington, D.C.:

"Influent loadings be based on mass flow, not concentration; natural dilution from infiltration, surface washings, etc., should be recognized as mitigating against shocks possible from 'slug' flows."

Charles J. Henry, Director, Water Pollution Control, Metropolitan Seattle, WA:

"Primarily, emphasis on use of a concentration standard with a secondary emphasis on mass limits is not the most ideal approach in control of hazardous materials discharge. While the single numeric standard is easier to enforce, it does not recognize that, in many instances, the water quality or sludge quality may be better, more cost effectively protected with a mass limitation supported by a more liberal concentration standard."

Marwan Sadat, Program Director, Office of Sludge Management and Industrial Pretreatment, New Jersey Department of Environmental Protection, Trenton, NJ, statement at Boston Public Hearing:

"We would further suggest that Option I as modified should impose not only numericals of concentration limitation but should also provide equivalent mass units which would be determined by the local authorities during the development of industrial pretreatment programs and would be subject to approval by EPA and State regulatory agencies. This is necessary to control unregulated expansion of pretreatment facilities in those cases where the surface water quality is critical."

James McQuean, Regional Manager, National Council of the Paper Industry for Air and Stream Improvement, Medford, MA, statement at Boston Public Hearing:

"I'd like to make this one single comment that industry is used to dealing in mass units. And, municipal treatment systems are used to dealing in concentration, of materials and their influents or effluents."

"In general, when, at some point, when limits are set for one reason or another whether it be pretreatment of final effluent, they sit down and decide how much flow each has, all right, and what concentration might result to make it easy for the analysts to determine how many

milligrams per liter or whatever it is in the final effluent and he can make his test and everything is satisfactory. And, everything is fine for a very short period of time. Because, what happens after that concentration is agreed upon, something changes, a year or two down the road. The flow changes in the plant. The amount of materials coming from one side of town increases. The amount of materials coming from the other side of town stays the same. And, we're left with the same concentration type limits if that's all there is in the standards. So, I would implore the agency to consider both mass and concentration. If there are certain things that make it easy for the analysts, fine, but I would like to have recourse on those to go back to the mass basis."

John Saucier, Director, Tennessee, Div. of Water Quality Control, Nashville, TN, Statement at Washington, D.C. Public Hearing:

"The mass basis on the other hand is certainly compatible with the philosophy of water conservation. If the development documents concept is continued then the question boils down to one of concentration versus mass limits."

Richard O'Hare, Manager, Environmental Conservation, Shell Oil Company, Carson, CA, statement at San Francisco Public Hearing:

"I think fundamentally we believe that mass limitations are the more desirable and more fundamentally correct, provided they take into account the variables involved in the quantities generated in the process that generates pollutants, and also they take into account the factors involved in the treatment involved."

"We certainly recognize, however, that there are some enforcement problems and control problems involved with the mass emission concept, and we would suggest that the local agency be permitted to use a concentration limitation which is ultimately derived from some basic mass limitation and that that be adaptable, then, to changes, should there be methods of saving water that might result in concentration increases."

John D. Thomas, Chief of Industrial Wastes, Orange County Sanitation District, Fountain Valley, CA, Statement at San Francisco Public Hearing:

"I have a few other comments. The districts have been into a source control program since July of 1976. In that program, we are using mass emission rates. My understanding, it's probably one of the few agencies in the country that are doing that. At this point in time, I'm very pleased with the results we are seeing on that, especially right now with the drought the way it is.

"For instance, we have a couple of companies that had had -- Well, we have had one company that discharged about 30,000 gallons a day prior to our program. They are down to 3,000 gallons a day. Granted, their concentrations are roughly tenfold what they were prior to the program, but they are meeting our mass emission rates for that particular facility."

Glen Fitzgerald, President, Alco Cad-Nickel Plating Corporation, Los Angeles, CA, statement at San Francisco Public Hearing:

"I think it's also true, that eventually this concentration basis will have to be interpolated in a mass emission factor because as we go into installing treatment facilities, water reduction is a primary requisite.

"And, of course, with the concentration, the minute we start to reduce our water, our concentration levels go up...from a strictly enforcement standpoint...concentration basis...has to be the tool or the measuring device that they (POTW's) go by. But it will have to be interpreted or derived from a mass emission standard."

Gilbert W. Bassett, Exec. Director, Environmental Conservation Board of the Graphic Communications Industries, Inc., Pittsburgh, PA:

"We further suggest that, whatever standards are developed of discharges into municipal systems, they should be stated in terms of quantities, rather than concentrations, in order to encourage conservation of water and to reduce the flow to the publicly-owned treatment works, thereby minimizing the need for costly expansion of the treatment plant. Concentration limits tend to be unduly restrictive insofar as they do not recognize fully the large amount of dilution which occurs within the municipal sewer system nor the ability of the municipal system to assimilate without difficulty small volume discharges of relatively highly concentrated pollutants."

T.C. Payne, Vice President-Environmental Quality, International Paper Co., Mobile, AL:

"We understand that the Agency intends to express pretreatment limits primarily in terms of concentration, although mass limits also may be provided where possible. We recognize that concentration limits are preferred because they facilitate compliance monitoring and enforcement. In our view, however, both concentration and mass limits should be provided in every case as alternative limitations. We believe the industrial facility should be allowed an opportunity to choose between compliance with concentration or mass limits, as long as the POTW and the facility agree.

"To fail to provide for mass limits discourages efforts to conserve water use. Water conservation programs are encouraged by the use of mass limitations (or reference to base water consumption to pro-rate the allowed concentration upward as water conservation programs reduce volume)."

H. Neal Troy, Manager-Environmental Control, Owens-Illinois, Toledo, OH:

"Pretreatment limits expressed solely in concentration limits, although facilitating compliance monitoring and enforcement do not encourage water conservation, which should be an important consideration to any water program. Concentration limits, along with mass limits or some other mechanism to prorate allowed concentrations upwards as water usage decreases, should be incorporated into the standards to encourage water conservation programs. Such programs not only save water but extend the POTW's capacities, and useful life, thereby, ultimately saving public funds."

Ralph D. Grotelueschen, Manager-Environmental Control, Deere Co., Moline, IL:

"Establish mass discharge requirements as the basic unit of control whenever possible rather than concentration units. Three advantages that will accrue from this concept are:

- a. Less water will be used by industry thereby conserving water and raw materials.
- b. We usually find this to be in the interest of energy conservation.
- c. This definitely will encourage the development of inherently less polluting manufacturing processes."

Glover, R.C., Manager-Waste Water and Solid Waste, Proctor & Gamble Co., Cincinnati, OH:

"In general, for simplicity in enforcement, there has been a strong tendency to write effluent limits in terms of concentration rather than mass. This is unfortunate because it is the total amount of pollutants, not their concentration in a stream of otherwise pure water, which is important. Concentration limits encourage wasteful use of water and discourage proactive programs to reduce water uses. Many POTW's which are otherwise adequate, are hydraulically overloaded. The flow reductions which are discouraged by concentration limits could save the taxpayers of this country a great deal of money. Even more important is the fact that water supplies rapidly are becoming the critical determinant of the economic strength and growth potential for major geographic areas, such as the West Coast. It is critical that the agency not foster regulations which discourage the conservation of our critical water resources."

Thomas J. Dufficy, National Assoc. of Photographic Manufacturer's, Inc., Harrison, NY:

"NAPM realizes that limits based on concentration are easy to monitor. However, as more and more industries adopt water conservation measures, numeric concentration limits will progressively become more difficult to meet. Average daily effluent concentrations will increase although the pollutant loading (lb/day) remains constant. One easy way to calculate such a daily loading (lb/day) is to multiply the concentration of a composite sample (mg/l) by the daily flow (gal/day) and a conversion factor."

Allen R. Frisckorn, Jr., Counsel, G & E Service Corp., Washington, DC:

"A number of areas of the United States are currently experiencing droughts and other water shortages. In this regard EPA should note that plants which must conserve water might encounter problems in meeting concentration derived discharge limits. EPA should take this fact into account to ensure that such plants are not unfairly penalized for circumstances beyond their control."

K.S. Watson, Director of Environmental Control, Kraft, Inc., Glenview, IL:

"We agree that EPA should issue detailed guidance (not specifications) for the use of the states and local communities in implementing their programs. Such guidance should

address both water quality based and technology based standards. We agree that mass limits and concentrations should both be specified but mass limits should have the higher priority. This is consistent with EPA's work to date on guidelines for stream discharge.

"Today, with the need for sound water usage assuming a position of greater importance, the adopting of mass limits supports this thesis. Concentration limits, on the other hand, do not thrust toward the need to soundly manage the use of water.

"The use of concentration limits only for each type of production operation will cause difficult and costly sampling and analyses problems for complex multiproduct plants. On the other hand, mass limits would require the use of only a single sampling station on the combined discharge of the total production facility."

W.J. Coppoc, Vice President-Environmental Protection, Texaco Inc., Beacon, NY:

"Technology standards must be developed on a mass discharge basis to provide equity with an industry to account for water reuse and effluent reduction practices. Concentration limits (derived from mass standards and actual flow) should contain provisions to allow adjustment for future effluent flow reduction. Artificial dilution to meet concentration limits is well recognized to be prohibited."

J. Taylor Banks, et.al., Natural Resources Defense Council, Inc., Washington, DC:

"Finally, EPA recognizes that use of "concentration limitations" could cause "dilution" problems. 42 Fed. Reg. 6481. Unfortunately, recognition is all that EPA's proposed options will do about this problem. EPA offers two reasons in support of its reliance on concentration limits. The first is ease of enforcement. It makes no sense to adopt weak standards than can be easily enforced when the result will be substantially diminished water quality. Moreover, because the water quality benefits of the pretreatment program would be reduced by use of effluent limits expressed as concentrations of pollutants, EPA has established a basis for reducing its enforcement effort, thereby subverting the explicit reason that EPA offered in support of relying on concentration limits. The second reason EPA offers ...is the 'agency's desire to implement the pretreatment program as quickly as possible.' Again, it makes no sense to develop a pretreatment program quickly if program quality must be sacrificed in the process....

"It is critical that total mass limitation be placed on incompatible pollutants. Such pollutants are not only toxic to aquatic life in significant concentrations, but often are bioaccumulative and persistent. Thus, while discharges of small concentrations may avoid acute toxicity problems, the total mass of pollutants may build up in stream sediments over time and lead to severe health and other environmental problems. We recommend that mass limits be established, and that local authorities be required to enforce such standards."

D. Comments Supporting the use of concentration-based limits for the expression of pretreatment standards.

Jack Barron, Department of Public Works, City of San Francisco, CA, Statement at San Francisco Public Hearing:

"So concentration is far better for us on an enforcement problem with industry. Mass emission is very, very difficult to monitor."

Newton A. Brokaw, Executive Director, Columbus Industrial Assoc., Columbus, OH:

"We recommend that POTWs be allowed to establish uniform concentration limitations as local pretreatment standards across industry categories, recognizing that eventual impact upon receiving waters is the prime concern of a POTW and that a pollutant will have the same impact on a POTW and its receiving water regardless of source of origin."

John A. Lambie, Chief Engineer-General Manager, Ventura Regional County Sanitation District, CA:

"The Pretreatment Standards should be issued on a concentration limit basis rather than a mass emission limit. The problem of increased water usage by industry for dilution of concentrated wastes must be dealt with on a local basis rather than through a federal limit. Water consumption surcharges and local ordinances against the use of water for dilution are more easily administered and effective than trying to federally modify a Pretreatment limit to serve water conservation purposes. The Pretreatment limits are more easily monitored and enforced on a concentration limit. The mass emission limit would require that all discharges being monitored have accurate flow measurements as well as concentration analysis. To attempt to enforce through litigation or other legal means a limit based on two less than accurate technologies would only serve to compound the problem."

James B. Bewley, Superintendent-Water Quality Control, South
Bayside System Authority, San Carlos, CA:

"The problem of "how" to enforce standards also deserve some discussion. It is generally agreed that mass emission rates, rather than concentration, would provide the most equitable standards within a particular industrial category. That is, if: a) accurate production data is quickly available, b) accurate daily flow data is available, c) a direct correlation between production and pollutant loading has been established, and d) a quick, relatively straightforward means of computing this information is available. It has been found working with individual industries, especially electroplaters, that none of the above are normally available. The only workable method for routine enforcement of discharge standards is the use of concentration based standards. It is essential that the time from collecting a sample to reporting the compliance or non-compliance be kept as short as possible. If mass emission standards via production rates were used, weeks and possibly months could pass before the status of compliance were known."

IV. THE EXTENT OF INDUSTRY AND POLLUTANT COVERAGE.

The EPA is presently in the initial phases of implementation of a new regulatory strategy in fulfillment of the requirements of a Consent Decree signed in June, 1976, by the Agency, Natural Resources Defense Council (NRDC), Environmental Defense Fund (EDF), and Citizens for a Better Environment. The Consent Decree among other requirements stipulates the promulgation of pretreatment standards controlling for 65 toxic pollutants as discharged by 21 major industrial categories.

The proposed pretreatment regulations focus on these 65 toxic pollutants and 21 industries and vary in their degree of coverage for each category. Several approaches call for broad coverage of industry and pollutants. In two approaches (Options I and II) technology-based standards would be established for these 21 Industries focusing on the 65 toxic pollutants. Another approach (Option IV) would cover 34 to 39 industries and ore than 65 toxic pollutants. Under yet another approach (Option III) coverage would be narrower, limiting itself to only 13 industries and less than the 65 toxic pollutants.

Preferences for these two categories of coverage - broad versus limited - have been expressed at public hearings and in written comment submitted to EPA. In addition, participants have expressed other viewpoints and raised other issues which would influence the extent, form, and degree of industry and pollutant coverage to be incorporated into the final pretreatment regulations selected for implementation.

Six issues (factors) have been identified that directly relate to expressed viewpoints on industry and pollutant coverage:

- A) The demand for broad industry and pollutant coverage;
- B) The demand for limited industry and pollutant coverage;

- C) Compliance with the requirements of the Consent Decree;
- D) The form of coverage: uniform/fixed numerical standards versus Federally-derived guidelines used on a case-by-case basis;
- E) Technical feasibility of industry achieving standards; and,
- F) The categorization of pollutants and industries for regulatory purposes.

Analysis of comments relating to industry and pollutant coverage revealed its inextricable relationship with other pretreatment issues - i.e., degree of Federal involvement, type of standards, variances, duplication, etc - examined in different sections of this evaluation. Consequently, discussion of those issues indirectly touch upon industry and pollutant coverage. In turn, viewpoints expressed in this section will, indirectly, have an influence on the other pretreatment issues. However, every effort was undertaken to make a distinction between the issues, so that the documented comments on the following pages could avoid needless redundancy and focus on the direct issue of pollutant and industry coverage.

A. Comments Supporting Broad Coverage

1. Broad coverage would best protect the public health and the environment, and is consistent with the objectives of the Act.

Gordon Nelson, Massachusetts Public Interest Research Group:

"National technology based standards must be formulated for all of the sixty-five toxic pollutants noted in the proposals. It would not be in accordance with the goals of the Act if the national standards covered only the most hazardous pollutants, as is suggested in Option III. Leaving all other incompatible pollutants to be controlled by local authorities invites unwanted non-uniformity in the standard setting process."

Jean Anderson, Chairman, Environmental Quality Committee, League of Women Voters of the U.S., Washington, DC:

"The League opposes limiting federal standards to only the most hazardous pollutants from the most significant dischargers for a number of reasons, not the least of which is that such a procedure would disobey the mandate of Section 307(b). That section directs the Agency to promulgate pre-treatment standards "to prevent the discharge of any pollutant through treatment works..., which pollutant interferes with, passes through or otherwise is incompatible with such works."

Marwan M. Sadat, Program Director, Office of Sludge Management and Industrial Pretreatment Division of Water Resources, New Jersey Department of Environmental Protection, Trenton, NJ:

"We recommend that Option 1 (modified) expand the list of the 21 industries which will be covered by pretreatment standards. An important omission, which we feel should be corrected is the development of pretreatment standards for major medical centers, biological laboratories and research institutes involved in research with carcinogens, viruses and toxic pollutants. The need to regulate this kind of discharge is obvious. The release of dangerous pathogenic organisms and cancer-causing substances used in experimental research not only poses danger to the human life but may result in the deposition of carcinogens in bottom sediments."

2. In order to provide adequate health and environmental protection a uniform regulatory program with broad authority is necessary.

Edward Larrabee, Superintendent, Wastewater Treatment Facilities, Sanger, California:

"I feel that this option (option III) is no good. In my opinion a standard of quality pretreatment should be maintained throughout the state and/or nation."

Joseph G. Zainea, City Manager, City of Grand Rapids, Michigan:

"All wastewater pretreatment needs are not covered by this Option, as standards for only the more hazardous pollutants are involved. Leaving the development and enforcement of standards for non-included pollutants to local authorities poses two primary problems. First, many local authorities do not have the experience or expertise available to enable them to be aware of all pollutants which should be controlled. Secondly, localities may be reluctant to allocate resources necessary to control pollutants for which there is no specific mandate by law. In short, this Option provides only partial coverage of pollutants and would not enhance consistency of impact of standards upon localities across the nation."

Dr. Gaytha A. Langlois, Co-Chairperson, Clean Water Committee,
Ecology Action for Rhode Island:

"In Option III, it is noted that less than 21 industrial and less than 65 toxic pollutants would be covered. This would also appear to be inadequate in meeting federal guidelines, based on the definition of the 65 toxic pollutants. Furthermore, permitting local authorities to amend national standards would seem to be unnecessarily lenient and would encourage evasion of the standards ... since industry discharges into POTW's are numerous and highly variable, it is important to establish pretreatment regulations for as many industries as possible. The small size of a given industrial units should not solely determine the impact of its toxic substances -- the significance of an industry to the national economy cannot always be correlated with its impact on the environment, e.g., the electroplating industry."

Bill B. Dendy, Executive Officer, California State Water Resources Control Board, Sacramento, CA:

"If...EPA is only going to establish pretreatment standards for a limited number of industries, instead of covering the entire spectrum, we strenuously object. Such a procedure may be cost effective from the standpoint of EPA's budget, but to transfer responsibility for developing the balance of the needed technology based standards to the states or to local agencies is not cost effective from the standpoint of overall expenditure of tax dollars. Further, we cannot understand why the electroplating industry is even being considered for less attention than others on the list of 21. Were we to prioritize the list, the electroplating industry would be close to the top of the list as needing regulation."

Howard J. Naftzger, Kensington, CA:

"All of the materials in the list of 65 are undesirable in the environment. (As EPA's Mr. Beck said at the San Francisco hearings, "You wouldn't want any of them on your corn-flakes.") Where reasonable cost-effective technology exists to substantially remove and isolate these materials, I believe it should be used. Once removed from the waste stream, many of these pollutants can be either recovered and recycled or destroyed. For those hazardous substances which must be disposed of as such, I think it is generally preferable that they be in concentrated form to minimize volume."

Robert C. Niles, Director-Environmental Control, UniRoyal,
Middlebury, CN:

"We subscribe to the principle that "prohibited discharge" standards similar to Section 128.131 should be established. The 65 toxic pollutants contained in the NRDC/EDF consent decree also need to be controlled by national standards, regardless of source. Mechanisms need to be

incorporated in the regulations that allow for additions to the toxic list as substances are proven to significantly be hazardous under prescribed concentrations and circumstances."

Stanley Dohmus, Deputy Assistant Secretary of the Interior,
Washington, DC:

"Option IV would best serve fish and wildlife resource protection."

T.H. Goodgame, American Institute of Chemical Engineers,
Benton Harbor, MI:

"...the discharge of toxic substances into the environment must be controlled. But, both regulations and legislation must take into account the fact that the mere removal of a toxic substance from the water does not protect the environment, for the substance may be discharged into the air, or onto the land. The overall control of toxic substances should minimize the effect on the total environment, not merely that in one medium. Regulations for the control of toxic substances should be based upon a systems approach. Quite simply, if the required level of control of a toxic substance causes other more damaging substances to be emitted into the environment, then the level of control must be adjusted to minimize the overall environmental effects, or to maximize environmental quality. And, this should consider toxic conditions, aesthetic qualities, economic effects and energy intensiveness."

B. Comments Supporting Limited Coverage

1. National numerical standards are appropriate for only the more toxic and hazardous pollutants. The remaining pollutants are better controlled at the local level where the local water quality situation and the individual removal capabilities of the POTW can be taken into consideration.

Jon S. Legallet, Legallet Tanning Company, San Francisco, CA:

"We have reviewed the alternate strategy options for pretreatment standards and believe option III is the best. This position is based on our belief that if the most serious pollutants are controlled Federally, sufficient and better regulation of the remaining pollutants can be developed and enforced by the State Municipalities."

"It is most important for the Federal regulation to cover only the most serious pollutants and leave the balance of regulations to the determination of local and state authorities."

Timothy L. Morris, Texas Water Quality Board, Austin, TX:

"It would be our recommendation that technology-based standards be developed and applied for the extremely hazardous pollutants about which there is limited technology. These pollutants would include pesticides, herbicides, and the various carcinogenic pollutants. On the other hand, water quality-based standards would be appropriate for pollutants that are subject to wet-chemistry techniques that are readily available in most of the affected publicly-owned treatment works' laboratories such as chromium, zinc, lead, and phenols."

Francis W. Kutchta, Director, Department of Public Works, Baltimore, MD:

"We therefore request the EPA to adopt the AMSA Pretreatment Policy as the National Standard and that the record show that it is the official stand of the City of Baltimore made at the public hearing April 21, 1977 in Washington, D.C."

"AMSA Policy: EPA shall issue nationally uniform, technology-based standards for only the most hazardous and toxic pollutants of all those regulated under a national pretreatment program."

David R. Small, Executive Vice President, H. Swoboda and Son, Division of Trans-Continental Leathers, Inc., Philadelphia, PA:

"It is our strongly held position and that of many others, both in our own and other industries with whom this has been discussed, that, of the four suggested possibilities, only Option III should be considered. The need for standards to control discharge of selected, highly toxic, pollutants is obvious."

"Beyond that need, what the Federal Government should regulate is the effluent of the POTW's. Based on their long experience and technical competence, the local POTW organizations know best what their facilities can and cannot accept from their discharging customers, to allow their facilities to meet treatment standards. It should be left for those POTW's with their intricate knowledge of local conditions and the capacities of their systems to impose safe and practical standards and charges on their customers. Interposition of the Federal Regulatory presence between these two principals is wrong and unnecessary interference, certainly beyond the intent of the original legislation."

J.F. Cormack, Supervisor, Water Programs Environmental Service, Crown Zellerbach, Camas, WA:

"Option III is the most preferable option since it seeks to regulate most stringently those compounds and sources that are most likely to cause problems. While this option is the most preferred one, there are certain problems. It is essential to have the regulation administered on a local basis. The proposed regulations are complex and difficult to understand and I feel that many local authorities will not be interested in the job if the rules remain in their present form. The procedures for variances and for developing local standards must be simplified and the EPA must be very sure to provide adequate assistance and guidelines for the necessary local standard setting. The focus on close regulation of only those industries and compounds of real importance is encouraging and should help in simplifying the administration of the regulation."

W.G. Turney, Bureau Chief, Michigan Department of Natural Resources, Lansing, MI:

"The concept of local program development with good guidance is consistent with both historic approaches and the present climate of implementability. Strict control of hazardous materials is the area for strongest current emphasis and Option III offers the best blend of these approaches."

Peter D. Hughes, Wastewater Treatment Facilities Commission, Fitchburg, MA:

"Of the four proposals, only one seems to have any practicality to it. That scheme involves the establishment by federal authorities of maximum limits for only the very few most toxic substances to biological treatment or human life. All other substances would be controlled by local authorities based on local treatment system conditions and capabilities. This would give the necessary backing to a municipality concerning the potentially most toxic substances and allow the municipality to determine the impact of other materials on their treatment facility, while considering other impacts including economic. With this approach, problem discharges could be addressed as they occur without an immediate large commitment of manpower looking at every potential problem prior to state or federal acceptance of a given municipality's program."

Larry G. Lawson, Virginia State Water Control Board:

"...technology-based standards should only be promulgated for toxic and hazardous materials and should be universally applicable.

"We believe that the national pretreatment standards for the most toxic and hazardous pollutants should be promulgated with uniform concentrations, regardless of the industrial category.

"In addition to these numeric limits, the standards should also identify the types of industries which these are associated and are expected to originate."

Bruce S. Crutcher, Greater Cincinnati Chamber of Commerce,
OH:

"Given the variety of treatment processes and the different plant configurations in existence, the associated variation in efficiencies and treatability, and the varying characteristics of receiving streams, both qualitative and quantitative, the promulgation of national uniform numeric pretreatment standards is deemed inadvisable except for the more significant dischargers of more toxic pollutants. In other words, national standards should be provided only for the most environmentally significant toxic pollutants and for the major sources of those pollutants. For these "most important" toxics, federal or state control over variances from a national standard is appropriate where requests for variance has been initiated and justified by a community or its industries. All other pretreatment regulations should remain within the province of local regulation. National control of non-toxic pollutants can best be achieved by the inclusion of effluent limitations in NPDES permits. Next best is to allow local regulations to prevail so long as receiving water quality standards are met."

Mr. Rice, Association of Metropolitan Sewerage Agencies,
Dallas, TX:

"The coverage of pollutants. EPA issue nationally uniform technology-based standards for only the most hazardous and most toxic pollutants of all those regulated under the program....Coverage of industries. EPA issue guidance, under section 304(f) of the Public Law 92-500, regarding the industrial categories most closely related to potential discharge of each pollutant that is covered by technology-based standards."

Seymour A. Lubetkin, Chief Engineer, Passaic Valley
Sewerage Commissioners, Newark, NJ:

"EPA would issue regulations and standards on the most toxic and hazardous materials, such as kepone, etc., where even the smallest trace amount of the item is detrimental to our ecology and cannot be tolerated. It would be EPA's judgment as to what materials and industries effected would be included in this list. Of course, if an individual industry disagreed with a particular material, it has its remedies through the appeal process. These would be controlled by EPA directly."

Robert Niles, Director of Environmental Control, Uniroyal, representing the Rubber Manufacturers Association, Statement at Washington, D.C. Public Hearing:

"...federal technology-based standards for only the most toxic pollutants, less than 65 pollutants, should be promulgated for all dischargers...incompatible pollutants for a POTW should be very carefully weighed before promulgation of a national standard."

Theodore Garrett, Counsel, National Association of Metal Finishers:

"The pretreatment standards, themselves, should be no more stringent than the 1977 BPT standards, should regulate only the most significant sources of toxic pollutants, and should be based principally on the municipal treatment and removal capabilities and the inhibition-interference considerations in the statute."

2. Limited coverage would be more cost-effective and treatment-effective avoiding the situation of treatment-for-treatment's sake which would occur in many cases in a broad coverage program.

Earle F. Young, Jr., Director, Environmental Affairs
American Iron and Steel Institute, Washington, D.C.:

"Because of the wide range of treatment provided by municipalities and the resultant variation in the impact industrial discharges have on treatment works, ranging from little or no effect of incompatible or toxic pollutants in large plants to significant effects in small plants, to set numeric limits to cover such a broad range of needed treatment would result in many cases in needless treatment and increased energy use to protect for the most critical situation. The best program would be one that protects the environment with the least number of pollutants having absolute or numeric limits. Option III provides this type of control."

Milton E. Abraham, Chairman, Niagara Falls Industrial Liaison Committee for the City of Niagara Falls Wastewater Treatment Plant, NY:

"We suggest a minimum EPA effort (as in Option III) in development of numerical pretreatment limitations with a concentrated effort in guidance and approval of sound local programs.

"...we strongly oppose such a strategy (Option IV). Such an approach would be extremely inefficient, cost ineffective (even if EPA resources were available), and would discourage industrial use of POTW's under the regionalization concept. We see no need for this level of federal involvement in pretreatment regulations."

H.J. Campbell, Jr., Engineering Service Division, E.I. DuPont De Nemours and Company, Wilmington, Delaware:

"We believe that the taxpayers' money can be more wisely spent through incentive programs for development of technically adequate local pretreatment programs. We suggest a minimum EPA effort (as in Option III) in development of numerical pretreatment limitations with a concentrated effort in guidance and approval of sound local programs."

Raymond Kudukis, President, Cleveland Regional Sewer District, Board of Trustees, Cleveland, OH, Statement at Washington, D.C. Public Hearing:

"To end up with a virtually endless list of toxics only ensures that virtually none will be controlled because of the endless litigation and extensive manpower requirements. This would be unfortunate, since some extremely toxic materials could go virtually unregulated in this process.

"We propose that EPA draft national pretreatment source standards for only the most hazardous and toxic pollutants. For the remaining pollutants, US-EPA should draft technology-based standards, structured around the POTW and its effluent. For these materials, credit should be given for dilution and removal in the POTW as defined in Public Law 92-500."

A.P. Kowalik, Manager, Union Oil Company of California, Los Angeles, CA:

"We also believe it is appropriate that Federal pretreatment standards should be established for only the most significant contributors of hazardous or toxic pollutants as described in Option III of the proposed rules. Developing Federal pretreatment standards for all of the 21 industries and all of the 65 toxic pollutants seems to be an unreasonable burden."

W. James Wells, Bell, Galyardt and Wells, Inc., Omaha, NB:

"Minimizing the total number of industrial plants regulated will minimize the amount of surveillance, sampling and testing as well as the amount of paperwork required by the local authorities, NPDES States and EPA. Concurrently, this will serve to focus attention on the major potential sources of hazardous pollutants. Similarly, regulating only the most hazardous pollutants focuses attention on the most significant sources of pollution while reducing the time and expense required to monitor and control pollutants of lesser significance."

3. Limited coverage is more appropriate at this early stage of the pretreatment program's development.

John G. Costello, Executive Director, Bergen County Sewer Authority, NJ, Statement at Boston Public Hearing:

"Furthermore, we feel the focus of federal efforts under Option III on the regulation of the most hazardous and toxic pollutants and the more significant sources would be the appropriate direction toward the maximization of environmental gains at this early stage of the program and would establish a firm foundation upon which to build a strong, highly respected national pretreatment program."

W.A. White, Vice President National Agricultural Chemical Assoc., Washington, D.C.:

"As to the number of industries to be covered over the three-year period proposed: It is always good to have a goal, but to make it a fixed objective within a limited period of time can be foolhardy when the resources are limited and the full extent of the endeavor is unknown, which seems to be the case here. EPA has faced fixed objectives in the past under similar circumstances and some of the results have not been satisfactory. We support the Option III goal of 10-13 industries in three years as an objective suggesting that time and resources be taken as needed to complete each project in a good manner, recognizing that the goal may not be reached or, optimistically, may even be exceeded. We hope that EPA will not require more than it can accomplish in a good manner with the available resources."

- C. Comments on the issue of strict compliance with the terms of the Consent Decree.

1. The EPA need not be overly concerned with complying with the terms of the Consent Decree.

Albert C. Clark, Vice President and Technical Director, Manufacturing Chemists Association, Washington, D.C.:

"We also believe EPA should not be overly preoccupied with the Natural Resources Defense Council, Inc. settlement agreement of June 6, 1976 in promulgating these standards. The current list of 123 toxic pollutants (65 pollutant families) is not sacred; certain compounds may be added appropriately, while others may be deleted. The goal of the Agency must be to work toward the goals of the Act without unreasonable risk to health and with equity toward POTW and their manifold users."

S. Norman Kesten, Assistant to the Vice President, Environmental Affairs, ASARCO Incorporated, New York, NY:

"...Consequently, it is essential that each POTW operator have the maximum flexibility to determine the quantity and characteristics of the wastes that are compatible with that plant. It is recognized, of course, that guidelines for some pollutants from some industries are mandatory under a court-ordered agreement between EPA and certain plaintiffs but the court order need not be permitted to interfere with the necessary flexibility."

Raymond Kudukis, President, Cleveland Regional Sewer District, Board of Trustees:

"We recognize that statutory revisions may be required and that some of our proposals may be counter to the NRDC/EDF consent decree. While we know that those who brought this action against EPA had every worthwhile intent, the impracticality of what is proposed could bog the entire program down in a complex web of further lawsuits, requiring many years to resolves."

John Saucier, Director, Div. of Water Quality Control, Nashville, TN, Statement at Washington, D.C. Public Hearing:

"The time, money and expenditure of resources required regardless of which option is selected, make it imperative that other alternatives be evaluated. This will require amending the consent decrees that exist today with EPA. Nevertheless, the State of Tennessee is of the opinion that this could be done."

B.H. Brubaker, Special Assistant to the Director of Safety and Environmental Engineering, Diamond Shamrock, Cleveland, OH:

"...Diamond Shamrock Corporation supports the concept of requiring pretreatment of; (1) highly toxic pollutants that pass through a POTW, after secondary treatment operations are functional at such POTW's and (2) those wastes demonstrably interfering with the operation of the POTW and traceable to industrial sources. We realize that such

an approach will, in all likelihood, require modification of the consent agreement. To this end, we refer you to the letter of May 26, 1976 by Judge Thomas A. Flannery (expressly filed with the opinion in NRDC v. Train, supra) indicating that such motions to modify may be entertained. In order for our position to prevail, Diamond Shamrock Corporation supports such a position as the most reasonable and equitable solution of the issue."

F.M. Charles, Corporate Director-Environmental Affairs, Union Carbide Corp., New York, NY:

"The regulation scope and schedule established in the NRDC/EDF consent decree accepted by the Agency are too ambitious to be consistent with early implementation. All parties to the agreement should reassess their priorities in light of the practical level of effort available to carry out the project, and the accomplishments that would best serve the needs of the nation."

Eugene L. Kilik, President, Tanner's Council of America, Inc., New York, NY:

"Finally, the consent decree in Natural Resources Defense Council, Inc. v. Train, 8 ERC 2120 (D.D.C.1976) does not preclude the adoption of Option III. EPA cannot bargain away its duty to implement the Federal Water Pollution Control Act in accordance with the intent of Congress. A bargain struck with a few interest groups cannot override the Agency's duty to the public."

Thomas E. Roberts, Supervisor of Environmental Control, Celanese Polymer Specialties Co., Louisville, KY:

"NRDC Consent Decree It is entirely satisfactory that EPA should have to modify the NRDC/EDF Consent Decree in order to implement Option III. Neither the States, the POTW's, nor industry had any input to the formulation of that consent agreement and it thus ignored many of our concerns. In fact, the chemical industry was specifically denied the right to intervene in that decree."

2. Coverage must be consistent with that stipulated in the Consent Decree.

Wayne A. Schmidt, Staff Ecologist, Michigan United Conservation Clubs, Lansing, MI:

"We reject Option III out-of-hand as inconsistent with the NRDC/EDF Consent decree."

Meyer Scolnick, Director-Enforcement Div., USEPA Region II,
New York NY:

"Option II is also unacceptable and may be unlawful. First of all, this option is inconsistent with the Section 307(b) mandate which requires the promulgation of national standards for the introduction of incompatible pollutants into a municipal facility. Secondly, the NRDC, EDF Consent Decree requires that national standards be established for 65 pollutants and 21 industries. Therefore, Option III is not even a legally practical alternative until the Court Order is modified."

J. Taylor Banks, et.al., Natural Resources Defense Council,
Washington, D.C.:

"Pollutant coverage under Option III would call for federal standards applicable only to known hazardous pollutants, and local standards. Sections 307(b) and (c) as well as the Settlement Agreement contain no authority for limiting national pretreatment standards in this manner. Pretreatment standards must be developed for all pollutants that interfere with, pass through, or otherwise are incompatible with publicly owned treatment works..."

"The coverage of point sources under Option III is, as noted by EPA in the preamble, flatly inconsistent with the Settlement Agreement. The criteria proposed by EPA for exclusion of industrial pollutant sources under Option III bear no resemblance to the criteria which under the Settlement Agreement EPA has agreed to utilize. Use of these criteria would result in a substantially smaller pretreatment program than is required by the Agreement (e.g. 13 rather

D. Comments supporting the development of Federal guidelines rather than standards.

William A. Healy, P.E., Executive Director, Water Supply and Pollution Control Commission, Concord, New NH:

"The proposed regulations would seem to be more appropriate to large communities which are more likely to have the resources necessary to implement the type of pretreatment program contemplated by EPA. Once again, this is clearly an attempt to apply national standards in an area which has numerous variables and would more properly be dealt with on a case-by-case basis within the broad framework of generalized state guidelines."

Walter A. Lyon, Director, Bureau of Water Quality Management,
Pennsylvania Department of Environmental Resources, Harrisburg,
PA:

"There needs to be some guidance for municipalities to allow them to establish pretreatment limits on a case by case basis. This guidance would not be in terms of a nationwide industrial standard of pretreatment but rather a description of the treatment processes available for the various industries and the degree of pollutant removal various treatment processes can achieve. Then, based on the individual situation at the publicly owned treatment works, the necessary degree of treatment could be established and effluent requirements be set for each industrial discharger to the treatment works. This would give the treatment plant operator the flexibility to develop a pretreatment program to fit its specific needs."

Albert C. Clark, Vice President and Technical Director,
Manufacturing Chemists Association, Washington, D.C.:

"Tailoring meaningful standards to individual POTW should be the Agency's prime concern. Too many assumptions or generalizations in the standard setting process will defeat an otherwise noble endeavor. We urge EPA to apply seasoned judgement in establishing criteria in an effort to make the program optimum with regard to both treatment effectiveness and cost effectiveness. Section 304(f) guidelines can best serve as a basis for judgement rather than rigid-number limitations."

J.F. Lagnese, Duncan, Lagnese and Associates, Inc., Pittsburgh, PA:

"...specific pretreatment standards by EPA would not be required. Certainly, it would be appropriate and probably necessary to satisfy the statutory requirements on pretreatment, that EPA would develop general standards to protect the POTW from damage or interference of the industrial discharge. I believe these could be universal type standards applicable to all industries. The detail implementation of regulations for this type of control and protection would remain the responsibility of each POTW subject to EPA review and approval similar to the procedure now used for user charge compliance, etc."

W.P. Anderson, Assistant Director, Environmental and Regulatory Affairs, Tenneco Chemicals, Saddle Brook, NJ:

"We believe the POTW operators should be allowed the broadest possible freedom to establish pretreatment regulations for their systems. These must take into account their specific NPDES permit limits and the capacity and capability of their own particular systems."

"Federal Guidelines based on reasonably available technology will undoubtedly be useful to the POTW. These guidelines, however, must not be allowed to evolve into rigid "not to exceed" limits as did the effluent guidelines under the NPDES program. These national guidelines must be drawn with due consideration to the very great differences in size, characteristics, treatment capability and discharge requirements of the various POTWS. For example, some of our plants discharge into systems with daily flows in the hundreds of millions of gallons which in turn discharge directly into the open ocean. On the other extreme, one plant discharges into a small system, which treats between one and 1.5 million gallons per day and discharges into a stream which is used for drinking water supplies."

Bill B. Dendy, Executive Officer, California State Water Control Board, Sacramento, CA:

"We suggest, as another alternative, a pretreatment program that is workable and relatively simple while expending resources only on the areas of greatest need. The heart of this program consists of placing discharge limitations on the individual municipalities to ensure adequate control on the discharge of toxic substances. The municipality would be required to institute those controls necessary to prevent any plant upset or effluent discharge in violation of their discharge permit. To assist the municipality in accomplishing this task, under Section 304(f), the Agency could publish true guidelines illustrating available pretreatment technology and performance for various industrial categories and could outline the procedural aspects of an adequate pretreatment program."

Paul C. Hittle, General Supervisor of Environmental Activities, Consumers Power Co., Jackson, MI:

"The Company, however, does not favor unguided local establishment of pretreatment standards for nonhazardous pollutants. The Company believes that many municipalities would not have the available resources to establish such standards based on meaningful criteria and that the unguided setting of standards by municipal agencies could produce widely differing and inconsistent standards throughout a state. Moreover, the task of establishing meaningful criteria upon which to base such pretreatment standards might well discourage many local agencies from actively participating in the pretreatment program. The Company, therefore, recommends that EPA or NPDES issuing states provide flexible guidelines for municipal agencies to follow in establishing pretreatment standards for nonhazardous pollutants."

J.L. Rodgers, Jr., Division Manager, Amer. Water Works Service Co., Inc., East Dedham, MA:

"We also feel that Option III will permit both the EPA and state agencies to provide general guidelines to be used by local agencies in developing proper programs for pretreatment and enforcement of these. Also, EPA and state agencies will be able to act as recommending agencies performing research for practical application in the field. Further, Option III will permit the quickest regulation of the most hazardous pollutants which are known to adversely affect aquatic environments, fish and/or drinking water."

T.H. Goodgame, American Institute of Chemical Engineers, Benton Harbor, MI:

"It is also strongly recommended that the national requirements be put forth in the form of guidance rather than standards. By this means, the agency with the local authority and responsibility for determination of limitations has the flexibility required of the local situation - that is, overriding local conditions can be fully taken into consideration, whether they are based upon technology, stream limitations or economics."

E. Comments supporting the position that the degree to which an industry is regulated must take into consideration the standard's technical attainability.

H.J. Campbell, Jr., Engineering Service Division, E.I. DuPont DeNemours and Company, Wilmington, DE:

"As with effluent guidelines for direct dischargers, any pretreatment guidelines should be based upon technology applicable to each given industrial category rather than transfer technology. Furthermore, guideline levels should also reflect reliable, long-term performance of technology that can be consistently attained by full-scale field equipment on a day-to-day basis. All too often transfer technology and short-term technology performance have been misused and relied upon in past guideline promulgation attempts. As we all have experienced, such inadequate technical bases have led to, and, if used in the future, will continue to lead to needless and ineffective legal recourses."

J.F. Cormack, Supervisor, Water Programs, Environmental Services, Crown Zellerbach, Camas, WA:

"The eventual establishment of a uniform limit for all categories for a given pollutant will be troublesome. It would presumably be on a concentration basis. This will inevitably result in discouraging desirable water conservation programs. Also, great care must be taken to ensure that the limits are technically achievable by all affected industries."

F. Comments supporting the position that regulated pollutants and industries should be categorized.

Marwan M. Sadat, New Jersey Office of Sludge Management and Industrial Pretreatment, Department of Environmental Protection, Trenton, NJ, Statement at Boston Public Hearing:

"Recognizing the economic impact of industrial pretreatment standards on small industries, we would support, after the implementation of water quality standards and careful consideration, future levels of concentration less stringent than the APT standards for the small dischargers. It is apparent that MCI's (Major Contributing Industries) benefit from the economy of scale resulting from the construction of large pretreatment facilities. In setting the APT standards, we feel that EPA should assign different levels of concentration for varying size pretreatment facilities. Large installations would have to meet more stringent requirements. Small discharge APT standards would impose higher concentration limits."

W.C. Trefz, Chief Engineer, Allegheny County Sanitary Authority, Pittsburgh, PA:

"The 65 toxic pollutants should be categorized into groups to establish priorities with emphasis on removing at an early date those most objectionable and for which proper techniques have been developed."

V. SLUDGE DISPOSAL AND TREATMENT CONSIDERATIONS

The type and quantity of industrial discharges and the degree to which industrial pretreatment is practiced will directly influence the characteristics of a POTW's sludge. Where industrial pretreatment is not practiced, toxic pollutants will be absorbed into and contaminate the POTW's sludge. The presence of these pollutants limits the sludge disposal alternatives - as composting and land spreading - available to the POTW and thus increases the cost of adequate sludge disposal. Consideration of this issue is incorporated into the four options in that the toxic contamination of municipal sludges and the ability of pretreatment standards to reduce contamination is a factor in the promulgation of national standards.

Under all four options, the granting of a variance or modification is contingent upon a showing by the POTW of adequate sludge disposal and/or utilization capabilities. Case-by-case modifications could result in further sludge contamination problems and, hence, additional constraints on feasible disposal alternatives. Therefore, variances are conditional on the availability of environmentally-sound disposal methods. In addition, it becomes readily discernible that the primary responsibility for the management of these toxic sludges will be placed on either the POTW or the industrial generator depending on: (1) the extent and degree of stringency of pretreatment standards; and, (2) the provision of variances.

Another aspect to this issue is the recently enacted Resource Conservation and Recovery Act. Under Subpart C of this Act, standards for the management of hazardous and toxic wastes will be established with enforcement authority through a permit system.

After a review of opinions expressed at public hearings and in written comment, four issues have been identified that have a direct bearing on the question of sludge disposal and treatment:

A. Whether sludge disposal considerations are rightfully a part of a pretreatment program or should be dealt with under the Resource Conservation and Recovery Act?

B. Responsibility for the management of toxic sludges.

C. The demand for broad industry and pollutant coverage to avoid sludge contamination problems.

D. The impact of case-by-case modifications on a POTW's sludge.

A. Sludge disposal considerations should be addressed by the Resource Conservation and Recovery Act of 1976 instead of being made a condition for variance approval.

Albert C. Clark, Manufacturing Chemists Association,
Washington, D.C.:

"It is recognized that pass-through may affect the characteristics of the sludge and thus limit the disposal options for it. Because sludge disposal is addressed in the Resource Conservation and Recovery Act and because of the multi-media aspects of sludge disposal, we urge that regulatory considerations under 40CFR403 be concentrated on the quality and quantity of the influent to the POTW. If that is done in the context of the POTW design and operating characteristics, the sludge problem should be simplified."

Richard J. Wooley, President, Spence Electro Plating
Company, Metal Finishers of Southern California, Burbank,
CA:

"This variance should in no way be conditioned upon the adequacy of the POTW sludge disposal methods. EPA has no authority for such requirements under Section 307(b) of the Act. Such matters can be dealt with as appropriate under other programs, such as the Resource Conservation and Recovery Act of 1976."

Bruce S. Crutcher, Greater Cincinnati Chamber of Commerce,
Cincinnati, OH:

"Questions related to sludge disposal methods should be severed from those related to pretreatment regulations, even those applicable to toxic substances. The Agency has authority under the Resource Conservation and Recovery Act of 1976 (PL 94-580) to insure proper sludge disposal and, as the Agency itself stated, the choice of a sludge disposal method should be a local decision based upon the alternatives available in that specific area."

E.E. Ross, Manager, Water Pollution Control Department, East Bay Municipal Utility District, Oakland, CA:

"While we believe that there may be definable relationships between direct industrial discharger quality and municipal sewage sludge quality, the extent to which sludge quality can be controlled by the application of pretreatment to conform with yet to be developed hazardous waste disposal guidelines or regulations pursuant to the Resource Conservation Recovery Act of 1976(PL 94-590) will depend upon local conditions.

"Compliance with PL 94-580 provisions may or may not be consistent with measures required to achieve the objectives stated in the first paragraph of this section. Therefore, we feel that the inclusion of sludge disposal considerations in the pretreatment program objectives for PL 92-500 is not appropriate at this time."

Theodore Garrett, Counsel, National Association of Metal Finishers, Washington, D.C.:

"The pretreatment regulations should provide for a relaxation of the federal standards where the municipal treatment works achieve treatment levels better than those assumed by EPA in developing the standards. This variance should in now way be conditioned upon the adequacy of the municipality's sludge disposal methods, as to which Section 307(b) of the Act provides EPA with no authority, and which is better handled under other statutes, such as RCRA."

Blaine Fielding, Legal Dept., Clark Oil Refining Corp., Blue Island, IL:

"Second, sludge disposal concerns are not properly the concern of pretreatment standards. To the extent that industrial discharges can, as asserted, 'contribute significantly to sludge disposal problems of POTWs' (Information For Proposed General Pretreatment Regulations, at p.2), no

good reasons are adduced for adopting pretreatment standards that would merely pass the problem back to the discharger. The environmental problem would be the same. Moreover, incorporating sludge disposal considerations into the pretreatment program is an extra-legal and unauthorized assertion of authority by EPA. Nowhere does the Act warrant such an assumption of authority by EPA. No one would deny that proper waste disposal is a serious national issue. However, it deserves to be treated in an integrated fashion under the Resource Recovery and Conservation Act, not in the fragmented, back-door approach contemplated by the proposed regulations. We recommend that all references to sludge disposal be deleted from the regulations.

Guy Weismantel, Western Editor Chemical Engineering, Los Angeles, CA:

"Also, prior to making rulings on joint treatment, EPA should get its own house in order. The present legislation is public law 94-580, the Resource Conservation and Recovery Act, October 21, 1976. Under subtitle C there is a section on hazardous wastes--and this section on hazardous wastes--and this section would naturally effect any joint treatment legislation. Under 94-580 Jack Lehman and his group have to define what is a hazardous waste. This will be done, with input from those who are interested, and it will probably be about an 18 month process. I do not honestly know how you can set guidelines on joint treatment until these definitions have been presented and published."

Peter A.A. Berle, Commissioner, New York State Dept. of Environmental Conservation, Albany, NY:

"...large metropolitan sewer districts also have the most severe problem of adequate disposal of large volumes of contaminated municipal sludge. Many reasonable methods of sludge disposal such as incineration or land disposal are precluded because of resultant air or groundwater pollution. In the immediate future, and until a pretreatment program becomes effective, extremely difficult decisions regarding adequate disposal of sludge will be facing us. It is for this reason that contingencies in the proposed regulations that relate to satisfying The Resource Conservation and Recovery Act (PL 94-580) may be inconsistent with the least environmentally adverse means of sludge disposal. Therefore, these contingencies must be flexible and allow significant State input and modification."

- B. The primary responsibility for the management of toxic sludges should be with the POTW rather than numerous individual industrial plants.

Andrew Aiken, Narragansett Electric Company, Providence, Rhode RI, Statement at Boston Public Hearing:

"There are also the issues of treatment system operation and sludge disposal to contend with. A single POTW, where it can adequately treat industrial wastewater, can be more effectively monitored and controlled by the appropriate agencies than can a series of pretreatment systems owned and operated by individual industries. Also, each pretreatment system will produce a solid waste product, much of which will be deemed a hazardous waste material under the Resource Conservation and Recovery Act of 1976. Such material will be difficult to dispose of and the temptation for illicit disposal may be compelling. With a single POTW and a limited number of pretreatment plants, the sludge disposal problem can be better controlled by solid waste management authorities."

Timothy L. Morris, Texas Water Quality Board, Austin, TX:

"You are proposing to go from that to a situation where you not only have the 12,000 publicly-owned treatment works with their concomitant sludge disposal problems, but also 55,000 industries with pretreatment facilities and concomitant sludge disposal problems. With the advent of such an increase in the number of sludge sources, you will begin to encounter every violative sludge disposal technique imaginable. The regulatory resources of the Federal, State, and local governments will be exceeded accordingly. We feel quite strongly that in order to minimize the sludge disposal problem the sludge disposal capabilities of the publicly-owned treatment works ought to be optimized."

Joint Comment of the Buffalo Sewer Authority and the Buffalo Area Advisory Council on Industrial Wastewater, Buffalo, NY:

"In support of our proposal, we feel that these recommendations have the best potential for improving the environment without excessive unnecessary economic impact on industrial users. A POTW with the responsibility for meeting water quality-related effluent limit guidelines for its own discharge, together with the responsibilities for the protection of the biological, mechanical and hydraulic integrity of the plant, and for the environmentally safe disposal of its sludge, is ideally qualified to establish pretreatment standards to control the character of its influent."

W.R. Johnson, Director-Plant Environment, General Motors Corp.,
Warren, MI:

"The law of conservation of mass dictates that very stringent pretreatment standards for preserving or upgrading the POTW's sludge quality would exchange the POTW's sludge disposal problem for an industrial sludge disposal problem. In either case, environmentally acceptable disposal problem. In either case, environmentally acceptable disposal methods must be used. However, the decision on where this burden should lie should clearly be left to the individual POTWs and not indirectly made for them by the U.S. EPA through the adoption of unnecessarily stringent national pretreatment standards.

John F. Hall, National Forest Products Assoc., Washington, D.C.:

"Stringent pretreatment requirements will in turn create large accumulations of sludge; POTW's are more experienced and are in a superior position technologically to handle large amounts of sludge. Numeric limits incorporated into municipal permits for incompatible pollutants should be considered when technology-based standards are being developed."

Kenneth A. Fenner, Counsel, Masonite Corp., Chicago, IL:

"An additional problem that arises under the pre-treatment scheme is that the number of locations at which sludges will be generated will expand enormously. The Agency's responsibility to police disposal will be multiplied tremendously, and perhaps far beyond the Agency's capabilities. The POTW on the other hand, as a central gathering point, will minimize the number of locations. Furthermore, the POTW will generally have a greater and more sophisticated sludge handling and disposal capability. These capabilities can be further augmented by the Agency's construction grants program and enforced by standard provisions found in Part B of all NPDES permits. The expenses, of course, can be passed on to the sources through the user charge system."

C.R. Calkins, Vice-President-Environmental Affairs, American Paper Institute, Washington, D.C.:

"Sludge disposal considerations in setting pretreatment standards may force industrial facilities to handle a variety of sludges in many separate locations. We submit that, in many cases, it may be better to have a municipality deal with sludge disposal rather than each individual industrial facility. This would be a particularly burdensome responsibility for small plants with limited technical staff

and/or land area to handle solid waste. We also believe that to require pretreatment which would produce a sludge from the POTW acceptable for land application at a location which disposes of sludge in an alternative manner (i.e., incineration) would not be cost-effective. We suggest, further, that sludge disposal considerations be limited to those highly toxic materials which are likely to concentrate in sludges."

C. Industry and pollutant coverage must be broad to avoid sludge contamination problems.

H. Clay Kellogg, Jr., General Manager, Kellogg Supply Inc.,
Carson, CA:

"This is the 52nd year which our company, Kellogg Supply, Inc., has been marketing sewage sludge. We currently sell approximately 40,000 dry tons per year and the material is on allocation by us to our customers because of lack of supply from the Sanitation District. Over 80% of our business is done with the retail nurseries and garden shops. In most areas of the United States there has not been an effort to market sewage sludge. Now that more and more of it is being collected, it could become a plague rather than the natural resource which it is if unfair restrictions are put upon its use ... To allow some industry to pollute one of our greatest natural resources, which sewage sludge is, would be a disgrace. Next thing you know, sewage would be called a hazardous waste or the Board of Health would put so many restrictions on its use that everyone would be afraid to use it."

Albert S. Matlack, The Society of Natural History of Delaware,
Hockessin, DE:

"Paper after paper bemoans the fact that toxic heavy metals limit the use of sewage sludge on land. Methods such as ion exchange, electrolysis, solvent extraction, precipitation, etc. exist for the recovery of Cr, Ni, Cd, Zn, Pb, Hg, Cu, etc. at the metal finishing on other source. The reason they are not used is that it is cheaper to throw away the Rhodesian Cr, or Canadian Ni, even though the supply at the source is limited. With these metals removed, the sludge can be used on land as a source of N, P, and organic material."

Wayne A. Schmidt, Staff Ecologist, Michigan United Conservation Clubs, Lansing, MI:

"MUCC supports strong wastewater pretreatment standards. We do not believe that the public should subsidize removal of industrial toxic pollutants, such as heavy metals and halogenated hydrocarbons, at publicly-owned treatment works (POTW). Most municipal treatment plants in Michigan

are not designed to remove such toxicants and the introduction of such chemicals creates serious problems affecting public resources -- air pollution from incomplete incineration of sludge; water pollution from inadequate treatment of wastewater discharge; increased costs of operation from incompatible chemicals interfering with normal treatment; and prevention of land treatment practices because of potential groundwater contamination and public health hazards from treatment of agricultural lands ... One of the reasons only '25' percent of the POTW sludge is utilized on land for animal and human food crops' is the absence of stringent pretreatment standards today. Current wasteful disposal practices (i.e., landfilling or incineration) should not be justification for pretreatment standards which do not assume future land disposal.

"Further measures should also be mandated regarding reduction of toxic substances at their source, and recycling and recovery of useful industrial materials... Problems of sewage treatment, and, particularly, sludge disposal are acute in our state, especially in the greater Detroit area. Disposal of sludge via land treatment is inevitable; the sooner stringent pretreatment standards are applied, the sooner we will have a chance to solve these problems of disposal."

Thomas Glenn, Director and Chief Engineer, Interstate Sanitation Commission, Greater New York Metropolitan Area, CN:

"But we are coming to realize that sludges containing more than acceptable amounts of heavy metals, and possibly other substances, originating in industrial wastes cannot be safely spread on the land.

"If these detrimental substances cannot be largely removed from sewage by practical and economic treatment methods, the only way to keep them from unreasonably intensifying the sludge problem is to insist on pretreatment and source control."

A.B. Early, Environmental Action, Washington, D.C.:

"Landspreading of sludge on croplands may require the removal of pollutants at greater rates than is required to meet the national standards. Either the national standards should be based on the use of the sludge disposal alternative demanding the greatest amount of removal (presumably land-spreading on croplands), or a mechanism must be established

enables the POTW to lower the standard because it is "incompatible" with the disposal alternative being used. The failure of the proposed regulations to address this problem presumably leaves the establishment of a more stringent standard as a local requirement. Section 307(b)(1) of the FWPCA (33USC1317 (b) (1)) requires the issuance of pretreatment standards for introduction of pollutants into publicly owned treatment works as defined in Section 212 "which would interfere with the operation of such treatment works." (emphasis supplied) Section 212(2)(A) of the Act (33 USC 1292(2)(A)) clearly contemplates sludge disposal as included in the definition of treatment works. Environmental Action takes the position that EPA should therefore assume the use of a sludge disposal method that requires the greatest amount of pollutant removal from the sludge disposal method that requires the greatest amount of pollutant removal from the sludge to prevent water or other environmental degradation."

- D. Case-by-case modifications of the promulgated standards could result in additional incompatible pollutants in POTW's sludge restricting disposal possibilities.

Charles J. Henry, Director, Water Pollution Control, Municipality of Metropolitan Seattle, WA:

"Some problems could develop from the requirement that acceptable sludge disposal program are a prerequisite to granting local variances. Since most large municipalities are faced with a sludge disposal problem, an interim policy may have to be established to prevent undue hardships on local industry tributary to such systems. If an industry is not contributing to the situation which is snagging the approval of an acceptable sludge disposal program, it should not be required to suffer the loss of an otherwise permissible variance."

W.G. Turney, Bureau Chief, Environmental Protection Bureau, Dept. of Natural Resources, State of Michigan, Lansing, MI:

"Sludge considerations: In the development and approval of local pretreatment programs, a very clear analysis of the sludge disposal or use question should be provided. The options available for sludge management may be more critically affected by pretreatment decisions than are the biological treatment process options which could be affected. A clear review of the sludge question should be required with respect to capital, energy, and other environmental impacts before local programs are approved."

Kenneth S. Kamlet, Counsel, National Wildlife Federation, Washington, D.C.:

"First, the issue of removal versus treatment, as the basis for a variance -- none of the options adequately addresses what EPA itself recognizes to be one of the fundamental problems pretreatment standards should be designed

to remedy; namely, reduction of contaminant levels in sewage sludge.

"As noted by the preamble to the proposed regulations many industrial pollutants can contribute significantly to the sludge disposal problems of POTW's. Industrial pollutants, particularly metals and other toxic pollutants can limit the sludge disposal alternatives available to the POTW, and thus, increase the cost of adequate sludge disposal facilities, and in some cases, improper handling of metals and/or other toxic contaminated sludges can result in uptake of metals by crops in the human food chain, or leaching of these pollutants into ground water, as well as surface waters. And that was a quote from the preamble of the proposed regs.

"So, the contaminant content of sewage sludge, the end-product of POTW contaminant removal processes, is a matter of considerable environmental significance. Unfortunately, the variance procedures proposed by EPA for all four of its pretreatment options, fail to give sludge the consideration it requires."

Albert J. Slap, Sierra Club's National Water Quality Committee, Philadelphia, PA:

"The idea of local credits for sewage treatment plants that remove substantial quantities of industrial pollutants is plainly wrong. Even though there is a removal from the liquid to solid phase, and consequently no pass-through EPA's responsibility over pollution is now 'from cradle to grave.' That is, EPA has not discharged its responsibility and, hence, cannot relieve the industrial discharger of its duty, by pointing to a percentage removal at the publicly owned treatment works.

"The sludge in the municipal plant would, in a variance situation, contain more industrial waste and probably be unfit for land application. EPA cannot leave the solution of this type of problem solely to the local government."

Marwan M. Sadat, New Jersey Office of Sludge Management and Industrial Pretreatment, Department of Environmental Protection, Trenton, NJ, Statement at Boston Public Hearing:

"National pretreatment regulations should preclude the qualifications of the national pretreatment standards and should not allow for any variances from those standards. When variances are granted on the basis of a high degree of removal by a POTW, the net result of such a variance is to concentrate in the sludge the pollutants which the pretreatment program is supposed to remove. Under Option 1, municipalities would be required to demonstrate

that adequate sludge disposal facilities could handle the additional contaminants in the sludge. This would only increase the complexity of the sludge disposal problem. It is important to keep in mind that the main objective of any industrial pretreatment program is to minimize the impact of pollutants on the environment. When toxic substances, heavy metals and contaminants are concentrated in the sludge they invariably affect another sector of our environment and may even, in extreme cases, return to the surface waters we are trying to protect. For this reason, we feel that whatever option EPA finally decides to implement, no variance for toxics and heavy metals should be granted to local authorities."

Louis J. Breimhurst, Director-Div. of Water Quality, Minnesota Pollution Control Agency, Roseville, MN:

"Any variance increases the potential for problems developing from sludge disposal. Approval of local credit allowances alone will adversely affect sludge quality. In addition, if industries are allowed to discharge a pollutant at a given concentration, as opposed to mass limits, POTW's receiving a given pollutant from several industries may still have a sludge quality problem. A water quality variance would only add to this problem. None of these options really dealt with this to assure good sludge quality for acceptable disposal. Since this aspect of wastewater treatment can constitute up to one-half of wastewater treatment costs, it is of major concern."

Dr. Dana Davoli, Director of Toxic Substances Research, Citizens for a Better Environment, Chicago, IL:

"In granting a variance, EPA also states that it must be assured that the sludge will be disposed of in an environmentally safe manner. Such variances granted by EPA would necessarily involve an increase in the amounts of toxic pollutants in the POTW's sludge. This would include increases not only in the levels of heavy metals such as lead, mercury and cadmium, but also increases in organic substances such as chloroform, benzene, and pesticides. Such increases in toxic substances would limit the number and types of disposal options available to the treatment plant and therefore increase the costs of sludge utilization or disposal. In addition, there are large gaps in our knowledge as to what constitutes a "safe" disposal method. Incineration of sludge may result in hazardous air emissions and water pollution both by fallout of these air emissions to the water and by improper disposal of the ash. Landfilling may result in pollution of ground waters and ocean dumping may have toxic effects on aquatic life. In some areas, sludge is used solely for agricultural landspreading. Even with proper land management, problems can still arise with this type of disposal due to our lack

of knowledge about the environmental fate and biological uptake and effects of such heavy metals as cadmium and selenium in agricultural use. Our level of knowledge is even more limited when dealing with organic compounds such as pesticides, polynuclear aromatic hydrocarbons and others listed on the settlement agreement. In addition to the problems associated with heavy metals (environmental fate, biological uptake), volatilization of organics from sludge can result in increased air pollution and increased human exposure. Due to this lack of information on safe disposal of sludge, CBE feels that every effort should be made to prevent contamination of municipal sludge with toxic materials. Stringent pretreatment standards are a step in the right direction. Granting variances to secondary treatment works is not. While we realize that stringent pretreatment standards may cause a sludge disposal problem for industry, the sludge produced in this case represents a much smaller volume and, therefore, could be more adequately handled by sanitary landfills."

VI. MEETING STATUTORY COMPLIANCE DEADLINES

Considerable discussion concerning POTW and industrial compliance with statutory deadlines, as set forth in PL 92-500, has been generated by the proposed pretreatment regulations. At the heart of the compliance issue lies the unanswered question of whether or not the, as-yet, unpromulgated pretreatment standards will cause delay in the attainment of the July 1, 1977, and July, 1983, water quality goals and technology control requirements.

The crucial factors which have raised this interest center on the following key relationships:

- a) the lack of enabling legislation for some States and localities;
- b) the time required to train and staff local agencies; to establish model ordinances;
- c) the "gearing-up" period that will be necessary to effect efficacious program implementation and administration;
- d) the uncertainties confronting both local control agencies and industries in municipal sewer systems where secondary treatment facilities are not yet operational; and,
- e) the unaddressed questions of due process, judicial review, and legal challenge.

The amalgam of comments presented in this section collectively address the compliance issue.

A. The lack of enabling legislation and model ordinances for some States and localities would delay meeting compliance dates.

John G. Costello, Executive Director, Bergen County Sewer Authority, NJ, Statement at Boston Public Hearing:

"It must also be recognized that many regional sewer agencies will require state-enabling legislation by all the member municipalities to obtain the legal power necessary for direct enforcement of pretreatment regulations. The Bergen County Sewer Authority, for example, is comprised of 44 autonomous member municipalities with the result that legal enforcement problems can be excessively complex. Any time limitations or penalties for delayed local enforcement must consider the time required for the local authority to obtain state-enabling legislation and for action by all the member municipalities. We would estimate that it would require at least 3 to 5 years to develop an adequate pretreatment program for regional sewerage agencies that now lack the proper enabling legislation."

Frank Dryden, Head, Technical Services Department, Sanitation District of Los Angeles, Whittier, CA:

"First, I think that you have to recognize that communities which do not now have the technical capability or manpower to set up and run a pretreatment program suitable to their system are going to require some time. It takes time to train and develop this capability."

"In our own case, we started, you know, in '70, and we still aren't up as far along as we would like to be. There are still parts of the permit program -- You know, we have gotten the major things all under control, but there are still -- of our 7,000, there are still some that we have not been able to get to and check. It takes time to write and adopt ordinances. And if you don't allow a couple years to three years for that type of process, you are kidding yourself. And if you try to do it by fiat in a short period of time, I think you tend to create chaos rather than help the situation along."

"You must have a training program that recognizes it's going to take time to develop this capability. But it is entirely capable of being developed in every community that needs it."

Bruce S. Crutcher, Greater Cincinnati Chamber of Commerce, Cincinnati, OH, Statement submitted at Washington, D.C. public hearing:

"Differently situated are many small POTW's serving smaller communities which include one or a few large indirect dischargers. Few of such managing authorities have adequate pretreatment and enforcement programs, and the posture of many may be such that the probability of being over-reached in negotiations with a large indirect discharger which may also exert a major influence on the economic health of the local community, may be significant. In this situation, we believe compliance with the intent of the Act would be unnecessarily delayed if the local authority is required to establish a program of pretreatment and enforcement which, when its inadequacies became apparent, would be superseded by State and Federal action."

Richard Woods, Counsel, Ocean County Sewerage Authority, Toms River, NJ:

"...the OCSA is created by virtue of the implementing legislation known as the Sewerage Authorities' Law, N.J.S.A. 40:14A-1, et seq. The powers of the sewerage authority are set forth in N.J.S.A.40:14A-7. This section of the Sewerage Authorities' Law is the powers of a sewerage authority. Although these powers are broad to enable a sewerage authority to exercise public and essential governmental functions to provide for the public health and welfare, they are not broad enough to enable an authority to impose, for instance, criminal sanctions for failure to comply with pretreatment regulations.

"Under the laws of the State of New Jersey, the police power is ultimately vested in the State Legislature. In certain instances, the police power has been delegated to municipalities which may, by ordinance, impose certain penal sanctions for actions which harm the public health, safety and welfare. Finally, in certain instances affecting public health, local boards of health are given the power to impose penal sanctions.

"A sewerage authority, however, does not have the type of police power which is vested in the State Legislature, municipalities and boards of health. It can act only within the parameters of its enabling legislation. Section 403.9 far exceeds, in our opinion, the powers which a sewerage authority in the State of New Jersey can exercise. It is the OCSA, or any other sewerage authority, to establish the programs as set forth in Section 403.9"

- B. The "gearing-up" period required for POTW design and construction as well as the administrative and procedural complexities will cause postponement of compliance deadlines.

Albert C. Clark, Vice President and Technical Director,
Manufacturing Chemists Association, Washington, D.C.:

"We commend the Agency's recognition of the time factor conflict between July 1, 1977 and the installation time faced by those who must meet yet-unpromulgated standards. We recommend that the Agency stipulate, in the promulgation, that the three-year period for compliance by all affected industries begins with the date of promulgation. For many, design, installation and start-up will indeed be a three year undertaking."

John Lambie, Chief Engineer-General Manager, Ventura Regional
County Sanitation District, Ventura, CA:

"The procedures as outlined for making an application for a variance in the pretreatment standards are complicated to the point that processing of a variance might require extensive manpower and time commitments."

Charles A. Geisler, Sanitation Engineer, City of Omaha, NB:

"Requiring an industry to sample and report on its status every six months does not guarantee meeting compliance. This will require a major police action."

Jack Barron, Division Engineer, Industrial Waste Division,
Department of Public Works, San Francisco, CA, Response to
Question at San Francisco Public Hearing:

"...Basically, we began our efforts in '73, and this is the gearing up process and problems that you have.

"Our first emphasis was on getting a surcharge program in operation, and we found we had to do it all at one time because we were being taken to court if we attempted it on a piecemeal basis. So we had to expend the first year in getting this program underway since our SPDES permit was granted in '74. So we didn't precisely know what we would have to control.

"So since '73, these ensuing years, we have been concentrating on our pH problems, which we now have under control, and then on our heavy metals.

"Now, we will be getting into controlling those things that may have any adverse effect on our secondary treatment plants in our next phase..."

"And I would like to reemphasize...that it takes considerable time to gear up to do these things because industry can't overnight, and neither can we overnight, arrive at solutions that will resolve the issues."

Frank Dryden, Head, Technical Services Department, Sanitation District of Los Angeles, Whittier, CA:

"I would like to point out that the options appear to be quite complicated administratively and that there is a great need to simplify some of the concepts and some of the administrative procedures, and that failure to simplify them will probably result in their demise because it will almost become an excuse for adopting what would be administratively simplistic but I think not the best or most reasonable approach, and that of decreeing uniform national standards without the variances. So I'm very concerned that, as you proceed to selecting and adopting a final option that you work for a simplification of the procedures, for which I have some suggestions this morning."

Roger R. Patocka, Banner Associates, Inc., Consulting Engineer and Architects, Brookings, SD:

"It is felt that any of the four options presented will require a great amount of effort to implement. Laboratory capability will be needed as well as the expertise necessary to perform the analyses. It is questionable if the proposed timetables can be met."

James B. Bewley, Superintendent, Water Pollution Control, South Bayside System Authority, San Carlos, CA, Response to question at San Francisco Public Hearing:

"...My only hedge would be what you determine to be a reasonably short period of time to get the program going and started.

"I'm sure you recognize it takes some time. You have the ordinance problem and the budgetary problems and finding the people. The time, though, up -- the time constraints up until now have not been on the local agency. We have been anxiously awaiting federal guidance since 1972 on this.

"So I do think that it would be reasonable that -- I will stay with California because my only experience is here -- that the State Board through the regional boards could establish a procedure for determining whether a local agency was capable of handling it. I think in the absence of such procedure, yes, that the -- the technology-based standards would be all that you have to work with."

Robert Cruess, Permit and Surveillance Division, State of New Hampshire, Concord, NH, Statement at Washington, D.C. public hearing:

"...I think the standards should be written before we have the procedures to implement them. But then, the second issue is that with these standards, I think you will find that it will take you ten years before you have a handful of communities running a pretreatment program. I think it would be better to have a more simplified program and make it concentrated only where we have large major industrial concentrations. In New Hampshire, that's probably two communities.

William B. Dendy, Executive Officer, California State Water Resources Control Board, Sacramento, CA:

"Subsection (3) indicates that EPA expects local agencies to be able to develop technology based limits on an interim basis pending promulgation of national standards. Considering the difficulties EPA encountered in establishing the BPT standards, this is a curious statement. We don't understand how local agencies can be expected to accomplish such a task in this time frame. The most that we would expect is for those few agencies already having some pretreatment requirements to continue and for some of the largest POTW operators not yet having any pretreatment requirements to adopt some requirements...It is also important that any requirement for pretreatment be consistent with the timing of municipal treatment facilities construction. Industries will, in accordance with applicable revenue recovery programs, be paying for these facilities and as such they should be entitled to obtain any benefits in terms of reduced pretreatment which result from the use of the municipal facilities."

W.R. Johnson, Director-Plant Environment, General Motors Corp., Warren, MI:

"During our contacts with POTWs, large or small, each has one or more persons responsible for implementing an industrial wastewater control program under a local ordinance. Programs of some large POTWs, such as Chicago Metropolitan Sanitary District and Los Angeles County Sanitary District, were developed and implemented successfully even before the promulgation of any federal pretreatment standards. Further, many POTWs have not fully developed the capability to enforce pretreatment programs because of the uncertain nature of federal regulations. The full development of local enforcement capability may take several years for some POTWs. However, again, the development of an equivalent capability at the federal level may take even longer."

C. Due process, judicial review, and other legal considerations will delay compliance with established statutory deadlines.

Kenneth S. Kamlet, National Wildlife Federation, Washington, D.C., addressing question regarding the level of adequacy for due process in granting variances, Washington, D.C. public hearing:

[Comments in regard to due process for industrial variances]

"Just off the top of my head, one thought occurs to me, as a means of preventing such variance proceedings from dragging on indefinitely while the discharges continue, might be an approach similar to one layed out by Congress in the Water Act, the Air Act and various other statutes, whereby industry, those that are subject to the regulation, are given 60 days or 90 days or some set period of time in which to complain, and if they don't avail themselves of that opportunity within that period of time, then they are foreclosed from complaining thereafter.

"Once they register their complaint, the request for a variance, they will have an opportunity to have a hearing and so forth, administratively and whatever. I am not suggesting that they not have the opportunity to make their case and have the decision made on the basis of the evidence they present.

"It seems to me that a balance has to be struck, as you pointed out, and one way of doing that would be to establish some reasonable cut-off for objecting to what has been adopted."

[Comments in regard to due process for POTW variances]

"1. First, we reiterate our strong view that variances should be made available only in rare cases, only where the "fundamentally different" nature of a POTW results in a degree of treatment (not merely "removal") in excess of that upon which the national standard was based, and only where the grant of a variance will cause no decline in the quality of either the resultant effluent or the resultant sewage sludge.

"2. Second, we believe different approaches are appropriate and necessary for new as opposed to existing POTW's. Since existing POTW's presumably have an operational experience upon which to draw, it is fitting that such plants should be given less time than new sources in which to challenge or seek variances from pretreatment requirements.

"3. Third, inasmuch as the national (and other) pretreatment standards for industries and pollutants will generally, if not always, have effective dates delayed by as much as three years from the date of their final promulgation, variance requests, variance proceedings, and the disposition of such requests should be made, conducted, and completed within the phase-in period. Moreover, variance decisions should be made sufficiently early in the phase-in period to permit affected industries to complete any necessary process or facility modifications within this period, without delaying the effective date of the standards.

"4. Fourth, for existing POTW's, the operating authority should have no more than 60 days from the date of promulgation of the final pretreatment standards within which to request a variance. EPA (or the NPDES state) should be required to hold a complete variance proceedings, along with a final disposition of the variance request, within a maximum of 180 days from the date of the request.

"5. Fifth, for new POTW's, the operating authority should have no more than 60 days from the date of promulgation of a final pretreatment standard within which to request a variance, unless: (a) EPA determines within 15 days of the request that probable cause exists to anticipate ultimate approval of the request, (b) the operating authority demonstrates that, by virtue of the "newness" of the POTW, it was not reasonably possible to accumulate the data necessary to evaluate the need for a variance within the time limits applicable to an existing POTW, and (c) the operating authority exercised its best good faith efforts to expeditiously assemble all necessary data and otherwise to comply with the time limits applicable to existing POTW's.

"6. Sixth, where a new POTW qualifies (as in 5, above) for an extension in the time limit for requesting such extension should in no case exceed 60 days from the earliest date on which the operating authority could reasonably have had available the data necessary to determine the need for a variance. Again, the decision on the requested variance should be forthcoming within a maximum of 180 days from the date of the request.

"7. Seventh, if it is necessary to stay the effectiveness of a pretreatment standard pending a determination on a request for a variance, the stay should be as narrowly drawn and of as limited a duration as possible. Variance requests for which decisions have not been made within the allotted 180-day period should be deemed denied."

C.J. Buschkill, Manufacturing Engineer, George Koch Sons, Inc., Evansville, IN:

"The present BPT requirement by July 1, 1977, and

BPT by July, 1983, are undefinable, indefinite, and unrealistic. The interpretation, as I have attempted to secure from federal, state and local levels, is so broad that litigation could easily continue for the next decade."

Seymour A. Lubetkin, Chief Engineer, Passaic Valley Sewerage Commissioners, Clifton, NJ, Statement at Washington, D.C. public hearing:

"Generally speaking, some of the time tables indicated in the Federal Register, are out of date with reality, particularly on some very large, complex projects. And, although I realize there are dates within the law that, at present, are unalterable, I request that when the final regulations are drawn, consideration be given to the problems of many urban areas, whereby primary treatment plants are being upgraded to secondary plants after dates, which prohibit such a plant from administering a pretreatment program.

"In our particular case, for instance, due to the size and complexity of the problem, the first phase of construction will not be completed until the end of 1980, whereby we will have a secondary treatment plant, but without primary clarifiers. Thus, not up to the removals required by law.

"The second phase will not be completed until the end of 1983, and it is only at that time, with a 93 percent removal, will we meet the standards necessary for our discharge.

"The PVSC is working as fast as possible and all the dates set in the law cannot make construction go any faster. It would be unconscionable, because of such a long and complex construction program, for the industries within our area to be unnecessarily penalized and burdened twice; first, by having to install pretreatment equipment because we cannot meet a construction date for our discharge as set in the regulations, particularly since the delay is causing no problems in our area, and then, secondly, by paying through the industrial cost recovery system for our expensive upgrading, which makes unnecessary part of their pretreatment."

Robert G. O'Dette, Environmental Engineer, statement at Washington, D.C. Public Hearing:

"The disregard for many economic considerations, from an engineering and consumer point of view is most distressing. The only costs mentioned in the Register were \$15 to \$85 million for reporting requirements, and less than \$1 million for compliance. The following conservative estimate will show that actually this cost may well exceed \$300 million for compliance alone.

"If this is the case, EPA will have violated Executive Order 11821, as extended, OMB Circular A-107, and

their own guidelines on economic impact analysis, which requires an analysis if incremental amortized costs of compliance, including capital charges, exceeds \$100 million.

"Without this analysis, it is virtually impossible for people who must bear the burden of the costs of the program and increased consumer costs, to make any informed decision to support or reject the proposed regulation."

J.R. Thorpe, Manager of Environmental Affairs, GPU Service Corporation, Parsippany, NJ:

"Under Section 403.8, a Regional Administrator may withdraw a previously granted "variance for removal of pollutants" (local credit) after notice to the POTW and all indirect dischargers, and publication of the reasons for the withdrawal. The proposed regulations, however, do not provide for a hearing prior to the withdrawal of the variance. In view of the severe impact on the operations of both the POTW and its industrial dischargers of a withdrawal of the local credit variance, EPA must provide an opportunity for a hearing prior to the withdrawal of the variance by the Regional Administrator.

Robert C. Niles, Director-Environmental Controls, UniRoyal, Middlebury, CN:

"Paragraph 403.6 (b), Pg. 6497 - An industrial discharger who is called a requester may ask for a variance 90 days following the promulgation of a pretreatment standard. In the rubber industry there are 1,189 fabricated rubber products plants which generally discharge to POTW's and are privately owned. The smallness of these operations tend to preclude knowledge of EPA's activities in this area and, therefore, timely response does not occur. EPA seldom surveys this type of operation so that, statistically, an element of fundamental difference from national pretreatment standards may occur. This vexing problem requires special consideration."

Paul C. Hittle, General Supervisor of Environmental Affairs, Consumers Power Co., Jackson, MI:

"In a state which has an approved NPDES program, this section would establish a three-level approval process for industrial variances. Approval of a variance would be required by the State Director, the EPA Regional Administrator, and the EPA National Administrator. Because of the possibility of delay in securing all three approvals, the Company recommends the inclusion of a 60-day time limit within which the State Director and EPA Administrators must either approve or disapprove complete variance requests. It is also recommended that provisions be added to allow delegation of this

"The Company also recommends that the time period for the submission of supporting evidence for a variance request be extended to at least 180 days, and that the Regional Administrator or State Director be given the authority to extend this period even further, when individual circumstances justify such an extension. Although a variance request could be made within the 90-day proposed period, adequate supporting evidence for a variance request be extended to at least 180 days, and that the Regional Administrator or State Director be given the authority to extend this period even further, when individual circumstances justify such an extension. Although a variance request could be made within the 90-day proposed period, adequate supporting evidence for the request might in some cases not be obtainable within the 90-day period. For example, the acquisition of reliable supporting evidence could require the purchase and installation of sampling and analytical equipment and contracting of outside laboratory sources. These activities could easily take 90 days to complete; even if they required a lesser period there would be little time to complete the necessary monitoring. In many cases, however, a brief period would not adequately cover the full range of a discharger's production activities, particularly if the period coincided with the discharger's seasonably high or low production period."

VII. DUPLICATION WITH EXISTING PRETREATMENT OR INDUSTRIAL SOURCE CONTROL PROGRAMS.

As stated in the February 2, 1977, Federal Register (Part II), a secondary objective of developing a national pretreatment strategy "...is to begin to reconcile existing pretreatment programs in many cities with the approach called for by the Federal legislation." However, the proposed pretreatment standards only stated the issue and addressed none of the complexities that might be occasioned by their promulgation. Statements at the four public hearings and in written comment submitted to EPA, support this contention. The major concern expressed was that the proposed regulations would cause duplication of facilities and in treatment efforts of existing pretreatment and industrial source control programs. Regulatory and enforcement conflicts, lack of mention of industrial POTWs, additional financial burdens, and no discussion of any EPA consideration of existing pretreatment efforts in determining new pretreatment requirements were also highlighted as problem areas. Discussion of these duplication issues are contained on the following pages.

- A. The Pretreatment program does not account for any conflict with presently established local/state source control programs that may or may not be more stringent.

Jack Barron, Department of Public Works, City of San Francisco, CA:

"So no matter what you do, we are still going to have a source control program. We can't avoid it.

"So in other words, we appear to have some duplication...

"The other thing is that you look at it from industry's point of view. We are working now with industry, have them under permits, under orders to do certain things for pretreatment.

"Now, it is possible that EPA will come along with pretreatment standards and require -- and we will have to require industry to take a second run at this pretreatment problem. And if they would have known originally how much pretreatment they would have to install, they may have addressed the issue in a very different manner. They may have gone to an entirely different method of manufacturing rather than attempt to eliminate some of the constituents in the current method of manufacturing."

James B. Bewley, Superintendent, South Bayside System Authority, San Carlos, CA:

"...you must recognize that most local agencies that have industrial problems have already begun a source control program and in whichever of the choices you pick, you want to make sure that you do not jeopardize any of the progress that we have made."

Don T. Howell, Director of Utilities, Board of Light and Water Commissioners, Concord, NC:

"Pretreatment requirements as proposed represented still another roadblock (to a Regional treatment plant). As the development of the Concord Regional Plan matured, using EPA's ever changing guidelines, primary clarifiers with chemical precipitation were approved in the initial grant application. After final plans and specifications were prepared and approved, the primary clarifiers were declared ineligible for grant participation. Local and

industrial funds were secured to construct the primary clarifiers to be used exclusively to remove industrial pollutants. This entire cost is to be paid by the affected industries. It is realized that additional sludge is to be expected from facilities of this nature, but at the same time dewatering and incineration facilities are under construction to dispose of this sludge in an environmentally acceptable manner. If facilities such as these are to be duplicated at every industrial plant, it will be impossible to be cost effective."

J.F. Cormack, Supervisor, Water Programs, Environmental Services, Crown Zellerbach, Camas, WA:

"There is one important situation that is not addressed in any of the options. This is the case where a large industry has a combined treatment plant with a small community. The nature of the final effluent approaches that from the industry. These plants were specifically constructed to achieve economy of operation and to avoid duplicate facilities. The imposition of pretreatment requirements is inappropriate in such situations."

E. Ray Farley, Superintendent, Water and Sewer Department, Lewisburg, TN:

"Why should incompatible wastes be handled differently from compatible wastes--where, through ordinance, local POTW's require pretreatment when the POTW's effluent standard is endangered? The basic goal of PL 92-500 is unpolluted water. The only dischargers affecting receiving waters are direct dischargers--point source and POTW's....We lose sight of the real goal at times. It would appear that EPA regulation of indirect dischargers is regulation for the sake of regulation."

James W. Scanlan, Assistant Chief, Facilities, Bureau of Water Quality Control, Arizona Department of Health Services, Phoenix, AZ:

"Secondary Objective....is to reconcile existing pretreatment programs in many cities. This should not be a Federal objective. It seems that the local authorities should be able to develop what programs they want. Some programs may be very restrictive because they don't want a lot of water-using industries, others might be very liberal so they can attract those industries. Therefore, the primary objective is very important; the secondary objective stated above seems to infringe on our competitive systems."

Karol M. Enferadi, Chairwoman, Industrial Wastewater Subcommittee, California Water Pollution Control Association, Pasadena, CA:

"Existing source control programs currently are being developed and enforced within the represented region under the NPDES permit system. There permits also require enforcement of EPA Standards when promulgated. It appears to date that none of EPA's standards are more restrictive than all of the represented local agencies enforced standards.

"An approved local source control program is the most efficient way of meeting water quality standards. Option II is, therefore, most compatible with the existing structure."

Nicholas J. Lardieri, Director-Environmental Resources, Scott Paper Co., Philadelphia, PA:

"We believe that EPA should take no action in the pretreatment area which would unduly jeopardize existing joint municipal-industrial treatment or inhibit further development of such systems. The desirability of joint treatment is a clearly stated policy of PL 92-500 which we strongly endorse. Joint treatment facilities result in economies of scale, elimination of multiple treatment sites and minimize required regulatory surveillance. Pretreatment regulations should be designed to preserve these advantages by encouraging local enforcement to the least possible number of Federal pretreatment standards."

B. The Pretreatment Regulation fail to recognize the difference between a "municipal" POTW designed to treat normal domestic sewage, and an "industrial" POTW designed specifically to treat industrial wastes.

Joe P. Teller, Deputy General Manager, Gulf Coast Waste Disposal Authority, Houston, TX:

"The proposed Pretreatment Standards regulation assumes that all Publicly Owned Treatment Works (POTW's) are conventional biological treatment facilities, and, even further, frequently refers to them as "municipal." For example: "These standards known as prohibited discharge standards, are designed to prevent inhibition or interference with the municipal treatment works...." (Fed. Reg. Vol. 42, No. 22, p. 6478); "The Agency will consider the effects of industrial wastes on the municipal sewer system...." (Fed. Reg. Vol. 42, No. 22, p. 6478); and "To be more specific regarding this assumption EPA would assume that the POTW is one of a group or family of biologic treatment processes which are commonly used in the treatment of normal municipal sewage...." (Fed. Reg. Vol. 42, No. 22, p. 6480).

"This assumption, which is apparent throughout the proposed regulations, is not valid in all instances. Existing facilities, specifically designed to treat industrial wastes and owned by public entities, are in operation now and have been for some time....

"There is clearly a distinct difference between a municipal POTW and an industrial POTW, yet no distinction is found in the proposed regulations. To overlook these differences would be a direct disservice to water quality management, and would pose a totally unnecessary financial and technical burden on those parties involved."

J.F. Cormack, Supervisor, Crown Zellerbach Environmental Services, Camas, WA:

"There is one important situation that is not addressed in any of the options. This is the case where a large industry has a combined treatment plant with a small community. The nature of the final effluent approaches that from the industry. These plants were specifically constructed to achieve economy of operation and to avoid duplicate facilities. The imposition of pretreatment requirements is inappropriate in such situations. Such plants should have the option of being regulated under the appropriate industry limits or by these regulations."

Timothy L. Morris, Texas Water Quality Board, Austin, TX:

"We also recommend that the regulations be drafted to exempt publicly-owned treatment works that are specifically designed, constructed, and operated to provide regional treatment of industrial waste such as the plants operated by the Gulf Coast Waste Disposal Authority and the Lower Neches Valley Authority in Texas. Major reductions in the pollutant loads on the Houston Ship Channel and the Lower Neches River have been realized by these systems. It is our belief that the pretreatment rules as they have been proposed will jeopardize the future of these systems like them if they are affected by the regulations just as any other publicly-owned treatment works would be."

Frank J. Krasofski, Vice President, James River Fitchburg, Inc., Fitchburg, Inc., Fitchburg, MA:

"No distinction is made between a municipal treatment facility designed primarily for domestic wastes and a facility primarily designed as a joint municipal-industrial system capable of processing industrial wastes.

"The city of Fitchburg operates two waste treatment plants; the West plant was designed to accept and process all industrial wastes from the various paper companies in the area, including James River-Fitchburg. The plant was designed in conjunction with the paper companies, and funded by these companies, along with the city of Fitchburg.

"Because the plant has already been designed for industrial wastes, pretreatment regulations for industry feeding wastes to the plant would be an unwarranted and unjustified cost burden of duplicated effort."

Blaine Fielding, Legal Dept., Clark Oil & Refining Corp., Blue Island, IL:

"First, there seems to be an unarticulated and over-generalized hostility to POTWs serving the function of a central mechanism for the treatment of industrial wastewater. There may be some basis for this in a locality where the POTW is geared exclusively or primarily to treat residential and commercial wastes, and not the more esoteric industrial wastes. However, we strongly believe, as discussed more fully below, that explicit recognition should be given to those highly industrialized areas in which the POTW is not only equipped to, but is desirous of treating industrial wastes, if it can demonstrate that it will do so in an environmentally sound manner. This is obviously the situation in the Chicago area where the MSDGC treats the wastes of 6000 industrial facilities, and we imagine the same is true in many other areas of the nation too."

Robert C. Niles, Director-Environmental Control, UniRoyal, Middlebury, CN:

"Furthermore each POTW represents an engineering design for the community it serves, including the industrial customer. Many POTW's are designed to handle industrial process wastes and therefore pretreatment regulations could be counterproductive. At one of our facilities we discharge high levels of phosphorous which helps the POTW meet the P/BOD ratio with a minimum of nutrient addition. Some industrial discharges have abnormal pH values in their discharges but mixing in the collection works results in a neutral pH at the treatment works."

- C. Experience with existing industrial source control or pretreatment programs forms a basis for determining the necessity or desirability of new or duplicative pretreatment requirements.

Jack Barron, Division Engineer, Industrial Waste Division, Department of Public Works, San Francisco, CA, Response to question at San Francisco Public Hearing:

"I can't answer as to what the smaller communities can or cannot do. I think it would have to be based on each individual community. But I think we could carry out this program that you are mentioning in a reasonable time and probably carry it out as quick or quicker and more efficiently than we could if we had to rely on EPA pretreatment standards, which will also have to probably be included with our source control program, because -- I'm second-guessing you here. Maybe I'm not doing this correctly -- but I think that you are going to put those same controls for those same contaminants in our NPDES permit, and if you do, then we face the problem that you are mentioning, whether or not you issue the pretreatment standards."

N.L. Martin, James River-Massachusetts, Inc., Fitchburg, MA;

"In 1972, the paper mills committed themselves to capital and fixed operating costs (for a treatment plant designed specifically to treat paper mill effluents as discharged) for ten years after startup plus all of the operating and maintenance costs based upon Solids, Flow, and BOD of water treated.

"The paper mill's commitments for ten years through 1985 was made expressly to allow us to discharge untreated waters to a municipal plant and achieve the required degree of treatment. A pretreatment provision in the commitment required the mills to bear full costs for pretreatment facilities required.

"We are, therefore, opposed to the imposition of further pretreatment requirements on mills which discharge into municipal plants when the required degree of treatment is achieved."

Larry G. Lawson, Virginia State Water Control Board, Richmond, VA, Statement at Washington, D.C., Public Hearing:

"We recognize that all the on-going pretreatment programs (nationally) are not the same nor are they at the same level of development and we have only presented Virginia's program as one example, however, we believe that before significant mandatory modifications to 40 CFR 128 are made serious consideration must be given to existing pretreatment programs."

T.O. Andrews, Manager, Environmental Protection, Hammermill Paper Company, Erie, PA:

"We believe that there are specific instances where water quality standards can be maintained without the requirement of pretreatment by specific industries through locally derived water quality based pretreatment limits. We do not believe the selection of options should be so rigid so as to preclude sensible courses of action such as the above.

"In any selection of a pretreatment scheme care should be exercised to prevent a confrontation between industry and the operators of publicly owned treatment works. The benefits of toxic substance control could be lost."

Edward E. Phillips, Director of Public Works, City of Hayward, CA:

"We feel that Option II allows the greatest possible flexibility with respect to source control programs. Specifically, it would permit Municipal sanitation agencies currently operating under NPDES permit with approved source control programs, to continue the orderly administration of these programs without having to impose federal technology-based standards on their industrial dischargers. In many cases, the imposition of these technology-based standards would only result in duplicity of efforts, added cost to industry, and no significant improvement in the quality of the receiving waters. As in our case, any NPDES approved local source control program should and would contain wastewater discharge standards designed and tailored to protect the operation of the specific publicly owned treatment works and insure compliance with NPDES permit conditions and limits established for the particular discharge."

E.D. Blum, Coordinator, Environmental Programs, Union Oil Company of California, Los Angeles, CA:

"Union Oil and its subsidiaries operate a refinery, a fertilizer complex and other smaller facilities in the Los Angeles area. These facilities all discharge their wastewaters to the various local Sanitation Districts (i.e., Joint Sanitation Districts of Los Angeles County, Los Angeles City Sanitation District, Orange County Sanitation District).

"These districts all have pretreatment programs in existence with stringent but achievable pretreatment standards. We understand that some of the pretreatment requirements imposed on our facilities are necessary to protect operation of the treatment plants while others are water quality based limits necessary to meet the requirements of the California Ocean Plan.

"We recognize the likelihood that all local districts throughout the country may not have the capabilities of the districts in the Los Angeles area. In these cases, the Federal pretreatment standards mandated by the Water Pollution Control Act appear to be appropriate. Any such Federal pretreatment standards should be based on a combination of pretreatment technology reasonably available to the indirect discharger plus removal capabilities of publicly owned treatment works. It is essential that such pretreatment standards be carefully designed to prevent duplication of treatment facilities between the indirect discharger and the publicly owned treatment works."

Mark A. Pisano, Executive Director, Southern California Assoc. of Governments, Los Angeles, CA:

"As you know, the larger sanitation agencies in Southern California, which serve major industries such as the electroplating industry, have done a capable job overall in designing and implementing local pretreatment programs. The local programs consist of ordinances controlling discharges to municipal sewers, discharge permits which specify discharge limitations, user charges, inspection and monitoring provisions, and fees for noncompliance with permit conditions. These local pretreatment programs involve "good housekeeping" techniques by industrial dischargers and, where necessary, pretreatment equipment. The local pretreatment programs are making significant progress in allowing sanitation agencies to meet NPDES limitations based on current EPA and State requirements on toxic pollutant discharges.

"In light of the demonstrated pretreatment capabilities of the major sanitation districts in Southern California, SCAG supports local development and enforcement of pretreatment standards, with nationally-developed, uniformly applied pretreatment standards applied only if EPA judges local pretreatment programs to be adequate. SCAG supports water quality-based variances, on a jurisdictional rather than pollutant-by-pollutant basis, with national pretreatment standards for the most serious industries and toxic pollutants being developed as in Option 3 and applied unless a water quality variance is granted."

C.R. Calkins, Vice President-Environment Affairs, American Paper Institute, Inc., Washington, D.C.

"A number of local authorities already have implemented fully adequate and effective pretreatment programs. A national pretreatment program will be more easily and effectively begun if these local programs are allowed to continue without an excessive "over-lay" of new federal standards and requirements."

Nicholas J. Melas, President, The Metropolitan Sanitary District of Greater Chicago, Chicago, IL:

"Presently, there are numerous local agencies with effective industrial waste control programs which account for a significant percentage of the nation's industrial dischargers. As an example, the Metropolitan Sanitary District of Greater Chicago (MSDGC) which serves approximately 12% of the total number of industrial dischargers in the nation has had an active industrial waste control program since 1969. The efforts of the local agencies should not be delayed or negated by Federal regulations but instead should be assisted in continuing their efforts. The objective should be the expansion of local programs and not the development of a whole new set of programs."

VIII. ECONOMIC IMPACT OF PRETREATMENT PROGRAMS .

Analysis of the public hearing transcripts and written materials submitted to EPA indicated widespread concern exists, among the municipalities required to design and implement pretreatment programs and the industrial discharges who must absorb pretreatment costs, that promulgation of pretreatment requirements will engender significant economic impacts for both sectors.

Economic areas of concern to local governments stem from their responsibility for designing and administering pretreatment programs. A municipality must enforce whatever pretreatment standards are necessary to meet the requirements, prevent violations, minimum sludge disposal costs, protect their systems from industrial waste damage, etc. Consequently, there are two fundamental economic elements to municipal pretreatment programs: 1) the cost of surveying, monitoring and analyzing industrial wastes discharged into the local sewer system, and 2) the cost of administering and regulating the program.

The nature of the pretreatment cost impacts on industrial dischargers focuses on several factors: the costs of the pretreatment (or self-treatment) facility; the particular industries and pollutants requiring regulation; individual plant size, age and operating efficiency; production process; capital structure and profitability; and financing mechanisms. The interrelationships between these economic factors are extremely complex, especially when one considers that there are substantial economies of scale to most pollution abatement processes (particularly when end-of-pipe treatment is employed). Hence, the average abatement cost for larger firms is much lower than that for smaller firms. Additionally, larger firms often have better access

to tax exempt financing, which provides an important subsidy for pollution abatement investments.

Comments directly addressing the institutional and industrial economic impacts of the proposed pretreatment regulations are documented on the following pages.

- A. The cost effectiveness of the pretreatment standards should be the prime substantive factor in formulating the final regulations.

Charles J. Henry, Director, Water Pollution Control, Municipality of Metropolitan Seattle, Seattle, WA:

"Pretreatment standards should be established on the basis of cost effectiveness. Although such analyses are recognized in the regulations, there has been an historic tendency to establish treatment requirements on the technical basis of capability rather than need. Full consideration of energy and other resource consumption, water quality needs and economic impacts should be strongly stressed to prevent unnecessarily restrictive standards and treatment requirements.

"Option three represents the most practical approach in this respect since it recognizes primary need to concentrate on the major dischargers and most hazardous pollutants."

Joe P. Teller, Deputy General Manager, Gulf Coast Waste Disposal Authority, Houston, TX:

"This assumption, which is apparent throughout the proposed regulations, is not valid in all instances. Existing facilities, specifically designed to treat industrial wastes and owned by public entities, are in operation now and have been for some time. Should recognition not be given to those industrial POTW's, serious economic and technical disadvantages would be immediately forthcoming. For example, Section 403.4(f) of the proposed regulation (Fed. Reg. Vol. 42, No. 22, p. 6497) would prohibit influent to a POTW in excess of 40° C (104°F). An industrial POTW, designed in accordance with sound engineering practices, would provide facilities to cool these wastes in order to provide efficient treatment in the plant. An existing facility which had provided the cooling phase would find itself with a capital expenditure item not needed, and the industry discharging the waste would be required to construct a cooling phase. This is clearly a waste of capital. Other examples are known to exist, such as the planned commingling of wastes with extreme

variations in pH, giving a resultant mix of the optimum pH without the addition of neutralizing chemicals.

"There is clearly a distinct difference between a municipal POTW and an industrial POTW, yet no distinction is found in the proposed regulations. To overlook these differences would be a direct disservice to water quality management, and would pose a totally unnecessary financial and technical burden on those parties involved."

Charles A. Geisler, Sanitation Engineer, City of Omaha,
NB:

"Consider all the pretreatment program standards and the situation where a company can jump from one area to another based on Industrial Cost Recovery charges. This in turn could cause overloading of existing facilities and NPDES limits or losing a paying customer.

"Is each violation a separate offense and punishable or can they (industry) just dump it all if they're going to pay a \$1,000 fine anyway. Must a company shutdown and close immediately if one of the EPA limits is violated? If it is to be enforced by ordinance, it must state clearly when this is to be the case. The statement "when it endangers health" is too general and not definable.

"If the POTW has only primary treatment facilities, does this mean the pretreatment standards imposed on industry would be those of a new point source not dumping into a POTW? If this is true, would there be a need for ICR charges?"

John G. Costello, Executive Director, Bergen County Sewer Authority, NJ, Statement at Boston Public Hearing:

"...The Sewer Authority feels that local agencies should be responsible for enforcement of pretreatment regulations because they are closer to the problem and are familiar with local conditions and would thus be better able to implement this program. However, because the potential exists for many legal challenges by industry and the legal fees resulting from extensive litigation could be prohibitive, the Authority feels that it is essential that Federal agencies provide strong backup, upon request by the Authority, at such time that we are faced with recalcitrant violators. This topic is one of our greatest concerns and cannot be emphasized enough. Without strong Federal backup available, most local agencies could simply not afford the financial impact of an effective pretreatment program."

- B. The cost to local government for administering a POTW's pretreatment program will be exceedingly expensive.

Timothy L. Morris, Texas Water Quality Board, Austin, TX,
Statement at Chicago Public Hearing:

"The day-to-day administration of the programs envisioned by your proposed rules will be extremely expensive. For instance, our experience with compliance monitoring which is comparable to that being proposed in these rules indicates that an average environmental technician working for about \$14,000 a year can effectively keep up with about 30 industries a year. If you take that salary figure and apply a 30% factor for salary cost and a 2.25 factor for overhead and support cost, you will find that your pretreatment program costs about \$1,365 per industry per year. Considering that there are 55,000 such industries nationally, that means that the cost to the local government for administering the program you have proposed will run about \$75 million annually nationwide. That is an expensive water pollution control program. It is particularly expensive when you realize that the average cost to the industry begin regulated exceeds \$100 each month."

Frank Dryden, Head, Technical Services Department, Sanitation District of Los Angeles County, Whittier, CA, Response to Question at San Francisco Public Hearing:

"I would say in our own case, in 1970 while we were running the rather cursory type protective system programs that have been historic, we had a very small staff devoted to source control, approximately five inspectors and two engineers. We now have 13 or 14 inspectors, plus the availability of the county engineers, inspectors, and we have a staff of about 40, most of whom are engineers, involved in our industrial waste program.

"The cost is half a million to a million dollars a year type program. That covers everything we do now. It's not -- It's not an expensive program. It is, and properly should be, covered by the charges to industries that cover our system. Because it is not an inexpensive program, we really don't like having to do anything more than we can show needs to be done."

Don T. Howell, Director of Utilities, Board of Light and Water Commissioners of the City of Concord, Concord, NC:

"We in the City of Concord, North Carolina have been working for more than five years attempting to

produce and construct a regional treatment plant. Exhaustive efforts have gone into developing a program that will benefit all sections of our county (Cabarrus). With the enactment of PL 92-500 everyone had the feeling that the battle had been won and we were at last on the way to cleaning up the environment. Great strides have been made, but roadblock after roadblock has caused delays and increases in projected costs.

"Pretreatment requirements as proposed represented still another roadblock. As the development of the Concord regional plan matured, using EPA's ever changing guidelines, primary clarifiers with chemical precipitation were approved in the initial grant application. After final plans and specifications were prepared and approved, the primary clarifiers were declared ineligible for grant participation. Local and industrial funds were secured to construct the primary clarifiers to be used exclusively to remove industrial pollutants. This entire cost is to be paid by the affected industries. It is realized that additional sludge is to be expected from facilities of this nature, but at the same time dewatering and incineration facilities are under construction to dispose of this sludge in an environmentally acceptable manner. If facilities such as these are to be duplicated at every industrial plant, it will be impossible to be cost effective."

Robert R. Matthews, Manager, Water and Sewer Commission, City of Freeport, IL:

"We are a certified municipal laboratory and POTW that are presently running an extensive monitoring program, sometimes successfully, and sometimes not. Industry in our city is responsive to our requirements and we are probably an excellent candidate for a local compliance program, whichever option you may choose. I do not take exception to the proposed regulations but I do raise the question of how to pay for the local government participation.

"Sections 201 and 208 are not enough. Construction grants are necessary when facilities are built, but by and large the thrust of these regulations will be on municipalities with already built facilities. Indeed in strict interpretation a local compliance program would require this. Therefore, E.P.A. should consider some sort of remuneration to the municipality that is operating a certified monitoring and laboratory program in the form of an operating grant. The administration could be simply tied to the local compliance program application and approval. In my opinion, the success of the proposed regulations depends on this provision."

Robert G. O'Dette Environmental Engineer, Statement at Washington, D.C. Public Hearing:

"The disregard for many economic considerations, from an engineering and consumer point of view is most distressing. The only costs mentioned in the Register were \$15 to \$85 million for reporting requirements, and less than \$1 million for compliance. The following conservative estimate will show that actually this cost may well exceed \$300 million for compliance alone ...

"Under the new regulation, pretreatment will be required regardless of flow, and with very little consideration for economic impact. Although it is difficult to generalize a cost for the physical-chemical pretreatment works, an engineering estimate of amortized capital costs, operation, and maintenance, chemical and power costs would be about \$50,000 per year for ten years.

"There are over 400 POTW's in the State of Tennessee alone. If only half these municipalities had only one industry, similar to the one described that would be affected by the change in regulations, the cost in Tennessee alone would be \$10 million. Considered over the 50 states, the cost could exceed \$300 million, and this is a very, very conservative estimate, I believe.

"EPA further states that an economic impact analysis will be performed for each pretreatment regulation when it is prepared and promulgated. I contend that economic evaluation at this time is too late. It is conceivable that the economic impact of any one subcategory regulation may not exceed the \$100 million; however, a total economic impact of the overall program could be devastating."

W.C. Trefz, Chief Engineer, Allegheny County Sanitary Authority, Pittsburgh, PA:

"All options will require considerable local monitoring and testing. All costs of local monitoring required for this program should be reimbursed by EPA. This would include cost of the system monitoring, sampling and lab analysis. Our best estimate of the Alcosan (Allegheny County Sanitary Authority) costs of the new regulations for our system would be as follows:

One time initial expense for purchase of equipment	\$565,000.00
Estimated annual increased operating costs	" \$245,000.00"

Gene B. Welsh, Chief-Water Protection Branch, Georgia
State Dept. of Natural Resources, Atlanta, GA:

"The application and enforcement of a pretreatment program under any of the options would be similar to the NPDES program which we now administer with direct industrial dischargers. However, the new program would require an expenditure of resources at least equal to and perhaps exceeding that of the industrial NPDES workload in the State and therefore would require some 8 to 10 additional staff members in this agency to administer it. We also believe that the programs outlined are so ambitious that EPA may have to double its NPDES staff in order to administer the program. It is folly to believe that the states or EPA could handle these additional responsibilities without substantial increase in staffs."

Gary F. Levy, Director, Jefferson County Dept. of Environmental Quality, Louisville, KY:

"All of these functions create an additional cost to the local authority because of the increase in manpower requirements, the need for additional equipment, an increase in support services such as laboratory analysis, the utilization of legal counsel for enforcement activities, and the increase in administrative services. Federal funds apply only to the cost of initial program development. The long term cost of operation and maintenance are to be funded by the system users."

Mark S. Davis, Secretary, Technical Advisory Committee, Indianapolis Chamber of Commerce, Indianapolis, IN:

"It appears that the City of Indianapolis will be required to expend approximately \$600,000 in first year start-up costs for an adequate industrial pre-treatment program. This rough estimate indicates a substantial need for additional federal assistance in the form of a grant. I strongly suggest that these types of start-up expenses are not an appropriate item for industrial cost recovery, but rather should be funded solely by a first year federal grant."

Peter A.A. Berle, Commissioner, New York State Dept. of Environmental Conservation, Albany, NY:

"We estimate that there are 6,000 industries in the State that have process wastewater discharges into POTW's with a total combined flow also of 1 BGD. In summary the pretreatment program in New York State will involve approximately four (4) times the number of industries

as the NPDES permit program with approximately the same amount of flow as industrial facilities subject to NPDES permits.

"To further assess the impact of the proposed regulations, it is estimated that of the 6,000 industries discharging to POTW's, we will have significant involvement with approximately 3,000 because of the presence of incompatible pollutants. This general, but realistic, estimate of the numbers of POTW's and industries involved, has led us to conclude that financial aid and manpower resources in excess of four (4) times that presently committed by New York State to the implementation of the POTW and industrial waste portion of the NPDES permit program will be required. This estimate does not include the commitment of resources on the local level.

"This significant program implication requires that New York State insist that sufficient funds be made available for the establishment, implementation and continuation of a pretreatment program."

Nicholas J. Melas, President, The Metropolitan Sanitary District of Greater Chicago, IL:

"A direct enforcement program by either the EPA or the NPDES states would require an inordinate expenditure of manpower and monies, and in many cases duplicate some of the efforts of existing local industrial waste control programs; e.g. sampling, compliance reviews. Even with Federal enforcement programs the local authorities would still have to carry out programs of their own to prevent interference from non-regulated industries or pollutants with the POTW's operation.

"As an example of the magnitude of proper enforcement of a local industrial waste control (a pretreatment) program, the MSDGC's program currently requires a staff of 100 full-time professional, technical and clerical employees at an annual cost of about \$2.5 million. This is to keep account of approximately 6,000 concerns which discharge liquid industrial wastes to the sewer system for treatment in the MSDGC treatment plants."

Randy Laks, Jefferson County Sewer District, Louisville, KY,
Statement at Chicago Public Hearing:

"We have done some estimating. We are in this process, going about this right now. So, we have some idea of what it costs. We are projecting out that it's going to take us about a year and a half to get around to 210 quote, unquote, "major contributing industries." And the estimated cost of this program, just going around and building the data base, first time around the labor cost is some-

where in the neighborhood of \$600,000. We also need some additional equipment, especially when you are getting into the organic contents. The cost associated with some of the additional equipment above of what we already have would be about \$220,000."

James Brannan, City of Ft. Smith, AK, Statement at Chicago Public Hearing:

"Development of a local pretreatment program in the equipment for and except in monitoring and enforcement program will cost an estimated \$80,000. This is the initial cost. The estimated cost of a continuing program of monitoring and enforcement is \$30,000 per year."

Gene Jensen, Kansas State Bureau of Water Quality, Topeka, KA, Statement at Chicago Public Hearing:

"Our estimate for Kansas is that if the State administers the program totally, or if some combination of State and local government were to administer the program, it would cost approximately \$500,000 per year."

"We estimate that the cost of industry in Kansas, and there are some 4,400 industries that would be regulated, might amount to another two to 20 million dollars per year."

"This sort of suggestion, nationally that the cost might be in the nature of a quarter of a million dollars and it might go four or five times that."

- C. The cost of pretreatment programs to industry could force, plant relocations, unemployment, plant closings, disproportionate payments by certain industries of user charges and industrial cost recovery funds, etc.

Alan C. Van De Boe, Superintendent of Sanitation, City of Quincy Sanitation Committee, Quincy, IL:

"A major concern involves the cost of providing pretreatment. If the pretreatment standards are too restrictive causing an industry to construct and operate an expensive pretreatment facility, it may be less expensive for that industry to totally separate itself from the municipal system, rather than pay for not only the pretreatment facilities, but also the User charges and Industrial Cost Recovery Charges mandated by Federal law. If an industry were to separate from the municipal system, the User charges paid by other industries and by residential users would increase, perhaps causing other industries to reach the point where it is cheaper to go it alone. From the standpoint of financing the operation of a municipal treatment facility, it is absolutely essential that as many users as possible are served by the system. Restrictive pretreatment standards encourage separation of industrial users from municipal systems and are contrary to this philosophy.

"One aspect of the proposed regulations would be of great benefit namely, the use of part of the Industrial Cost Recovery (ICR) funds to finance the development and enforcement of locally-derived pretreatment limits. One argument against local enforcement is the general lack of funding at the local level for such a program. Under the current regulations, 50% of the amount of ICR funds collected is to be sent to U.S. EPA, 40% is to be retained and placed into a restricted account while the final 10% can be used at the discretion of the municipality. The concept of restricting some of the ICR funds for use only for expansion or reconstruction of the municipal treatment facilities is beneficial and should remain at 40%. It is suggested that the amount of discretionary funds be increased from 10% to 25% of the amount of ICR funds collected. Since the ICR monies do come from industrial users, they should be used to finance the programs intended to regulate those same industrial users. The 25% figure should generate sufficient funds to effectively carry out a pretreatment program."

C.J. Buschkill, Manufacturing Engineer, George Koch Sons, Inc., Evansville, IN:

"A very small plater or other business, requiring waste water treatment might be able to survive if it were allowed to pay a surcharge to the local treatment facility to correct its deficiencies. This procedure, placed within the judgement of a local governing body, could respond to individual probabilities. The state and certainly the federal level could never be adaptable to the flexibility required for this possible approach."

Richard Wooley, Metal Finishing of Southern California, Burbank, CA, Response to question at San Francisco Public Hearing:

"...there was an area that was indicated on Page 6485 that no variance would be allowed unless the POTW had complete secondary treatment.

"Now, as we discussed, there is a --there is a timing problem there because of funding, engineering considerations. A number of POTW's will not have secondary treatment in force for several years. And if this statement were followed exactly, it would mean that no variance could be applied for until such secondary treatment was, in fact, in full operation.

"This might require real capital expenditure by industry for a matter of one, two or three years, and then would no longer be necessary, and that would be an unduly harsh economic impact."

Pearce Klazer, Division of Water Supply and Pollution Control, Rhode Island Department of Health, Statement at Boston Public Hearing:

"...There are several serious concerns inherent in the proposed pretreatment rules that in our opinion may have the potential of reversing, rather than augmenting, recent efforts to improve the quality of our nation's waterways. For example, now with hefty industrial cost recovery charges mandated by PL 92-500, municipal sewer user charges and fees, now to be combined with pretreatment requirements and costs, which may approach those of BAT, there leaves little inducement for those industries to consider using or even remaining in municipal sewage systems when instead they can obtain a NPDES permit and treat their own wastes, and in doing so, be eligible for an IRS write-off, SBA loans, a variety of state economic development aid, as well as state sales tax and property tax exemptions."

Theodore Garrett, Counsel, National Association of Metal Finishers, statement at Washington, D.C. Public Hearing:

"The National Association of Metal Finishers represents the electroplating and metal finishing industry. Members of this industry, typically, are small firms in urban areas, which of necessity discharge into municipal treatment plants, and which have neither the physical space nor the financial resources to install expensive pretreatment technology.

"The Association justifiably fears that the promulgation of pretreatment standards which are more stringent than necessary, may sound a death knell for a large portion of this industry."

Marvin Rivland, Counsel, Compliance Operations, City of New York, New York, response to questions at Washington, Public Hearing:

"Now, with respect to pretreatment standards, virtually the only industry in New York which will be affected by pretreatment standards will be the electroplating industry... There are about 200 electroplaters. There were several years ago. I have no reason to believe that that figure has changed.

"Now, if strict standards are imposed, and thinking in terms of the substantial background levels, if strict standards are imposed upon this industry, we figure that 80 percent of them -- 80 percent -- will either have to close up or move.

"The reason is not only financing, which is horrendous, but also room, and you mentioned this in the discussion of your February 2nd publication. There of these job plating shops to install the kind of precipitation equipment, if that is the best practical technology, and at present I think it is. I have no reason to believe that reverse osmosis, ion exchange has come into its own.

"It is chemical precipitation. There is no room for the installation of this type of technology, the equipment that goes with it. The industry would certainly have to move, or members of the industry would have to move.

"They would move to places where they could have more land for the installation of the equipment. That means to New York City a loss of 1,000 to 1,500 jobs."

L.K. Duncan, Plant Manager, Davison Chemical Division, W.R. Grace & Co., Chattanooga, TN:

"National technology-based pretreatment standards are not mandated by PL 92-500, and would lead in many instances to "pretreatment for treatment's sake", regardless of POTW operations and effluent quality. The national economic result of such measures would be of sufficient magnitude to mandate national and regional Economic Impact Analyses by the EPA. The adverse effect on national energy resources would be enormous. A secondary ultimate consequence would be withdrawal of many industries from POTW systems in favor of direct stream discharge, thus imposing severe future economic burdens on POTW's."

John J. Burnett, Director of Utilities, City of Niagara Falls, NY:

"Please be advised that the city of Niagara Falls, New York wishes to take a strong stand for pretreatment standards similar to Option 3. The publicly owned treatment works is in initial stages of the largest industrial users. These 24 have contractual obligations to the city for their proportionate shares of both capital funding and operation and maintenance monies, since 1971 they have recognized their obligations for pretreatment in order to conform to the local sewer ordinance, the city is unalterably opposed to any opinion that may force these industrial users to discontinue participation in the local program for economic reasons."

Bruce D. Miller, Assistant Plant Manager, Kidde Chestnut Operating Co., Reading, PA:

"Specifically we are a city based industry without space to add pretreatment equipment, but our local P.O.T.W. can and does handle our effluent properly on a surcharge basis."

"We are satisfied, they are satisfied, and the effluent leaving the P.O.T.W. is satisfactory."

"Pretreatment regulations would unnecessarily cause jobs to be lost where a problem does not exist."

W.P. Anderson, Assistant Director, Environmental and Regulatory Affairs, Tenneco Chemicals, Saddle Brook, NJ:

"Development of the Federal Guidelines must also consider that the typical plant discharging to a POTW is an older and smaller plant located in a congested urban area. Because of its location, it may not have the option of discharging directly to public waters. Many such plants have very limited space available for the construction of extensive pretreatment facilities. Because of their age and size, such plants are frequently marginal economic-

ally, and, therefore, the addition of any cost burden will be a very serious concern to them. Individual plant economics, of course, cannot be allowed to rule out treatment to the extent required, but should be weighed very carefully in determining just what is required in order to meet the objectives stated earlier. Treatment to the extent possible within the limits of technology (for the sake of treating to that extent) should not be required unless it is necessary to achieve the objectives."

Marwan Sadat, Program Director, Office of Sludge Management and Industrial Pretreatment, New Jersey Department of Environment, Statement at Boston Public Hearing:

"Option II and III place heavily industrialized states in a difficult position. These options would encourage shopping by industries wishing to relocate. Many surface waters in these states are water quality limited. And, therefore, would result in much more stringent industrial water pretreatment standards. The implications of the situation are quite obvious.

"Our problem in New Jersey, in the Northeast is especially complex. Some authorities in New Jersey have industrial discharges into municipal systems which number in the hundreds. And, in one specific case upwards of 2,000 industries discharge into a single municipal system. We estimate there are, in New Jersey, approximately 12,000 indirect dischargers while 900 industries discharge directly in our streams. We must, therefore, carefully consider which of these options could be easily developed within our own legislative framework and which would be most effective in achieving our water quality goals."

Allen R. Frischkorn, Jr., Attorney, GTE Service Corp., Washington, D.C.:

"GTE is concerned that the imposition of mandatory pretreatment standards on small concerns will cause such concerns to go out of business. In accordance with corporate policy, the GTE manufacturing companies attempt to utilize small and emerging sources of supply wherever practical. It is essential in our view that the agency must not adopt pretreatment regulations which would be burdensome to these small sources and for whom costs of compliance would be prohibitive. In this same regard, we note that plants which utilize a POTW incur substantial costs through user charges, industrial cost recovery, ad valorem taxation, property assessments, etc., none of which are borne by direct dischargers."

Thomas E. Roberts, Supervisor of Environmental Control,
Celanese Polymer Specialties Co., Louisville, KY:

"Economic Impact - The economic impact of a general regulation that establishes ground rules and procedures to be used to develop a national pretreatment program is going to be significant. This new national pretreatment program could easily cost CPSC \$3 million to \$4 million in capital outlays and \$0.5 to 1.0 million in annual operating expenses, over what we would have to spend to comply with existing POTW ordinances; and CPSC is just one small company. An option, like IV, that requires redundant treatment facilities could cost significantly more. We believe these general regulations, no matter which option is selected, definitely have a economic impact greater than \$100 million per year."

D. The energy implications of implementing the pretreatment program have not been investigated or quantified

E.F. Young, Director, Environmental Affairs, American Iron and Steel Institute, Washington, D.C.

"The energy situation is another reason for flexibility. The energy crunch has developed since enactment of Public Law 92-500; while this in no way changes this law, energy considerations must be given increased emphasis along with the environmental considerations to achieve the maximum social good. Providing flexibility to take into account variations in POTW removals to meet water quality standards, and getting standards for only the most significant toxics, gives the greatest possible energy savings, as there is not treatment for treatment's sake or just cause we know how to treat--treatment is required only to protect the POTW and maintain water quality. Management of discharges and management of operation of POTW's keyed to protecting the environment will give the best return of investment and save the most energy, while encouraging the treatment of industrial wastes in POTW's."

Timothy L. Morris, Texas Water Quality Board, Austin, TX,
Statement at Chicago Public Hearing:

"Realizing that the resources of the regulatory agencies are limited, that pretreatment systems will place high demands on energy and other natural resources, and considering what these programs will do to product cost and other inflationary pressures, we believe very strongly that prior to implementation of the program, its cost must be very critically appraised in light of the benefits to be derived."

Jack M. Betz, Director, Bureau of Sanitation, Los Angeles, CA:

"To require the Best Practicable Control Technology Currently Available (BPTCTCA) when NPDES requirements were already met would involve heavy expenditures of energy which would be wasteful of resources and would add further pollutants to the air, water and land environments."

"Cost effectiveness in terms of environmental improvement involves balancing fund availability with needs in terms of the control of possible pollutants to the air, land or water. If NPDES requirements for POTW discharges to the waters can be met with the changes outlined above, it would not be a cost effective solution to require BPCTCA. Estimates for the City of Los Angeles indicate that satisfactory results can be obtained at about 25% of the cost of BPTCTCA."

Raymond Kudukis, President of the Board of Trustees, Cleveland, Regional Sewer District, Cleveland, OH, Statement at Washington, D.C. Public Hearing:

"While in theory uniform nationwide technology-based standards for each class and type of industry may appear to be desirable, in reality, the nation at this point in overall environmental benefits to be achieved by this objective may not outweigh the total costs.

"We, in the Mid-West, having faired the worst winter on record, and having suffered severe energy curtailments, are particularly sensitive and conscious of energy problems. Therefore, we believe that energy must be utilized in the most cost-effective manner, and can find little justification for treatment for the sake of treatment.

"I would like to see an energy impact statement, in terms of any one of these projects."

Bill B. Dendy, Executive Officer, California State Water Resources Control Board, Sacramento, CA:

"To require the equivalent effluent quality for discharges to all water bodies, in our opinion, can represent a substantial waste of the energy and other resources in many cases. Regardless of its impact on the individual industrial discharger, this is the sort of waste of resources that this country simply cannot afford."

Henry B. King, President, United Brewers Association, Inc., Washington, D.C.:

"The USBA believes that an Economic Impact Analysis should be prepared prior to the issuance of final pretreatment regulations. Both the economic and energy usage impacts of the proposed regulations need to be fully explored and discussed. By the Agency's own admission the proposed national pretreatment program dwarfs the NPDES Program. Although the proposed 40 CFR 403 alone may not result in economic and energy impacts of sufficient magnitude to trigger an Economic Impact Analysis Statement, it is the keystone of a national pretreatment strategy which is actually being established. While the numerous regulations governing pretreatment for individual industry subcategories may not justify an extensive analysis, certainly the program as a whole does."

E. What is the feasibility of implementing Industrial Cost programs in small municipalities when its economic benefits in large municipalities are suspect?

Jack Barron, Division Engineer, Industrial Waste Division, Department of Public Works, San Francisco, CA, Response to question at San Francisco Public Hearing:

"I would like also to address the comments that you solicited on the industrial cost recovery program. In the case of San Francisco, our program for water pollution is about \$1.5 billion total at this time. And when you look at the possible amount that can be recovered on an industrial cost recovery basis, it's very negligible, and I believe and I think very difficult to collect administratively because, when you start to separate out domestic waste, sanitary waste, etc., it would be very, very cumbersome.

"A large part of our program is for wet weather handling because we have a combined system. On that basis, I don't believe -- And I have no facts to back this up at this time -- but it would seem that industry may not be required to contribute very much under the industrial cost recovery program be eliminated."

John G. Costello, Executive Director, Bergen County Sewer Authority, NJ, Statement at Boston Public Hearing:

"An additional compliance incentive suggested is to increase the present allocation of 10 percent of recovered industrial cost recovery payment which may be used as the grantees sees fit that's 40 CFR 35.928-2 (B). Upon completion of its current plant expansion from 50 million gallons to 75 million gallons the Bergen County Sewer Authority, under its ICR Program, will recover approximately \$180,000 per year for 30 years. This would result in an allocation of \$18,000 per year to be used at its discretion. However, the cost to operate the ICR Program is estimated at \$100,000 annually and the annual cost of enforcing a pretreatment program is expected to be at least \$100,000. Therefore, we suggest that 100 percent of ICR payments be made available to local authorities to use as they see fit. These funds would most likely be applied to the combined cost of financing the ICR and pretreatment programs. It must be recognized, however, that any change in allocation of ICR payments may require modification of Section 204(B) (3) and possibly other sections of Public Law 92-500."

Raymond Kudukis, President of the Board of Trustees, Cleveland Regional Sewer District, Cleveland, OH, Statement at Washington D.C., Public Hearing:

"As a positive incentive to those willing to accept the burden of regulating industry within their system,

and agreeing to maintain their POTW effluent within EPA's limits, Public 92-500 should be changed to permit them to retain 100 percent of all industrial cost recovery monies collected, and to utilize these monies for any wastewater related purposes. While many may debate the merits of ICR, as long as it remains a requirement, all monies collected should be retained by the local agency."

Seymour A. Lubetkin, Chief Engineer, Passaic Valley Sewerage Commissioners, NJ, Statement at Washington, D.C. Public Hearing:

"This type of program will simplify things for the federal government, but will add cost to the local agency's administration. We, at PVSC, will undoubtedly increase our staff by approximately 40 people on this industrial control item alone, and we feel we should be reimbursed by having 100 percent of the industrial cost recovery monies being returned to us, to finance our monitoring program, as I am not implying that monitoring would be eliminated."

Karol M. Enferadi, Chairwoman, Industrial Wastewater Subcommittee, California Water Pollution Control Association, Pasadena, CA:

"Regarding the question of a possible increase in the percentage of industrial cost recovery charges collected that a grantee might be permitted to use for any purpose, Subcommittee consensus is that publicly owned treatment works be permitted to use, for any purpose, 100 percent of the funds collected. The local agency could keep all recovered funds and channel monies back into the local pretreatment program, thereby reducing everyone's costs. Some represented agencies report that the amount of monies under consideration is negligible and that administrative costs often outweigh the value of the current ten percent. Therefore, this Subcommittee recommends that the Industrial Cost Recovery Program be eliminated."

Roger E. Krempel, et. al., Water Utilities Director, Fort Collins, CO:

"ICR funds is well intended, but the present ten percent is not sufficient to finance existing ICR operating and accounting expenses. To comment on an estimated increase in retained funds to finance a proposed program, the extent and demands of which are totally unknown, is purely a guessing game. The fact that local municipalities need a higher percentage of these ICR funds, with or without this proposed pretreatment program, is a foregone conclusion."

William E. Korbitz, Manager, Metropolitan Denver Sewage Disposal District No. 1, Denver, CO:

"In connection with industrial cost recovery, it is suggested that the industrial cost recovery provisions be eliminated from the Act. If this cannot be done, a minimum of 50 percent of the recovered moneys should be retained by the local agency to help cover the administrative costs of the ICR program."

L.A. Grosmaire, Chairman, Tennessee Manufacturers Association, Nashville, TN:

"It is not readily understood how the Environmental Protection Agency could say that the application of BAT to the removal of the metals and other toxics concerned in these regulations would be accomplished nationwide for less than \$100 million. In Tennessee alone, these technology based standards would result in untold millions of new capital dollars as estimated by the Tennessee Department of Economic and Community Development. This estimate extrapolated nationwide could result in billions of dollars of unproductive capital added to industry costs. We therefore urge the EPA to determine these economic costs first in order to better evaluate a direction to proceed. Since the separation processes required in pretreatment have a significant energy need, this critical category should also be evaluated prior to selection and promulgation of pretreatment requirements."

LOG OF LETTERS WITH OPTION PREFERENCE AND MAJOR
POSITION ON:
PROPOSED STRATEGY OPTIONS FOR PRETREATMENT STANDARDS
(in alphabetical order)

Abraham, Milton E., Chairman, Industrial Liaison Committee, Niagara Falls
Area Chamber of Commerce, Niagara Falls, NY 14303 (dated: April 5,
1977)

Option Preference: III
Major Position: Prefers local control

Adams, William R., Jr., Commissioner, State of Maine, Dept. of Environmental
Protection, State House, Augusta, ME 04333 (dated: April 28,
1977)

Option Preference: None
Major Position: Prefers Utilization of existing NPDES system

Anderson, W.P., Assistant Director of Environmental and Regulatory
Affairs, Tenneco Chemicals, Park 80 Plaza West-1, Saddle Brook, NJ
07662 (dated: April 29, 1977)

Option Preference: III
Major Position: Prefers local control

Anderson, Jean, Chairman, Environmental Quality Committee, League of
Women Voters of the United States, 1730 M St., N.W., Washington,
D.C. 20036 (dated: May 11, 1977)

Option Preference: I & IV Combination
Major Position: Concerned with sludge recycling

Andrews, T.O., Manager-Environmental Protection, Hammermill Paper Co.,
Erie, PA 16533 (dated: April 28, 1977)

Option Preference: None
Major Position: Concerned with duplication with existing pretreatment
programs

Atherton, Holt, Chairman, Greater San Antonio Chamber of Commerce, 602
E. Commerce, P.O. Box 1628, San Antonio, TX 78206 (dated: April
28, 1977)

Option Preference: III & II
Major Position: Prefers water quality variances

Baker, William C., Director of Public Works, City of Burlington, Box
1358, Burlington, NC 27215 (dated: March 14, 1977)

Option Preference: II
Major Position: Prefers local control

Banks, J. Taylor, et. al., Natural Resources Defense Council, Inc.,
917 15th St., N.W., Washington, D.C., 20005 (dated: May 24, 1977)

Option Preference: IV

Major Position: Concerned with inadequacy of EPA's proposed
regulations

Barry, Donald R., Director of Industrial Relations, Industrial Management
Council of Rochester, N.Y., Inc., 12 Mortimer St., Rochester, NY
14604 (dated: May 17, 1977)

Option Preference: None

Major Position: Prefers national standards with local enforcement

Bassett, Gilbert W., Executive Director, Environmental Conservation
Board of the Graphic Communications Industries, Inc., 4615 Forbes
Ave., Pittsburgh, PA 15213 (dated: May 10, 1977)

Option Preference: II

Major Position: Prefers water quality standards

Batchelor, William H., City Manager, Rocky Mount, NC 27801 (no date)

Option Preference: II

Major Position: Prefers local control

Bennett, Frank C., Chairman, Rochester Section Inc., American Chemical
Society, Rochester, N.Y. (dated: May 3, 1977)

Option Preference: None

Major Position: Concerned with certification of monitoring personnel

Benson, T.L., Jr., Vice President, Composite Can Div., 130 S. Bemiston
Ave., Clayton, MO 63105 (dated: May 4, 1977)

Option Preference: III

Major Position: Prefers local control

Berle, Peter A.A., Commissioner, NYS Dept. of Environmental Conservation,
50 Wolf Rd., Albany, NY 12233 (dated: March 7, 1977)

Option Preference: IV

Major Position: Prefers addition of variance for incidental removals

Best, Charles W., Sr. Chemical Engineer, J.H. Baxter & Co., 1700 S. El
Camino Real, San Mateo, CA 94402 (dated: April 25, 1977)

Option Preference: II

Major Position: Prefers local control and water quality variances

Betts, C. Nevin, Director-Environmental Activities, Sonoco Products Co.,
Hartsville, SC 29550 (dated: May 18, 1977)

Option Preference: III

Major Position: No rational

Betz, Jack M. Director, Dept. of Public Works, City of Los Angeles,
Rm 1140, 200 N. Main St., Los Angeles, CA 90012 (dated: March 31,
1977)

Option Preference: II
Major Position: Prefers local control

Bewley, James B., Superintendent-Water Quality Control, South Bayside
System Authority, 666 Elm St., San Carlos, CA 94070 (dated: May
13, 1977)

Option Preference: II
Major Position: Prefers water quality variances

Biros, John A., Village of North Tarrytown, Dept. of Water and Sewer,
28 Beekman Avenue, N. Tarrytown, NY 10591 (dated: April 29, 1977)

Option Preference: II
Major Position: Prefers local control

Bisco, Harry, P.E., Director of Operations, City of Allentown, PA, 18101
(dated: April 29, 1977)

Option Preference: None
Major Position: Prefers Federal standards and local control

Blabum, Carl J., Director, State of Wisconsin, Dept. of Natural Resources,
Box 7921, Madison, WI 53707 (dated: May 5, 1977)

Option Preference: None
Major Position: Prefers local control

Bliss, Frederick R., Technical Manager, Strathmore Paper Co., Westfield,
MA 01085 (dated: May 18, 1977)

Option Preference: II & III Combination
Major Position: Prefers local control

Bloch, Ethyle R., Co-Chairman, Clean Water Committee, Izaak Walton
League of America Inc., Ft. Wayne Chapter, IWLA, 6340 Donna Dr.,
Ft. Wayne IN 46819 (dated: May 4, 1977)

Option Preference: IV
Major Position: Concern with environment through strong pretreatment
program

Blum, E.D., Coordinator-Environmental Programs, Union Oil Co. of Calif.,
Union Oil Center, Box 7600, Los Angeles, CA 90051 (dated: April
29, 1977)

Option Preference: III & II
Major Position: Prefers local control and water quality variances

Boecklin, George E., President, National Coffee Assoc. of U.S.A., Inc.,
120 Wall Street, N.Y., N.Y. 10005 (dated: May 13, 1977)

Option Preference: III
Major Position: Prefers local control

Booman, Keith A., Ph.D., Technical Director, Soap and Detergent Assoc.,
475 Park Ave. South, N.Y., NY 10016 (dated: May 13, 1977)

Option Preference: Combination of II and III
Major Position: Prefers water quality standards

Boone, Eugene, President, John Inglis Frozen Foods Company, P.O. Box
311, Modesto, CA 95353 (dated: April 14, 1977)

Option Preference: I
Major Position: Increase time frame

Borchardt, Robert J., Chief Engineer and General Manager, Metropolitan
Sewerage Dist. of the County of Milwaukee, P.O. Box 2079, Milwaukee,
WI 53201 (dated: May 13, 1977)

Option Preference: None
Major Position: Prefers water quality standards

Boruszewski, Robert J., P.E., Director of Public Works, Calhoun County,
County Bldg., Marshall, MI 49069 (dated: May 12, 1977) Bowman,
Robert K., Vice President-General Manager, Consumers Packing

Option Preference: III
Major Position: Prefers local control

Bowman, Robert K., Vice President-General Manager, Consumers Packing
Plum & Liberty Sts., Lancaster PA 17604 (dated: April 12, 1977)

Option Preference: None
Major Position: Prefers local control

Brehm, Stuart H., Jr., Executive Director, Sewerage and Water Board of
New Orleans, City Hall, Civic Center, New Orleans, LA 70165
(dated: April 12, 1977)

Option Preference: II and IV
Major Position: Concerned with costs

Breimhurst, Louis J., P.E., Director, Div. of Water Quality, Minnesota
Pollution Control Agency, 1935 W. County Rd. B2, Roseville, MN
55113 (dated: May 17, 1977)

Option Preference: I or that submitted by the State of Tennessee
Major Position: Does not prefer water quality standards

Brokaw, Newton A., Executive Director, Columbus Industrial Assoc.,
1515 West Lane Ave., Columbus, OH 43221 (dated: May 5, 1977)

Option Preference: None
Major Position: Prefers local control

Brubaker, B.H., Special Assistant to the Director of Safety and Environmental
Engineering, Diamond Shamrock Corp., 1100 Superior, Cleveland, OH
44114 (dated: May 2, 1977)

Option Preference: III
Major Position: Prefers control of only the most toxic pollutants.

Bruce, Thomas K., Director, Division of Water Resources, City of Durham,
Durham, NC (dated: May 5, 1977)

Option Preference: II
Major Position: Prefers local control

Bruder, K.W., General Manager, Fresh Meats Co., P.O. Box 2568, San
Antonio, TX 78299 (dated: April 26, 1977)

Option Preference: III & II
Major Position: Prefers water quality variances

Burnett, John J., Director of Utilities, City of Niagara Falls, NY
(dated: May 1, 1977)

Option Preference: III
Major Position: Concern with interference with local treatment
programs

Busch, William H., P.E., Manager-Permit Section, Div. of Water Pollution
Control, Illinois Environmental Protection Agency, 2200 Churchill
Rd., Springfield, IL 62706 (dated: May 11, 1977)

Option Preference: III & II
Major Position: Prefer water quality variances

Busckill, C.J., Manufacturing Engineer, Geo. Koch Sons, Inc., P.O. Box
351, Evansville, IN 47744 (dated: March 24, 1977)

Option Preference: None
Major Position: Prefers local control

Calkins, C.R., Vice President-Environmental Affairs, American Paper
Institute, 1619 Massachusetts Ave., N.W., Washington, D.C. 20036
(dated: May 16, 1977)

Option Preference: III & II
Major Position: Prefers water quality variances

Campbell, H.J., Jr., Engineering Service Div., E.I. DuPont de Nemours
& Co., Inc., Wilmington, DE 19898 (dated: April 15, 1977)

Option Preference: III
Major Postion: Prefers local control

Casazza, Joseph F., Commissioner of Public Works, City of Boston, One City Hall Square, Boston, MA 02201 (dated: April 8, 1977)

Option Preference: IV
Major Position: Concerned with costs

Chaddock, R.E., Executive Director of Environmental Affairs, Hercules Inc., Wilmington, DE 19899 (dated: March 22, 1977)

Option Preference: III
Major Position: Prefers local control

Chambers, John T., Jr., P.E., Administrator-Construction Grants Unit, Louisiana Health and Human Resources Administration, Dept. of Health, P.O. Box 60630, New Orleans, LA 70160 (dated: May 9, 1977)

Option Preference: None
Major Position: Prefers local control

Charles, F.M., Corporate Director-Environmental Affairs, Union Carbide Corp., 270 Park Ave., New York, NY 10017 (dated: May 16, 1977)

Option Preference: II and III combination
Major Position: Prefers water quality standards

Chase, Edith, Environmental Director, League of Women Voters of Ohio, 5731 Caranor Drive, Kent, OH 44240 (dated: May 16, 1977)

Option Preference: None
Major Position: Supports Federally promulgated technology standards

Chu, Joseph P., and Philip E. Gerwert, Environmental Activities Staff, GM Technical Center, General Motors Corp., Warren, MI 48090 (dated: May 10, 1977)

Option Preference: None
Major Position: Discusses the establishment of effluent limitations in pretreatment requirements

Civins, Jeffrey, Vinson and Elkins, Attorneys at Law, First City National Bank Bldg., Houston, TX 77002

Option Preference: None
Major Position: Concerned with POTW is designed to treat industrial wastes

Clark, Albert C., Vice President-Technical Director, Manufacturing Chemists Assoc., 1825 Connecticut Ave., N.W., Washington, D.C. 20009 (dated: April 11, 1977)

Option Preference: III
Major Position: Prefers water quality variances

Clark, Paul F., Commissioner, City of Chattanooga, Dept. of Public Works, Chattanooga, TN 37402 (dated: May 18, 1977)

Option Preference: Supports State of Tennessee
Major Position: Prefers strong local control

Cockrell, Lila, Mayor, City of San Antonio, San Antonio, TX 78205 (dated: April 25, 1977)

Option Preference: II & III
Major Position: Prefers water quality variances

Conway, W.G., Loop Cold Storage Co., Southton and Center Rds., P.O. Box 179 San Antonio, TX 78217 (dated: April 19, 1977)

Option Preference: II & III
Major Position: Prefers water quality variances

Coppoc, W.J., Vice President-Environmental Control, Texaco Inc., P.O. Box 509, Beacon, NY 12508 (dated: May 17, 1977)

Option Preference: None
Major Position: Prefers local control and water quality standards

Corbeil, R.J., Manager of Environmental Affairs, Southern California Gas Co., 810 S. Flower St., Los Angeles, CA 90017 (dated: May 16, 1977)

Option Preference: II & III
Major Position: Prefers water quality variances

Cormack, J.F., Supervisor, Water Programs, Crown Zellerbach, Environmental Services, 904 N. Drake St., Camas, WA 98607 (dated: April 14, 1977)

Option Preference: III
Major Position: Prefers local control

Courtney, Stephen M., Technical Director, Menominee Paper Co., Inc., P.O. Box 300, Menominee, MI 49858 (dated: May 16, 1977)

Option Preference: II & III
Major Position: Prefers water quality standards be included

Cousineau, John A., Manager, Townsend Div. of Textron Inc., 1224 E. Warner Ave., Box 2157, Santa Ana, CA 92707 (dated: April 6, 1977)

Option Preference: II
Major Position: Prefers local control

Crane, Larry E., Executive Director, Iowa Dept. of Environmental Quality, 3920 Delaware Ave., P.O. Box 3326, Des Moines, IA 50316 (dated: May 3, 1977)

Option Preference: IV
Major Position: Prefers State control

Crutcher, Bruce S., Greater Cincinnati Chamber of Commerce, Cincinnati, OH (dated: April 21, 1977)

Option Preference: Combination of II & IV

Major Position: Split options to provide equity between small and large municipalities

Cummings, David, Chief Chemist, Tri-Aid Sciences, Inc., 161 Norris Dr. Rochester, NY 14610 (dated: April 7, 1977)

Option Preference: None

Major Position: Concerned with certification of monitoring personnel

Curran, Robert F., Director-Environmental Technology, CIBA-GEIGY, Ardsley, NY 10502 (dated: May 16, 1977)

Option Preference: III

Major Position: Prefers local control

Custis, Glenn W., P.E., Environmental Engineer, Environmental Control Dept., Reynolds Aluminum-Reynolds Metals Co., Richmond, VA, 23261 (dated: May 18, 1977)

Option Preference: None

Major Position: Prefers use of water quality criteria

Daleiden, Mary and Joseph, 2715 Harrison St., Evanston, IL 60201 (No date)

Option Preference: IV

Major Position: Concerned with environment

Davis, Mark S., Secretary, Technical Advisory Committee, Indianapolis Chamber of Commerce, 320 N. Meridian, St., Indianapolis, IN 46204 (dated: May 12, 1977)

Option Preference: III

Major Position: Prefers local control

Davoli, Dr. Dana J., Director of Toxic Substances Research, Citizens for a Better Environment, Suite 2610, 59 E. Van Buren St., Chicago, IL 6060 (dated: May 1977)

Option Preference: IV

Major Position: Concerned with the environment and EPA adhering to the Consent Decree

De Gennaro, K.E., Manager-Environmental Engineering and Control, Western Electric, 222 Broadway, NY, NY 10038 (dated: May 16, 1977)

Option Preference: II and III combination

Major Position: Prefer local control with water quality standards

Dendy, Bill B., Executive Officer, State Water Resources Control Board
State of California , P.O. Box 100, Sacramento, CA 95801 (dated:
May 3, 1977)

Option Preference: II

Major Position: Concerned with complexity of the regulations;
prefers water quality standards, and local control

DiGuisseppi, David, Assoc., Regional Plnr., Central Mass Regional Planning
Planning Comm., 70 Elm St., Worcester, MA 01609 (No date)

Option Preference: Combination of I & IV

Major Position: Concern for participation by 208 agencies

Dohmus, Stanley D., Deputy Assistant Secretary of the Interior, Office
of the Secretary, Washington, D.C. 20240 (dated: April 14, 1977)

Option Preference: II

Major Position: Regulations should consider effect of toxics in
sludge on wildlife

Domzalski, L.J. Technical Manager, Nalco Chemical Co., 2901 Butterfield
Road, Oak Brook, IL 60521 (dated: May 11, 1977)

Option Preference: II and III combination

Major Position: Prefers local control

Dorman, Loren F., President, American Wood Preservers Institute, 1651 Old
Meadow Rd., Mclean, VA 22101 (dated: May 18, 1977)

Option Preference: II and III combination

Major Position: Prefers strong local control

Dowden, Bobby, Ph.D., Assistant Superintendent, Treatment Div., Dept. of
Public Utilities, P.O. Box 65, Shreveport, LA 71153 (dated: April
11, 1977)

Option Preference: I

Major Position: Concerned with possible local enforcement difficulties

Dryden, Franklin D., Head Technical Services Dept., County Sanitation
Districts of Los Angeles Co., P.O. Box 4988, Whittier, CA 90677
(dated: April 14, 1970)

Option Preference: II

Major Position: Prefers local control, and supplied information
enforcement of water quality standards

Duensing, Hollis G., General Attorney, Law Dept., Assoc. of American
Railroads, American Railroads Bldg., Washington, D.C. 20036
(dated: May 18, 1977)

Option Preference: II

Major Position: Prefers maximum local control

Dufficy, Thomas J., National Association of Photographic Manufacturers Inc., 600 Mamaroneck Ave., Harrison, NY 10528 (dated: May 17, 1977)

Option Preference: III

Major Position: Prefers local control with water quality variances under NPDES Permit system

Duncan, L.K., Plant Manager, W.R. Grace & Co.-Davison Chemical Div., 4000 Hawthorne St., Chattanooga, TN 37406 (dated: April 22, 1977)

Option Preference: None

Major Position: Concerned with duplication of efforts

Early, A.B., Environmental Action, Suite 731, 1346 Connecticut Ave., N.W., Washington, D.C. 20036 (dated: May 18, 1977)

Option Preference: IV

Major Position: Concern for environment and safe sludge disposal

Early, Jack D., President, National Agricultural Chemicals Assoc., The Madison Bldg., 1155 Fifteenth St., N.W., Washington, D.C. 20005 (dated: May 9, 1977)

Option Preference: None

Major Position: Concerned with TSCA and FIFRA

Eby, Donald L., Director-Process Environment, Monsanto Co., 800 N. Lindbergh Blvd., St. Louis, MO 63166 (dated: May 16, 1977)

Option Preference: II & III Combination

Major Position: Prefers maximum local control

Effinger, John III., P.E., Systems Engineer, Water and Sewer Utilities, P.O. Box 580, Ft. Collins, CO 80522 (dated: April 29, 1977)

Option Preference: III

Major Position: Concern with non-point sources

Eisele, Thomas D., Deputy Director, Lake Michigan Federation, 53 W. Jackson Rd., Chicago, IL 60604 (dated: April 29, 1977)

Option Preference: IV

Major Position: Concerned with environment

Enferadi, Karol M., Chairwoman, Industrial Wastewater Subcommittee, California Water Pollution Control Assoc., 127 N. Madison Ave., Suite 304, Pasadena, CA 91101 (dated: April 29, 1977)

Option Preference: II

Major Position: Concerned with impact of pretreatment program on local source control programs

Fairfield, George H., Director of Public Works, City of Kearney, Box 489, Kearney, NB 68847 (dated: May 3, 1977)

Option Preference: I
Major Position: No rational

Farley, E. Ray, Superintendent, Water and Sewer Dept., 505 Ellington Pkway, Lewisburg, TN 37091 (dated: April 27, 1977)

Option Preference: None
Major Position: Concerned with duplication of effort

Fenner, Kenneth A., Esq., Office of the General Counsel, Masonite Corp., 29 N. Wacker Dr., Chicago, IL 60606 (dated: May 17, 1977)

Option Preference: None
Major Position: Prefers local control

Ferry, John D., Secretary-Treasurer, American Wood-Preservers' Assoc., 1625 Eye St., N.W., Washington, D.C. 20006 (dated: May 17, 1977)

Option Preference: II and III combination
Major Position: EPA should be concerned only with truly toxic pollutants

Fielding, Blaine, Legal Dept., Clark Oil and Refining Corp., 131st and Kedzie Ave., Blue Island, IL 60406 (dated: May 3, 1977)

Option Preference: None
Major Position: Concerned with duplication of treatment facilities

Fisher, William E., Administrator-Research Div., International Fabricare Institute Research Center, 12251 Tech. Rd., Silver Spring, MD 20904 (dated: May 18, 1977)

Option Preference: III
Major Position: Concerned with exempting laundries from the Pretreatment program

Freeman, George C., Jr., Special Counsel to the Utility Water Act Group, 1730 Pennsylvania Ave., N.W., Suite 1060, P.O. Box 19230, Washington, D.C. 20006 (dated: May 16, 1977)

Option Preference: II and III combination
Major Position: Concerned with complexity of variance provisions and possibility of local government not implementing a local compliance program

Fuller, Glen H., Washington State Dept. of Ecology, Office of Water Programs, Water Quality Div., Olympia, WA 98504 (dated: May 16, 1977)

Option Preference: III
Major Position: Opposes water quality variances

Garrett, Theodore L., Counsel, National Association of Metal Fishers,
and the Copper & Brass Fabricators Council, 888 Sixteenth St.,
N.W., Washington, D.C. 20006 (dated: May 18, 1977)

Option Preference: II & III Combination
Major Position: Concerned with the legal technicalities of
technology-based standards

Geisler, Charles A. , Sanitation Engineer, City of Omaha, 1819 Farnam
St. Omaha, NB 68102 (dated: March 14, 1977)

Option Preference: None
Major Position: Prefers local control

Gilman, I.H., General Manager-Environmental Affairs, Chevron U.S.A., Inc.,
575 Market St., San Francisco, CA 94105 (dated: May 10, 1977)

Option Preference: II & III
Major Position: Prefer water quality variances

Glover, R.C. and J.F. Byrd, Managers, Proctor and Gamble Co., Hillcrest
Tower, 7162 Reading Rd., Cincinnati, OH 45222

Option Preference: III
Major Position: Prefers local control

Golle, H.A., Vice President - Operations, General Foods Corp., 250 North
St., White Plains, NY 10625 (dated: April 25, 1977)

Option Preference: III
Major Position: Prefers local control

Goodgame, T.H., Director, American Institute of Chemical Engineers, Environ-
mental Div., Monte Rd., Benton Harbor, MI 49022 (dated: May 16, 1977)

Option Preference: Combination of all 4
Major Position: Prefers local control

Graeser, Henry J., Black & Veatch Consulting Engineers, 555 Griffin Square,
Suite 820, Dallas TX 75202 (dated: February 16, 1977)

Option Preference: II & III
Major Position: Prefers local control and water quality standards

Grage, Larry, Chief Operator, Village of Bensenville, 700 W. Irving Park
Rd., Bensenville, IL 60106 (dated: March 21, 1977)

Option Preference: I
Major Position: Wants Federal backup

Grant, C.T., et.al., Deputy Commissioner for Environmental Health Services,
Oklahoma State Dept. of Health, N.E. 10th St. & Stonewall, P.O. Box
53551, Oklahoma City, OK 73105 (dated: May 16, 1977)

Option Preference: II & III Combination
Major Position: Prefers local control

Green, James M., 208 Project Director, First Tennessee-Virginia Development District, 207 N. Boone St., Johnson City, TN 37601 (dated: March 17, 1977)

Option Preference: IV
Major Position: Wants industrial input

Grosmaire, L.A., Chairman, Air and Water Resources Committee, Tennessee Manufacturers Assoc., 708 Fidelity Federal Bldg., Nashville, TN 37219 (dated: April 27, 1977)

Option Preference: None
Major Position: Prefers local control and water quality-based standards

Ralph D., Manager-Environmental Control, Deere & Co., John Deere Rd., Moline IL 61265 (dated: May 9, 1977)

Option Preference: II & III
Major Position: Prefers local control and water quality variances

Gouck, James A., Chairman, Buffalo Area Advisory Council on Industrial Waste Water, P.O. Box 1069, Buffalo, NY 14240 (dated: April 28, 1977)

Option Preference: II & III
Major Position: Prefers water quality variances

Gubrud, Arne E., Environmental Affairs Director, American Petroleum Institute, 2101 L. St., N.W., Washington, D.C. 20037 (dated: May 16, 1977)

Option Preference: III
Major Position: Limit major Federal involvement

Guarino, Carmen F., Water Commissioner, Water Dept., City of Philadelphia, 1180 Municipal Services Bldg., Philadelphia, PA 19107 (dated: April 11, 1977)

Option Preference: III
Major Position: Prefers local control

Hall, Elmer E., Pacific Gas and Electric Co., 77 Beale St., San Francisco, CA 94106 (dated: May 18, 1977)

Option Preference: II
Major Position: Concerned with conflict between Federal and State programs

Hall, John F., Vice President-Resource & Environment, National Forest Products Assoc., Forest Industries Bldg., 1619 Massachusetts Ave., N.W., Washington, D.C. 20036 (Dated: May 18, 1977)

Option Preference: II & III
Major Position: Supports water quality variances

Halloran, William J., Executive Secretary, Blackstone Valley District Commission, P.O., Box A., Rumford, RI 02196 (dated: March 23, 1977)

Option Preference: None
Major Position: Prefers state enforcement

Hanson, Charles R., Plant Manager, Velsicol Chemical Corp., 1199 Warford St., Memphis, TN 38108 (dated: May 16, 1977)

Option Preference: Offers new option
Major Position: Monitor inlet of POTW and utilize water quality standards

Harper, Fred A., General Manager, County Sanitation Districts of Orange County, P.O. Box 8127, Fountain Valley, CA 92708 (dated: April 28, 1977)

Option Preference: II
Major Position: Prefers local control

Harris, H.D., Vice President, Engineering, the Gates Rubber Co., 999 S. Broadway, Denver, CO (dated: April 19, 1977)

Option Preference: III
Major Position: Supports local control

Hasfunther, William A., 404 Riggs Ave., Severna Park, MD. 21146 (dated: May 1, 1977)

Option Preference: None
Major Position: Prefers local control and standards

Hauck, Roland L., "Save our Nextdoor Creek" Task Force California and Nevada Conservation Resources Committee-Sierra Club, 320 La Serena Way, Sonoma, CA 95476 (dated: April 15, 1977)

Option Preference: None
Major Position: Concern for the environment

Haxby, L.P., Manager-Environmental Affairs, Shell Oil Co., One Shell Plaza, P.O. Box 2463, Houston, TX 77001

Option Preference: II & III
Major Position: Prefers water quality approach

Healy, William A., P.E., Executive Director, Water Supply and Pollution Control Commission, State of New Hampshire, Prescott Park, P.O. Box 95-105 Loudon Road, Concord, NH 03301 (dated: April 13, 1977)

Option Preference: None
Major Position: Options ignore existing state laws and do not consider small municipalities

Heath, D.P., Coordinator-Environmental Conservation, Mobil Oil Corp., 150 E. 42nd St., NY, NY 10017 (date: May 17, 1977)

Option Preference: II & III combination
Major Position: Prefers water quality variances

Henry, Charles J. Director, Water Pollution Control, Metropolitan Seattle, WA 98104 (dated: March 31, 1977)

Option Preference: III
Major Position: Supports Mass limitations

Hert, Oral H., Technical Secretary, Stream Pollution Control Board, Indiana, 1330 W. Michigan St., Indianapolis, IN 46205 (dated: April 27, 1977)

Option Preference: II & III
Major Position: Prefers local control and water quality standards

Hittle, Paul C., General Supervisor of Environmental Affairs, Consumers Power Co., 212 W. Michigan Ave., Jackson, MI 49201 (dated: May 17, 1977)

Option Preference: None
Major Position: Prefers EPA Guidelines for Water quality criteria

Hofheinz, Fred, Mayor, City of Houston, Houston, TX 77001 (dated: May 2, 1977)

Option Preference: II & III
Major Position: Prefers locally-derived water quality standards

Honberger, Roger F., Washington Representative, County of San Diego, Suite 500, 1735 New York Ave., N.W., Washington, D.C. 20006 (dated: May 17, 1977)

Option Preference: None
Major Position: Prefers modification enforcement provision (section M)

Hopkins, Glen J., Deputy City Manager, Kansas City, MO 64106 (dated: April 11, 1977)

Option Preference: AMSA Option
Major Position: Concerned with costs, and prefers water quality standards

Houston, A.B.M., Manager-Compliance and Liaison Dept., Stationary Source Environmental Control, Ford Motor Co., One Parklane Blvd., Dearborn, MI 48126 (dated: May 19, 1977)

Option Preference: II & III Combination
Major Position: Prefers locally-derived standards

Howell, Don T., Director of Utilities, Board of Light and Water Commissioners of the City of Concord, Lock Drawer 567, Concord, NC 28025 (dated: April 1, 1977)

Option Preference: III

Major Position: Coordinate pretreatment with other programs

Hughes, William E., Composite Can and Tube Institute, 1800 M Street, N.W., Washington, D.C. 20036 (dated: April 29, 1977)

Option Preference: III

Major Position: Prefers local control

Hyatt, Joe H., P.E., Deputy Director of Public Works, City of Jacksonville, 220 E. Bay St., Jacksonville, FL 32202 (dated: March 31, 1977)

Option Preference: IV

Major Position: National Pretreatment program will lend authority to local efforts

Johnson, David L., Jr., Chief Operator, Wastewater Treatment Plant, Vice-Chairman Genesee Valley Section - NYSPCA, Village of Avon, Avon, NY 14414 (dated: April 13, 1977)

Option Preference: IV

Major Position: Federal laws have more authority than local laws

Johnson, W.R., Director-Plant Environment, Environmental Activities Staff, General Motors Corp., General Motors Technical Center, Warren, MI 48090 (dated: May 11, 1977)

Option Preference: II

Major Position: Prefers local control

Jones, Jack, Director of Public Works, City of Orem, 56 N. State St., P.O. Box 247, Orem, UT 84507 (dated: April 1, 1977)

Option Preference: III

Major Position: Not stated

Jones, Rex E., Executive Director, Indiana Heartland Coordinating Commission, 7212 N. Shadeland Suite 120, Indianapolis, IN 46250

Option Preference: II & III

Major Position: Prefers water quality standards

Jordan, A. Gayle, Attorney, Southern Railway System, Law Dept., P.O. Box 1808, Washington, D.C. 20013 (dated: May 17, 1977)

Option Preference: None

Major Position: New pretreatment regulations are unnecessary

Kamlet, Kenneth, Counsel, National Wildlife Federation, 1412 16th St.,
N.W., Washington, D.C. 20036 (dated: May 17, 1977)

Option Preference: IV

Major Position: Supports limited variances-views on "due process" issue

Kay, Arthur N., Environmental Control Director, City of St. Charles,
Municipal Center, St. Charles, IL 60174 (dated: May 11, 1977)

Option Preference: III

Major Position: Prefers local control

Keene, Albin G., Superintendent, Scarborough Sanitary District, P.O. Box
302, Scarborough, ME 04704

Option Preference: III & II

Major Position: Prefers local control

Kellogg, H. Clay, Jr., General Manager, Kellogg Supply, Inc., 2394 S.
Figueroa St., Carson, CA 90745 (dated: April 20, 1977)

Option Preference: None

Major Position: Concerned with sludge

Kelly, Robert H., Forest Preserve District of DuPage County, 881 W. St.
Charles Rd., Lombard, IL 60148 (dated: April 15, 1977)

Option Preference: I

Major Position: Prefers Federal control

Keston, S. Norman, Assistant to the Vice President-Environmental Affairs,
ASARCO, Inc., 120 Broadway, NY, NY 10005 (dated: April 18, 1977)

Option Preference: I

Major Position: Prefers local control through variances

Kilik, Eugene L., President, Tanners' Council of America, Inc., 411 Fifth
Ave., New York, NY 10016 (dated: May 18, 1977)

Option Preference: III

Major Position: Consent Decree is not binding on EPA

King, Henry B., President, U.S. Brewers Assoc., Inc., 1750 K St., N.W.,
Washington, D.C. 20006 (dated: May 9, 1977)

Option Preference: III

Major Position: Prefers local control

Kitazaki, S.W., General Manager, Oconomowoc Electroplating Co., Inc.,
Ashippum, WI 53003 (dated: April 28, 1977)

Option Preference: I

Major Position: Concerned with equity of enforcement

Klinger, Florence, 072 Green Street, Martinez, CA 94553 (dated: April
14, 1977)

Option Preference: IV

Major Position: Prefers local control

Klippel, Richard W., P.E., Chairman, Industrial Waste Committee, New
York Water Pollution Federation, NY (dated: May 11, 1977)

Option Preference: None

Major Position: Prefers technology-based standards

Korbitz, William E., P.E., Manager, Metropolitan Denver Sewer Disposal
District No. 1, 6450 York St., Denver, CO 80229 (dated: April 27,
1977)

Option Preference: III

Major Position: Prefers Federal standards with local control

Kovach, Gyula F., P.E., Director, Water Pollution Control, Kansas City
Dept. of Boulevards, Parks, and Streets, Civic Plaza, 701 N. 7th
St., Kansas City, KA 66101 (dated: May 17, 1977)

Option Preference: II

Major Position: Utilize toxicity tests to show demonstratable
need to regulate a toxic

Kowalik, A.P., Manager - Environmental Affairs, Gulf Oil Co., - U.S.,
P.O. Box 2001, Houston, TX 77001 (dated: May 2, 1977)

Option Preference: II & III

Major Position: Supports water quality standards

Krasofski, Frank J., Vice President-General Manger, James River - Fitchburg,
Inc., Old Princeton Rd., Fitchburg, MA 01420 (dated: April 11,
1977)

Option Preference: None

Major Position: Concerned with exemption of industrial waste
treatment facilities

Kuchta, Francis W., Director, Dept. of Public Works, City of Baltimore,
600 Municipal Bldg., Baltimore, MD 21202 (dated: April 19, 1977)

Option Preference: AMSA Option

Major Position: Prefers local control and water quality variances

Kumagi, James S., Ph.D., Deputy Director of Environmental Programs,
State of Hawaii, Dept. of Health, P.O. Box 3378, Honolulu, HA
96801 (dated: May 6, 1977)

Option Preference: II
Major Position: Prefers local control

Lagnese, Joseph F., Duncan, Lagnese & Assoc., Inc., 3185 Babcock Blvd.,
Pittsburgh, PA 15237 (dated: March 18, 1977)

Option Preference: II & III
Major Position: Wants water quality variances

Lambie, John A., Chief Engineer-General Manager, Ventura Regional County
Sanitation District, CA (dated: April 20, 1977)

Option Preference: II
Major Position: Prefers local control

Langlois, Gaytha A., Ph.D., and Linda Silversmith, Ph.D., Chairwomen,
Clean Water Committee, Ecology Action for Rhode Island, 286 Thayer
St., Providence, RI 02906 (dated: May 1, 1977)

Option Preference: IV
Major Position: Concern for environment through strict regulations

Lardieri, Nicholas J. Director-Environmental Resources, Scott Paper Co.,
Scott Plaza, Philadelphia, PA 19113 (dated: May 16, 1977)

Option Preference: None
Major Position: Concerned with EPA interference with joint industrial-
municipal POTWs and programs

LaRosa, Reginald A., P.E., Director, Environmental Engineering Div.,
Agency of Environmental Conservation, State of Vermont, Montpelier,
Vermont 05602 (dated: May 2, 1977)

Option Preference: None
Major Position: Prefers NPDES State control

Lasker, Jerry, Executive Director, Indian Nations Council of Governments,
630 W. 7th St., Tulsa, OK 74127 (dated: May 16, 1977)

Option Preference: I
Major Position: Prefers minimization of duplication through local control

Larrabee, Edward, Superintendent, Wastewater Treatment Facilities, 1700
7th St., Sanger, CA 93657 (dated: March 24, 1977)

Option Preference: I
Major Position: Prefers local control

Legallet, Jon S., Legallet Tanning Co., 1099 Quesada Ave., San Francisco
CA 94124 (dated: April 8, 1977)

Option Preference: III
Major Position: Prefers local control for less hazardous toxics

Levi, L., Chairman, Environmental Impact Committee, Southern Rubber Group,
5775 Dellwood Lane, Beaumont, TX 77706 (dated: May 3, 1977)

Option Preference: III
Major Position: Supports position of the Manufacturing Chemists
Assoc., (Albert Clark)

Levy, Gary F., Director, Dept. of Environmental Quality, Jefferson County,
618 Old Louisville Trust Bldg., Louisville, KY (dated: April 26, 1977)

Option Preference: None
Major Position: Prefers local control and utilization of the
NPDES Program

Lewis, Gayle, H., P.E., Chief-Planning Div., State of Nebraska, Natural
Resources Commission, P.O. Box 94876, Lincoln, NB 68509 (dated:
May 4, 1977)

Option Preference: Combination of Options II & III
Major Position: Concerned with expense of pretreatment program
for small industries

Lockwood, John, Deputy City Manager, City of San Diego, City Administration
Bldg., 202 C. St., San Diego, CA 92101 (dated: April 11, 1977)

Option Preference: II
Major Position: Not justified

Lohman, General Manager, Blackwell Burner Co., P.O. Box 37383, San
Antonio, TX 78237 (dated: April 15, 1977)

Option Preference: II & III
Major Position: Prefers water quality variances

Long, D.W., Attorney, Southern Pacific Transportation Co., Southern
Pacific Bldg., 1 Market Plaza, San Francisco, CA 94105 (dated:
May 17, 1977)

Option Preference: III
Major Position: Prefers local control

Lubetkin, S.A., Chief Engineer, Passaic Valley Sewerage Commissioners,
600 Wilson Ave., Newark, NJ 07105 (dated: April 22, 1977)

Option Preference: III

Major Position: Modification of Option III to include Option II

Lynam, Bart T., General Superintendent, Metropolitan Sanitary District
of Greater Chicago, 100 E. Erie St., Chicago, IL 60611 (dated:
April 4, 1977)

Option Preference: None

Major Position: Lack of time for comment

Lyon, Walter A., Director, Bureau of Water Quality Management, Dept. of
Environmental Resources, Commonwealth of Pennsylvania, P.O. Box
2063 Harrisburg, PA 17120 (dated: March 25, 1977)

Option Preference: II

Major Position: EPA should develop detailed guidance documents

Mannella, Raymond J., Director-Environmental Engineering, RCA, Cherry
Hill, NJ 08101 (dated: May 2, 1977)

Option Preference: III

Major Position: Prefers local control

Matlack, Albert S., The Society of Natural History of Delaware, R.D. #1
Box 137, Hockessin, DE 19707 (dated: March 13, 1977)

Option Preference: I

Major Position: Prefers federal standards and local enforcement

Malkin, Gabriel, Mission Manager, Water Quality Task Force, National Paint
and Coating Assoc., 1500 Rhode Island Ave., N.W., Washington, D.C.
20005 (dated: May 18, 1977)

Option Preference: III or AMSA option

Major Position: Prefer water quality variances be included

Martin, Roy E., Director-Science and Technology, National Fisheries Institute,
Inc., 1730 Pennsylvania Ave., N.W., Washington, D.C. 20006 (dated:
May 17, 1977)

Option Preference: IV

Major Position: Concerned with marine environment

Matthews, Robert R., Manager, Water & Sewer Commission, City of Freeport,
230 Stephenson St., Freeport, IL 61032 (dated: March 17, 1977)

Option Preference: None

Major Position: Concerned with grand awards

Maurer, R.H., Environmental Maintenance Coordinator, Celanese Chemical Co., Box 9077, Corpus Christi, TX 78408 (dated: May 20, 1977)

Option Preference: II & III

Major Position: Concerned with POTW's designed to treat industrial wastes

McGarry, Robert S., General Manager, Washington Suburban Sanitary Commission, 4017 Hamilton St., Hyattsville, MD 20781 (dated: May 17, 1977)

Option Preference: II and III Combination

Major Position: Prefers local control and water quality standards

McManus, William H., Executive Vice President, Envelope Manufacturer's Assoc., 1 Rockefeller Plaza, NY, NY 10020 (dated: May 9, 1977)

Option Preference: III

Major Position: Prefers local control and locally-derived standards

McReynolds, L.A., Manager-Environment, Consumer Protection and Standards, Phillips Petroleum Co., Bartlesville, OK 75004 (dated: May 16, 1977)

Option Preference: III

Major Position: Prefers local control

Mead Corporation, World Headquarters, Courthouse Plaza, N.E., Dayton, OH 45463

Option Preference: II & III

Major Position: Supports inclusion of water quality standards

Melas, Nicholas J., President, Metropolitan Sanitary District of Greater Chicago, 100 East Erie St., Chicago, IL 60611 (dated: April 15, 1977)

Option Preference: II

Major Position: Concerned with pretreatment facility duplications

Mileski, Stanley E., Assistant to V.P.-Operations, Texize Chemicals Corp., P.O. Box 368, Greenville, SC 29602 (dated: May 17, 1977)

Option Preference: II & III

Major Position: Prefers addition of Option II variances

Miller, Bruce D., Assistant Plant Manager, and Satyendra M. De, Chief Chemist, Chestnut Operating Co., Second and Chestnut Sts., Reading, PA 19602 (dated: April 27, 1977)

Option Preference: II & III

Major Position: Prefers water quality to be considered

Miller, S.G., City of Boulder, Boulder, CO 80302 (dated: April 26, 1977)

Option Preference: I & II

Major Position: Prefers local control with guidelines based on Consent Decree

Milligan, George W., Water Pollution Control Director, A & Burlington
Sts., S.W., Cedar Rapids, IA 52404 (dated: May 2, 1977)

Option Preference: III

Major Position: Concerned with industrial coverage

Milligan, Thomas J., City Manager, City of Sparks, City Hall, 431 Prater
Way, Sparks, NV 89431 (dated: April 26, 1977)

Option Preference: III

Major Position: Prefers local control

Miyahira, Wallace, Director and Chief Engineer, Honolulu, HA (dated:
April 26, 1977)

Option Preference: AMSA Option

Major Position: Same as AMSA

Moeller, Alton S., Plant Engineer, Lone Star Brewing Co., 600 Lone Star
Blvd., San Antonio, TX 78297 (dated: April 29, 1977)

Option Preference: II & III

Major Position: Prefers water quality variances

Moore, Robert E., Manager, Santa Ana Watershed Project Authority, 7150
Brockton Ave., Suite 202, Riverside, CA 92506 (dated: April 28,
1977)

Option Preference: None

Major Position: Prefers local control

Morris, Timothy L., Assistant Director, Field Operations, Texas Water
Quality Board, Austin, TX (dated: April 19, 1977)

Option Preference: II

Major Position: Prefers local control

Morse, Robert E., III, Attorney for Imperial Sugar Co., One Shell Plaza,
Houston, TX 77002 (dated: May 16, 1977)

Option Preference: II and III combination

Major Position: Concerned with POTW's designed to treat industrial
wastes

Moschell, R.V., Director of Public Utilities, One Civic Center, Middletown,
OH 45042 (dated: May 2, 1977)

Option Preference: III

Major Position: Prefers local control

Muir, J.L., Superintendent, Waste Water Treatment Plant, City of Tolleson,
AZ (dated: March 18, 1977)

Option Preference: II

Major Position: Wants Federal Guidance

Muldoon, T.J., Vice President-Administration, Fibre Box Assoc., 224 S. Michigan Ave., Chicago, IL 60604 (dated: May 9, 1977)

Option Preference: III

Major Position: Prefers local control

Muno, William E., Chemical Engineer, Enforcement Div., U.S.E.P.A., Washington, D.C. (dated: April 10, 1977)

Option Preference: II

Major Position: Reservation over local control

Munroe, Robert E., Sr. Vice President-Manufacturing & Corporate Services, Great Western Sugar Co., P.O. Box 53208, Denver, CO 80217 (dated: April 22, 1977)

Option Preference: II

Major Position: Prefers local control

Murrey, Al E., P.E., Chief, Bureau of Water Quality, Idaho State Dept. of Health and Welfare, Div. of Environment, Statehouse, Boise, ID 83720 (dated: May 18, 1977)

Option Preference: II

Major Position: Prefers local enforcement

Naftzger, Howard J., 133 Purdue Ave., Kensington, CA 942708 (dated: April 30, 1977)

Option Preference: I or IV

Major Position: Prefers Federal control

Nay, Ward H., Vice President for Engineering, The Upjohn Co., Kalamazoo, MI 49001 (dated: May 6, 1977)

Option Preference: II

Major Position: Prefers local control and water quality standards

Nestro, John M., Secretary, Joint Municipal Authority of Wyomissing Valley, Berks County, Borough Hall, West Reading, PA (dated: April 19, 1977)

Option Preference: None

Major Position: Prefers national technology standards

Nikolich, Eli, Environmental Control Officer, Wastewater Treatment Plant, 5607 W. Jensen Ave., Fresno, CA 93706 (dated: April 29, 1977)

Option Preference: None

Major Position: Enclosed sewage ordinance

Niles, O'Jay, Director-Technical Services, American Textile Manufacturers Assoc., Wachovia Center, 400 St. Tryon St., Charlotte, NC 28285 (dated: May 18, 1977)

Option Preference: II & III Combination

Major Position: Concerned with industry being overburdened by regulations

Niles, Robert C. Director-Environmental Control, UniRoyal, Oxford Management & Research Center, Middlebury, CN 06479 (dated: May 2, 1977)

Option Preference: II & III

Major Position: Prefers water quality variances

Nolte, F.S., Plant Manager, the Celotex Corp., 2943 W. Southcross, San Antonio, TX 78211 (dated: April 20, 1977)

Option Preference: II & III

Major Position: Prefers water quality variances

Notzon, Al J. III, Executive Director, Alamo Area Council of Governments, TX (dated: April 27, 1977)

Option Preference: None

Major Position: Prefers local control

Odendahl, James P., P.E., Acting Director, Division of Environmental Quality, Missouri Dept. of Natural Resources, 2010 Missouri Blvd., Jefferson City, MO 65101 (dated: May 13, 1977)

Option Preference: I

Major Position: Prefers local control

Olncy, Austin F., Director, Delaware State Dept. of Natural Resources and Environmental Control, Edward Tathall Bldg., Dover, DE 19901 (dated: May 18, 1977)

Option Preference: None

Major Position: Concerned with additional administrative problems and duplications

Olson, Jon L., District Director, Sanitary District of Rockford, 3333 Kishwaukee St., P.O. Box 918, Rockford, IL 61105 (dated: May 4, 1977)

Option Preference: III

Major Position: Concerned with interference with local programs

Olson, O.B., Vice President-Administration, Shawano Paper Mills, P.O. Box 3629, Green Bay, WI 54303 (dated: May 13, 1977)

Option Preference: III & II

Major Position: Opposed to uniform national standards

Ott, Randy P., P.E., Industrial Waste Engineer, Onondaga Co. Dept. of Drainage and Sanitation, 125 Elwood Davis Rd., N. Syracuse, NY 13212 (dated: May 17, 1977)

Option Preference: None

Major Position: Prefers local control and water quality standards

Overcash, Cliff, President, North Central Texas Council of Governments, P.O. Drawer COG, Arlington, TX 76011 (dated: April 28, 1977)

Option Preference: AMSA option

Major Position: Prefers local control

Owen, T.C., Director, Office of Environmental Affairs, Union Camp Corp., P.O. Box 1391, Savannah, GA 31402 (dated: May 11, 1977)

Option Preference: II & III

Major Position: Supports inclusion of water quality variances

Padar, Francis V., P.E., M.C.E., Assistant Deputy Commissioner, Nassau Co. Dept. of Health, 240 Old Mineola Rd., Mineola, NY 11501 (dated: April 19, 1977)

Option Preference: None

Major Position: Prefers local control with Federal standards

Parish, W.D., Chairman PAC, Lower Rio Grande Valley Development Council, Suite 207, First National Bank Bldg., McAllen, TX 78501 (dated: April 29, 1977)

Option Preference: None

Major Position: Prefers local control with water quality variances

Patocka, Roger R., R.E., Banner Assoc., Inc., 1024 6th Street, P.O. Box 298, Brookings, SD 57006 (dated: March 1, 1977)

Option Preference: None

Major Position: Change definition of "Composite Sample"

Payne, T.C., Vice President-Environmental Quality, International Paper Co., P.O. Box 16807, Mobile, AL 36616 (dated: May 9, 1977)

Option Preference: II & III

Major Position: Prefer water quality variances

Perry, Lloyd H., Chairman, Chattanooga Manufacturers Assoc., 817 Broad St., Chattanooga, TN 37402 (May 13, 1977)

Option Preference: None

Major Position: Prefers water quality standards

Phillips, Edward E., Director of Public Works, Hayward, CA (dated: April 29, 1977)

Option Preference: II

Major Position: Concerned with interference with local programs

Pisano, Mark A., Executive Director, Southern California Assoc. of Governments, 600 S. Commonwealth Ave., Suite 1000, Los Angeles, CA 90005 (dated: May 13, 1977)

Option Preference: III

Major Position: Stresses competence of local sanitation districts

Powers, E.L., Director, Environmental & Energy Control, Mobay Chemical Corp., Penn Lincoln Parkway West, Pittsburgh, PA 15205 (dated: May 5, 1977)

Option Preference: III

Major Position: Prefers local control

Pyle, Joe N. , P.E., et. al., Seligman and Pyle Consulting Engineers, Inc., Suite 207, 419 S. Main Avenue, San Antonio, TX 78204 (dated: April 15, 1977)

Option Preference: II & III

Major Position: Prefer water quality variances

Racine, W.J., Vice President-Products Div., Atlantic Richfield Co, 515 S. Flower St., Los Angeles, CA 90051 (dated: May 12, 1977)

Option Preference: II and III combination

Major Position: Prefers local control

Rathmell, Richard K., Market Manager, Waste Treatment Systems, Permutit Co., Inc., P.O. Box 355, Paramus, NJ 07652 (dated: May 2, 1977)

Option Preference: None

Major Position: Not relevant

Reinfurt, Edward, Director of Government Affairs, Associated Industries of New York State, Inc., 150 State St., Albany, NY 12207 (dated: May 17, 1977)

Option Preference: II & III Combination

Major Position: Prefers local control

Rice, I.M., Director, Dallas Water Utilities, and Chairman of the Assoc. of Metropolitan Sewerage Agencies, Suite 200, 1015 18th St., N.W., Washington, D.C., 20036 (dated: May 17, 1977)

Option Preference: AMSA Option

Major Position: Prefers local control for large municipalities

Riley, Jerry K., Administrative Assistant, ABC Truck Rental and Leasing Co., P.O. Box 9203, San Antonio, TX (dated: April 19, 1977)

Option Preference: II & III
Major Position: Prefers water quality variances

Roberts, Thomas E., P.E., Supervisor of Environmental Control, Celanese, Polymer Specialties Co., One Riverfront Plaza, Louisville, KY 40202 (dated: May 2, 1977)

Option Preference: Combination of I, II, & III
Major Position: Prefers minimum regulations

Robson, C. Michael, Director of Liquid & Solid Waste Projects, Dept. of Public Works, City of Indianapolis, 2360 City-County Bldg., Indianapolis, IN 46204 (dated: April 15, 1977)

Option Preference: II
Major Position: Prefers local control with water quality standards

Rodgers, J.L., Jr., Division Manager, American Water Works Service Co., Inc., New England Div., 20 Milton St., P.O. Box 158, East Dedham, MA 02026 (dated: May 16, 1977)

Option Preference: III
Major Position: EPA should develop guidelines for localities

Roegelein, W., Jr., President, Roegelein Provision Co., Box 1698, San Antonio TX 78296 (dated: April 15, 1977)

Option Preference: II & III
Major Position: Prefers water quality variances

Rook, J.H., Manager-Regulatory Affairs, Environmental Protection Dept., American Cyanamid Co., Wayne, NJ 07470 (dated: May 11, 1977)

Option Preference: II & III
Major Position: Prefers addition of water quality variances

Rose, Gordon, Vice-President, Bio-Chem Analysts, Inc., 4940 N. Memorial Pkwy., Huntsville, AL 35180 (dated: May 13, 1977)

Option Preference: IV
Major Position: Prefers limited local control

Rosen, Harold S., Deputy City Manager, City of San Jose, 801 North First St., San Jose, CA 95110 (dated: April, 1977)

Option Preference: II
Major Position: Concerned with interference with local source control programs

Ross, E.E., Manager, Water Pollution Control Dept., East Bay Municipal Utility District, 2130 Adeline St., Oakland, CA 94823 (dated: April 25, 1977)

Option Preference: None

Major Position: Prefers local enforcement with water quality considerations

Rowe, A.R., Jr., Negley and Co., Inc., P.O. Box 12071, San Antonio, TX (dated: April 15, 1977)

Option Preference: II & III

Major Position: Prefers water quality variances

Rubin, Florence, President, League of Women Voters, 120 Boylston, MA 02116 (dated: May 15, 1977)

Option Preference: I

Major Position: Concerned with equity problems

Sadat, Marwan M., Ph.D., P.E., Program Director, Office of Sludge Management and Industrial Pretreatment, State of New Jersey-Dept. of Environmental Protection, Div. of Water Resources, P.O. Box 2809, Trenton, NJ 08625 (dated: April 26, 1977)

Option Preference: I

Major Position: Concerned with protection of sludge

Salzmann, Don E., City of Melrose, Melrose, MN 56352 (dated: April 12, 1977)

Option Preference: II & III

Major Position: Prefers local control

Sasse, Gary S., Assistant Chief Administrator, City Hall, 125 N. Main St., Memphis, TN 38103 (dated: April 13, 1977)

Option Preference: II

Major Position: Lack of data to justify a pretreatment program

Saucier, John, Director, Tennessee Div. of Water Quality Control, Dept. of Public Health, 621 Cordell Hill Bldg., Nashville, TN 37219 (dated: May 17, 1977)

Option Preference: II

Major Position: Supports water quality standards and submits supporting documents

Scanlan, James W., P.E., Assistant Chief, Facilities, Bureau of Water Quality Control, Div. of Environmental Health Services, Arizona Dept. of Health Services, State Health Bldg., 1740 W. Adams St., Phoenix, AZ 85007 (dated: April 29, 1977)

Option Preference: II

Major Position: Prefers local control

Scherer, C.H., Water Reclamation Superintendent, Wastewater Treatment,
P.O. Box 1971, Amarillo, TX 79186 (dated: April 28, 1977)

Option Preference: III

Major Position: Concerned about interference with local programs

Schnitzius, Allen W., Mayor, Village of Cuba, 17. E. Main St., Cuba, NY
NY 14727 (dated: March 16, 1977)

Option Preference: II

Major Position: Prefers local control

Schmidt, Wayne A., Staff Ecologist, Michigan United Conservation Clubs,
2101 Wood St., P.O. Box 30235, Lansing, MI 48905 (dated: April
21, 1977)

Option Preference: IV

Major Position: Concerned with sludge disposal

Schuh, Joseph R., Manager-Production Developments, P.O. Box 402427, 975
Arthur Godfrey Rd., Miami Beach, FL 33140 (dated: May 11, 1977)

Option Preference: III

Major Position: Concerned with laundry industry exemption

Schwartz, Stephen M., Manager-Environmental Engineering, Keystone Consolidated
Industries, Inc. (no date)

Option Preference: II

Major Position: Prefers local control

Scolnick, Meyer, Director, Region II, Enforcement Division, U.S.E.P.A.,
Washington, D.C. (dated: April 29, 1977)

Option Preference: Combinations of Options I and IV

Major Position: Concerned with enforcement problems

Shaw, C. Russell, Director-Energy Conservation, Erving Paper Mills,
Templeton, MA (dated: April 27, 1977)

Option Preference: None

Major Position: Concerned with POTW designed specifically
for industrial wastes

Sherwood, Roger C., Sr. Environmental Engineer, Georgia-Pacific Corp.,
900 S.W. Fifth Ave., Portland, OR 97204 (dated: May 16, 1977)

Option Preference: III & II combination

Major Position: Prefers local control

Shukle, Robert J., Industrial Waste Consultant, Technical Services and Grants Section, Colorado Dept. of Health, 4210 E. 11th Ave., Denver, CO 80220 (dated: May 16, 1977)

Option Preference: None

Major Position: Concerned with program administration

Silverman, Richard H., Manager-Law Dept., Salt River Project, P.O. Box 1980, Phoenix, AZ 85001 (dated: May 16, 1977)

Option Preference: III

Major Position: Prefers local control

Sloan, Garrett, Director, Miami-Dade Water and Sewer Authority, P.O. Box 330316, Miami, FL 33133 (dated: March 30, 1977)

Option Preference: III

Major Position: Prefers local control

Sluizer, Mervyn, Jr., Technical Director, Institute of Industrial Launderers, 1730 M. St., N.W., Suite 613, Washington, D.C. 20036 (dated: May 16, 1977)

Option Preference: II & III

Major Position: Prefer water quality variances

Small, David R., Executive Vice President, H. Swoboda & Son, Div. of Trans-Continental Leathers, Inc., 1027 Bodine St., Philadelphia, PA 19123 (dated: March 14, 1977)

Option Preference: II & III

Major Position: Wants water quality variances

Smith, Jack K., P.E., Chairman, Government Affairs Committee, Missouri Water Pollution Assoc., Inc. (dated: April 19, 1977)

Option Preference: III

Major Position: Prefers local control

Solomon, Neil, M.D., Ph.D., Secretary of Health and Mental Hygiene, State of Maryland, 201 W. Preston St., Baltimore, MD 21201 (dated: April 15, 1977)

Option Preference: II

Major Position: Prefers water quality variances

Spence, John D., Jr., Superintendent, Western Carolina Regional Sewer Authority, Mauldin Rd., P.O. Box 5242, Greenville, SC 29606 (dated: April 21, 1977)

Option Preference: None

Major Position: Prefers local control

Stamps, J.C., P.E., Technical Director, Standard Electric Co., 3016 Austin HW., P.O. Box 18127, San Antonio, TX 78218 (dated: April 25, 1977)

Option Preference: II & III
Major Position: Prefers water quality variances

Stetler, C. Joseph, President, Pharmaceutical Manufacturer's Assoc., 1155 Fifteenth St., N.W., Washington, D.C. 20005 (dated: May 17, 1977)

Option Preference: II and III combination
Major Position: Concerned with limiting documentation

Strassner, Kenneth A., Regulator Attorney-Washington Counsel's Office, Kimberly-Clark Corp., 1730 Pennsylvania Ave., N.W., Suite 1100, Washington, D.C. 20006 (dated: May 18, 1977)

Option Preference: III
Major Position: Prefers limiting number of regulated pollutants

Studabaker, W.C., P.E., Environmental Engineer, Eastern Lines, Atchison, Topeka, & Santa Fe Railway Co., P.O. Box 1738, Topeka, KA 66628 (dated: May 17, 1977)

Option Preference: III
Major Position: Utilize and build on existing pretreatment programs

Stull, E.B., President, Stull Chemical Co., 1006 Paulsen, San Antonio, TX 78219 (dated: April 19, 1977)

Option Preference: II & III
Major Position: Prefers water quality variances

Sullivan, Roger A., Director of Manufacturing, Sullivan Paper Co., Inc., 61 Progress Ave., P.O. Box 88, W. Springfield, MA 01089 (dated: May 10, 1977)

Option Preference: III
Major Position: Prefers local control

Tanzer, Ernest K., P.E., Executive Secretary, Environmental Steering Committee, Eastman Kodak Co., 1669 Lake Ave., Rochester, NY 14650 (dated: April 29, 1977)

Option Preference: Recommends an alternate option
Major Position: Emphasizes local control using NYSPDES/NPDES Program

Taylor, James L., Process Control Engineer, Wastewater Treatment Facilities Commission, 718 Main St., Fitchburg, MA 01420 (dated: April 5, 1977)

Option Preference: III
Major Position: Prefers control of only most hazardous substances

Tiepel, Chairman, Environmental Services Task Force, Public Technology Inc., 1140 Connecticut Ave., N.W., Washington, D.C. 20036 (dated: May 2, 1977)

Option Preference: Combination of II & III

Major Position: Presents a summary of the reactions of U.S. urban communities

Teller, Joe P., Deputy General Manager, Gulf Coast Waste Disposal Authority, 910 Bay Area Blvd., Houston TX 77058 (dated: March 28, 1977)

Option Preference: II & III

Major Position: Prefers water quality variances

Thomas, S.H., Director of Environmental Services, Owens-Corning Fiberglass Corp., Fiberglass Tower, Toledo, OH 43659 (dated: May 17, 1977)

Option Preference: II & III combination

Major Position: Combination is most time-effective and equitable

Trefz, William C., Chief Engineer, Allegheny County Sewer Authority, 3300 Preble Ave., Pittsburgh, PA 15233 (dated: April 29, 1977)

Option Preference: IV

Major Position: Concerned with jurisdictional problems and prefers quality variances

Troy, H. Neal, Manager-Environmental Control, Owens-Illinois, P.O. Box 1035, Toledo, OH 43666 (dated: May 9, 1977)

Option Preference: III

Major Position: Prefers local control

Thorpe, J.R., Manager of Environmental Affairs, GPU Service Corp., 260 Cherry Hill Rd., Parsippany, NJ 07054 (dated: May 2, 1977)

Option Preference: III

Major Position: Prefers locally-derived limits

Turney, W.G., Bureau Chief, Environmental Protection Bureau, Dept. of Natural Resources, State of Michigan, Lansing, MI 48926 (dated: April 4, 1977)

Option Preference: III

Major Position: Prefers local control

Umlauf, Larry D., Vice President, Pet Inc., 400 S. Fourth St., St. Louis, MO 63166 (dated: May 3, 1977)

Option Preference: III

Major Position: Prefers local control

Van De Boe, Alan C., Superintendent of Sanitation, City of Quincy, City Hall Bldg., Quincy, IL 62301 (dated: April 4, 1977)

Option Preference: II

Major Position: Prefers local control

Van Sicler, Richard R., Rohm and Haas Tennessee, Inc., P.O. Box 591, 730 Dale Avenue, Knoxville, TN 37901 (dated: April 11, 1977)

Option Preference: II

Major Position: Prefers local control

Voight, W.G., Chairman, Stinson Manufacturing Co., 555 Harriman, San Antonio, TX 78204 (dated: April 19, 1977)

Option Preference: II & III

Major Position: Prefers water quality variances

Vondrick, Art F., Water & Sewers Director, City of Phoenix, 215 E. McDowell Rd., Phoenix, AZ 85004 (dated: March 28, 1977)

Option Preference: III

Major Position: Prefers local control

Vrana, Richard A., Plant Manager, Howell Hydrocarbons, P.O. Box 27776, San Antonio, TX 78299 (dated: April 26, 1977)

Option Preference: II & III

Major Position: Prefers water quality variances

Walker, Paul A., Environmental Engineer, Hollingsworth & Vose Co., East Walpole, MA 02032 (dated: May 2, 1977)

Option Preference: II & III

Major Position: Prefers local control with water quality standards

Walker, W. Jack, President, Greater Knoxville Chamber of Commerce, 301 Church Ave., S.E., Knoxville, TN 37902 (dated: May 10, 1977)

Option Preference: None

Major Position: Water quality standards with maximum local control

Ward, Frank L., Superintendent, Municipal Treatment Plants, High Point, NC (dated: April 25, 1977)

Option Preference: III

Major Position: Concerned with maintaining POTW inter-relationships with industry

Ward, W.A., Vice President-General Manager, Aggie Chemical Industries, P.O. Box 8335, San Antonio, TX 78208 (dated: April 22, 1977)

Option Preference: II & III

Major Position: Prefers water quality variances

Warr, James W., Chief Administrative Officer, State of Alabama Water Improvement Commission, Perry Hill Office Park, 3815 Interstate Court, Montgomery, AL (dated: April 26, 1977)

Option Preference: None

Major Position: Concerned with delegation of authority to non-NPDES states

Watson, K.S., Director of Environmental Control, Kraft Inc., 801 Waukegan Rd., Glenview, IL 600025 (dated: May 16, 1977)

Option Preference: II & III Combination

Major Position: Concerned with definition of "slug discharge"

Webb, David, Director of Operations, City of Bentonville, 115 West Central, Bentonville, Ark., 72712 (no date)

Option Preference: I

Major Position: Prefers local control

Webb, Mitchell and Baxter Grier, Officers, San Antonio Manufacturer's Assoc., 111 W. Laurel, Suite 228, San Antonio, TX 78212 (date: April 27, 1977)

Option Preference: II & III

Major Position: Prefers water quality variances

Wegbreit, Sam, Box 5210, Brown University, Providence, RI 02912 (no date)

Option Preference: Offers personally-derived option

Major Position: Gives detailed analysis

Weismantel, Guy, Western Editor, Chemical Engineering, 3200 Wilshire Blvd., South Tower, Los Angeles, CA (dated: April 5, 1977)

Option Preference: None

Major Position: Concerned with the overall problems of implementing a pretreatment program

Wells, W. James, Jr., P.E., Bell, Galyardt and Wells, Inc., 5634 S. 85th St., Omaha, NB 68126 (dated: May 3, 1977)

Option Preference: None

Major Position: Prefers local control and water quality standards

Welsh, Gene B., Chief-Water Protection Branch, Dept. of Natural Resources, Environmental Protection Div., State of Georgia, 270 Washington St., N.W., Atlanta, GA 30334 (dated: April 29, 1977)

Option Preference: IV

Major Position: Prefers local control and locally-derived treatment limits

Western Reserve Economic Development Agency, 522 Office Bldg., 918 Youngstown Rd., Niles, OH 44446 (dated: May 16, 1977)

Option Preference: None

Major Position: EPA should schedule more briefings with local officials

White, W.A., Vice President, National Agricultural Chemicals Assoc., The Madison Bldg., 1155 Fifteenth St., N.W., Washington, D.C. 20005 (dated: May 18, 1977)

Option Preference: II & III Combination

Major Position: Support local government cooperation with industry

Willenbrink, R.V., Director-Environmental Control, Ashland Oil, Inc., P.O. Box 391, Ashland, KY 41101 (dated: May 16, 1977)

Option Preference: II & III

Major Position: Prefers addition of water quality variances

Woods, Richard H., Counsel, Ocean County Sewerage Authority, 10005 Hooper Ave., Toms River, NJ 08753 (dated: May 17, 1977)

Option Preference: I

Major Position: Concerned with equity problems

Wright, James F., Executive Director, Delaware River Basin Commission, P.O. Box 7360, West Trenton, NJ 08628 (dated: May 9, 1977)

Option Preference: III

Major Position: Prefers local enforcement

Young, Earle F., Jr., Director-Environmental Affairs, American Iron and Steel Institute, 1000 16th St., N.W., Washington, D.C. 20036 (dated: April 19, 1977)

Option Preference: III

Major Position: Prefers local control

Young, G.R., President, Southern Chemical and Refining Co., P.O. Box 552, Melbourne, FL 32901 (no date)

Option Preference: None

Major Position: Not relevant

Yerges, Howard, Vice President-Engineering, Banquet Foods Corp., 100 N. Broadway, St. Louis, MO 63102 (dated: April 29, 1977)

Option Preference: None

Major Position: Prefers local control

Zainea, Joseph G., City Manager, City of Grand Rapids, MI 49502

Option Preference: II

Major Position: Prefers local control

Zenie, Emil, Supervisor of Industrial Waste Control, Monroe Co. Div.
of Pure Waters, 65 Broad St.,-Rm. 100, Rochester, NY 14614 (dated:
May 16, 1977)

Option Preference: III

Major Position: Prefers technology-based standards applied to effluent
of POTW

Zohn, J., P.E. Director, Dept., of Public Works, Wastewater Management
Div., 5055 Washington St., Denver, CO 90216 (dated: April, 1977)

Option Preference: II & III

Major Position: Prefers water quality variances

ADDENDUM TO LOG OF LETTERS

Bielo, Robert J., Susquehanna River Basin Commission, 5012 Lenker Street,
Mechanicsburg, PA 17055 (Dated: April 22, 1977)

Option Preference: IV
Major Position: Prefers Federal Standards and
Local Control

Bigler, Daniel E., New Jersey Water Pollution Control Association,
318 - 76th Street, North Bergen, NJ 07047
(Dated: April 28, 1977)

Option Preference: None
Major Position: Prefers Local Control

Costello, John G., Bergen County Sewer Authority, Box 122,
Little Ferry, New Jersey 07643 (Dated: June 2, 1977)

Option Preference: III & II
Major Position: Prefers Local Control

Green, John A., U.S. EPA, Region VIII, 1860 Lincoln Street
Denver, Colorado 80203 (Dated: June 10, 1977)

Option Preference: I
Major Position: Recognition of Resource Implications of
all Options Inadequate

Nelson, Myron K., Johnson County Unified Sewer Districts,
P. O. Box 39, Shawnee Mission, KA 66201 (Dated: June 2, 1977)

Option Preference: III
Major Position: Prefers State Control

Todd, S. K., United States Steel Corporation, 600 Grant Street,
Pittsburg, PA 15230 (Dated: May 4, 1977)

Option Preference: III
Major Position: Prefers Local Control

Van De Boe, Alan C., City of Quincy Sanitation Committee, Quincy,
Illinois 62301 (Dated: April 20, 1977)

Option Preference: None
Major Position: Prefers Local Control