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Local Government Implementation Of Environmental Mandates

Five Case Studies

Final Report

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I. EXECUTIVE SUMMARY

INTRODUCTION

The Program Evaluation Division (PED) of the Office of Policy, Planning and Evaluation (OPPE) conducted this study to better inform EPA management of the most significant problems perceived and experienced by local governments in implementing environmental mandates.

Information was collected by PED staff through interviews with local government officials from five communities across the country--Neligh, Nebraska; Morgan City, Louisiana; Frederick, Maryland; Rockford, Illinois; and Riverside, California. Interviewees included mayors, council members, city managers, plant operators, city attorneys, planners, and technicians. Participant communities were selected with the assistance of EPA Regional Offices to ensure a mix of community characteristics such as size, economic base, geographic location, and ecological conditions.

EPA program mandates are the primary focus of the study; however, city officials were asked about the difficulties they are experiencing with any or all environmental programs--including State programs delegated by EPA. For purposes of this study PED defined "local governments" as general purpose municipal governments.

This report does not evaluate the extent to which local governments' views differ from EPA's perspective, nor were the statements of local officials verified. Implementation "problems" stated are presented from the viewpoint of the local government officials. Since the study's purpose was to identify implementation problems as local governments themselves experience them, PED believes the utility of this information is greatest through this type of presentation.

FINDINGS

Main Message

o ***Problems local governments experience implementing and complying with environmental mandates are not only financial. Obstacles to implementation include ineffective communication, uncertainty about future requirements, and a lack of governmental partnership between EPA and local governments.***

This main message is based upon the following six systemic .. dings drawn across the five case study communities.

A. Communications

Case study communities are dissatisfied with the dissemination and quality of information from EPA and the States. Local governments struggle to keep themselves informed of, and to understand the content of, current environmental regulations--obtaining information more often from private consultants and supply vendors than from the Federal Register. This appears to be the case even more so with smaller communities than with larger ones.

B. Regulatory Pace

City officials interviewed find changing and increasing regulations costly and difficult to administer. All of the communities interviewed noted that both the increasing volume of regulatory requirements, as well as the fact that regulations and standards do not stay static, pose significant problems and costs for them across several different environmental services.

C. Regulatory Flexibility

Case study communities believe regulations are often too prescriptive, requiring local governments to do work that does not solve local environmental problems. In some cases, local officials argue that compliance with EPA requirements prescribes an approach that they find inappropriate to their conditions, and they believe they are denied the latitude to choose a different approach.

D. Revenue Generation

Interviewees object to having to impose higher rates and taxes on their residents to pay for new environmental mandates. Weak economic bases and a lack of "buy-in" on the assessment of risk underlying the requirements reinforce this reluctance.

E. Regulatory Consistency

Officials interviewed believe the current regulatory approach targets them disproportionately in assigning responsibility for protecting the environment. Case study communities believe that they are doing more than their fair share in protecting human health and the environment--either because they are required to address problems that should not be

their responsibility or because of a belief that responsibilities are not distributed equitably among communities or other responsible parties.

F. Federal-Local Relationship

Case study communities are dissatisfied with the current Federal-Local relationship--which they view as often more adversarial than cooperative. Local officials believe they are not treated respectfully as partners in environmental protection which erodes goodwill. The five communities also indicated that the federal-state-local hierarchy is often problematic, hindering their ability to obtain needed assistance from EPA.

CONCLUSIONS AND RECOMMENDATIONS

Main Message

o EPA can help local governments implement environmental mandates by developing a stronger customer-orientation and fostering a more cooperative relationship between city officials and the Agency. In order to improve this relationship, EPA should change some aspects of the way it views, regulates, informs, and interacts with local governments.

A. Local Governments as Customers of EPA

Local governments are an important customer of EPA and are in need of assistance with the implementation of EPA-mandated programs. There are actions EPA can take to better meet the needs of local governments, thereby promoting more effective environmental protection at the local level. PED recommends that EPA:

- Ensure local governments' awareness of regulatory responsibilities;
- Provide notifications of pending regulations so local governments can plan for future activities and expenditures;
- Educate local governments about environmental risk behind regulations;
- Offer additional technical assistance and training to local governments;
- Open a dialogue with Congress and OMB regarding the pace of regulation issuance.

B. Local Governments as Partners of EPA

Although local governments are one of the largest sectors of the regulated community, they are different from other regulated entities in their provision of essential services to the public. As a result, local governments are an integral part of the public sector environmental management framework (along with State and federal environmental agencies), and should therefore be treated differently than other regulated entities. EPA needs to change the way it views and interacts with local governments--which is primarily as regulated entities comparable to private industry--and achieve a balance between interacting with local governments in their role as public service entities and in their role as regulated entities. PED recommends that EPA:

- Communicate directly with local governments, as appropriate;
- Involve local governments in the development of regulations wherever possible;
- Allow for local and regional approaches to environmental problems, as allowed by statute;
- Encourage local priority setting through comparative risk studies and agreements with States and EPA;
- Increase Regional Office authority to negotiate and enforce local and regional approaches.

II. INTRODUCTION

A. Background

Both EPA and the Congress have been hearing complaints from local governments as to the increasing burden of complying with environmental mandates. Recently, three large U.S. cities have completed studies of the costs of local environmental protection. All three of these studies focus predominantly on current and projected financial expenditures.

The problems local governments experience implementing environmental mandates however are not limited to financial resources. In October 1991, for example, EPA received comments from 60 local governments on the Agency's Regulatory Agenda. Roughly one-quarter of the community comments specifically identified financial issues as the primary problem stemming from environmental regulation. A larger percent of the complaints from these municipalities related to other implementation barriers, e.g., a belief that regulations were inappropriate, and insufficient in-house technical capacity to implement environmental mandates.

Although some EPA offices have conducted a few, limited (generally single-program) analyses of local government programs, no study had previously been undertaken by EPA or any outside group to provide Agency decision makers with both a multi-media perspective and a multi-issue characterization of the types of problems being experienced by local governments in implementing EPA mandates.

B. Purpose of Study

The purpose of this project was to better inform EPA management, based upon a limited data set, of the most significant problems perceived and experienced by local governments in implementing environmental mandates. The study had three main goals:

1. Characterize five local governments' implementation of relevant EPA programs, describing specific conditions of a given local government's implementation of EPA programs.

2. Identify implementation problems. Explore the extent to which the following factors are perceived by local governments to effect implementation: financial resources (expenditures and revenue generation); technical capacity (staff and facility resources); competing priorities (other public expenditure options); applicability (to local

conditions); communications (notification, guidance, assistance, and input mechanisms); and other factors inhibiting local government implementation.

3. Determine additional study needs. (Note: This phase of the project is ongoing and is not presented in this report.

C. Scope of Study

This study examines all types of implementation problems experienced by local governments in carrying out environmental programs, regardless of whether the local government acts as a regulator or as a regulated entity. For purposes of this study, local governments are defined as general purpose municipal governments. The study did not examine special service districts or regional governments. As an examination of implementation realities and problems, the study looked across media programs, examining qualitative as well as quantitative factors affecting implementation.

Although the study's primary focus is EPA mandates, the Program Evaluation Division (PED) was interested in learning about problems arising from any environmental mandates. Thus, municipalities were asked about difficulties they are experiencing with any or all federal environmental programs--including State programs delegated by EPA.

The study does not characterize the compliance status of these communities. Nor does it provide any cost-benefit analyses of individual mandates. The study also did not evaluate the extent to which local governments' views differ from EPA's perspective, nor were comments verified. Since the study's purpose was to identify implementation problems as local governments themselves experience them, PED believes the utility of this information is greatest through this type of presentation. However, the implementation issues they raise are affecting their ability to comply with federal and state environmental requirements.

D. Study Methodology

A case study methodology was selected to meet the goal of mapping local government perceptions of environmental requirements and the self-reported difficulties encountered in implementing mandates. To meet these goals, PED performed several tasks. Foremost were interviews with elected officials, managers, and staff of five local governments. These included the cities of:

- Neligh, Nebraska
- Morgan City, Louisiana
- Frederick, Maryland
- Rockford, Illinois
- Riverside, California

These communities were selected, with assistance from EPA Regional Offices, to provide a sample diverse in population, location, and economic and environmental conditions. PED also selected communities that were not the subject of an EPA enforcement action at the time of the project. Therefore, the report does not address the communities' experience with federal or State compliance inspections and enforcement cases. This sample is in no way intended to be statistically valid or representative. These communities provide "real-life" examples of the realities of environmental program implementation in five diverse locales.

Members of the PED project team visited each of these communities during the month of March 1993. The project team conducted interviews with approximately fifty city officials including mayors, council members, city managers, plant operators, city attorneys, planners, engineers, and technicians.

To prepare for on-site visits, PED collected financial and demographic data on the five case study communities as well as information on the services each community provides to its residents. This data was collected from the U.S. Department of Commerce, Bureau of the Census, and from the cities themselves through a brief questionnaire which was mailed out in advance of PED's visits. The case study methodology was piloted in Federalsburg, Maryland prior to the community visits.

In designing the case study methodology, PED staff met with EPA Headquarters managers and staff to discuss the impacts of specific EPA programs and policies on local governments. These meetings were held with EPA's Offices of Air and Radiation; Water; Solid Waste and Emergency Response; Policy, Planning and Evaluation; Regional Operations and State/Local Relations; and Administration and Resources Management.

Prior to conducting the case study visits, the PED project team reviewed several studies and reports describing local government implementation. Some of these studies were specific to one EPA program or media, e.g., water, while others were limited to analyses of financial impacts. These studies include EPA's Municipal Sector Study (1991), EPA's Review of Nine Small Municipalities Wastewater and Drinking Water Systems (1991), and those compiled by the cities of Columbus, OH, Lewiston, ME, and Anchorage, AK.

Finally, to complement the five case studies, the PED project team interviewed experts in the field of public finance, and representatives of local government and trade associations to gain insights into the context in which local governments function, and the nature of problems being experienced.

E. Project Team

The PED project team which conducted this study and wrote this report included Kristina Heinemann, Gabriella Lombardi, John Moses, and Andy Spielman (Project Manager). Len Fleckenstein served as Project Advisor. Elvira Dixon was the Project Secretary. Charlotte White wrote Appendix F: A Catalog of EPA Activities to Assist Local Governments.

F. Acknowledgements

The Program Evaluation Division would like to thank all those who participated in this study. Participants included EPA Headquarters and Regional management and staff who provided valuable insights and comments at the outset of this project. We are grateful to the officials of the State and local governments with whom we met for sharing their time and experiences. The individual representatives of professional associations and from EPA's Environmental Financial Advisory Board (EFAB) provided the project team with important perspectives which are reflected in this report as well. Finally, we thank the city officials of Federalsburg, Maryland who provided us with the opportunity to pilot the study methodology.

G. Organization of this Report

This report will continue with a brief description of the five case study communities and the EPA environmental programs with which they are involved.

The report will then provide study findings drawn from analysis conducted across the five communities. Following these findings are recommendations for EPA to consider. (Detailed descriptions of each community and environmental programs can be found in the appendices.)

III. THE FIVE CASE STUDY COMMUNITIES

A. COMMUNITY PROFILES

The following section provides a brief profile of each case study community to introduce relevant demographic, economic, service provision and environmental characteristics, and to provide a context for the study findings which follow in Section IV. A more detailed case study description for each community can be found in Appendix B.

Neligh, Nebraska

Neligh (pronounced "Neely") is a small farming community located in the agricultural "heartland" of northeastern Nebraska, 150 miles from both Omaha and Lincoln. The City is the largest community and the county seat of Antelope County.

Neligh has a population of 1,742 residents (1990 US Census). Since 1980, Neligh's population has declined by 8%. One quarter of Neligh's population is under 18 years old, and one quarter of the City's population is over 65 years old -- more than double the national average of 12.5% (1990 US Census).

Farming, livestock production, and agriculturally-based small businesses dominate Neligh's economy, though the City supports a limited amount of light manufacturing. In 1990, Neligh's unemployment rate stood at 3.1%. The community's per capita income is $9,879 and the average household income is $20,680 (1990 US Census). The City contains 771 housing units with a median value of $29,200 and a median monthly rent of $146 (1990 US Census).

Neligh provides the following municipal services: police protection; a public library; dial-a-ride transportation; electric service; drinking water; sewage treatment; a recycling drop-off center; an organic waste drop-off center; a used oil disposal center; and a municipal solid waste transfer station.

The NPDES program has been delegated to the Nebraska Department of Environmental Quality (NDEQ). The Nebraska Department of Health (NDOH) has been given primacy for the drinking water program in the State by EPA.

Morgan City, Louisiana

Morgan City is located on the Louisiana coast in "bayou country" and is the largest City in St. Mary's Parish. The Atchafalaya River and the intra-coastal waterway flow by Morgan City.

Morgan City's location also puts it at a transportation crossroads. It is located forty miles from "chemical alley"--the corridor of chemical manufacturers between New Orleans and Baton Rouge. As a result of its proximity to the plants, Morgan City sees a lot of chemical barge traffic to the Gulf of Mexico via the intra-coastal waterway. In addition, a major US highway runs through Morgan City, as does the railroad.

In 1980, the population of Morgan City was reported by the US census as 16,114. By 1990, the population of Morgan City had decreased to 14,531 according to the US census estimates. The City has suffered a loss in both population and jobs over the last ten years. This corresponds with the collapse in energy prices over the last ten years which has had numerous ripple effects on the economy of the region that includes Morgan City. The City estimates that it has lost 6000 jobs and $8,000,000 in income since 1984. The present-day unemployment rate is 10.9%. The present day employers in Morgan City consist of shipbuilders, ship yards, and oil rig fabricators, in addition to the local hospital and the parish school board.

The per capita income in Morgan City is $10,577 and the average household income is $22,664 (1990 US Census). Morgan City contains 5,838 housing units, 5,192 (89%) of which are occupied (1990 US Census).

Public works activities are directed by a Public Works Director and individual facilities, i.e., the drinking water plant and the wastewater treatment plant are managed by plant managers with approximately six operators at each plant. Other City services include police, fire, library, parks and recreation, planning and zoning, and general public works, such as road construction.

Several factors of Morgan City's physical environment are important in understanding the environmental protection issues that face the City. The first: as with all the municipalities along the Louisiana coast the community is at sea level. This feature has important consequences for wastewater and stormwater treatment and control and solid waste disposal. The second: the Atchafalaya River flows by the City. The volume of water in the Atchafalaya River as it flows by Morgan City is one third of the flow of the Mississippi; the other two thirds flows through New Orleans. The swift flow and high volume of water are two important factors in wastewater treatment and drinking water quality in Morgan City.

The State environmental protection agency, the Louisiana Department of Environmental Quality (LDEQ), administers the drinking water program in the State. Louisiana has primacy for the drinking water program, but is not authorized for the NPDES

program. The LDEQ writes a permit separate from the federal permit for the wastewater treatment plant in Morgan City.

Frederick, Maryland

Frederick, Maryland is located in western Maryland, 50 miles from both Baltimore, MD and Washington, D.C. It is the county seat and largest city in the mostly rural Frederick County. Frederick was incorporated in 1745. City officials describe their community as the "legal, commercial, and financial center of the county."

Frederick is located at the foothills of the Allegheny Mountains along the Monocacy River which flows into the Potomac River and eventually into the Chesapeake Bay.

Frederick has a population of 40,148 (1990 US Census) and has grown dramatically (43%) since 1980. The community's per capita income is $15,410 and the average household income in Frederick is $34,891 (1990 US Census). The median value of a home is $113,400 and the median rent is $517 (1990 US Census).

Sixteen thousand county residents--most of whom live in Frederick City--commute to Washington, D.C. and its suburbs. Most of the businesses in the City are service--not industrial. These include insurance operations, national hotel reservation operations, a federal communications center and a federal medical research center, the final being the City's largest employer.

City services include police and public safety, transportation, waste removal and recycling, general public works, planning, zoning, and engineering services, parks and recreation, a community center, a youth department, a program for the homeless, wastewater treatment, drinking water, a general aviation airport, public housing, and buildings. Solid waste, drinking water, and wastewater services are all located within the Public Works Department.

The lead State environmental agency in Maryland is the Maryland Department of the Environment (MDE). MDE has been delegated authority to administer the NPDES permit program and has primacy for the Public Water Supply Supervision (PWSS) program.

Rockford, Illinois

Rockford, Illinois is located in northern Illinois, 86 miles northwest of Chicago. It is the county seat and largest city in the mostly rural Winnebago county. Rockford has a population of 139,426 (1990 US Census) and is the second largest municipality (by population) in the State. Rockford's population is fairly stable having decreased only 0.2% since 1980.

Rockford's per capita income is $14,109 and the average household income in the City is $28,232 (1990 US Census). The median value of a home is $56,300, the median rent is $291 (1990 US Census). Rockford is described by City officials as a "conservative, practical community."

Rockford is an industrial city. There are 950 manufacturers in the City ranging in size from 5 to 4,500 employees. The unemployment rate is reported by the Commerce Department to have been 6.1% in 1990. The State of Illinois estimated the rate to be 8.3% in 1992.

City services include: police, fire, emergency medical, and library services, transportation, solid waste removal and recycling, general public works, drinking water, buildings, planning and zoning, and social services. All City departments report to the City Administrator, who reports to the Mayor. Solid waste and drinking water are located within the Public Works Department. Wastewater treatment is not a City service, but is provided by the regional Rock River Water Reclamation District.

Rockford is located on the Rock River, which flows south and west into the Mississippi River near Davenport, Iowa. Despite the presence of the Rock River, Rockford is entirely dependent on groundwater for its supply of drinking water. The heavy industrial presence in Rockford has affected groundwater quality.

The lead State environmental agency in Illinois is the Illinois Environmental Protection Agency (IEPA) headquartered in Springfield. IEPA also maintains a regional office in Rockford. The staff in this office are primarily responsible for enforcement and inspections. IEPA has been delegated authority to administer the NPDES permit program and has primacy for the Public Water Supply Supervision program (PWSS).

A major issue of the City's 1989 mayoral race was solid waste disposal. Concern over landfill capacity and rising costs initiated a public-private effort to begin composting and recycling ahead of State mandates.

Riverside, California

The City of Riverside is located in Southern California approximately 50 miles southeast of Los Angeles on the banks of the Santa Ana River. It is the largest city in Riverside County, which is the State's fourth largest county by area. Riverside County also has the highest rate of population growth in Southern California, one of the top growth regions in the country.

Over the past decade, Riverside has experienced the high growth rate characteristic of Southern California. The City's population grew 32.5% over the course of ten years from 171,000 in 1980 to 226,000 in 1990 (US Census). This expansion in population size, plus a

growth in the City's elderly and minority populations, have required the City to expand and adjust its mix of services.

Riverside's per capita income is $14,235 and the average household income is $34,801 (1990 US Census). The median value of a home in Riverside is $134,800 and the median rent is $512 (1990 US Census).

While many of the City's residents commute to Los Angeles and Orange County, it also has its own economic and industrial base. Warehousing is a common commercial activity in the area due to the proximity to freeways, and Riverside is home to several manufacturing and warehousing businesses. Light and high-tech industry and education are also major employers in Riverside.

Despite some success in attracting new business and employers, Riverside is suffering from the current economic downturn. Down-sizing in the military and defense sectors has removed a significant number of jobs from the area. The City's unemployment rate is now close to the State average at approximately 12%.

The community has a council-manager form of government with seven members of council and a separately elected mayor. The city manager is hired by the City Council, and administers city affairs with the aid of two assistant city managers. Riverside has 2200 city employees, and provides a full range of municipal services. The City also owns a museum, a convention center, and a general aviation airport. While the public transportation system is regional, the City does operate access services for senior citizens and disabled residents (Dial-a-Ride).

The City owns an electric utility, begun in the founding days of the City. The utility powers the entire City and is an important revenue source for the City, raising about $15 million dollars annually for the general fund. One City official noted that Riverside is fortunate to have an electric utility because it helps fund many important General Fund services such as police and fire protection. The City is also part owner of the Palo Verde nuclear facility as members of an energy consortium.

Electric, drinking water, sewer and refuse utilities, and airport and transportation operations are run as enterprise funds. Rate payers are billed for waste water treatment, drinking water, municipal solid waste, and streetlights through a consolidated utility bill. Proposition 13 has severely restricted the ability of localities throughout California to raise revenues through property taxes. Consequently, revenue generation has shifted to alternative mechanisms such as fees for all specific services and sales tax.

The City reported that, like many municipalities in the State, most of its general fund revenue is generated via sales tax. This has lead to fierce competition among localities for businesses selling high ticket items.

The City's annual report notes that revenue growth has not kept pace with population growth or inflation, due in large part to competition for the purchase of goods and services from surrounding communities, increased unfunded State requirements, and the national economic slowdown.

Riverside is situated in an arid climate on the banks of the Santa Ana River, a naturally ephemeral stream with continuous flow due to the discharge from community waste water treatment plants. This characteristic of the Santa Ana River has important consequences for the waste water program. Also noteworthy is the significant amount of agricultural activity which still occurs in the area surrounding Riverside despite a pattern of high residential growth over the past ten years. The City is also located in a bowl formed by the San Bernardino mountains to the east. This geographic feature contributes to the collection and concentration of air pollutants, and has significant implications for the transportation of solid waste.

Environmental regulation in California is characterized by regionalization of relevant State agencies with multiple layers of regulatory responsibility. NPDES program authority has been delegated to the State Water Resources Board, a governor-appointed entity, which must work with and through nine independent Regional Water Control Boards.

The State Department of Health Services (DHS) has primacy for the drinking water program. The DHS has several regional offices, but interacts at the local level primarily through county health departments. While the DHS is responsible for regulation of drinking water quality, the Regional and State Water Resources Boards are also involved through the regulation of water quantity and the distribution of water rights between water utilities.

Air quality management for mobile sources statewide is the purview of the State Air Resources Board. Riverside is part of a multi-county district known as the South Coast Air Quality Management District (SCAQMD). The SCAQMD is responsible for preparing an air quality management plan for the district, and for working with local governments to ensure implementation of the plan. SCAQMD also promulgates and enforces air pollution reduction regulations.

The role of the State's environmental agency, California EPA (CalEPA), and its relationship to the agencies mentioned above is still evolving and is unclear to many service managers and local officials. While the Department of Health Services is a direct arm of CalEPA, the State Water Resources Board and the Air Resources Board are independent agencies and must none-the-less still report to CalEPA.

B. ENVIRONMENTAL SERVICES IN THE FIVE COMMUNITIES

Local governments must balance a number of complex and competing roles. They are the primary purveyors of basic and essential public services. In some cases, such as the industrial wastewater pre-treatment program, local governments serve as regulators, controlling the activities of waste generators to minimize pollution or maximize treatment.

However, in the course of providing services (e.g., providing sewage treatment), local governments are also responsible for treating pollution generated within the municipal political boundary either by municipal activity or by its residents and businesses. In addition, local governments often must treat pollution originating outside their political boundaries, generated either by human activity or natural processes (e.g., providing safe drinking water). In this role, local governments are regulated, subject to compliance requirements under State and/or federal mandates.

In aggregate, case study communities provide all of the major local environmental services: provision of drinking water and the collection and disposal of solid waste, and wastewater. This section includes brief descriptions of each of these services and the EPA program requirements that are most important and troublesome to those implementing them. The following services and programs are described in this section:

- wastewater collection and disposal and the NPDES permit program;
- industrial discharges and the NPDES Pre-treatment program;
- stormwater treatment and control and the NPDES stormwater program;
- drinking water provision and the PWSS program; and
- collection and disposal of municipal solid waste and the RCRA Subtitle D program.

Drinking Water

All five case municipalities included in this study own and operate a drinking water treatment plant and distribution system that provides drinking water to at least 95% of the community. Two of the case communities, Morgan City, LA and Frederick, MD, draw their drinking water from nearby surface water and the other three, Riverside, Neligh, and Rockford from groundwater wells. The communities typically pump (from wells or rivers and lakes), treat, test, monitor, store, and distribute drinking water to private homes and commercial businesses and industry.

Local governments provided treated (disinfected and fluoridated) drinking water to their residents for many years prior to the passage of the Safe Drinking Water Act (SDWA). All PWSS standards apply to purveyors of drinking water; there are no site specific standards under the SDWA. Sampling of drinking water occurs not only in City-owned pipes and facilities but also in private homes--even in the smallest of systems in the case communities. In meeting PWSS requirements, the five local governments included in this study sample and sometimes treat their drinking water to meet maximum contaminant limits for 83 specific regulated elements and compounds.

Drinking water services and facilities are supported through fees billed directly to individual households in all five of the case communities.

Wastewater Collection and Discharge

Four of the study's five case communities own and operate a wastewater treatment plant. The remaining community, Rockford, is serviced by a regional plant that treats wastewater from five other communities as well.

The communities own wastewater treatment plants which employ a variety of different treatment techniques, some of which are new and innovative. The plants themselves vary in age between five to twenty-five years old, while wastewater collection systems were often decades older than the treatment plants. At the plant the municipalities treat and discharge wastewater to nearby rivers. Plant operations are monitored by testing the effluent at various stages of the treatment process. Finally, the five communities disposed of residual sludge either by land-applying or land-filling it.

POTWs that service each of the five communities are subject to effluent limitations mandated by the Clean Water Act. The effluent limitations are contained in the POTW's NPDES permit, which specifies the volume of wastewater that the plant may discharge as well as the amounts of organic material and specific pollutants that may be released into nearby rivers and streams.

All of the publicly-owned wastewater treatment facilities and services in the five case communities are funded by revenues collected through fees paid by households in the community.

Industrial Pre-treatment

Two of the five case study communities, Frederick and Riverside, administer industrial wastewater pre-treatment programs as part of the NPDES program. The two smallest communities, Neligh and Morgan City do not have industrial facilities located within the City limits and the fifth city, Rockford, is serviced by a regional facility that administers

an industrial pre-treatment program. Under the pre-treatment program, municipal sewage treatment officials in Riverside and Frederick develop local limits for pollutant discharges, issue permits or enact local ordinances that place limitations on what industrial facilities can discharge to municipal sewage treatment plants. City officials also inspect and sample industrial facilities to verify that they are in compliance with pre-treatment requirements. This is one program at the municipal level where the local government acts as a regulator of private sector facilities.

Solid Waste Collection and Disposal

Solid waste services in the case study communities are characterized by variety. All but one of the cities provide collection and hauling of refuse; some provide these services directly while others rely on contractors. Residents in the fifth community are responsible for arranging waste collection and transportation to the municipally-owned compacting/transfer station on their own.

None of the case study communities owns or operates a municipal landfill; they use regional landfills which are either county- or privately-owned. The five case study communities, therefore, are not directly subject to the RCRA Subtitle D regulations that specify criteria and standards for the design, location, and performance of new and existing landfills, and for the on-going post-closure maintenance of landfills (financial assurance). None of the communities uses incineration as a disposal method.

All five of the case study communities are located in States which have passed recycling and source reduction mandates. The five communities offer a mix of recycling services ranging from highly developed curb-side pick-up and composting programs to what was self-described as a very "minimal" effort. Only one of the communities does not operate a municipal recycling program, relying instead on county collection from recycling drop-off sites. A second community participates voluntarily in a county-run effort.

Unlike the other programs discussed so far, solid waste management activities are not typically operated as enterprise funds; other revenue sources ranging from sales tax to property tax to general fund revenues are used to supplement funds raised through direct billing for services.

Stormwater Treatment and Control

Only two of the case communities, Riverside and Rockford, are subject to Phase I stormwater permitting regulations mandated by the CWA of 1987. These regulations require municipalities with populations over 100,000 to obtain an NPDES permit for discharges from separate stormwater systems. NPDES stormwater permits require municipalities to identify major outfalls and facilities that discharge stormwater into the municipal sewer system;

collect and report discharge characterization data; identify the legal and financial resources and authority to control stormwater discharges; and propose a management program consisting of best management practices (BMPs) designed to reduce pollutant loadings.

Riverside joined in a regional effort led by the Riverside County Flood Control District (RCFCD) to prepare and submit a stormwater application in accordance with the deadlines for large municipalities (populations over 250,000). The RCFCD served as the primary permit applicant; Riverside and six other communities joined the application as co-applicants. The RCFCD served as the technical advisor to the other municipalities during the permit application process; each community is responsible for its own implementation of the program.

Rockford is the only city in Illinois which is subject to the Phase I requirements; Chicago and Peoria, the only other cities in the State with populations greater than 100,000, have combined stormwater and wastewater-sewer systems and are therefore not subject to stormwater permitting requirements at this time. Rockford was subject to the May 1992 and May 1993 application deadlines. At the time of the case study, Rockford was in the process of collecting the information needed for its permit application, and was developing its program of best management practices.

Development of the stormwater permit application and implementation of the program is funded through general revenues in Rockford. In Riverside, an innovative funding mechanism had been developed, allowing municipal co-permittees to generate revenues through the RCFCD's taxing authority. The presence of these funds are largely responsible for the City's involvement with the program.

Other Environmental Programs

In addition to the three major EPA programs, NPDES, Drinking Water and Solid Waste, that regulate environmental services at the local level, Rockford, Illinois reported that it has been affected by two other EPA programs, the Superfund and the Underground Storage Tank programs. These two programs consumed a significant amount of the City's attention and resources. (Local government implementation of the Superfund and UST programs is described in Appendix A.)

Riverside, California also reported that it has been subject to EPA requirements outside of the three major program areas. Riverside's location west of the San Bernardino Mountains contributes to the collection and concentration of air pollutants and makes the City susceptible to poor air quality. Consequently, Riverside's city planning department is involved in air quality planning, some of which is mandated by the Clean Air Act of 1990. (Local government implementation of the Air program is described in Appendix A.)

IV. FINDINGS ON LOCAL IMPLEMENTATION OF MANDATES

Local governments have traditionally provided essential public services, such as drinking water supply, wastewater and solid waste collection and disposal, through their public works departments. In all five case study communities this is still true. Increasingly, however, the services that these public works departments provide are subject to larger numbers of complex federal environmental regulations. These regulations require local governments to add new services such as stormwater treatment and control as well as new monitoring and testing responsibilities. Complying with these federal regulations has required a level of service that has stretched the capacity and the resources of these local public works departments and in many cases made implementation very problematic.

This study included five communities of diverse population sizes ranging from 1,700 people in Neligh, Nebraska to 250,000 people in Riverside, California. Despite this range in population size, the problems that the five communities identified were similar and for the most part not size-dependent.[1]

MAIN MESSAGES

- **Problems local governments experience implementing and complying with environmental mandates are not only financial. Obstacles to implementation include ineffective communication, uncertainty about future requirements, and a lack of governmental partnership between EPA and local governments.**

- **EPA can help local governments implement environmental mandates by developing a stronger customer-orientation and fostering a more cooperative relationship between city officials and the Agency. In order to accomplish these changes, EPA should change aspects of the way it views, regulates, informs, and interacts with local governments.**

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[1]This section of the report presents the study's six major findings. These findings address the range of concerns that the five local governments included in this study believe hamper their ability to implement environmental mandates. Supporting each finding is anecdotal evidence from the five communities. The study did not investigate each of the situations and difficulties described by local officials to obtain additional information or verify factual accuracy.

A. COMMUNICATIONS

Finding: ***Case study communities were dissatisfied with the dissemination and quality of information from EPA and the States.***

Knowledge of new regulations and accurate and timely information to support implementation are essential, basic requirements for compliance with environmental mandates. Local governments struggle with keeping themselves informed and up-to-date as well as with understanding the content of the regulations.

Lack of Awareness of Requirements

Local government officials in several different environmental service areas in all five communities reported that they were often unaware of EPA requirements or became informed about the regulations after an important deadline had passed. One City official in Frederick concerned about compliance with stormwater requirements at the municipally-owned airport had contacted officials at the State Department of the Environment, EPA Region 3, and the federal Aviation Administration (FAA) in order to determine what the City needed to do. He was unable to get answers to his questions. Another city's official reported that he had received guidance from EPA on lead testing protocols two months after the program was required to be in place. Morgan City officials expressed concern about not having seen a copy of the RCRA Subtitle D regulations that are due to go into effect this October. These specific concerns were in addition to more general comments made by city officials in all five cities conveying the same basic message: "local governments are not kept informed of federal environmental requirements".

Generally, the smaller communities included in the five case communities experienced more problems related to keeping informed of and tracking EPA regulations. Larger communities generally had more resources to follow and interpret regulations.

Difficulty in Understanding Regulatory Requirements

City officials across the board in all five cities found Federal Register notices difficult to understand and the Federal Register (FR) itself difficult to use in locating information that was pertinent to their particular service. Often the plant managers were unable to interpret the FR notices, attributing their difficulty to the legalistic style of the notices. This was a comment that surfaced repeatedly in conversations with local officials. In several cases, managers and staff in particular services relied on city attorneys to translate the Federal Register notices into understandable english.

Over-Reliance on Professional Associations and the Private Sector

The five local governments rely heavily on non-governmental organizations such as professional associations (for example, the American Water Works Association for information on drinking water regulations, the American Rural Water Association for assistance also with drinking water treatment, and the American Metropolitan Sewerage Association) and also the private sector, primarily, technical consultants, for information supporting implementation of EPA's regulations and sometimes basic information on the requirements themselves. Several local officials cited reliance on non-governmental groups, primarily private consultants, as a problem.

Specifically, community officials were concerned that concurrent attempts by private consultants to market a product or service and provide technical assistance may not always present technical information in a complete and unbiased manner. They believed that EPA, as the promulgator of the regulations, had an obligation to disseminate them along with supporting information.[2]

Several officials were concerned about getting information from private consultants and scientific supply company representatives as they came around to market their services and products. Plant managers and staff were concerned that these individuals had a vested interest in the local government purchasing a product or a service from them and that the information the vendors presented might be colored by this intent.

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[2]Local officials generally reported few instances of direct local government-EPA interaction. This includes direct verbal communication from or to EPA as well as direct written communication such as mailings containing information on EPA regulations.

B. REGULATORY PACE

Finding: ***Case study communities find changing and increasing regulations costly and difficult to administer.***

All of the communities interviewed noted that the present volume of requirements and the fact that regulations and standards do not stay static pose significant problems and costs for them across several different environmental services.

Difficulty in Planning

The climate of uncertainty that exists for local government officials over what regulation will be published and when, and what the regulation will require makes it difficult for local officials to plan and budget for the future. Several examples of this occurred across environmental services in the case communities. In Neligh members of the City Council voiced a concern that uncertainty [about EPA regulations] made it difficult for them to plan for the future. Drinking water plant operators in Riverside commented that changing MCLs made them unsure of what standard they should use as the basis for their facility design. In another example, Frederick City officials reported that the municipal wastewater treatment plant received a $12 million upgrade and then the State required an additional $5 million investment for nitrogen reduction from their effluent. The City believed that their costs would have been lower if the two upgrades had been done simultaneously. A portion of their expenditure, they believed, was unnecessary. This occurred even though the plant modifications were designed through State-supported technical assistance.

Frederick, MD, also expressed general concern about not having sufficient lead time to budget and plan for new requirements. The public works department in Frederick begins to plan and budget for their needs a year in advance. They reported that they don't find out about requirements and their associated costs until six months past the compliance deadline and eighteen months out of the budget cycle, adding an additional constraint on their funding of new EPA requirements.

Increasing Volume of Regulatory Requirements

Staff in several municipalities mentioned that the number of drinking water contaminants that they are now required to test for and the number that they anticipate having to test for in the future is large. The large volume of requirements challenges the ability of staff with limited resources to keep up and has increased their costs significantly. Testing and monitoring requirements increase and costs rise with the addition of each new MCL that drinking water facilities are subject to. A Neligh City official reported that the City

projected a twenty-fold increase in monitoring costs of $16,200 a year, from $800 in 1991 to $17,000 in 1994. This increase is an especially great burden in a City where just over a quarter of the population is over 65 and on fixed incomes.

Municipal facilities also face additional costs in having to add greater analytic capacity to their drinking water testing labs. A City official in Riverside pointed out that the present mercury limits were below the detection limits of their existing lab instruments, which means they will face additional costs for the purchase of new equipment because they choose to continue using their own laboratory. Facilities also must add capacity in terms of staff expertise and so must devote dollar resources and staff time to training and certification courses that address new requirements.

C. REGULATORY FLEXIBILITY

Finding: ***Case study communities believe regulations are often too prescriptive, requiring local governments to do work that does not solve local environmental problems.***

Local officials in the five case communities commented that EPA regulations are too prescriptive and don't allow them adequate flexibility in using their resources.

Inapplicable Requirements

In several case communities local officials believed that EPA regulations required them to take action to address an environmental threat that did not exist locally. In some cases local officials disputed EPA's assessment of local risk, and in other cases city officials believed EPA had mischaracterized local conditions. Drinking water officials in Riverside believe that EPA inappropriately regulates according to a "worst case scenario" and does not allow for regional or local flexibility in implementing regulations.

This lack of flexibility was reported in Riverside, where managers for both drinking water and wastewater services believed that they were being held to inappropriate standards. In drinking water, community officials cited the proposed radionuclide rule that would require them to remove radon from their drinking water. They believed that radon was generally not an indoor air problem in Riverside and further believed that removing radon from their drinking water would have only a very minor effect on radon levels in indoor air. They feel they would not be using City resources to create a noticeably healthier environment for their citizens should they be required, at great expense, to strip radon from their drinking water.

With regard to the wastewater program, the treatment plant operators believed that they were being held to excessively stringent limitations in their discharge permit based on the classification and designated use of the receiving water. The wastewater plant discharges to the Santa Ana River, which is classified as a Class III waterbody with a fishable/ swimmable designated use. The Class III designation requires the City to treat the effluent as if it were being discharged to a river that supports salmon and trout. However, the Santa Ana River is a warm water, ephemeral stream with a sandy substrate that maintains a continuous flow only due to the flow from several municipalities' treatment plants' effluent. It is not a suitable habitat for salmon and trout. City officials believe the designation as such is inappropriate and has substantially and unnecessarily increased costs in operating their plant.

Wastewater officials in Riverside also disputed the requirement that they comply with CWA §304 (l) metals limitations which they believe are inapplicable to the Santa Ana River for most of the same reasons noted above. The City has disputed these requirements for several years and has been subject to stringent interim standards requiring large capital outlays in the meantime. The City does not believe the interim standards are reasonable site specific requirements either.

In an attempt to appeal some of their present NPDES permit limits, wastewater officials in Riverside asked to recalculate their lead and copper limits. The present limits are based on the impact on salmon and trout, species which do not exist in the Santa Ana River. City officials reported that EPA responded, after a long delay, with requirements for calculations and testing (involving a substitution of all non-native fish with all new native species), that were well beyond the City's capabilities. In practice, in the City's experience, little flexibility exists in obtaining more appropriate limits in their permit.

In Rockford, IL, the manager of the regional sewage treatment plant reported his belief that the Great Lakes Initiative, established by the eight States that border the Great Lakes, had established standards that were being presently applied to all waterbodies regardless of whether or not streams drained into one of the Great Lakes. Consequently, he believes some wastewater treatment plants in the Great Lakes States are subject to much more stringent standards than are appropriate.

As a final example, city officials in Frederick, MD, noted what they consider to be inapplicable air standards. Frederick is now located in the recently reorganized Washington-Baltimore, DC-MD-VA-WV Consolidated Metropolitan Statistical Area (CMSA). City officials believe that the reorganization of the CMSA has expanded the air non-attainment area. Purely by virtue of the fact that they are now in the reorganized CMSA, Frederick must comply with the requirements set out for air non-attainment areas. City officials do not believe that local air quality conditions warrant being included in a non-attainment area and having to comply with restrictions on parking, auto emissions, and having to switch to alternative fuels for their City fleet.

"Wrong" Approach

In some cases officials argued that compliance with EPA requirements prescribed an approach that they found inappropriate to local conditions. In these cases local officials objected to not having the latitude to choose the approach they thought appropriate. This was the case in Riverside where (again in anticipation of having to comply with the proposed radionuclide rule), City officials believed they would have to install costly aeration towers to strip the radon from their drinking water. City staff testified in Washington, D.C. arguing there were more cost-effective alternatives to treating drinking water supplies for radon, such as installing exhaust fans in every home. Riverside officials contend that even though this rule had not yet been promulgated, EPA would not allow them to consider any alternatives.

City officials in Riverside, where poor air quality is a major environmental problem, maintained that EPA's approach to controlling emissions from mobile sources does not go far enough. EPA's mobile sources program mandates the State, regional air quality control districts, and municipalities to write regulations or local ordinances implementing transportation control measures. Present transportation control measures that seek to change the extent of people's use of the automobile, e.g., carpooling, do not, in the view of the air planning staff in Riverside, get at the real issue of providing an alternative to the automobile, such as public transportation or a "clean" car. These alternatives require national leadership from EPA (for example, EPA pressure on Detroit to produce a "clean" car) which the City believes is lacking.

D. REVENUE GENERATION

Finding: ***Case study community officials object to having to impose higher rates and taxes on their residents.***

Imposing higher rates and taxes on citizens represents a political gamble for local elected officials. Politicians are naturally reluctant to do this. A weak economic base and a lack of buy-in on the assessment of risk underlying requirements serve to reinforce local officials' reluctance.

Limited Ability to Raise Revenue

In some cases community officials believe they are simply unable to impose higher fees and taxes. This was particularly the case in Neligh, Nebraska as Neligh is a small farming town with just over a quarter of its population retired and on a fixed income. Local officials believed that they had little ability to increase taxes or fees for their residents. City officials reported that an increase of $4.00 per month in fees is significant for a good portion of the town's retired residents.

Lack of Willingness

A number of factors may contribute to local reluctance to pay for EPA mandates. Two key factors identified by the five case communities are: (1) the belief that someone else, the State or EPA, should help pay for implementation of the mandates; and (2) the belief that EPA's assessment of risks are often incorrect or not well-founded.

Several cities' officials believed that EPA or the State should pay for all or part of the costs incurred by local governments in carrying out some EPA requirements. This was especially true when the City had paid for activities that they perceived had benefits beyond their borders or benefited the Agency. For example, the stormwater permit program requires applicants to collect baseline data to include in their applications. Rockford and Riverside, the two cities having to comply with stormwater requirements at this time, commented that, from their point of view, the collection of background information benefited the national stormwater program and should be funded by EPA.

Local governments cited a number of cases where they either did not understand EPA's assessment of risk or disagreed with it. Local officials also sometimes questioned EPA's basic assumptions and models of risk, in particular in regard to the Superfund program. Officials commented that their perception is that EPA in the Superfund program often pursues an unreasonably low level of risk and bases its regulations on worst-case

scenarios that drive up their costs significantly. A Rockford city official commented that in remediation of a Superfund site at which the City is a Potentially Responsible Party (PRP), they would be required to pump and treat contaminated groundwater to meet guidelines more stringent than drinking water standards. The City questioned the cost-effectiveness of this standard of "clean".

Another official in Rockford questioned why the Superfund remedial action level for trichloroethylene (TCE) was 5 micrograms per liter and the TCE drinking water MCL is 128 micrograms per liter. In another case a local official in Riverside questioned why a wastewater §304 (l) standard was again more stringent than a drinking water standard. Local officials find it difficult to understand the inconsistency between standards and find it difficult to justify the additional cost of meeting standards that they perceive to be excessively stringent.

In another instance, City officials in Riverside questioned drinking water standards. One drinking water official commented that new monitoring techniques allow testing to ever-lower levels, e.g., from parts per million to parts per trillion. Their fear was that the availability of new technology is driving drinking water standards lower and lower. They disagreed with the pursuit of what they perceived as "zero" risk.

E. REGULATORY CONSISTENCY

Finding: ***Case study community officials believe the current regulatory approach targets them disproportionately in assigning responsibility for protecting the environment.***

All five local governments believe that they are being required to take action and address problems that should not be their responsibility. In some cases the communities also believe that responsibilities are not distributed equitably among cities. These two factors contribute to the belief shared by all of our case communities that they were doing more than their fair share in protecting human health and the environment.

Bearing Responsibilities Beyond Local Jurisdiction

All five case communities were unanimous in their belief that public responsibility for the quality of drinking water ends at the water meter, the last publicly-owned point in the water distribution system. The communities all objected to having to test for lead and copper in drinking water at the tap in private homes. In some cases officials were adamant in expressing their view concerning the proper limitations on local government responsibility. They felt lead and copper testing at the tap set a bad precedent in extending the jurisdiction of the local government into private homes.

Fixing Problems Caused by Others

In several instances, communities expressed the concern that municipal facilities, such as wastewater treatment plants, are routinely targeted to address environmental problems or to provide services outside their City limits because they have the necessary infrastructure and they are readily identified. This is often the case in the nitrogen limits set in NPDES permits for wastewater treatment plants. Wastewater officials believe they are subject to excessively stringent limitations to compensate for all the agricultural non-point sources that go unregulated upstream. In their view, the farmers upstream were getting a "free ride" from the City residents. In the eyes of local officials, City rate-payers do not create the pollution and they should not be expected to fix the problem.

In Frederick, MD, City officials believed that they were unfairly targeted to solve a county problem. Many septic tanks had failed in residential areas just outside the City limits. The City stepped in to address the health threat created by the failing septic tanks and provided sewer hook-ups to these county residents along with a five-year waiver of their normal sewer fee. (These residents could not afford both the fee and the hook-up charge.) The City in the end picked up the services for county residents at no cost to the county, but

at a loss of revenue for the City. City officials believed that they had been unfairly "saddled" with the problem because they had the facility and expertise needed to deal with the problem.

Inequitable Distribution of Requirements Between Communities

Communities also perceive unfairness in EPA requirements that are not mandatory or that are phased in on different timetables in different locations. In some cases, communities were reluctant to implement certain policies without an assurance that other neighboring communities would as well. Riverside officials noted that they would like to implement transportation control measures (TCMs) to reduce air pollution from mobile sources, but are reluctant to do so unless surrounding communities also adopt such measures because TCMs would increase the cost of doing business in Riverside and drive business opportunities away to surrounding communities that do not institute the controls. This was a significant concern in Riverside because the volume of business done in their City affects the generation of sales tax, a primary revenue source for the City.

The stormwater treatment and control program is being phased in according to population so not all localities are subject to the requirements at the same time. Rockford officials are concerned that the phased implementation of stormwater requirements has placed the City at a competitive disadvantage for business investment. As stormwater permits are issued and cities begin to make the capital expenditures necessary for stormwater treatment and control, Rockford officials believe that the City will have to impose higher taxes on business to fund compliance costs. Community leaders are concerned that these higher costs will drive economic development opportunities out of Rockford to adjacent communities which are not yet subject to stormwater requirements.

F. FEDERAL-LOCAL RELATIONSHIP

Finding: ***Case study community officials are dissatisfied with the current Federal-Local relationship. They believe they are not treated respectfully as "partners", which erodes goodwill.***

Local officials indicated that they are dissatisfied with the current federal-state-local relationship. From the point of view of several local officials, the federal-local relationship is often more adversarial than cooperative, and the federal-state-local hierarchy is often problematic. The five case communities also indicated that they had very little opportunity to contribute to the development of EPA regulations in order to make them more implementable at the local level. All of these factors impede the ability of local governments to protect human health and the environment.

Not Treated Respectfully

Several local officials reported that they believe that EPA does not treat them respectfully as a partner who shares a mutual goal: to protect human health and the environment. As a case in point, a pretreatment program manager in Riverside indicated that Region 9 staff conduct an annual visit to confer about the pre-treatment program in Riverside. However, City staff reported that these visits always occur in the form of an audit and are more adversarial than collegial. From the perspective of the City staff in Riverside, this is unfortunate because they would welcome the opportunity to have a mutually beneficial discussion with EPA with the goal of improving performance in Riverside rather than with the goal of auditing and punishing them.

Poor Intergovernmental Coordination

Several of the case communities reported that officials in their State had failed to coordinate with federal officials in connection with issues that affected local implementation of EPA mandates. This lack of coordination creates additional and unnecessary barriers to effective program implementation at the local level.

Morgan City officials reported lack of coordination between the State and EPA. Louisiana has not been delegated the NPDES program, but does run a separate State water discharge permitting program. Therefore, the City must obtain two discharge permits (State and federal) for its wastewater treatment plant. This has been problematic for the plant which must comply with two permits that contain mutually exclusive limitations for chlorine, one of which establishes a minimum of greater than two parts per million, and the other a maximum of less than one part per million; if the City satisfies one permit condition, they

violate the other. Clearly, from the City's point of view, this is a situation where its implementation was made more difficult because the State and EPA had not coordinated with each other. The double permitting also was problematic for the City because the permits were on two different schedules, creating the need for redundant monitoring and reporting at the local level.

Wastewater treatment officials in Riverside, CA, also reported that the State agency, regional water control board, and EPA do not work well together. When there is little cooperation among the key wastewater regulators, the City often finds itself in the middle. City officials reported that lack of cooperation was particularly evident in preparation of a "Use and Sustainability Analysis" of the Santa Ana River. Heated and volatile discussions between State and EPA regulators during working meetings increased the duration and cost of the study which was completed after two years and at a cost of $2 million.

The communities also reported a lack of coordination between Headquarters and the Regional Offices within EPA. Riverside commented that it received different information from the EPA Regional Office and Headquarters on the requirements of the lead in drinking water regulations.

Little Input

The five case communities included in this study reported that they had very little input into the development of EPA regulations. They do not view the existing process as one that affords them the opportunity to contribute their perspective and concerns. Several officials reported their belief that once a regulation is proposed the Agency is generally not receptive to significant changes. The public comment process was not perceived as being a useful avenue for substantive input. Communities voiced additional concerns about not being asked by EPA for input into the development of regulations and finding it difficult to determine how best they could make their concerns felt.

V. CONCLUSIONS AND RECOMMENDATIONS

Based upon the findings in the previous section, the Program Evaluation Division (PED) of the Office of Policy, Planning and Evaluation (OPPE) has reached two conclusions regarding local government implementation of environmental mandates. These conclusions posit needed changes in behavior by EPA as well as changes in relations between EPA and local governments. Each conclusion is accompanied by a series of recommendations for specific actions to be taken by EPA in order to facilitate local implementation of regulatory responsibilities.

Conclusion 1: Local Governments as Customers

Local governments are experiencing difficulties complying with some environmental requirements, and are in need of assistance with the implementation of EPA-mandated programs. EPA can take steps to better meet some of the basic needs of local governments as an important EPA customer, thereby promoting more effective environmental protection at the local level.

Recommendation: Ensure Awareness of Regulatory Responsibilities

EPA should prepare written guidance specific to EPA requirements imposed on local governments for every program. This information should be clearly written, concisely describe federal requirements placed on local governments, and be provided in a timely fashion, while acknowledging that State requirements may differ. Helping local governments to be more aware of their regulatory responsibilities is needed as a first step towards compliance with or implementation of mandated programs.

Recommendation: Provide Notification of Upcoming Regulations

EPA should inform local governments of pending regulatory requirements well in advance of both regulation issuance and compliance deadlines. Local governments require significant lead time to: (1) develop out-year capital budgets, (2) understand regulatory requirements, and (3) "sell" the program to elected officials and rate payers.

Recommendation: ***Educate Local Governments as to Risks***

EPA should, as a part of every regulatory effort, undertake an educational campaign to "sell" program/regulatory requirements to local governments. Local government officials--elected and career--need to understand the environmental risks which have led to the chosen policy/regulatory approach.

Recommendation: ***Offer Technical Assistance***

EPA should explore ways of increasing targeted technical assistance and training to local governments. Once needs have been determined, EPA should offer an expanded array of assistance through workshops, conferences, and on-site assistance. As appropriate, EPA Headquarters, Regional Offices, and labs should be involved in the provision of this service.

Recommendation: ***Engage in a Federal Intragovernmental Dialogue***

EPA should establish a dialogue with other Executive Branch offices (e.g., OMB) and the Congress on local government implementation issues and on the pace of issuance of regulations which affect municipalities. The existing climate at EPA HQ of "getting the regulations out the door" is not always compatible with the consideration of implementation needs and realities. EPA, along with OMB and the Congress, needs to better consider the ultimate customer of the regulations being written, and balance the legitimate need to regulate pollution control with consideration of the capacity of local governments to meet these mandated schedules.

Conclusion 2: Local Governments as Partners

Although local governments are one of the largest sectors of the regulated community, they are different from other regulated entities in their provision of essential services to the public. As a result, local governments are an integral part of the public sector environmental management framework (along with State and federal environmental agencies), and should therefore be treated differently than other regulated entities. EPA needs to change the way it views and interacts with local governments--which is primarily as regulated entities comparable to private industry--and achieve a balance between interacting with local governments in their role as public service entities and in their role as regulated entities.

Recommendation: Communicate Directly

EPA should explore alternative mechanisms for delivering information to local governments--including the possibility of direct communications. EPA's previous reliance on communicating to local governments through States and associations may not be appropriate in all cases. EPA's changing interactions with local governments should most likely involve increased direct communication.

Recommendation: Involve Local Governments in Regulation Development

EPA should involve local governments in the development of regulations that affect them. Whenever possible, local governments should be brought into the regulatory development process prior to the issuance of proposed regulations in the Federal Register. EPA might consider involving local governments through regional meetings or through a representative body/advisory group.

Recommendation: Allow for Local Approaches

EPA's regulatory approaches need to offer local governments greater flexibility and need to ensure greater equity between communities. To the extent allowed by the underlying environmental statute, EPA should allow and encourage local governments to implement environmental programs and requirements through innovative alternatives or area-wide approaches. To the greatest extent possible, these approaches should focus on watersheds, air basins, or ecosystems.

Recommendation: ***Encourage Priority Setting***

EPA should enable local governments to conduct comparative risk studies that are broad and involve the public. EPA should disseminate information on methodologies and, to the extent allowed by law, should then work with States to have the results of such studies influence federal and State priorities in terms of funding, assistance, and compliance deadlines. EPA should explore entering into trilateral agreements among the three levels of governments.

Recommendation: ***Increase Regional Offices' Role***

EPA Headquarters should seriously consider devolving more responsibilities to its Regional Offices to negotiate and enforce local and area-wide approaches. EPA Regional Offices are closer to the "front line" of regulatory implementation and are better equipped to work directly with local governments, e.g., assist local governments with priority-setting and negotiating compliance agreements. EPA Regional staff are already working with State officials and will need new authorities to affect change.

APPENDICES

APPENDIX A: PROGRAM SPECIFIC INFORMATION FOR THE FIVE CASE STUDY COMMUNITIES

Although a portion of the following information has been discussed in Chapter IV of this report, Appendix A presents information on case community implementation of a number of federal environmental programs, including the drinking water program; the wastewater treatment program; the stormwater program; and the municipal solid waste program. Each program is presented in terms of its federal regulatory context, the State and local roles in implementing the program, typical case community implementation activities, and the major problems case communities experienced implementing the program.

At the end of this section, there is a brief summary of the eight EPA programs that case communities also identified as important to their work implementing environmental mandates.

1. DRINKING WATER PROGRAM

Regulatory Context

The Safe Drinking Water Act is the federal statute that protects the public from exposure to harmful contaminants from drinking water, through regulation of public water systems. The Public Water System Supervision (PWSS) program develops and administers national drinking water quality standards for specific contaminants or treatment techniques to protect drinking water supplies from contamination. The PWSS program also delegates responsibility for administering national drinking water quality standards to States with EPA-approved drinking water programs. Specifically, the PWSS program establishes uniform standards for drinking water quality, identifying 83 specific contaminant limits. The Act also requires EPA to administer a wellhead protection program to protect the areas surrounding drinking water wells as well as establish a program to regulate the underground injection of wastes into groundwater.

Local Role

Under the PWSS program, drinking water systems are regulated either by EPA or by States delegated authority to administer PWSS. All States but Wyoming and the District of Columbia have been delegated authority to administer PWSS. Typically, local water supply systems are required to monitor and treat their drinking water to meet contaminant limits as

well as report excesses of maximum contaminant limits (MCLs) to EPA or delegated States. Local water supply systems also must notify the general public of incidents in which the drinking water supply exceeds contaminant limits. Public notification is also required for failure to sample and for treatment technique violations.

State Role

Currently, 49 of 50 States have been authorized by EPA to administer the PWSS program in their States. EPA regional offices administer the program directly in Wyoming and the District of Columbia.

The case study communities were all located in States authorized to administer the PWSS program directly. In three of five case communities, Neligh, Morgan City, and Riverside, State health agencies administered the PWSS program; in the remaining communities, Frederick and Rockford, State environmental agencies administered the program.

State agencies are authorized to certify local laboratories to perform water quality testing. A number of State agencies provide laboratory testing to local governments for a nominal fee.

Case Community Implementation

Although drinking water supply is not a municipal service in every city in the nation, all five case study communities owned and operated public drinking water systems. The public water systems in the five case communities collect and store raw water, test and treat raw water for contaminants, and distribute treated drinking water to their residents. Three case communities, Riverside, Rockford and Neligh, derived drinking water from groundwater wells. The remaining two communities, Frederick and Morgan City, drew surface water from nearby rivers, streams, and lakes.

Drinking water program expenditures typically are funded solely from drinking water revenues. All five case community drinking water programs were operated as enterprise funds. This dedicated funding source means less competition with other services for city funds.

Case Community Perception of Problems

All five case study communities identified EPA's testing and remediation requirements for lead and copper in drinking water as a major problem. Under this program, local governments must test for lead and copper from the tap in privately-owned

dwellings. Local government officials argued that while it is appropriate for a water utility to ensure that municipally-owned drinking water systems are not contaminated with unsafe levels of lead or copper, it is not appropriate for the utility to guarantee that privately-owned pipes, within private dwellings, are free of lead/copper contamination because such pipes are located outside the utility's jurisdiction.

The case study communities remarked that increasing operations and maintenance costs are becoming a significant problem for municipal drinking water programs. This problem primarily can be traced to the costs stemming from the dramatic increase in the number of drinking water contaminants that must be monitored and treated by the local water utility. The enactment of the 1986 amendments to the Safe Drinking Water Act mandated EPA to require drinking water systems to comply with 57 new drinking water contaminant limits, in addition to the 26 contaminant limits in place before 1986. Every three years thereafter, the statute requires EPA to promulgate regulations for an additional 25 contaminants in drinking water with which local governments must comply.

Finally, case study communities were skeptical of some of EPA's risk characterizations of potential environmental hazards, and the corresponding cost-benefit calculations of remediating such hazards. Officials in Riverside, California questioned the risk assessments underlying the Agency's proposed contaminant limits for radon in drinking water. City officials asserted that the presence of radon in drinking water does not significantly contribute to the radon air quality problem. Riverside officials contend that if the City were to treat its drinking water to reduce radon according to the proposed rule, radon concentrations in indoor air would only be reduced from 1 picocurie/m3 to 0.96 pc/m3. Finally, City officials estimate that using EPA's proposed recommended treatment technology to remove radon from drinking water (e.g., aeration via air strippers) would increase residential water rates by as much as 40% to 50%.

2. WASTEWATER TREATMENT PROGRAM

Regulatory Context

The Clean Water Act (CWA) is the federal statute that restricts the contaminants that industrial facilities and public sewage treatment plants are allowed to discharge in wastewater effluent. To conform to CWA restrictions, wastewater dischargers must apply for and receive NPDES permits from EPA or States authorized by EPA to administer the program. Permits must be reapplied for at least once every 5 years since issuance of the last permit.

Local Role

Under the NPDES permit program, wastewater dischargers are required by EPA or authorized States to monitor and treat their discharge to meet pollutant limits as well as report water quality to EPA or an authorized State agency.

The NPDES pre-treatment program authorizes local governments to regulate the effluent of industrial dischargers. Specifically, sewage treatment plants may be authorized by EPA or States to require industrial facilities to remove pollutants which would not be removed by the POTW from their effluent before it is discharged into the municipal wastewater collection system. Local pretreatment program activities typically include enacting ordinances establishing local industrial effluent discharge limits, periodic monitoring of industrial effluent, inspection of industrial facilities, and enforcement against non-compliers.

State Role

At present, 39 of 50 States have been authorized by EPA to administer the NPDES program in their States. Also, States can designate the use classification of receiving water bodies in accordance with federal standards and with EPA approval.

Four of five case study sewage treatment plants are located in States authorized to administer the NPDES program. The fifth community, located in Louisiana, is in a State that is not authorized by EPA to implement the NPDES program. The Louisiana Department of Environmental Quality does issue its own State discharge permit to wastewater facilities. Therefore, Morgan City must apply for and receive both a State permit and an EPA NPDES permit.

Case Community Implementation

Sewage treatment facilities typically receive, sample, treat, monitor, and dispose of wastewater effluent. Residual sludge must be tested and treated in a manner appropriate for its intended use or method of disposal. While sewage treatment can be provided by a municipality or a private firm, four case study communities own and operate sewage treatment plants themselves. The fifth community, Rockford, receives sewage treatment from a regional sanitary service district.

Sewage treatment plants typically operate as self-funded enterprises (i.e., sewage fees are used solely for sewage plant expenditures). Sewage services were operated as an enterprise fund in all five communities.

Under the pre-treatment program, sewage plants issue permits or enact local ordinances restricting the level of pollutant discharges in industrial effluent. In addition, sewage plants often inspect and sample industrial discharge to verify compliance. Three case study treatment facilities, Riverside, Rockford, and Frederick, administer mandatory pre-treatment programs. The remaining two municipalities, Neligh and Morgan City, have little industry and do not operate a pre-treatment program.

Sewage treatment plants typically administer the pre-treatment program as part of the wastewater enterprise fund. Additional revenue for pre-treatment expenditures is collected through permit and testing charges.

Case Community Perception of Problems

The case communities contend that NPDES permits are becoming increasingly stringent. Sampling requirements are being tightened in terms of effluent testing frequency. Local government officials point out that what once were quarterly tests are now monthly tests.

In addition, sampling requirements are being tightened in terms of effluent contaminant limits. Officials from Riverside, California noted that the current mercury contaminant limits are below the detection capabilities of the treatment plant's laboratory equipment.

The case communities are also concerned with aging infrastructure of sewage collection systems. Case community officials asserted that sewage pipes are often decades older than the treatment plant, resulting in serious groundwater intrusion into the pipes which may dramatically increase a sewage plant's daily intake of wastewater.

Morgan City, Louisiana officials pointed out that while the sewage treatment plant was constructed in 1987, some of the City's existing sewage pipes were installed below sea level over one hundred years ago and are severely deteriorated. Consequently, the City has a great deal of trouble with infiltration and inflow of stormwater runoff. The City's treatment plant was designed to operate at an average 1.5 million gallons/day with a maximum operational capacity of 4.5 million gallons/day. However, groundwater infiltration has increased the average daily flow to 4.0 million gallons/day.

Finally, case study communities assert that they are sometimes held to inappropriate wastewater discharge standards. The City of Riverside's sewage treatment plant, for instance, is located on the banks of the Santa Ana River -- a naturally ephemeral river with a dry stream bed that should flow only during Southern California's winter rainy season. However, because a number of municipal sewage treatment plants discharge directly into the Santa Ana, the additional wastewater effluent causes the river to flow throughout the year. The Santa Ana has been designated as a fishable/swimmable water body, a classification which significantly increases the stringency of the plant's permit limits and consequently increases the costs of operating the plant.

3. STORMWATER PROGRAM

Regulatory Context

The original 1972 Clean Water Act (CWA) prohibits the discharge of any pollutant to the navigable waters of the United States from a point source unless the discharge is authorized by a National Pollutant Discharge Elimination System (NPDES) permit. As part of the 1987 Amendments to the CWA, Congress required EPA to establish a program to address discharges from separate storm sewer systems in addition to the more traditional municipal and industrial process wastewater discharges.

The stormwater program is defined in two phases based on facility type and municipality size. Each phase establishes a timetable for submission of each of two parts of the stormwater permit application.

Phase I covers separate municipal storm sewer systems serving 100,000 or more people, as well as eleven categories of industrial facilities. Certain categories of municipally-owned industrial facilities such as airports, powerplants and uncontrolled sanitary landfills are also subject to the Phase I stormwater requirements. Large municipalities of greater than 250,000 were subject to November 1991 and 1992 application deadlines. Medium-sized communities with populations between 100,00 and 250,000 were subject to May 1992 and 1993 application deadlines. Phase II of the program is intended to cover additional separate stormwater discharges not addressed in Phase I.

Local Role

Under the program, municipalities must obtain NPDES permits for discharges from municipal separate storm sewers. The permit application process requires municipalities to:

- identify major outfalls and facilities that discharge stormwater into the municipal sewer system;
- collect and report discharge characterization data;
- identify the legal and financial resources and authority to control stormwater discharges; and
- propose a management program consisting of best management practices (BMPs) designed to reduce pollutant loadings.

As presently designed, the stormwater management program does not require municipalities to monitor dischargers to the municipal system or to achieve specific reductions in pollutant loadings.

State Role

Authorized NPDES States have authority for the stormwater permit program; four of the five case study communities were located in States with NPDES authority. Only Morgan City, Louisiana, was not.

Case Community Implementation

Only two of the case study communities, Riverside and Rockford, are subject to Phase I stormwater permitting requirements. They were required to submit two-part permit applications specifying the information listed above.

Riverside joined in a regional effort led by the Riverside County Flood Control District (RCFCD) to prepare and submit a stormwater application in accordance with the deadlines for large municipalities. The RCFCD served as the primary permit applicant; Riverside and six other communities joined the application as co-applicant. The RCFCD served as the technical advisor to the other municipalities during the permit application process; each community is responsible for its own implementation of the program.

Rockford is the only city in the State of Illinois which is subject to the Phase I requirements; Chicago and Peoria, the only other cities in the States with populations greater than 100,000, have combined sewer systems and are therefore not subject to stormwater permitting requirements.

Rockford was subject to the May 1992 and 1993 application deadlines. At the time of the case study, Rockford was in the process of collecting the information needed for its permit application, and was developing its program of best management practices. Unlike Riverside, Rockford is "on its own" in developing the permit application and has hired a consultant for this purpose, as other governmental entities such as the State or the county are not able to offer technical assistance. Development of the stormwater permit application and implementation of the program is funded through general revenues in Rockford, a fact which caused some difficulty for the community as described below.

In Riverside, an innovative funding mechanism had been developed, allowing municipal co-permittees to generate revenues through the County's taxing authority. The presence of this funding mechanism was primarily responsible for the City's willingness to undertake the program.

Although some Phase I communities have addressed program funding through the creation of stormwater utilities, this was not the case in any of the study communities.

Case Community Perception of Problems

Both cities stated that they were not well informed about the stormwater requirements. They had to rely on consultants and other non-governmental sources of information as, in both cases, the State agencies did not have a program in place and were not able to provide any assistance. The cities also experienced a lack of accurate information regarding what the stormwater regulations required of them. For example, Riverside initially understood that stormwater permits would specify water quality limits for various constituents like wastewater NPDES permits.

The communities also complained that they were subject to tight deadlines for compliance. Rockford noted that in the absence of adequate time to develop in-house expertise, it was required to turn to outside consultants at a much greater cost to the City.

The cities noted that the data collection required for the applications is expensive. There is also fear that requirements will increase, with additional costs for implementation. While Riverside applauded the overall approach of the stormwater management program, which gives flexibility to localities through its emphasis on the development of BMPs suited to local conditions, it is convinced that some portion of stormwater will not be of adequate quality and will require treatment. The City is anticipating and fearing huge capital expenditures for treatment such as large retention basins and constructed wetlands at outfalls. In this event, the City would have to float a revenue bond and raise the current $3 per parcel assessment to as much as $40 per parcel.

Case community stormwater program staff also noted that it is difficult to "sell" elected officials and the public on the program's importance, which makes it difficult to raise necessary revenues. In the words of one official, the public would rather have clear winter roads than worry about road salt as a pollutant. In another community, the monitoring and control of stormwater was seen as a joke, as the community lies at or below sea level and is concerned about flooding when it rains.

One community was especially vocal about its fear of losing jobs and economic opportunities to adjacent communities with no stormwater responsibilities and correspondingly lower tax rates.

4. MUNICIPAL SOLID WASTE SERVICE

Regulatory Context

Subtitle D of the Resource Recovery and Conservation Act (RCRA) is the federal statute which requires EPA to provide criteria and standards for the design and performance of solid waste disposal facilities such as landfills. EPA does not regulate other aspects of MSW activities, such as recycling or collection of municipal solid waste.

EPA has issued Subtitle D regulations specifying criteria and standards for the design, location, and performance of new and existing landfills, and for the on-going post-closure maintenance of landfills (financial assurance).

The original deadlines for compliance have been extended recently in response to complaints about implementation and compliance difficulties from landfill owners and operators, many of which are local governments. The deadlines for compliance are currently October 1993 for the design and performance standards, and Spring 1994 for the financial assurance requirements. However, the agency is considering extensions for limited reasons to some of the deadlines.

Local Role

To the extent that a local government owns or operates a landfill, it is subject to federal Subtitle D requirements. Although some communities do not own or operate their own landfills, as is the case in the five case study communities, they none-the-less experience various indirect costs and difficulties as described below.

In addition to the federal landfill requirements, many local governments are subject to State recycling and source reduction mandates. Four of the five case communities were located in States which had passed such legislation; legislation in Louisiana established recycling and source reduction goals instead of mandated diversion rates.

State Role

Under EPA provisions, States may receive "approval" to assume responsibility for program implementation and enforcement by incorporating the new requirements into their own permitting programs. Kentucky, Virginia, and Wisconsin are presently the only "approved" States; none of the case communities were in States that had been approved for EPA landfill programs.

Many States have issued waste reduction or recycling legislation and regulations in an effort to address landfill cost and capacity issues. As of May 1992, 41 States plus the District of Columbia had passed legislation establishing recycling goals. All five of the States in this study had passed such legislation, and all but Nebraska had established deadlines for attaining mandatory recycling rates.

Case Community Implementation

Solid waste services in the case communities are characterized by variety. All but one of the cities provide collection and hauling of refuse; some provide these services directly while others rely on contractors. Residents in Neligh are responsible for arranging waste collection and transportation to the municipally-owned compacting/transfer station on their own.

None of the case communities owns or operates an active landfill; they use regional landfills which are either county or privately owned. None of the communities uses incineration as a disposal method.

The case communities also offer a mix of recycling services ranging from highly developed curb-side pickup and composting programs to what was self-described as a very "minimal" effort. Only Frederick does not operate a municipal recycling program, relying instead on county collection from recycling drop-off sites. A second community, Morgan City, participates voluntarily in a county-run effort.

Unlike the other programs discussed so far, solid waste management activities are not typically operated as enterprise funds; other revenue sources ranging from sales tax to property tax to general fund revenues are used to supplement funds raised through direct billing for services. Only one of the case communities, Riverside, indicated that its refuse service is operated as an enterprise fund.

Case Community Perception of Problems

While the case cities do not directly experience the burden and costs posed by federal landfill requirements, they are none-the-less subject to various "pass-through" costs and difficulties. Communities indicated that as more stringent requirements increase the costs of landfill operation, these costs are passed on to them by landfill operators in the form of higher tipping fees. Officials in Frederick, for instance, noted that the City's annual tipping fees are increasing by $400,000, a 33 percent increase over the previous year.

Communities are also faced with the loss of existing landfill resources. In Neligh, landfill owners plan to close the site rather than incur the costs of complying with new Subtitle D landfill requirements. Morgan City will lose its current site in 1995, as the State

has indicated it will not renew the facility's permit. Riverside is facing loss of its current landfill sites due to diminishing landfill capacity. The landfill being used by Rockford has a remaining lifespan of five to seven years, although the owners are negotiating with the State of Illinois to expand the facility.

In each of these cases, the communities expressed concern about developing or identifying an alternative site in time before closure, and about the increased costs of transportation associated with hauling to landfills which will be further away from the community than the present sites. Riverside is facing the need to transport waste across a mountain range, which would require the purchase of special trucks. Neligh expects it will have to begin hauling its waste to another site 80 miles away in another State.

Communities said they are experiencing difficulty with the costs of recycling programs; the costs are typically much higher than for refuse disposal. One community official noted that the county-run recycling program spends $160-170 per ton for recycled materials, compared to the City's costs of $65-70 per ton for waste disposal by landfill; another noted that recycling costs exceed $100 per ton even with all the avoided costs factored in, compared to $70 per ton for waste disposal including the costs of collection, transportation, and tipping fees.

All five communities also cited the problems posed by a lack of markets for various recycled goods. Program costs cannot be recovered through sale of the recycled goods. One community with a highly developed recycling and composting program indicated that sale of recycled goods only generates about $1,200 to $2,000 per month, in contrast to monthly expenditures of $88,000. Cost escalation also occurs due to the need for storage of recyclable materials. The communities expressed the opinion that national leadership is necessary in the area of market development.

5. ADDITIONAL RELEVANT EPA PROGRAMS

In addition to the four programs described in the previous pages, a great number of other EPA programs potentially impact local governments. The following programs were identified by at least one case community as an important EPA program that is implemented by municipal staff. The following descriptions are not meant to be a robust analysis of the impact of federal environmental programs on local governments, but rather a brief summary of some of the programs that may involve local governments. It also is worth noting that many of these programs are described in earlier portions of this report.

Under the Chemical Emergency Preparedness program (SARA Title III - the Emergency Planning and Community Right-to-Know Act), local governments are required to prepare, implement, test, and revise local response plans for chemical accidents at fixed facilities. Each community's emergency response plan must be jointly written by local emergency response agency staff, community residents, industry officials who manage the facilities from which releases might occur, and others. Local government emergency planning agencies also must collect information on chemicals produced, stored, and used at relevant industrial facilities and disseminate the information to the general public.

The Hazardous Waste Management program (RCRA Subtitle C) is designed to track the generation, movement, and disposal of hazardous waste from all sources, including local governments. However, facilities producing less than 100kg per month of hazardous waste are classified as Conditionally Exempt Small Quantity Generators and are exempt from most federal tracking, reporting, and accumulation requirements.

Facilities producing between 100kg and 1,000kg of hazardous waste per month are classified as small quantity generators and must comply with certain federal hazardous waste tracking, reporting, accumulation, and disposal requirements. Facilities producing more than 1,000 kg of hazardous waste per month are classified as large quantity generators and must comply with the full federal requirements for waste tracking, reporting, accumulation, and disposal. Household hazardous waste (i.e., waste produced during the course of normal, daily residential living) is excluded under RCRA Subtitle C and is classified as solid waste under RCRA Subtitle D.

The Mobile Source Pollution program (Clean Air Act - 1990 Amendments) is designed to reduce vehicular emissions of air pollution (e.g., cars and trucks) in areas whose air pollution exceeds federal standards. The mobile source program has four major provisions that may apply to local governments.

First, local governments may be required to operate municipal vehicles with fuels that emit lower levels of pollutants than conventional fuel, such as using oxygenated gasoline which emits lower amounts of CO than regular gasoline. Second, local governments may be required to purchase low-polluting vehicles (e.g., electric vehicles) for municipal fleets. Third, communities soon will be required to maintain their vehicle fleets according to EPA's new inspection and maintenance standards. Finally, local government officials may have to implement various transportation planning measures to reduce vehicular congestion, such as enhancing public transportation opportunities or expanding municipal car-pooling programs for employees.

The Stationary Source Pollution program (Clean Air Act - 1990 Amendments) is designed to reduce emissions of air pollution from stationary sources (e.g., municipally-owned powerplants, solid waste landfills) that exceed federal standards. To meet federal standards, municipal stationary sources can install emissions reduction devices (e.g., "scrubbers"), switch to lower-emissions fuels, or reduce fuel consumption to meet emissions requirements. Eligible municipal stationary sources also can trade emissions allowances to meet some federal requirements.

The Superfund program (CERCLA/SARA) authorizes EPA to assess inactive or abandoned hazardous waste sites, place qualifying sites on a list of national cleanup priorities, and establish a program to clean up such sites. Clean up costs may be reimbursed, voluntarily or through EPA enforcement, by those parties responsible for contaminating the Superfund site. If a local government is identified as a potentially responsible party at a Superfund site, it may be liable for paying some of the clean up costs at the site. Local governments may receive up to $25,000 per response for conducting temporary emergency measures in response to a hazardous substance threat under the Local Government Reimbursement program.

The Underground Storage Tank program (RCRA Subtitle I) is designed to clean up and prevent contamination of ground water from leaking underground storage tanks (USTs) storing petroleum products or CERCLA-defined hazardous substances. Under EPA's requirements, local governments must clean up and replace leaking USTs and register and install leak detection equipment on existing USTs. Local governments also must demonstrate to EPA or States the financial capability to pay for the costs of cleanup and third party liability associated with an UST leak. Many States have established State assurance funds to help owners/operators defray some of these cleanup costs.

The Wellhead Protection program (Safe Drinking Water Act 1986 Amendments). The Statute requires States to adopt the Wellhead Protection Program to protect the geographic areas surrounding public drinking water wells. The States, in turn, may require local governments to implement a variety of groundwater protection measures including: land-use management controls and zoning restrictions, local ordinances which control hazardous materials in wellhead areas.

The Wetlands Protection program (Clean Water Act - Section 404) regulates--through permits-- the discharge of dredged or fill material into the nation's waters, including wetlands. Activities that are typically regulated under Section 404 include fills for development, water resource projects (e.g., dams and levees), infrastructure development (e.g., highways and airports) and conversion of wetlands for farming and forestry.

APPENDIX B: INDIVIDUAL CASE STUDY DESCRIPTIONS

The following descriptions characterize the five municipalities which participated in the PED case studies. Background information is provided for each individual city, regarding its geographic, demographic, and economic conditions. Major municipal environmental services are characterized, as are statements of problems faced in implementing environmental mandates as described by city officials. The study did not investigate each of the situations and difficulties described by local officials to obtain additional information or verify factual accuracy. Since the study's purpose was to identify implementation problems as local governments themselves experience them, PED believes the utility of this information is greatest through this type of presentation.

For consistency across cases, PED describes implementation of the wastewater, drinking water, and municipal solid waste programs in the greatest detail. The five case study cities are presented as follows:

I. Neligh, Nebraska

II. Morgan City, Louisiana

III. Frederick, Maryland

IV. Rockford, Illinois

V. Riverside, California

Note: Case study cities were selected with the assistance of EPA regional office personnel. Cases are intended to provide a mix of community characteristics such as size, location, economic base, and environmental conditions.

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Individual Case Description

NELIGH, NEBRASKA

GENERAL INFORMATION

Location/Population/Economic Issues

Neligh (pronounced "Neely") is a small, farming community located in the agricultural "heartland" of northeastern Nebraska, 150 miles northwest of Omaha and 152 miles northwest of Lincoln. The City is the largest community and the county seat of Antelope County.

Neligh was established in September 1872 by four men from West Point, Nebraska who hoped to develop 520 acres along the Elkhorn River into a townsite. In 1873, John D. Neligh built a water-powered grinding mill on the banks of the Elkhorn River. Operated continuously until 1967, Neligh Mills developed and produced high quality flour and feeds, including "Gold Medal Flour" (which was sold to General Mills in 1959 and is still marketed under the same trademark today). In its prime, Neligh Mills served as a linchpin in the local economy. Today, Neligh Mills is the City's primary tourist attraction and historic landmark.

Neligh has a population of 1,742 (1990 US Census). Since 1980, the community's population has declined by 8%. According to City officials, young people are moving out of the City to look for jobs while older people are beginning to come to Neligh to retire.

One-quarter of Neligh's population is under 18 years old (27.3%), and one-quarter of the City's population is over 65 years old (26.5%) -- more than double the national average of 12.5%. Community leaders note that the Antelope County Economic Development office gets one or two calls per week from someone in California looking for a place to retire.

Farming, livestock production, and agriculturally-based small businesses dominate Neligh's economy, though the City boasts some light manufacturing (e.g., a survey-flag factory). The City also supports a private, non-profit regional hospital, a private nursing home, and a regional newspaper. In 1990, Neligh's unemployment rate stood at 3.1%. The community's median per capita income is $9,879 and the median household income is $20,680 (1990 Census).

Neligh contains 771 housing units; 694 units are occupied (90% occupancy rate). 516 houses are owner-occupied (74.4% of occupied units) with a median value of $29,200. 178 housing units are rented (25.6% of occupied units) with a median monthly rent of $146

(1990 Census). City officials note that most dwellings in Neligh house between . and 2 persons.

Government Organization

Neligh is organized as a Mayor-Council form of government. The City's public officials include an elected mayor and four City Council members, who are elected to four year staggered terms. Neligh's appointed officials include the City Superintendent, who oversees and operates the City's drinking water, wastewater, municipal solid waste, and street repair programs; and the City Clerk, who oversees the operations of city hall. The City superintendent also is certified to operate the municipal wastewater and drinking water facilities.

Neligh offers the following services to its residents: police protection, a City-owned public library, dial-a-ride transportation, electric service, drinking water, sewage treatment, a recycling drop-off center, an organic waste drop-off center, a used oil disposal center, and a MSW transfer station.

Budget

Neligh's total assessable value is $24,485,048 and the City is assessed at full market value. The City's fiscal year 1990-91 revenues were $1,590,960, with an annual expenditure of $1,763,874. Neligh suffered a deficit of $172,914 in fiscal year 1990-91.

Nebraska State law requires Neligh to balance its budget every year as well as limit local property tax increases to 4% per year, with approval of a majority of the City Council, unless three-quarters of the City Council votes in favor of a maximum 5% annual increase.

CONTEXT FOR ENVIRONMENTAL PROGRAMS

The Nebraska Department of Environmental Quality (NDEQ) administers the State's air pollution, municipal solid waste, hazardous waste, and wastewater programs. US EPA delegated the NPDES program to NDEQ. US EPA delegated the drinking water program to the Nebraska Department of Health (NDOH).

Drinking Water Program

Neligh owns and operates the community's drinking water system. It has four drinking water wells which deliver between 8.1 and 8.6 million gallons per month. The system serves 764 users, approximately 100% of City residents.

The City does not treat drinking water, except for adding fluoride at the wellhead. Groundwater is then pumped into a City-owned 250,000 gallon underground storage reservoir and directly into City mains for immediate consumption. Neligh public works staff also maintain the water storage and delivery system.

Neligh staff sample each well monthly for coliform, bacteria, and fluoride and send the samples to NDOH laboratories for analysis. Test results are returned to Neligh and forwarded to the appropriate NDOH office for review. The City also samples drinking water for phase I VOCs every 3 years (as required by EPA and NDOH) and forwards the samples to NDOH for analysis and review. In addition, the lead and copper rule requires sampling at twenty sites once every six months for a year.

City staff began sampling for phase II VOCs on July 1, 1993. Under this requirement, local governments with fewer than 3,300 residents must conduct quarterly tests of phase II VOCs. Neligh officials estimate that these tests will cost the City $2,400 per quarter for the next two years because drinking water samples must be sent to a State-certified laboratory in Indiana for analysis.

The drinking water program is staffed by one certified full-time operator and the City superintendent on a part-time basis. The operator and superintendent are both certified and attend a 15-hour training session every three years.

The drinking water program is self-supporting and generates revenue from the sale of water through user fees and hook-up fees. Neligh charges a flat $4.00 fee to connect to the system and for the first 2,000 gallons consumed. The City charges $1.00 per household for every 1,000 gallons of water consumed between 2,000 and 100,000 gallons. The water consumption charge declines to $.80 per 1,000 gallons consumed above 100,000 gallons.

Because drinking water testing requirements are increasing and each well must be tested for each contaminant, the City's drinking water costs have risen dramatically. According to City officials, Neligh's drinking water testing costs will increase from $1,500 in 1992, to $11,500 in 1993, to $17,000 in 1994 before declining to $875 in 1995.

Neligh's drinking water fund surplus is being reserved for increasing testing costs (e.g., non-volatile organics; VOCs; Pb; and Cu). Rates were raised 11% in 1991 in anticipation of additional testing requirements.[3]

Fiscal year 1992-93 revenues from drinking water sales were an estimated $96,133, with expenditures estimated at $83,273.

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[3]Rates were increased again by 50% August 3, 1993, effective August 20, 1993.

Drinking Water Information Sources

The City receives most of its information and technical assistance on drinking water issues from the State (e.g., State health inspectors) or from associations (e.g., League of Cities, National Rural Water Association circuit-riders).

Local Government Perception of Drinking Water Problems

1. The City superintendent's biggest concern as a water purveyor is the contamination of the City's drinking water wells by agricultural chemicals. He remarked that if US EPA really wants to protect groundwater, it should issue more stringent regulations on farms applying pesticides through "chem-irrigation" (i.e., injecting pesticides directly into an irrigation system using well-water).

2. Neligh needs to repair or replace some of its drinking water delivery system. The City's water system was built over fifty years with three different-sized pipes, which varies water pressure and ultimately impairs the proper flow and circulation of water throughout the City.

3. City officials are concerned about increasing drinking water testing requirements, i.e., the lead and copper regulations. In July 1993, Neligh officials will have to sample 20 private dwellings to identify if the City has a Pb/Cu problem. The City also is required to conduct follow-up tests in the future. City officials believe the requirements are inflexible.

   Moreover, Neligh officials contend that the regulations shift liability for privately-owned plumbing to local governments. According to the City officials, EPA requires local governments to go into private dwellings to take water samples at seven a.m. before any water has been drawn by the resident, as well as personally inspect every house and business in the City for backflow and cross-connection problems.

Wastewater Treatment Program

Neligh owns and operates the community's sewage treatment facility, delivery pipes, and connection lines. Neligh's superintendent estimates that 99% of city residents are connected to the City system. The City does not operate an industrial pretreatment program. Approximately 40% of Neligh City streets have separate storm sewers.

The activated sludge treatment plant was built more than 25 years ago. The City's NPDES permit will be renewed in 1993. The sewage treatment plant's permitted capacity is 162,000 gallons per day.

Two lift stations pump sewage into the main lines which deliver the wastewater into the main facility. The wastewater treatment plant is comprised of an aeration tank, clarifier, digester, and two lift stations.

Wastewater effluent is discharged directly into the Elkhorn River. Sludge is land-applied in the following manner. Diluted sludge is settled into a concentrate (8-9% solids), pumped into a 2,000 gallon tank truck, and sprayed onto a farmer's field.

Neligh staff send monthly wastewater samples to a private lab for testing. The City pays the laboratory $35 for each monthly sample. City officials then compile the monthly wastewater test results and submit them quarterly to the NDEQ for review. Wastewater staff also send an annual heavy metals testing report to the NDEQ for review.

The plant is staffed by the City superintendent and a part-time operator (32 hrs per week), who will work full-time after an effluent disinfection program is in operation.

Because the State designated the Elkhorn River a full contact recreational river, any community discharging into the river must disinfect its effluent to meet requirements in the new NPDES permit (to be issued in 1993). To disinfect its wastewater, the City can utilize ultraviolet radiation, construct a chlorination and dechlorination equipment, or construct a four-cell effluent treatment lagoon.

The City probably will install chlorination/dechlorination equipment at a cost ranging from $100,000 to $150,000, because it is cheaper than the two remaining alternatives. City officials remark that constructing an effluent lagoon may cost between $600,000 and $700,000 and UV disinfection is not only more expensive but is also difficult to operate, and therefore leaves chlorination as the only viable option for Neligh.

The wastewater treatment program is self-supporting and generates revenue from user fees and hook-up charges. The sewage treatment fee structure is identical to that of drinking water. Neligh charges a flat $4.00 fee to connect to the system and for the first 2,000 gallons of effluent. The City charges $1.00 for every 1,000 gallons of effluent between 2,000 and 100,000 gallons. Consumers discharging more than 100,000 gallons per month of effluent are charged an additional $50 per month.

Residential users' water meters are read monthly. Sewer fees are based on average water use during January, February, and March. Fees for industrial users are determined every month due to fluctuation in industrial water use.[4]

Fiscal year 1992-93 revenues from wastewater treatment were an estimated $75,408 with expenditures estimated at $39,712.

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[4]Rates were increased 50% August 7, 1993, effective August 20, 1993.

Wastewater Treatment Information Sources

Neligh receives technical information from the annual environmental conferences hosted by the Nebraska Rural Water Association and from conferences and meetings hosted by the League of Nebraska Cities. A City official noted that "the $100 membership fee the City pays to the Nebraska Rural Water Association is the best $100 spent by the City."

Local Government Perception of Wastewater Treatment Problems

1. Neligh officials point out that the City has a 25 year old plant and complain that it is expensive to operate.

2. City staff contend that State sludge disposal regulations are unclear. Initial State mandates prohibited land application of sludge on frozen ground. This rule was eventually lifted. However, the City may have to build a sludge storage facility in the near future if the sewage treatment plant violates the maximum load requirements.

   According to City officials, the State of Nebraska delayed issuing guidance on sludge, because they didn't receive regulations and guidance from the federal government in a timely manner.

   City officials also pointed out that uncertainties about wastewater regulations make it difficult for Neligh City Council to conduct long term planning. The Council can't plan for unexpected expenditures.

3. Neligh officials believe that disinfection regulations seem arbitrarily adopted. City officials note that the Elkhorn River flows through a pasture for most of its length where livestock directly contaminate it with animal waste. Yet, Neligh is required to treat and disinfect its wastewater.

   Public hearings were held in 1986 that changed the use designation of the Elkhorn River. City officials commented that they don't understand what all the implications of this change in status are.

Municipal Solid Waste Program

Neligh does not provide trash removal for its residents. Residents can hire private haulers to remove trash for a fee (between $7 and $10.50 per month). Residents also can haul trash to the City-owned compactor/transfer center during open hours for $1 per trash bag (non-residents pay a slightly higher fee). One of the private haulers serving Neligh

disposes of trash at the compactor/transfer center and pays the City a tipping fee ($7.50 per cubic yard of waste).[5]

The City operates an industrial-sized trash compactor and refuse transfer center. The compactor uses a hydraulic ram to compress trash into a 40 feet long steel bin that can be placed on a flatbed tractor-trailer. The compactor is covered by a large steel shed and is used throughout the year.

Once a compactor bin is full, private contractors haul the entire bin to a privately-owned landfill 30 miles away in Norfolk, Nebraska for approximately $265 to $275 per bin. The privately-owned landfill is due to close in October 1993.

The compactor is staffed by a part-time employee 13 hours per week. Residents also can take discarded batteries to the compactor/transfer center for disposal. The compactor was built approximately 25 years ago and was financed by a bond that has been repaid.

Neligh also operates a regional recycling center, located in a defunct mobile home factory/warehouse. The City purchased the site with $140,000 from a $300,000 State matching grant. The remainder of the grant has been used to pay staff salaries and purchase a glass crusher and a pallet bundler - used to bundle crushed metal and plastic containers and flattened cardboard.

The center collects newsprint, plastic containers, steel and aluminum cans, and cardboard. The center does not accept "white goods", such as refrigerators, which are accepted at the municipal "tree dump". Recyclables are sorted by volunteers and are sold to various markets. Newsprint is sold locally to farmers for livestock bedding. Plastic containers are bundled and sold to a firm in Kansas to make plastic "lumber". The City currently is trying to find processors to accept the remaining recycled materials.

Residents can drop-off materials at the center on Saturdays and other times when it is open to the public. Nine outlying local governments (located up to 80 miles away) rent dumpsters from Neligh to fill with recycled materials. When the dumpsters are full, they are returned to Neligh for processing. Each municipality pays the City $100 for the use of each complain and reimburses Neligh $1 per mile for transportation costs.

City officials noted that the impetus for the recycling center came from a Nebraska law to reduce the landfill waste stream by 25% by 1994 and 40% by 1996. Neligh officials also pointed out that they believed that the City would not be able to meet the State mandate if it had not received the State recycling grant.

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[5]On August 2, 1993, the tipping fee increased to $10.00 per cubic yard.

The center is administered part-time by a City employee, who coordinates the efforts of volunteers and manages the facilities operations for 20 hours per week. The City is planning to hire a full-time recycling equipment operator soon. The recycling advisory board, comprised of City and county residents, advises Neligh City Council on recycling operations.

Neligh operates a tree dump (which accepts organic yard waste, such as grass clippings, and "clean" demolition waste) for its residents. The City fire department incinerates organic waste at the tree dump.

At the same location, the City accepts white goods and provides an aboveground storage tank for residents to dispose of used motor oil. The tree dump/used-oil center is staffed by a part-time employee 13 hours per week.

Neligh's waste removal and recycling program is not a self-supporting enterprise fund and generates revenue from user fees and local property taxes. Property taxes supplement user fees when there is a revenue shortfall.

Fiscal year 1992-93 revenues from waste removal and recycling were an estimated $43,611, with expenditures estimated at $44,479.

Municipal Solid Waste Information Sources

Neligh's superintendent remarked that he has never had contact with US EPA, and receives information on regulatory requirements as well as technical assistance from the State and member associations.

Local Government Perception of Municipal Solid Waste Problems

1. Aside from newsprint and plastic containers, City officials are finding it difficult to locate recycled materials processors. Neligh officials contend that there are insufficient markets for recycled materials.

2. Neligh officials are concerned that State statute LB1257 will force the closure of the private landfill the City uses. Neligh's Superintendent doesn't know where the trash will go when the private landfill closes. It would be very costly to ship trash to the nearest landfill, which is 90 miles due east in Sioux City, Iowa.

   Antelope County and three nearby counties are investigating the feasibility of locating and building a multi-county regional landfill. The multi-county effort is experiencing difficulty from residents who don't want the facility located near them.

3. The City Superintendent noted that because disposal regulations for freon will increase disposal costs, the City will probably experience an increase in the number of "white goods" (e.g., refrigerators) abandoned in ditches.

OTHER ENVIRONMENTAL PROGRAMS

The City has no underground storage tanks (USTs), but does have a wellhead protection program (WHPP), and participates with a county local emergency planning committee to handle hazardous substances incidents.

Air Pollution Issues

A Neligh official remarked that it's ironic that the City is allowed to burn discarded trees but can't burn an old, discarded couch or mattress. The official asserts that burning a couch in Neligh does not significantly harm air like smog does in Los Angeles or Denver. He said that one can see the air pollution problem flying into Los Angeles or Denver. He believes that Neligh shouldn't be held to the same air pollution control restrictions as those cities.

PROGRAMMATIC SUCCESSES/INNOVATIONS

Neligh officials point to the municipal solid waste recycling program as one the City's most notable environmental success. Not only does the recycling program reduce the community's municipal solid waste stream, City officials assert, it helps nearby communities reduce their waste stream also.

Because it may cost $100,000 just to disinfect wastewater effluent, the superintendent recommended to the City Council that Neligh build effluent catchment lagoons to hold the wastewater effluent instead of a more costly detention tank.

LOCAL GOVERNMENT PERCEPTION OF CROSS-CUTTING PROBLEMS

Neligh's City attorney noted that while it took 100 years to get into these problems, US EPA is trying to clean them up in only 10 years. He added that he agrees that our nation should clean up its environmental problems, but local governments should not be required to do so in only 10 years.

Community leaders contend that communication is the main problem; they find it difficult to know who to obtain information from at US EPA as well as properly interpreting the information which they receive. Neligh officials note that the City lacks the staff to study and interpret Federal Register notices it receives. In addition, Neligh staff believe that there seems to be a lack of communication between the federal government and the State as well as with communities.

City staff note that selling the costs of regulations to the public also is a problem for local governments. If the City doesn't properly explain to residents the benefits of the City entering their homes to check for Pb/Cu in drinking water, it will be difficult to justify fee increases that the new regulations will cause. People want all the services but don't want to pay the costs. City officials also contend that Neligh tries to do a good job and seems to be penalized through increasing costs.

City officials remarked that they have never had an opportunity to give input to EPA. Staff contend that communication flows one-way from US EPA. Instead, staff note, communication must flow from EPA to local governments and back to EPA. One Neligh environmental official remarked that, "this is the first time that I have been asked to give my input to EPA."

Staff pointed out that the City must comply with the Americans with Disabilities Act (ADA), which competes with non-mandated programs such as the City's "dial-a-ride" bus system.

City officials noted that insurance companies are writing pollution exclusions into the City's policies. The City's insurance company excluded Pb/Cu liability from Neligh's $35,000 annual insurance coverage.

Officials pointed out problems securing a State revolving loan. Staff noted that Neligh has applied for State revolving loan funds. However, both the low bond rates in private capital markets (the City is rated an A or A+ by the major bond agencies) and the red tape involved with government funding (due to add-on requirements mandated by OSHA, EEOC) act as disincentives to accepting an SRF loan.

Neligh staff noted that the biggest financial difficulty in the City is the limited income level of its residents. The City can't raise sewer or water rates very much to meet mandates because more than 25% of City residents are retirees living on fixed incomes.

MESSAGES/RECOMMENDATIONS to EPA

1. City officials recommend that EPA require each State to conduct a comprehensive environment assessment of itself instead of requiring each State to comply with national environmental standards. Officials believed that EPA should not write regulations to fit national standards, EPA should write regulations that are tailored to local environmental conditions. To do this, each State would have to conduct an assessment of itself to create a classification of State or regional environmental problems. Then, EPA would need to develop State or regionally-based levels of protection and require States and localities to comply with such standards. If a State assessment reveals that a local government has mildly polluted air but severely polluted groundwater, then that local government would be required to first focus on cleaning the contaminated groundwater, then focus on cleaning up the polluted air.

2. Neligh staff recommend that EPA protect groundwater from pesticide contamination. To do this, staff recommended that EPA require every agricultural irrigation system to install a reduced pressure device (e.g., dual-check valve) in the irrigation system or prohibit the application of pesticides through the irrigation system.

3. City staff recommend that EPA lessen its requirements for good test results (i.e., if tests indicate that the City doesn't have and hadn't created a problem, then additional tests should not be required). For instance, Neligh officials contend that under its new NPDES permit, the City must disinfect its wastewater discharge to comply with the use designation of the Elkhorn river, even though such treatment will have virtually "no positive effect" on a water body contaminated with animal waste immediately upstream and downstream of Neligh's sewage treatment plant.

4. Neligh officials suggest that the federal government establish an environmental loan fund. According to staff, if EPA is going to mandate certain kinds of environmental protection, there should be a mechanism to help local governments implement the mandates. City officials remarked that, "We're not begging for money, we need a good loan system, or grants given on a cost-share or matching basis. Many local governments are populated with residents on fixed incomes. Small cities need financial assistance."

5. Neligh staff would like to receive technical assistance from EPA. Staff remarked that, "it would be nice to get a set of instructions on how to comply with US EPA regulations, especially operations and maintenance requirements of wastewater facilities. Please put the material in a layperson's language." Local officials also would like information on what is required of small local governments and on the types of waivers for which small local governments might qualify.

6. Municipal leaders would like an opportunity to provide input into EPA's regulatory process and permit approval process. However, officials expressed a concern that they don't know where to give input or where input would go because federal agencies are so large.

Individual Case Description

MORGAN CITY, LOUISIANA

GENERAL INFORMATION

Location/Population/Economic Issues

Morgan City is located on the Louisiana coast in "bayou country". The Atchafalaya River and the intracoastal waterway flow by Morgan City. Immediately to the east of the City is Lake Palourde. Morgan City is located in St. Mary's Parish.

Morgan City's location along the Louisiana coast makes it particularly vulnerable to hurricanes that originate in the Caribbean. The City suffered significant effects from Hurricane Andrew last year. They estimate $5,000,000 in damage to City-owned property. The City is protected from the Atchafalaya River by a twenty-one foot seawall and earthen levee system. The City is also protected from Lake Palourde to the east by an earthen levee system.

Morgan City's location also puts it at a transportation crossroads. It is located forty miles from "chemical alley"--the corridor of chemical manufacturers between New Orleans and Baton Rouge. As a result of their proximity to the plants, Morgan City sees a lot of chemical barge traffic to the Gulf of Mexico via the intracoastal waterway. (One such chlorine barge got stuck under a bridge for a week in 1973 prompting evacuation of the City.) In addition a major US highway runs through Morgan City as does the railroad.

In 1980 the population of Morgan City was reported by the US census as 16,114. Morgan City, itself, reported a population of 19,000 in 1980. The difference between the two figures can be explained by the fact that the Census Bureau did not list a 3,000 person subdivision as part of Morgan City, which the City included in its population estimates. The subdivision was officially annexed by the City in 1985.

The offshore oil exploration, drilling, and production business was booming in the 1970's and early 1980's in Morgan City. However, by 1990, the population of Morgan City had decreased to 14,531 according to the US census estimates. The City has suffered a loss in both population and jobs over the last ten years. This corresponds with the collapse in energy prices over the last ten years which has had numerous ripple effects on the economy of the region that includes Morgan City. The City estimates that it has lost 6000 jobs and $8,000,000 in income since 1984.

The present day employers in and around Morgan City consist of shipbuilders, ship yards, oil rig fabricators, in addition to the local hospital and the Parish school board.

Government Organization

The City government consists of a Mayor and a City Council. The Mayor appoints a City Administrator with the approval of the City Council. The public works activities are directed by a Public Works Director and individual facilities, the drinking water plant and the wastewater treatment plant are managed by plant managers with approximately six operators at each plant.

CONTEXT FOR ENVIRONMENTAL PROGRAMS

Several aspects of Morgan City's physical environment are important in understanding the environmental protection issues that face the City. First, as with all the municipalities along the Louisiana coast, the community is at sea level and readily subject to flooding. This feature has important consequences for wastewater and stormwater treatment and control and solid waste disposal in the ground. Second, the Atchafalaya River flows by the City. The volume of water in the Atchafalaya River when it flows by Morgan City is one third of the flow of the Mississippi, the other two thirds flows through New Orleans to the Mississippi River delta and out to the Gulf of Mexico. The swift flow and high volume of water affects wastewater treatment and control and drinking water quality in Morgan City.

The State environmental protection agency, the Louisiana Department of Environmental Quality (LDEQ), administers the drinking water program in the State. Louisiana has primacy for the drinking water program, but does not have delegation for the NPDES program. The LDEQ writes a permit separate from the federal permit for the wastewater treatment plant in Morgan City.

Drinking Water Program

Morgan City owns and operates a drinking water treatment plant and distribution system. The City employs six Class IV certified operators at the plant, which serves Morgan City exclusively and provides all the households, businesses, and industry in Morgan City with drinking water. A neighboring town, Amelia, formerly was hooked up to the City's plant, but has since built its own plant.

Morgan City draws its drinking water from two surface water sources, Lake Palourde and the Atchafalaya River. The City maintains three intakes into the system and five water storage towers. At the plant the water is treated with free chlorine for disinfection and a

zinc/orthophosphate system for corrosion control. Although lead contamination comes from the corrosiveness of water and the lead content of pipes, Morgan City officials reported that the City has little problem with lead and copper contamination in their drinking water because it comes from surface water.

The City does the routine on-site testing of the drinking water, which includes: turbidity testing and pH measurement once an hour, chlorine testing once every two hours, and finally hardness and alkalinity measurement once a day. The City also does microbiological testing of the drinking water at a lab at the wastewater treatment plant using State-certified methods and a State-certified technician. The City also arranged sampling for lead and copper analysis of drinking water from private homes.

The State does all the rest of the testing for the City. All the "hard chemistry" (as they describe it), the testing for volatile organic compounds (VOCs) and trihalomethanes (THMs) as well all the other chemical contaminants in the federal drinking water regulations. This includes testing for lead and copper in the samples collected in response to the lead and copper rule. The City pays a flat fee annually for the testing that the State does.

The City bills for water, sewer and gas in the same bill. The revenues collected by the City in fiscal 1992 for drinking water use totalled $1,350,000. The expenditures for the plant operation alone totalled $530,966 for fiscal year 1992. The City recently invested $100,000 in their plant for replacement of a multi-media sand-rock-charcoal filter. Prior to the replacement of the filter, they added a new wing to the fifty-year old drinking water plant in 1969. The plant has double the capacity that the City needs at the present time. They eventually need to replace one of the City water towers at a cost of several hundred thousand dollars. They don't foresee being able to do it in the near future however.

The City reported that the potential for contamination of the drinking water supply is high given the large amount of barge traffic on both the Atchafalaya and the Mississippi rivers upstream of Morgan City. The Mayor reported that the City had commissioned a water quality study of their drinking water sources several years ago which concluded that the water was "basically okay" for drinking. The City did not report any major contamination problems with their drinking water.

Drinking Water Information Sources

The drinking water plant manager in Morgan City did not mention any interaction or direct communication from EPA. They are a member of and participate in meetings with the American Waterworks Association (AWWA). They attend annual national AWWA meetings as well as bimonthly meetings of the Louisiana conference of the AWWA. The Louisiana Rural Water Association is another point of contact along with the regional office of the LDEQ.

Local Government Perception of Drinking Water Problems

1. Morgan City identified several difficulties that they were having implementing their drinking water program, but overall the service was operating without major difficulties stemming from federal mandates.

2. Morgan City has a problem with aging infrastructure. In particular, one of their water storage tanks needs to be replaced. This is not something that they can afford to do in the near future. The drinking water plant itself is fifty years old, although they recently replaced the sand filters at the plant.

3. The drinking water service has recently upgraded their plant and now believe that they will be facing new requirements for treating their drinking water. Instead of chlorinating their water, Morgan City believes that they are going to be required to ozonate their water. They believe that their investment in the recent upgrade to the plant is threatened by the change in disinfection requirements.

4. Morgan City draws its drinking water from surface water, which is generally low in its lead and copper concentration. In the case of Morgan City, they are way below the action level for lead and copper. Despite this fact, they are required by the lead and copper rule to test for lead and copper at the tap in people's homes. They objected to this on two fronts, one that it is unnecessary because the levels are low and the other because they don't think they should be responsible for the quality of drinking water beyond the water meter. In principle, they object to having to test at the tap, but in their case it will not be a significant problem because their levels are low. (Morgan City did plan to apply for reduced monitoring after the first round of lead and copper testing.)

5. Another problem that Morgan City experiences results from the role that the State plays in Louisiana in doing all the testing for chemical contaminants in the drinking water. Because the State does the testing there is always a significant lag between when the sample is drawn, when public notification takes place, and when the City corrects the problem. They often have to notify the public before the City has had a chance to correct the problem.

6. The manager of the drinking water plant cited public perception of the quality of the drinking water as his biggest concern. This in part results from Morgan City's position at the end of the Mississippi River system. The are subject to all of the cumulative contamination that occurs upstream of them which, whether or not it occurs, leads to public uncertainty about the quality of the drinking water in Morgan City.

Wastewater Treatment Program

The City owns and operates a wastewater treatment plant. Before the present wastewater treatment plant came on-line in 1986 Morgan City was dumping raw sewage into the Atchafalaya River. EPA issued an Administrative Order to Morgan City to stop dumping raw sewage and construct a wastewater treatment plant. EPA agreed initially to fund 75% of the cost of constructing the wastewater treatment plant and the City would pick up the remaining 25% of the cost. At the time the City was hard pressed to pay for 25% of the plant. By the time the City had the finances to attempt construction, funding was removed by EPA. In the end the City financed the entire cost of the plant through bonds.

The sewer fee is based on water use. Morgan City has established a commercial and a residential rate. The current rate was established last March at 57% of water use, an increase from 45% established in 1986. The commercial rate currently in use is 67% of water use. Up until 1986 there was no sewer fee because there was no treatment. Charging a fee for wastewater services is a relatively recent phenomenon in Morgan City. Total sewer fund revenues for fiscal year 1992 were $615,000 and expenditures, $551,912.

The wastewater treatment plant is issued two permits, one from LDEQ, and the other from EPA. The wastewater treatment plant discharges into the intra-coastal waterway (Bayou Boeuf) which joins the Atchafalaya River very soon after the outfall from the plant. City officials commented that they believed their NPDES permit is among the most stringent in the nation.

The plant serves all of Morgan City and has a capacity of 4.5 MGD. City staff normally operate the treatment plant at 4.0 MGD, 90% of the plant's capacity. The plant requires six operators who work an eight hour shift during the day. The plant does not require that anyone be there at night.

The City has a separate stormwater sewer system. The storm and sanitary sewers are connected only at the "conflict" boxes, which have been rebuilt within the last three years. However, in southern Louisiana infiltration and inflow (I+I) to the sewer lines is a big problem. The ground is unstable and is constantly shifting. This damages the sewer lines to the point that stormwater infiltrates and flows into the pipes and thus to the sewage treatment plant. The flow to the sewage treatment plant during storms sometimes pushes the capacity limit of the plant.

The plant has a unique treatment process. They use two interchannel boat-shaped clarifiers. These clarifiers run with very little power and operator attention. There is an initial pumping action that sets up a flow past the clarifier for all the rest of the treatment process. In the process of treating wastewater the City must chlorinate it to lower the bacteria counts and then de-chlorinate it before releasing it back to the river. The City does most of its own monitoring and testing of wastewater-- the microbiological and chemical

testing. They do contract out some of the work, such as testing for metals as a result of industrial flows to the plant.

Morgan City has a small pre-treatment program, which employs a pre-treatment coordinator. Wastewater treatment staff mentioned that they spot check the effluent from hospitals and clinics before it reaches the plant. They also review and keep track of all the chemicals that industry has identified in their effluent. For political reasons City officials are reluctant to pass the costs of pre-treatment and testing on to industry.

The wastewater treatment plant in Morgan City is subject to modification by the engineers that designed and built the boat-shaped clarifiers. There are only one hundred of this type of clarifier in the country and Morgan City's was the second one to come on-line. The firm is located seventy miles away in Baton Rouge and they often come down to Morgan City to try out new things on their plant. Morgan City reaps some benefit in being close to the builders in that they get no-cost upgrades to their plant as well as assistance whenever they have problems. Morgan City did not say they were in need of any significant modifications to their plant.

Wastewater Treatment Information Sources

The wastewater treatment plant in Morgan City has won several awards from EPA, Region 6. They have also been in touch with the Water Division Director in Region 6 and said that he has been helpful.

Morgan City reported that they sometimes turn to larger municipalities for assistance as well as to EPA. Consultants do provide information, but most of the time Morgan City cannot afford to hire consultants.

Local Government Perception of Wastewater Treatment Problems

1. The wastewater treatment program has problems with aging infrastructure. The sewer pipes in Morgan City were laid down one hundred years ago. They have a great deal of trouble with infiltration and inflow as a result of the old pipes, the shifting ground, and the fact that the pipes are at or below sea level.

2. City officials are concerned about the impacts of changing rules. They reported that after the City recently upgraded the wastewater treatment plant, a wastewater treatment rule changed, invalidating the modification that they had just made to the plant.

3. The wastewater treatment plant in Morgan City is subject to two discharge permits, one from the State and the other from the EPA Regional Office in Dallas. The two

permits are written separately. This creates several problems for the local government. The schedules for issuing the permits are not the same. Morgan City must go through the process twice, once with the State and again with the federal government. The permits also contain conflicting requirements. The City faced a situation where the State required a minimum level of greater than 2 ppm chlorine and the federal permit contained a maximum level of less than 1 ppm chlorine. The City was caught in the middle and could not comply with one without violating the other.

4. The City has also taken advantage of the fact that they have a successful system of treatment and a good location (being located on a fast-flowing, high-volume river). They are using their wastewater treatment capacity to attract new industry to town. They hope to get seafood processors to move their operations to Morgan City and locate next to the wastewater treatment plant. They feel they can take advantage of their excess capacity for organic loading to the plant by taking in the waste high in BOD content from the seafood processors. Their effort has gotten delayed because seafood processors elsewhere have faced zero costs in processing their waste up until now. City officials believe that EPA has just started to enforce the regulations governing seafood processors and their effluent. (Morgan City would like to see EPA enforce the effluent guidelines regulations for seafood processors.) They also have run into a snag with getting approval for the process from FDA.

Municipal Solid Waste Program

Morgan City does not operate or own its own landfill. The landfill is parish owned and operated and located in a neighboring town, Berwick. The City has been dumping at that landfill since 1978. The permit for this landfill is due to expire in 1995.

Morgan City provides basic services in the way of trash pick-up. Morgan City now pays a tipping fee of $19/ton at the parish landfill. If and when the City moves to a new landfill they anticipate an increase in their tipping fee from $19 to $50 per ton.

Morgan City does not have pick-up for recycling. St. Mary's Parish used to have a drop-off center for recycling glass, paper, metal, etc., but it has been discontinued. The existing Parish recycling program includes a center for tire, white good, and battery disposal. The Parish has reached a 3% reduction in their municipal solid waste stream at a cost of $300/ton to recycle.

The Subtitle D regulations that take effect this October are forcing the City and the Parish to consider the future of their present landfill and alternatives to it. The State is encouraging regional landfills where several parishes own and operate a landfill. For Morgan City this would mean sharing a landfill with two other Parishes with a total of

twelve municipalities using one landfill. There are presently 450 landfills in Louisiana. City officials reported that this number could be reduced down to 16 regional landfills.

Local Government Perception of Municipal Solid Waste Problems

1. The City attorney, a consultant hired by the City, had significant concern over not being informed about the Subtitle D regulations that will take effect in October, 1993. A hearing on the parish landfill had been scheduled and the City Attorney as of that day had not gotten a copy of the Subtitle D regulations. None of the other communities participating in the hearing had been able to obtain the regulations.

2. City Officials felt it was an undue burden to have to monitor a landfill site for thirty years, as the subtitle D regulations require for a landfill closing date after October of 1993.

3. City officials are concerned about increased program transportation costs. The prospect of the landfill in St. Mary's Parish closing and the development of regional landfills across the State raises the issue of increasing and prohibitively high transportation costs for municipalities like Morgan City.

4. Officials in Morgan City commented that the low dollar value for goods to be recycled makes it very difficult to collect them and make a significant impact on reducing the amount of waste collected. The City has no manufacturing operation nearby to support (provide a market for) their recycling operations.

OTHER ENVIRONMENTAL PROGRAMS

Stormwater Program

Morgan City is not yet subject to the stormwater regulations for municipal separate storm sewers. However, officials in Morgan City viewed treatment and control of stormwater as somewhat of a "joke". Their biggest problem and primary concern regarding stormwater is to get rid of it as quickly as possible so that the town does not flood.

RCRA (C) Program

At the wastewater treatment plant they conduct a test that involves mixing a reagent with wastewater from the plant. In mixing the two substances they generate a hazardous waste. They have been unable to dispose of the hazardous waste despite many attempts to get some direction on how to go about it. They have been storing the material for four

years. The plant operator and lab technician at the plant were extremely frustrated at not being able to get more direction from EPA, the State, or anyone on how they should proceed with disposal.

PROGRAMMATIC SUCCESSES/INNOVATIONS

Morgan City took the initiative and was able to take advantage of a new technology in wastewater treatment. They also took a risk in trying something that was unproven. They did not have the support of the Louisiana Department of Environmental Quality in installing the boat clarifiers at the plant, but went ahead without it.

The City did anticipate some of the large expenditures that they would have to make down the road by setting up a Pollution Abatement Fund. Revenues from a 3/4% sales tax go into this fund.

LOCAL GOVERNMENT PERCEPTION OF CROSS-CUTTING PROBLEMS

Several of Morgan City's environmental services were in need of repairs and replacement to their infrastructure from the water storage tank to the sewer pipes that were laid down 100 years ago.

Low levels (below the action level) of lead and copper are present in the City's drinking water, yet the City is required to conduct extensive in-home testing for lead and copper. City officials, in anticipation of having to treat and control stormwater, believed that it would be inappropriate to collect/store stormwater runoff in their location.

Officials in Morgan City believe that they have not been kept informed of federal regulations. They also believe that they are not able to know, or to comment on the national scope and implications of the regulations or the policy that is made in Washington.

Morgan City feels as though local governments foot the major portion of the bill for implementation of federal requirements. They feel that "everyone wants to do their fair share" but object to assuming the major portion of the bill. They feel they abide by the rules, but get punished in the end.

Community officials cited two examples where they felt the City had been "burned" by federal agencies either reneging on a financial commitment to the City or backing out of a program initiative that the City had already made a substantial financial investment in.

In the first case, City officials reported that EPA had committed to fund 75% of the cost of building the City's required wastewater treatment plant. In the end, EPA did not pay for any of the construction and the City financed the entire cost of building the plant. The City argued that they could not even afford 25% of the cost of building the plant at the time of the agreement for a 75-25 split of costs between EPA and the City.

During the Carter administration, the City faced a mandate to convert away from natural gas to fire their electric generation plant. The City invested time and funds into the conversion with the understanding that EPA would finance 75% of the cost. The City financed their 25% through issuing bonds. In the end, however, the project was never completed and the federal government never came through with their 75% of the financing.

Historically Morgan City has not needed to impose a lot of fees on its populace. Services were either not provided, such as wastewater treatment, or there has been a "cash cow" service such as an electric generating plant that provided spill-over revenues to other services. Economic hard-times have fallen on Morgan City at the same time that the fee level is greater than what it has been in the past. The local population has taken a "double-hit".

MESSAGES/RECOMMENDATIONS to EPA

1. Distribution of regulations to affected communities was a key concern of the City Attorney. He suggested a method used by the military called "Distribution A" where the Army sends out copies of new rules, etc. to over 50,000 individuals. Couldn't a similar system be adopted for distribution of materials to 25,000 local governments?

2. Morgan City would like to have access to someone at EPA in a position of authority. They like the idea of a small communities coordinator in each of the regional offices.

Individual Case Description

FREDERICK, MARYLAND

GENERAL INFORMATION

Location/Population/Economic Issues

Frederick, Maryland is located in Western Maryland, 45 miles west of Baltimore and 46 miles northwest of Washington, D.C. Incorporated in 1745, Frederick is the county seat and largest city in the mostly rural Frederick County. City officials describe their community as the "legal, commercial, and financial center of the county."

Frederick has a population of 40,148 (1990 census). Frederick's population has grown dramatically (43%) since 1980. The average household income in Frederick is $34,891. The median value of a home is $113,400 and the median rent is $517.

Sixteen thousand county residents--most of whom live in Frederick City--drive the interstates to work in Washington and its suburbs. Most of the business in the City is service--not industrial. These include insurance operations, a national hotel reservation operation, a federal communications center, and medical research conducted at Fort Detrick--the City's largest employer.

Government Organization

The City government is organized as a Mayor-Council municipal government. City services include: public safety; waste removal and recycling; general public works; parks and recreation, youth programs, and a community center; zoning, planning, and engineering services; wastewater treatment; a general aviation airport; public housing, and homeless programs. All City departments report to the Mayor. Solid waste, drinking water, and wastewater divisions are all located within the Public Works Department.

Budget

Both Maryland law and local ordinance require a balanced budget each year. The Frederick charter limits municipal debt to 8% of the assessed value of all taxable property within the City.

CONTEXT FOR ENVIRONMENTAL PROGRAMS

The lead State environmental agency in Maryland is the Maryland Department of the Environment (MDE). MDE has been delegated authority to administer the NPDES permit program and has primacy for the Public Water Supply Supervision (PWSS) program.

Frederick is located at the foothills of the Allegheny Mountains along the Monocacy River which flows into the Potomac River and eventually into the Chesapeake Bay.

Drinking Water Program

Drinking water supply is a municipally owned and operated service. Water supply comes from three surface sources. City officials estimate that 99.9% of Frederick's residents are served by City water. There are three plants, two pump stations, and 20 staff. Six million gallons are produced in an average day.

Chlorine and fluorine are added to raw water for disinfection. Aluminum sulfate is added as a coagulant, and lime is added as an inhibitor. The water is carbon filtered for taste and odor. The City owns all of the treatment operations and maintains the distribution system as well.

Most of the sampling and testing is conducted in-house by the City chemist. All bacteriological testing is performed in-house. Lead, and copper, and synthetic organic compounds (SOCs) are tested for in a contract laboratory facility.

In fiscal year 1992 revenues and expenditures on drinking water supply were nearly $1.3 million. The drinking water program is operated as an enterprise fund. Revenues are generated through the sale of water. Consumers are charged for water quarterly based on metered consumption.

The City anticipates plant redesign and other improvements may be necessitated if the maximum contaminant level (MCL) for trihalomethanes (THM) is lowered. The redesign in question would involve the chlorine contact basin.

Drinking Water Information Sources

Water Division staff have no direct interaction with EPA; although EPA correspondence and journals are sometimes received from MDE. All regular communications are with MDE. Information on regulatory changes is usually received from the American Waterworks Association (AWWA) or from chemical supply vendors.

Water Division staff occasionally obtain technical assistance in the form of seminars and training sessions from the State. City staff report that the State "is getting better" at offering such assistance.

Local Government Perception of Drinking Water Problems

1. The lead and copper rule. Frederick officials contend that EPA "is forcing" producers to control lead levels in private homes. Officials believe that it is "absurd" to do testing at the homes.

2. "Never-ending increase in requirements". SDWA monitoring and testing is costing the City an estimated additional $30,000 annually. If a violation of one of the new MCLs is detected, the treatment will add additional new expenses.

3. Constantly increasing operator certification requirements. City staff complain that certification classes, which are increasingly mandated, increase operational costs both directly and indirectly with time away from work and training expenses.

4. Requirements are "sometimes stupid and not applied evenly or consistently." Frederick officials believe that they are held to tougher water quality standards than are private concerns.

Wastewater Treatment Program

The City of Frederick, which has separate sanitary and storm sewers, owns and operates a wastewater treatment plant. Every home and business in the City is served by Frederick sewers. In fact, some of Frederick County--including the entire Town of Walkersville--also is served by Frederick City.

The City's current NPDES permit, which expires in November of 1995, allows effluent from the Frederick wastewater treatment plant to be discharged into the Monocacy River. The plant is permitted to discharge 8 MGD. However, Frederick's plant receives a large amount of water from infiltration and inflow (I and I). Therefore, the City's NPDES permitted volume could be exceeded during storm events.

A staff of 23 run the wastewater treatment operation. Frederick's current plant was brought on line in 1988 to replace a trickling filter plant originally constructed in 1936. The new plant was constructed to handle a flow of 7 MGD and has since been raised to 8MGD. The plant often operates at full capacity.

The new plant was built at a cost of $12 million. After construction, the State required Frederick to reduce nitrogen levels, resulting in an additional $5 million worth of

plant improvements. Because the plant incorporates innovative technology--in-channel clarifiers--the project received 100% funding from the State and EPA.

In winter, sludge from the treatment process is disposed in a landfill. During the rest of the year a contractor applies the sludge to agricultural land.

The wastewater service is operated as an enterprise fund. In fiscal year 1992 expenditures were $1.4 million. (Note: The City did not report fund revenues.) Revenues are derived from consumption-based rates equal to 100% of the water consumption.

Frederick operates an industrial pre-treatment program. This program has been underway for approximately seven years. Eleven facilities are permitted by the City and are charged a discharge permit fee by the City to pay for the program. One City staff person coordinates the program, conducting inspections and collecting wastewater samples. Most of the water tests are conducted in-house, the exception being metals tests which are contracted out. Because they have witnessed wasteload reductions, the wastewater officials feel that their pre-treatment program has been successful.

Wastewater Treatment Information Sources

The wastewater division has no direct contact with EPA. All communications are directly with MDE. Because information on regulatory requirements comes primarily from trade associations, the City feels "in the dark" regarding new regulations.

MDE does offer technical assistance directly and through cooperative agreements with parties such as the Maryland Environmental Training Center. The State provided assistance to the City for the first year of operation of the new plant.

Local Government Perception of Wastewater Treatment Problems

1. The City could potentially violate its NPDES permitted volumes due to I and I. In addition to volume, the permit limits the number of hook-ups allowed which restricts growth and economic development.

2. Identifying the Inflow and Infiltration (I&I) problem areas is technically complicated and will be expensive.

3. Although funding the construction of the new plant was not a problem due to the EPA grant received, City officials are not entirely satisfied with this innovative technology.

4. City officials feel that their plant is being used to solve a County problem. As septic tanks fail, homes in the County are hooked-up to the City system for health reasons. The hook-up fee is so high that the City must grant five-year waivers from sewer fees. The City then loses revenues.

5. The City has tremendous difficulty keeping informed of new regulations. Timely information is needed to plan and budget for required changes. For example, when the new plant was built the City did not have to treat for nitrogen. This change in requirements required modifications to the facility.

6. City officials question EPA decision making. They wonder if cities ever are asked to provide information to EPA during the development of regulations, or if decisions are made without data. They point out that no one from EPA has ever asked Frederick's opinions.

7. Turnover at MDE is so high that City officials feel they are always "scrambling" to find information.

8. City officials contend that the State has been pressuring the City to fine more pretreatment significant industrial users (SIUs) because EPA was pressuring them. Likewise, they believe EPA and the State see fines and enforcement actions as indicator of success; which the City does not.

Municipal Solid Waste Program

The City of Frederick Sanitation Division collects solid waste from all residences and some businesses in the City. Collection is provided curbside twice weekly. Trash collection equipment is City owned. The 21 staff who collect the trash are all City employees.

Once City trucks have collected the trash it is taken directly to Frederick County's landfill. Frederick City has neither owned nor operated a landfill in decades.

Frederick County Public Works collects certain recyclable goods from drop-off points in Frederick City. The City offers no recycling program. Frederick County sponsors a household hazardous waste collection annually. City trucks will accept yard waste; however, it is disposed in the landfill--not composted. The City will not accept furniture, paint and solvents, oil, lead-acid batteries, tires, construction supplies, or large auto parts.

Currently, the City collects and disposes of solid waste for $65-70 per ton. Frederick County, which offers curbside recycling in unincorporated areas of the County, spends $160-170 per ton to recycle.

The costs of leachate controls and liner mandates are raising tipping fees at the landfill. City officials estimate that increasing tipping fees at the landfill will increase solid waste expenses by an additional 33% or $400,000 per year.

Recently MDE mandated a 20% reduction in municipal solid waste from Frederick County. The City anticipates this will require the purchase of new equipment (e.g., recycling trucks) and the hiring of additional staff.

Department budgetary information was not provided by the City. A flat per residence assessment is included in the annual property tax bill. There is no separate bill for trash collection sent to City residents.

Municipal Solid Waste Information Sources

Sanitation Division staff have no interaction with EPA. All information on regulatory requirements is received from the County Public Works Department.

Local Government Perception of Municipal Solid Waste Problems

1. City officials assert that new federal mandates are causing increases in tipping fees of 33%.

2. City staff also point out that State source reduction mandates will require new capital and operational expenditures.

OTHER ENVIRONMENTAL PROGRAMS

Stormwater Program

A stormwater management permit may be required by EPA for the Frederick airport. City personnel have been unable to receive a definitive answer regarding whether or not the municipal airport is regulated under EPA's stormwater program. City officials estimate the cost to the City as between five and six thousand dollars to define the effluent coming from the airport. They believe that if costs are simply for gathering information, then EPA should pay.

Air Program

City officials noted what they consider to be inapplicable air standards. The City of Frederick is now located in the recently reorganized Washington-Baltimore, DC-MD-VA-WV Consolidated Metropolitan Statistical Area (CMSA). City officials believe that the reorganization of the CMSA has expanded the air non-attainment area. Purely by virtue of the fact that they are now in the reorganized CMSA, Frederick must comply with the requirements set out for air non-attainment areas. City officials in Frederick do not believe that the air quality conditions locally warrant being included in a non-attainment area and having to comply with restrictions on parking, auto emissions, and having to switch to alternative fuels for their city fleet.

PROGRAMMATIC SUCCESSES/INNOVATIONS

To replace a 50 year old plant the City constructed an innovative new wastewater treatment technology. The new facility uses an in-channel clarifier, which incorporates the clarifier into the oxidation ditch. There are fewer moving parts and lower energy costs. The City chose this technology because 100% funding for this technology was available from EPA and because the State was "pushing it." This technology doesn't meet a particular environmental need, but was available through a grant and is "a feather in the State's cap."

LOCAL GOVERNMENT PERCEPTION OF CROSS-CUTTING PROBLEMS

Intergovernmental issues. The City has environmental services and expertise; surrounding jurisdictions do not. These jurisdictions demand City services and aid, which raises equity and supply issues.

Increasing electric rates. Frederick's drinking and wastewater plants are highly electricity intensive. City officials estimate that Clean Air Act mandates and the accompanying electric rate hikes are responsible for $165,000 in additional drinking water and wastewater operating costs this fiscal year.

Lack of technical support. The City relies almost exclusively on trade journals and vendors/contractors for information. Frederick officials and staff believe there is no help from any level of government--only requirements and timetables.

Difficulty understanding regulations. Frederick Public Works Department staff contend that information doesn't get to local governments in a readable form.

Competing priorities. City officials assert that capital improvements for environmental programs are in direct competition with social programs, other services (e.g., recreational) , and public safety. The electorate doesn't vote based on environmental concerns but on these others services.

MESSAGES/RECOMMENDATIONS to EPA

1. What is needed is a coordinated approach to environmental management. Look at the big picture and stop focusing on narrow issues.

2. Local governments need expertise to determine how to do things. Money should be spent not on developing regulations but for providing expertise to help local governments arrive at environmental goals in the most economical way.

3. EPA should insure the clear flow of information between levels of government. EPA must keep the right people at the local level informed, and get them the information they need.

4. EPA is too concerned with science and not concerned enough with management--i.e., "how to do it." Local governments need assistance from EPA for implementation.

5. We are going to see a revolution by local governments. They will say, "EPA, if you want it done then do it yourself."

6. The Americans with Disabilities Act (ADA) and the Clean Air Act (CAA) might force local governments out of transit and airport services.

7. EPA needs to remember that all governments benefit by increasing the tax base and jobs. Many regulations are counter-productive to this.

Individual Case Description

ROCKFORD, ILLINOIS

GENERAL INFORMATION

Location/Population/Economic Issues

Rockford, Illinois is located in northern Illinois, 86 miles northwest of Chicago. It is the county seat and largest city in mostly rural Winnebago County. Rockford has a population of 139,426 (1990 census) and is the second largest municipality by population in the State. Rockford's population has been fairly stable over the past decade, decreasing only 0.2% since 1980.

Rockford is described by City officials as a "conservative, practical community." The average household income in Rockford is $28,232. The median value of a home is $56,300, the median rent is $291.

Rockford is an industrial city. There are 950 manufacturers in the City ranging in size from 5 to 4,500 employees. According to Commerce Department figures, the City's 1990 unemployment rate was 6.1%; State estimates in 1992 placed the City's unemployment rate at 8.3%.

Government Organization

The City has a Mayor-Council form of government. City services include: police, fire, emergency medical, library, transportation, solid waste removal and recycling, general public works, buildings, planning and zoning, and social services. All City departments report to the City Administrator, who in turn reports to the Mayor. The solid waste and drinking water services are located within the Public Works Department.

Wastewater treatment is not a City service, but is provided by a regional authority, the Rock River Water Reclamation District (RRWRD).

Budget

Illinois State law requires a balanced budget and limits the City's debt. The City's total operating budget for fiscal year 1990 included revenues of $77 million and expenditures of $79.9 million.

CONTEXT FOR ENVIRONMENTAL PROGRAMS

Rockford is located on the Rock River, which flows south and west into the Mississippi River near Davenport, Iowa. Despite the presence of the Rock River, Rockford is entirely dependent on groundwater for its supply of drinking water. The heavy industrial presence in Rockford has impacted the water quality beneath the City.

The lead State environmental agency in Illinois is the Illinois Environmental Protection Agency (IEPA) headquartered in Springfield. IEPA also maintains a regional office in Rockford. The staff in this office are primarily responsible for enforcement and inspections.

IEPA has been delegated authority to administer the NPDES permit program and has primacy for the Public Water Supply Supervision program (PWSS).

In Illinois, wastewater treatment is regulated by the Sanitary Act of 1917. The Act established independent wastewater treatment corporations each assigned to a specific geographic area and headed by an appointed board of trustees who oversee the operations of the local reclamation district. Moreover, each reclamation district also is incorporated as a municipal corporation, whose boundaries are not limited by existing municipalities or counties.

Drinking Water Program

Drinking water provision is a municipally owned and operated service located organizationally in the City's Public Works Department. There are 79 employees in the Water Division.

The City's drinking water service is the largest groundwater supplier in the State, operating 39 active wells which pump ten billion gallons per year. The service area covers 50 square miles of service area with 48,000 connections, and serves ninety per cent of the City's residents.

The City maintains 663 miles of water mains with 4,700 hydrants and over 13,000 valves. Water is stored in 9 major reservoirs, and is moved through the distribution system

by 62 high service pumps. Pumped water is disinfected through free chlorination. Fluoride is then added, as are blended phosphates. The pumping, treatment, storage, and distribution systems are completely computerized.

A State lab in Springfield provides contaminant testing to the city for a fee. The State lab sends empty sample bottles to Rockford and mandates a return date, usually with only a few days turn around time for the City to collect samples and return the bottles.

Between 1981 and 1986 the utility had to close five shallow wells which were contaminated by a nearby Superfund site in the City's industrial center. Two new deep wells were constructed to replace those lost to contamination. Two existing shallow wells were retrofitted with Granular Activated Carbon (GAC) filtration treatment at a cost of $600,000 each. A third well received a GAC filtration system through a US EPA Superfund installation.

The drinking water utility is operated as a separate enterprise fund. In fiscal year 1991, the Water Division had expenditures of $10 million and revenues of $12 million. Revenues are generated through hook-up charges and the sale of water. Water sales are meter based, and consumption charges range from 92 cents per hundred cubic feet of water to 22 cents per hundred cubic feet depending on the amount consumed. Customers are billed quarterly for water. The water bill is combined with the solid waste collection bill.

Rates have been raised seven percent per year from 1988 through 1992 and 3% in 1993 to replace wells which were lost to contamination and to strengthen the distribution system. Rockford's water rates are below the median in the State (the third lowest residential rate, the lowest commercial rate and the lowest industrial rate of thirteen cities in Illinois in 1991). Water Division officials explained that there are "[V]ery few complaints from citizens about the cost of water."

Rockford's Water Division has had almost no interaction with the US EPA. Water Division officials have never contacted US EPA. Water officials stated that, "US EPA is not easily accessed from Rockford." Water Division officials have been aware of public comment periods on Safe Drinking Water Act (SDWA) regulations, but have never offered comments. They would like to see US EPA-sponsored regional regulatory hearings and meetings within driving distance of Rockford (e.g., Chicago, Springfield, or Madison) so that they could provide input into the regulatory development process. Presently, regulatory hearings are never within driving distance of Rockford.

Drinking Water Information Sources

The Water Division's primary sources for learning of new regulatory actions are trade association journals such as that published by the American Waterworks Association (AWWA). They also subscribe to environmental updates from the Bureau of National

Affairs and Inside EPA. They would be interested in receiving a monthly update from US EPA on regulatory changes.

Upon learning of regulatory requirements, water staff frequently call the IEPA for interpretation. City staff have found that IEPA is usually unable to answer their questions. For example, when Rockford contacted IEPA for guidance on the lead and copper rule, IEPA expressed their opinion that City staff knew more about the rule than IEPA did. IEPA told Rockford to "do whatever they (Rockford) want."

Rockford received a $20,000 grant from IEPA to delineate wellhead protection (WHP) areas around their active wells. This exercise was completed, and City officials claim "(delineation) was...worthwhile." However, no changes, (e.g., down-zoning or other land-use ordinances) have been made in response to the WHP delineations as yet. City officials reported that the possibility of greater wellhead protection measures are always available to Rockford.

Local Government Perception of Drinking Water Problems

1. The water utility has had trouble understanding the requirements of the lead and copper rule, and knowing what to do. They found the rule to be very "complex" and were unable to obtain guidance from their State agency.

2. The public notification rule has caused problems for the utility, unnecessarily eroding its credibility with the public. Public notifications are often required for cases involving lab testing errors. By the time the error has been ascertained, the notification has already been published and the public has been unnecessarily alarmed. This is troublesome to the water managers and staff, who see themselves as "stewards of water" and take public health concerns seriously.

3. The costs of mandated monitoring and testing are preventing the City from addressing a key program priority, the presence of rust in the City's water supply. Water officials indicated that this is an aesthetic concern, as the rust does not violate any public health or water quality standards. However, rusty water is a significant problem for the utility's customers and generates the most complaints to the utility. Water officials would like to address the problem, but don't have the funds to implement desired iron and manganese controls.

4. Also related to the costs of monitoring and testing are unreasonable State requirements for water sampling and the return of bottles to the lab. For example, on March 8th, 1993 the City received a letter from the State requiring IOC testing by March 10th. The City was surprised, as IOC testing had not been required or conducted for over eight years. The cost of shipping the bottles overnight to meet the

State mandated return deadline was $1,100. The City feels that the State sees them as having "deep pockets."

5. The City feels that the MCLs are "extreme" and "unreasonable". The City's perception is that the MCLs are "cold numbers" and not risk-based. Specifically, they question why the MCL for TCE is 5 micrograms per liter when the Superfund remedial action level for TCE is 128 micrograms per liter.

6. While utility officials noted that the lead and copper testing had already been conducted in Rockford and was therefore a "done deal", they felt that the requirements for testing at the tap exceeded the proper jurisdiction of local governments.

7. Finally, the City has problems obtaining guidance and interpretations on water mandates. They find the Federal Register too difficult to read and do not receive adequate support from their State agency. IEPA claims to be unable to answer many questions as they are "waiting on Washington."

Wastewater Treatment Program

The Rock River Water Reclamation District (RRWRD) is an independent special service district providing centralized wastewater treatment for the City of Rockford and surrounding communities. The District extends over 37,000 acres and serves 200,000 people in 55,000 households, 46,000 of which are located in Rockford.

Although RRWRD is not owned nor operated by the City of Rockford, 97.8% of City residents are provided with public sewage (U.S. Census). The District employs 135 staff, and is headed by five trustees who are appointed from its service area to three-year staggered terms.

The Reclamation District uses an activated sludge process to treat an average of 30 million gallons of wastewater per day (66% of the plant's capacity). The plant's capacity is 45 million gallons per day (mgd), downgraded from previous permit limits of 65 mgd. Fifty percent of the wastewater treated by the facility comes from local industry, and fifty percent comes from residential customers.

The plant conducts primary and secondary treatment on the incoming wastewater and disinfects the effluent with chlorine. The District does not dechlorinate its effluent. Virtually all operational testing is conducted by District staff; only rarely does the District contract an outside laboratory to conduct testing (e.g., pesticides analysis). The State compares RRWRD's test results against its own samples.

Sludge is sent to a private landfill for disposal. A portion of the sludge is dehydrated at the landfill to reduce its volume. The dehydration process uses methane gas recovered from the landfill.

In response to more stringent NPDES permit requirements, the District is upgrading its secondary treatment unit to lower the plant's ammonia nitrogen discharge. The improvement is scheduled to go on line in November 1993 at a cost of $2.5 million. RRWRD also is installing new sewer lines to new housing developments in its service region.

The District's NPDES permit is valid until 1996. Although IEPA has NPDES primacy, US EPA Region 5 has final review authority over the District's permits.

In 1984, US EPA approved the Reclamation District's industrial pretreatment program, with 90 significant industrial users. The District is responsible for pretreatment enforcement. Plant operations managers believe that local industry has done a good job fulfilling its pretreatment responsibility.

RRWRD is operated as an enterprise fund. District expenditures for fiscal year 1992 - 1993 were $10.9 million, with revenues of $10.9 million. RRWRD generates revenues from residential and industrial customers, which defray the District's operation and maintenance expenses including replacement of sewage treatment equipment and some capital purchases. Ad valorem community taxes contribute revenue to repay bonded capital debt.

Residential customers are billed quarterly for sewage treatment, which is calculated according to the volume of drinking water consumed. An average residential customer is charged approximately $15 to $20 per quarter for sewage treatment.

In contrast to its residential billing practices, the District charges its industrial customers according to both the quantity and quality of wastewater effluent. Consequently, industrial customers pay significantly higher fees than residential customers. Specifically, the District charges industrial customers $400 for each toxic pollutant (e.g., cyanide, copper) released per quarter, per plant. The District also charges industrial users for in-house laboratory testing (e.g., BOD, solids, flow, pretreatment, organics). A Rockford potato chip manufacturer, for example, pays the District $175,000 every quarter for sewage treatment.

Plant managers believe that IEPA is reasonable, noting that IEPA will listen to the problems of District staff and work with them in contrast to US EPA. According to District officials, it has been difficult for RRWRD to get answers from US EPA regarding industrial standards. District officials also contend that US EPA Region 5 tends to act independently from EPA headquarters.

Wastewater Treatment Information Sources

The plant managers' primary sources of information are the Federal Register, American Metropolitan Sewerage Agencies, and the Illinois Association of Wastewater Authorities. They also orders technical bulletins from US EPA.

Local Government Perception of Wastewater Treatment Problems

1. Reclamation District officials contend that they get caught in the middle of disagreements between State and EPA regional regulators. RRWRD officials noted that IEPA and US EPA Region 5 interpret NPDES regulations for mixing zone standards differently, and that IEPA and US EPA Region 5 also are debating the interpretation of nitrogen water quality limits, especially as it effects the final effluent ammonia limits.

2. The District has had difficulty getting prompt responses from US EPA's Region 5 office and from EPA headquarters. For instance, RRWRD asked Region 5 to review the District's new pretreatment ordinance three years ago and only recently received a response.

3. District officials assert that US EPA's proposed Great Lakes Initiative regulations should not be applied to all of Illinois' rivers, streams, and direct dischargers. District officials contend that the Great Lakes Initiative establishes highly restrictive pollution discharge limits for the entire State, even though many of the affected POTWs discharge into waterbodies that flow into the Mississippi River system, not the Great Lakes system.

4. RRWRD staff pointed out that US EPA's categorical standards for centralized wastewater treatment facilities are inconsistent. (Note: centralized wastewater treatment facilities are private wastewater treatment facilities that treat concentrated industrial effluent for a fee, before it is discharged into the public sewage system.)

   District officials noted that because categorical pretreatment standards are calculated according to the industry discharging the pollutant, such standards will vary for the same pollutant across industries. Consequently, it is extremely difficult for POTWs to accurately calculate pretreatment standards for centralized wastewater treatment facilities that treat pollutants from different industries.

5. The District asserts that US EPA Region 5 guidance occasionally conflicts with US EPA headquarters guidance. According to RRWRD staff, EPA Region 5 required the District to follow a specific technical standard which Headquarters later revoked.

6. Officials argue that IEPA needs to accept the delegation of the pretreatment and 503 sludge programs from US EPA. RRWRD staff assert that it is more difficult for Region 5 to provide appropriate oversight than for the State since the Region is less familiar with their facility and less flexible than the IEPA. District officials explained that IEPA has not accepted delegation for this program because of State funding shortfalls.

7. District staff believe that US EPA is issuing regulations at an increased pace and that NPDES permits are becoming more stringent and less flexible. The frequency of wastewater testing, for instance, is increasing. Consequently, the District must hire more personnel and invest in more equipment to meet increasing federal requirements.

8. District managers contend that US EPA frequently asks RRWRD to remediate RCRA groundwater contamination that was not caused by the District. Managers also pointed out that when the District remediates such contamination, the District does not receive any remuneration and must bear the costs itself.

9. Reclamation District personnel noted that US EPA testing protocols sometimes are incompatible. For example, organic chemicals analytical methods 524, 624, 8240, and the US EPA Contract Laboratory Program (CLP) Statement of Work (SOW) all basically analyze for the same parameters - VOCs, yet they have different hold times, different instrument tuning frequencies, calibration requirements, levels of criteria, surrogates, and QC requirements.

Municipal Solid Waste Program

The City offers weekly, same-day collection service for refuse, recycled goods, and yard waste. Collection is provided by a private hauler under contract to the City. Bulk waste pick-up is conducted by appointment, although CAA restrictions on the venting of freon have terminated the disposal of white goods in the landfill; these items are set aside at the landfill for salvage and freon recovery operations. The City also sponsors a non-budgeted waste oil program which operates through volunteer efforts.

The Solid Waste Planning Act of Illinois sets recycling targets for each county in the State by size and population density; Winnebago County is required to reach a 15% diversion rate by 1994. So far, the county is reaching a 10-11%, while Rockford is diverting approximately 34% for residential refuse.

The City collects glass (clear, green and brown), newspaper (as well as junk mail, magazines, and telephone books), aluminum, tin, bi-metal, aerosol cans, christmas trees, and plastic (#1 and #2) for recycling using a compartmentalized recycling truck. The present sorting facility is operated by a different private contractor than provides collection services,

and has the ability to sort and bale materials. A State grant has been obtained to increase the number of sorting lines so that additional types of recycled material (home and office paper, junk mail) can be processed.

Rockford also initiated a composting program in response to concerns about landfill capacity, rising landfill costs, and an anticipated State ban on land disposal of yard wastes. The City has a separate, municipally owned-contractor operated, 155 acre composting site.

This is the fourth season for composting, and City residents now treat yard waste collection and composting as a matter of fact. 14,000 tons of yard waste were collected last year, diverting about 20-22% of the City's waste stream.

The City sells the finished compost to City residents and commercially to greenhouses for $20 per ton, or a penny per pound. Some money from a special trust fund for refuse issues, the Rockford Refuse Research Fund, was used for the composting program for public education and to encourage backyard composting.

The City owned and operated a landfill from the 1940's until 1972, when it was closed in response to State passage of an environmental protection statute. After closure, the City sold a portion of the site to private concerns.

Currently, City refuse is hauled to a nearby privately-owned and operated landfill which was opened in 1972 after the City closed its municipally-owned landfill. The site has 5 to 7 years of capacity left. The landfill has added another cell to the site, with a new life span of twenty-five years. The City once considered siting its own landfill, but abandoned the plans when the landfill agreed to pursue expansion plans.

Municipal solid waste service rates have doubled in the past five years. City residents pay $108 per year in user fees and approximately $23.00 in property tax for solid waste services. This breaks down to about $11 per month: $3 of which goes for composting; $2 goes towards recycling; about $6 for refuse disposal. Officials noted that composting has been the biggest contributor to this rate increase, as composting costs go up $5 per ton each year.

The City pays tipping fees of $30 per ton, up from $13 per ton in 1989. The landfill's "at-the-gate" fee is $53, so the City feels it is getting a good rate. Town politics won't permit long-term contracts for refuse disposal; the City keeps renegotiating three to five year contracts, even though greater cost savings could potentially be obtained through a longer term contract.

Recycling costs are significantly greater than landfill disposal costs; City officials contend that this will be a big problem if mandates require particular recycling levels without any market development. Recycling costs exceed $100 per ton even with the avoided costs

factored in; composting runs about $135 per ton including hauling, tipping fees and development costs; landfill disposal costs about $71.34 per ton including hauling.

The City loses money recycling glass, breaks even on steel, paper, magazines, and plastic, and makes money only on aluminum. The earned income amounts to $1200 to $2000 a month, compared to expenses of $1.93 per each of 48,000 households.

The City's municipal solid waste service is run as an enterprise fund. Expenditures for the current year were $6,274,191 with revenues of $6,327,660. Last year's expenditures were $5,816,219 with revenues of $5,838,732. User fees and property taxes are the main sources of revenues, and any budget shortfalls are covered through rate increases.

Municipal Solid Waste Information Sources

Officials managing the solid waste service read Inside EPA and the Bureau of National Affairs Bulletins, but feel the material is not always accurate. Additionally, different sources of information provide varying interpretation of requirements and mandates.

At present, RCRA is not as important to City services as is State guidance on implementation questions. However, the City anticipates conflicts between State and federal solid waste regulations once the EPA starts issuing RCRA D regulations. The City does find a conflict between Clean Air Act regulations and State laws regarding the disposal of white goods.

Local Government Perception of Municipal Solid Waste Problems

1. Recycling will continue to be costly for municipalities until markets are developed.

2. Solid waste officials feel that its hard to know what is really required of them. Information sources are not always accurate, and different sources provide varying interpretations of requirements and mandates.

OTHER ENVIRONMENTAL PROGRAMS

Underground Storage Tank Program

Rockford purchased a old industrial site for one dollar from an agricultural equipment manufacturer in the early 1970's. This property is now known as the "City Yards". The property contained seventeen underground storage tanks which vary in age, some dating back to the turn of the century. At the time of taking title to the property, the City gave little

thought to the presence underground storage tanks (UST) and the future liability that they might incur for their removal and remediation of the site.

It has been the responsibility of one individual in the City government, aptly referred to as the "Mayor of City Yards", to "get up to speed" on the UST requirements and educate the elected officials on the issues before the City. The poor political salability of underground storage tank issues has not always worked in his favor.

In 1990, the City began the process of removing the tanks and the contents of the tanks. During that year, the City spent $470,000 on these activities. City officials believe they have removed most of the environmental threat posed by the tanks. They are now in the remedial investigation phase of the project which has involved installation of groundwater monitoring wells and plans to take quarterly core samples. They have not yet started any of the remediation work at the site.

Local Government Perception of Underground Storage Tank Program Problems

1. The City undertook the tank removal process with the understanding that they would be reimbursed by the State for the costs incurred. However, the State UST Trust Fund is "broke" and the State has therefore been slow to reimburse local governments for the work that they have done; Rockford has yet to be reimbursed for their costs.

2. City officials worked hard to cultivate relationships with State regulators and keep IEPA informed about the City's activities, especially at the IEPA's Rockford regional office. However, the IEPA staff in Rockford did not keep their counterparts in Springfield informed. In dealing with the Springfield office, Rockford ran into fresh problems that made their groundwork with the regional office official obsolete. For example, this occurred when the City used a leak detection method that the State office in Springfield did not approve.

   The City also took care to do all the necessary paperwork to document their activities and submit the proper papers to Springfield. However, City officials had to resubmit forms because they had not been given the proper forms to begin with or had not been made aware of the precise information required by the Springfield IEPA office.

3. The City has also encountered difficulties with State policies permitting reimbursement for the removal of registered tanks only. After the City had received a permit to pull the tanks, had completed the removal work, and had submitted the paperwork for reimbursement, they were informed by the State that five of the tanks were "unregisterable" and technically could not be issued a removal permit until after they had been registered. Reimbursement for the costs of their removal was therefore out of the question.

4. City officials complained that delays in State reimbursement to Rockford has meant that they have had to delay environmental clean-up. The real work of protecting the environment has been subject to frustrating delays.

5. City officials complain that poor information and guidance from the State has proven costly to the City. At the suggestion of State officials, Rockford treated the removal of all 17 tanks as one leak occurrence, only to discover, after the fact, that the State has a reimbursement cap of $1,000,000 per occurrence. All of their activities may therefore be limited to a $1,000,000 cap, and the City estimates that total costs for the entire removal and clean-up could be on the order of $20,000,000.

6. The final irony of the situation from Rockford's point of view has been a recent law enacted in Springfield that states for tanks that have been in place and inactive since 1974 they should be left alone. They don't need to be pulled from the ground. Almost all of the tanks in Rockford's City Yards were in this category.

Stormwater Program

Rockford is the second-largest City in Illinois and the only city over 100,000 that has a separate storm sewer system. It is therefore the only city in the State having to comply with Phase I of the stormwater regulations.

To date, the City has prepared the two part stormwater permit application. The first part of the application was due May, 1992 and the second part was due May 1993. The application consists of a plan for the initial collection of stormwater samples, the installation of some best management practices (BMPs) such as erosion control and construction of a regional detention facility, and an explanation of the legal authority available to Rockford for enforcing implementation of BMPs.

Local Government Perception of Stormwater Program Problems

1. Rockford is the only City in Illinois that has to comply with this phase of the program. Officials feel that they are writing the municipal program for the State of Illinois without getting assistance, support or compensation from the State for doing so.

2. Officials involved in developing the stormwater program noted that it was difficult to get timely, accurate information about stormwater regulations and requirements from either EPA and State sources.

3. Rockford is concerned about the impact of the stormwater regulations on economic development in Rockford. Complying with the regulations will increase the cost of

doing business in Rockford, putting the surrounding municipalities at a comparative advantage.

4. City officials feel very vulnerable to citizen suits from environmental groups if the City should miss program deadlines. Officials noted that the vulnerability is similar for local governments with regard to compliance with the Americans with Disabilities Act (ADA).

5. The stormwater program is difficult to sell politically to elected officials and the public. It is not obvious what the problem is. The benefits of the solutions--BMPs put into practice--are also not obvious to the public and/or elected officials.

6. City officials feel that the requirements call for an undue amount of data collection; if the federal government is interested in data collection, local officials feel it should pay for it.

7. The requirements for the Stormwater program came upon local officials very quickly. They have not had sufficient time to educate the public about the problem and gain the necessary political support or to develop the expertise in-house to handle the work.

Superfund Program

Rockford is an old manufacturing city with a significant portion either a current or potential Superfund site. Two square miles of the City is listed on the National Priorities List (NPL) as the Southeast Rockford Ground Water Contamination site and comprises 83 city blocks. Another eight miles are under investigation and may be added to the site, bringing the total to 10 square miles. According to City officials, the negative impact on economic development and growth in the City is significant.

The City of Rockford is a Potentially Responsible Party (PRP) at "Pagel's Pit", a 100 acre Superfund site located outside City limits in a predominately rural unincorporated area. Currently, Pagel's Pit houses an active 47 acre, private solid waste landfill that Rockford uses for its municipal solid waste. EPA designated Rockford as a PRP because the City has disposed its municipal waste at the landfill on Pagel's Pit for decades. The other PRPs for this site include the landfill owners, Winnebago Reclamation Service, Inc. (WRS), the Rock River Water Reclamation District (RRWRD) which disposes of its sludge in the landfill, and a few "de minimis" PRPs.

The landfill was listed on the NPL list in 1986, and has continued to operate all during the Remedial Investigation and Feasibility Study (RIFS) and remediation phases of the Superfund process. The WRS will cover normal costs of closing the landfill; oversight and "excessive" costs will be split between the three big players. This City's share of these

expenses will come out of a "trust fund", the Rockford Refuse Research Fund. The trust paid for the City's share of RIFS costs, insulating the public from fee escalation.

The RIFS was conducted by the private PRP, with US EPA oversight and State involvement. The record of decision (ROD) was issued June 1991, and a consent decree for remediation was entered into on February 10, 1993 providing for proper closure of the landfill at the time it reaches capacity, unless earlier closure is desired by the operator. The Consent Decree also provides for the installation of down-gradient wells to contain contaminated groundwater at the site.

Rockford officials also are concerned with the Acme Solvents Superfund site, which is located approximately 200 yards to the east of Pagel's Pit. Acme Solvents is an old industrial solvents facility active up to the 1960's where liquids and wastes of all kinds were poured into the soil. Acme has separate PRPs (the City is not involved), and is approximately 6 months ahead of the cleanup of Pagel's Pit. Because Pagel's Pit is downgradient of Acme Solvents, City officials are concerned that groundwater may flow from Acme into the Pagel's Pit site.

Local Government Perception of Superfund Program Problems

1. City officials are concerned about the impacts of the Superfund program on business and industry; potential Superfund liability is a significant damper to economic development. The ongoing investigation and potential designation of the ~~downtown~~ Southeast Rockford Ground Water Contamination area under Superfund also causes great concern among community leaders; if no one is willing to buy contaminated sites, Rockford officials believe that the City will become a ghost town.

2. Banks are also reluctant to lend within the "Superfund-tainted" areas; some city residents have had a hard time getting mortgages in one area where contamination of the drinking water supply was found (see drinking water program description). The City spent time with the banks trying to alleviate this problem, and there has been some improvement.

3. City officials feel that the Superfund program spends too much money on endless litigation and search for culpability. Rockford officials contend that $5.3 million has been spent trying to track down the guilty parties in the Southeast Rockford Ground Water Contamination site; there are 600 PRPs, many of whom are out of business.

   Instead, the program should focus more on solutions; money would be better spent on remediation, monitoring wells, etc. The City convinced the EPA to permit restart of a contaminated City well with a carbon filter upgrade. Now people are getting water supply, plus the groundwater is being pumped and treated, an all-around win-win situation.

4. City officials complain that the EPA philosophy seems to be unreasonable pursuit of zero risk. The Pagel's Pit Superfund site is going to have to pump and treat contaminated groundwater to meet guidelines in excess of the drinking water standards; officials strongly questioned the value and logic.

5. The City feels that the CERCLA/SF process is too inflexible. Rockford officials contend that EPA manages Superfund sites the same, regardless of whether the site is an active or inactive site, or if the site is in an urban or rural area.

6. City officials also feel that costs are inflated by unnecessary federal requirements; a study of Pagel's Pit Southeast Corner Operable Unit could have been done for $50,000, significantly less than the actual cost, had it not been for federal requirements.

7. Superfund costs divert funds away from other City needs and goals. City officials assert that if Rockford didn't have to pay Superfund costs, the City would use the funds to run a household hazardous waste collection program.

   City officials noted that Superfund inflates the City's operation and maintenance costs. The City paid almost $375,000 towards the costs of the RIFS process, and predicts it will have expenditures of another $800,000 over the next 6 years.

   The City's tipping fees have increased due to Superfund costs. To date, Superfund requirements have cost the landfill owner $5 million dollars, which are of course passed on to customers.

8. Rockford officials question why the Superfund remedial action level for trichloroethylene (TCE) was 5 micrograms per liter and the TCE drinking water MCL is 128 micrograms per liter.

PROGRAMMATIC SUCCESSES/INNOVATIONS

The Rock River Wastewater Reclamation District's Industrial Pretreatment program was established in 1972, and became the first program in Illinois and one of the first in the nation to be approved by US EPA in 1984. US EPA also provided the District with "Removal Credits" which relax certain discharge standards in light of the plant's treatment efficiency.

Also in 1984, the District began dehydrating sludge, reducing its volume by 70% and water content by 90%. The sludge is dried by a contractor who uses methane gas generated by the decomposition of sludge and other waste at the contractor's landfill. This technique

may permit the District to directly land-apply dehydrated sludge instead of disposing it in-ground, reducing the District's sludge disposal costs.

The City of Rockford has developed a "trust fund", the Rockford Refuse Research Fund, as a unique funding mechanism for a variety of solid waste-related issues and projects. This money is generated by a $3 per ton rebate paid to the City by the landfill operator and the City's private hauler. This fund generates about $138,000 per year, and this money is used for recycling education, waste oil collection program, and for costs arising from the City's involvement as a PRP in a Superfund site at the operating landfill.

The City is also very proud of its composting operation and for the great success of its recycling program.

LOCAL GOVERNMENT PERCEPTION OF CROSS-CUTTING PROBLEMS

The following section presents some issues, concerns or problems which were raised by more than one program.

Officials complained that US EPA too often follows a one-size fits all approach to writing and issuing regulations. Irrelevant and frequently costly requirements are imposed on local governments, while real needs are unmet due to insufficient flexibility. These concerns were most vocally raised in discussion about the wastewater treatment and Superfund programs.

Virtually all of the programs and services mentioned instances of poor coordination and cooperation within and between various State and federal agencies. Poor intergovernmental relations created numerous and varied implementation problems for the local service providers.

Virtually all programs and services also presented numerous examples in which their need to address problems or take action was stymied by inefficient and ineffective processes, or "red tape", within various agencies. Managers and officials were frequently frustrated by the diversion of time, effort and resources into processes which did not produce results.

Virtually all program and service managers complained of the lack of clear, timely information about regulations and requirements. Many also complained of the lack of adequate technical assistance and guidance.

Managers of several programs and services, most notably the drinking water and solid waste programs, indicated that mandate-driven expenditures preclude them from addressing other important program or service goals and needs.

Officials indicated their belief that various drinking water, wastewater and stormwater mandates inappropriately require local governments to go beyond their proper jurisdiction to address problems that are generated by other actors and parties.

MESSAGES/RECOMMENDATIONS to EPA

1. City officials conveyed a number of messages to the EPA regarding opportunities for changing or improving the regulatory climate in which local governments operate.

2. Cooperation is the key to problem solving. Rockford would like to be able to come up with unique, effective solutions.

3. Agencies need to consider municipal funding capabilities and cost effectiveness. The City found that there was **no regard** for municipal funding considerations during consent decree negotiations. Two superfund sites across the street from each other were treated as two different sites with two sets of lawyers, investigations, etc.. Costs were unnecessarily duplicated. There are **no** deep municipal pockets. The City is concerned about being a declining manufacturing economy; there is need for innovative solution to problems.

4. Local officials feel that prioritization is the key; what needs to be done in what order and to what degree of clean? Local governments can't do it all to zero risk.

5. State capacity issues are important. There are money crunches in the State agencies which results in forced attrition; the best staff leave because they're overworked and underpaid. This causes problems for local officials who to turn to the State assistance.

6. The States and federal governments should respect the technical ability and integrity of local governments and not do things like "fire off" notices of violation.

7. There must be a reasonable risk-based basis for the MCL standards, not just cold numbers.

8. EPA should slow down and re-organize the steps of the stormwater program.

9. Cities need more time for program development and implementation. Implementing regulations takes time; the agency need to "lighten up". "There is only so much we can do out here."

10. Service managers could use understandable "How To" books from EPA.

11. Local officials would like agencies to schedule regional regulatory hearings and meetings within driving distance. They could attend these, but are not able to participate in forums which require lengthy travel.

Individual Case Description

RIVERSIDE, CALIFORNIA

GENERAL INFORMATION

Location/Population/Economic Issues

The City of Riverside is located in Southern California approximately 50 miles southeast of Los Angeles on the banks of the Santa Ana River. It is the largest city in Riverside County, which is the State's fourth largest county by area, encompassing approximately 7,200 square miles. Riverside County also has the highest rate of population growth in Southern California, one of the top growth regions in the country.

Over the past decade, Riverside has experienced the high growth rate characteristic of Southern California. The City's population grew 32.5% over the course of ten years from 171,000 in 1980 (Census) to 226,000 in 1990 (Census). This expansion in population size, plus a growth in the city's elderly and minority populations, have required the City to expand and adjust its mix of services. Riverside's per capita income is $14,235 and the average household income is $34,801.

While many of the City's residents commute to Los Angeles and Orange County, it also has its own economic and industrial base. Warehousing is a common commercial activity in the area due to the proximity to freeways, and Riverside is home to several manufacturing and warehousing businesses. Light and high-tech industry and education are also major employers in Riverside.

Despite some success in attracting new business and employers, Riverside is suffering from the current economic downturn. Down-sizing in the military and defense sectors has removed a significant number of jobs from the area. The City's unemployment rate is now close to the State average at approximately 12%.

Government Organization

The community has a Council-Manager form of government with seven members of council and a separately elected mayor. The City manager is hired by the City Council, and administers City affairs with the aid of two assistant City managers.

Riverside has 2,200 City employees, and provides a full range of municipal services. The City also owns a museum, convention center, and a general aviation airport. While the public transportation system is regional, the City does operate access services for senior citizens and disabled residents (Dial-a-Ride).

The City owns an electric utility, begun in the founding days of the City. The utility powers the entire City and is an important revenue source for the City, raising about $15 million dollars annually for the general fund. One City official noted that Riverside is fortunate to have an electric utility because it helps fund many important general fund services such as police and fire protection. The City is also part owner of the Palo Verde nuclear facility as members of an energy consortium.

The electric, water, sewer and refuse utilities, plus the airport and transportation operations are run as enterprise funds. Rate payers are billed for waste water treatment, drinking water, municipal solid waste, and streetlights through a consolidated utility bill.

Budget

Proposition 13 has severely restricted the ability of localities throughout California to raise revenues through property taxes. Consequently, revenue generation has shifted to alternative mechanisms such as fees for all specific services and sales tax.

The City reported that, like many municipalities in the State, most of its general fund revenue is generated via sales tax. This has lead to fierce competition among localities for businesses selling high ticket items.

The City's annual report notes that revenue growth has not kept pace with population growth or inflation, due in large part to competition for the purchase of goods and services from surrounding communities, increased unfunded State requirements, and the national economic slowdown.

CONTEXT FOR ENVIRONMENTAL PROGRAMS

Riverside is situated in an arid climate on the banks of the Santa Ana River, a naturally ephemeral stream with continuous flow due to the discharge from community waste water treatment plants. This characteristic of the Santa Ana River has important consequences for the waste water program. Also noteworthy is the significant amount of agricultural activity which still occurs in the area surrounding Riverside despite a pattern of high residential growth over the past ten years.

The City is also located in a bowl formed by mountain ranges to the east and west. This geographic feature contributes to the collection and concentration of air pollutants, and has significant implications for the transportation of solid waste.

Environmental regulation in California is characterized by regionalization of relevant State agencies with multiple layers of regulatory responsibility. NPDES program authority has been delegated to the State Water Resources Board, a governor-appointed entity, which must work with and through nine independent Regional Water Control Boards.

The State Department of Health Services (DHS) has primacy for the drinking water program. The DHS has several regional offices, but interacts at the local level primarily through county health departments. While the DHS is responsible for regulation of drinking water quality, the Regional and State Water Resources Boards are also involved through the regulation of water quantity and the distribution of water rights between water utilities.

Air quality management for mobile sources statewide is the purview of the State Air Resources Board. Riverside is part of a four-county district known as the South Coast Air Quality Management District (SCAQMD). The SCAQMD is responsible for preparing an air quality management plan for the district, and for working with local governments to ensure implementation of the plan. SCAQMD also promulgates and enforces air pollution reduction regulations.

The role of the State's environmental agency, California EPA (CalEPA), and its relationship to the agencies mentioned above is still evolving and is unclear to many service managers and local officials. While the Department of Health Services is a direct arm of CalEPA, the State Water Control Board and the Air Resources Board are independent agencies which must none-the-less report to CalEPA.

Drinking Water Program

Drinking water is provided by the City's Public Utilities Department, which is responsible for wells, treatment facilities, and the transmission and distribution system. Approximately 99% of City residents are served by public water supply.

The City of Riverside's primary source of drinking water is ground water from the Bunker Hill Basin northwest of the City in the valley next to the San Bernardino mountains in San Bernardino County. The City supplements its ground water supply with purchase of treated water from Northern California and the Colorado River through the Western Municipal Water District. In most years, imported water accounts for less than 10% of the City's water consumption.

Riverside currently provides treatment services and facilities including water chlorination, water quality testing, hazardous materials coordination, public information programs, and backflow prevention programs.

In-basin water is treated only with chlorine, which takes place before the water reaches Riverside. In addition, water from different wells is combined or "blended" to dilute contaminants to acceptable levels.

Approximately 150 to 160 staff of the Public Utilities Department's 400 employees work in the drinking water service. The City expects it will have to hire new staff in order to meet monitoring and other requirements; last year, implementation of the lead (Pb) regulation alone required an additional 1/2 time position.

The drinking water service is run as a separate enterprise fund. The City meters water usage, so customers are billed for actual consumption. In order to encourage conservation, the utility has converted its rate structure from declining block rates to a flat rate for industry and an "inverted" rate for non-industrial users i.e., the lowest rate is for indoor use, a higher rate for outdoor use, and a still higher rate for other uses.

The utility has been experiencing recent cost increases and revenue pressures. Fiscal year 1992 expenditures were $18.3 million, with revenues of $16.9 million. Fiscal year 1993 expenditures were estimated as $20.5 million, with revenues of $17.3 million. Retained earnings and rate increases are used to cover revenue shortfalls. Expenditures for treatment alone jumped from $295,000 in fiscal year 1992 to $425,000 in fiscal year 1993. Budget transfers are used to cover any shortfalls.

The City's groundwater supply in the Bunker Hill Basin is threatened by a trichloroethylene (TCE) plume from near-by Norton Air Force Base. Present remediation efforts (pump and treat) will not prevent the plume from reaching the City's wells. Norton Air Force Base has offered to pump and treat the municipal water supply once the plume has reached the well-field, but Riverside would prefer a proactive effort aimed at preventing contamination from occurring.

The City believes that it will have to start treating in-basin water (beyond the current chlorination) to continue its use, with the potential for incurring enormous costs. For example, the utility is facing capital costs of $1.5 to 2.5 million next year for treatment of a toxic constituent at just one well. The City now has 40 wells, so costs would be extremely high if all 40 wells required treatment.

The utility also expects continued escalation of treatment costs in response to additional and more stringent water quality requirements. The service speculated that these various factors create the potential for as great as a 40-50% increase in rates.

Drinking Water Information Sources

Riverside drinking water officials in Riverside indicated that they do not have much direct interaction with US EPA. They noted that local governments in California are accustomed to working through State or regional entities; the utility sends information for various requirements such as lead (Pb) and total coliform to the State which merely passes the information on to US EPA.

Utility officials suggested that an early warning system for pending regulations and guidance is needed; towards this end, US EPA should distribute information early to groups such as the American Water Works Association (AWWA). City officials feel that negotiated regulations, or "neg-regs", promote greater awareness e.g., the neg-reg on disinfection byproducts served to inform the City about pending activity on this requirement.

City staff indicate that there is no clear or direct governmental source of information about mandates and requirements. They most frequently receive such information from professional or trade organizations such as the AWWA, and from meetings and conferences.

Utility staff do not find the EPA to be a useful source of technical information or assistance. Staff has placed calls to the drinking water hotline in Washington, but commented that they frequently don't know enough about the requirements to ask the right questions and obtain the necessary information.

Service managers and staff felt that US EPA needs to solicit City involvement early in the regulatory development process. They noted that small operators in particular do not have the opportunity to comment and be involved; many small operators still don't know about the drinking water monitoring requirements.

Local Government Perception of Drinking Water Problems

1. Drinking water officials raised a number of concerns about the US EPA's proposed radon radionuclide rule. The City questioned the agency's assessment of the public health risk posed by radon exposure, arguing that other industrialized nations such as Great Britain and Canada have seen fit to set much less stringent standards without concerns about endangering public health.

   Utility officials also question the value of requiring drinking water remediation in Riverside as they do not believe the area has an indoor air radon problem. They contend that by trying to regulate radon in drinking water, EPA is trying to fix the problem "through the back door". They assert that if Riverside were to treat its drinking water as required by the proposed rule, radon levels would be reduced by

only .04 picocuries, achieving minimal public health protection at an extremely high cost to the utility.

The City also expressed frustration that when they doubt the agency's risk assessments and science, they cannot afford to conduct their own studies, cannot argue science, and are therefore forced to argue against requirements on the basis of economics alone. City officials feel that this creates an appearance that they are more concerned about dollars than public health, a distasteful position for officials who see themselves as stewards responsible for protecting public health from genuine threats.

They also challenged the appropriateness of EPA-designated treatment technologies to conditions in Riverside. US EPA specifies air strippers as the "best available technology", but this treatment method would result in air quality violations and is not allowed by the South Coast Air Quality Management District (SCAQMD). In effect, the City is left without viable treatment options.

Drinking water staff felt that US EPA's estimates of costs for radon removal were very much understated, and wondered if US EPA uses cost/benefit considerations in its rules. The City anticipates radon remediation costs could run between $50 million and $130 million, requiring a 35% increase in water rates. The service manager sees little value in spending the money.

Staff argued that even if treatment is necessary, there are more cost-effective alternatives to treating water supplies for radon than the agency-specified "best available technology" (BAT). They asserted that even installation of exhaust fans in all the houses would be cheaper and just as effective.

The City staff realize that US EPA has a Congressional mandate to address radon in water supplies, and that US EPA was further forced to act by law suits and is pressured by special interest groups to pursue zero risk. City staff would like Safe Drinking Water Act Reauthorization to establish more reasonable goals and approaches.

2. Drinking water officials registered a number of complaints about the pace of change and increase in requirements. Not only are maximum contaminant levels (MCLs) for existing constituents increasing in stringency, but the agency continues to promulgate new standards for additional pollutants. This leads to uncertainty and difficulty in planning; service managers are never sure what level of treatment to use as the basis for facility design.

   Utility officials noted that new monitoring techniques allow contaminant testing at ever lower levels, e.g., from parts per million to parts per trillion. They called for regulations to set reasonable levels; zero contaminant levels are probably not justified.

They also noted the need for reasonable implementation time frames, or service costs rise too rapidly.

3. Officials expressed their belief that US EPA gets its marching orders from Congress, and then regulates according to a worst case scenario. Instead, the regulatory process needs to be modified to allow for more regional and local flexibility in the implementation of regulations. Early on, US EPA should identify various factors (e.g., geography, region of the country, community size, etc.) that could justify variations in pollution control approaches. Regulatory requirements should then vary according to these factors.

4. Service managers raised a concern about the inequitable distribution of responsibility and cost for addressing some environmental problems. Regulators frequently target municipalities when there's no single identifiable party for a source of pollution, as with Non-Point Source (NPS) pollution from agricultural fields. However, this is not an equitable approach; the rate payers did not create the water pollution problem, so they should not be expected to fix the problem.

   Drinking water officials suggested that perhaps NPS contamination should be addressed following the Superfund concept, i.e., identify the responsible parties and make them pay.

5. Norton Air Force Base in San Bernardino is a designated Superfund site, identified 6 to 8 years ago. The site's trichloroethylene (TCE) contamination is upstream of Riverside's drinking water wells in the Bunker Hill Basin. The City has found all steps in the Superfund remediation process to be slow and short on producing results.

   They charged that the air force base was slow to acknowledge the plume's threat to Riverside's wells, and that Norton continues to "drag its feet" despite the fact that current remediation steps are not sufficient to prevent contamination of the water supply.

   Riverside is concerned that the Base will close before clean-up is completed. The City of San Bernardino will want new tenants for the site, and Riverside fears that the two cities will be pitted against each other with San Bernardino fighting for redevelopment of the site and Riverside calling for a halt to such plans until the safety of its water supply has been assured.

   The City had some suggestions for the agency about the Superfund program. It suggested that the US Public Health Service's Agency for Toxic Substance and Disease Registry could provide a useful, EPCRA-like tool for increasing public awareness of the impact of contaminants. (The Emergency Preparedness and Community Right to Know Act, or EPCRA, requires reporting of and public access to information about the release of various toxic substances.)

The City also suggested that US EPA pursue legislation to give US EPA more leverage over federal facilities. The City believes that US EPA should be able to treat federal facilities as if they were industry facilities when it comes to contamination issues.

6. The City indicated that the required lead and copper sampling has been completed, with results well below the action level. However, the City was not pleased about having to conduct tests at the tap in private residences; in their eyes, government responsibility should stop at the water meter and not extend all the way to the household faucet. The federal requirement for in-home monitoring by the local governments was not terribly difficult (although it was somewhat difficult to get households to participate), but it was not a good precedent. The requirement reflects a different philosophical approach than the City is willing to support.

7. Riverside drinking water officials believe that the local government perspective is shut out of the rule-making process. They expressed their impression that once something is in the Federal Register, it's a "done deal"; there's no further opportunity for dialogue.

   Officials believe that the "Neg-reg" Process (negotiated rule-making) offers a vehicle for local government input into the regulatory process. They think US EPA should couple neg-reg and regional approaches, and that US EPA Region 9 should play a larger role in coordinating this input.

   City officials also feel shut out of the legislative process. They recognize the importance of prescriptive legislation in creating many of the implementation difficulties they face and are interested in the potential for addressing many of these problems through the reauthorization process. However, they note that it is difficult for local governments to get involved in the national legislative debate.

8. Utility officials complained that information from the US EPA is not useful. For example, the Federal Register is written in legal language that is extremely difficult to understand. They noted that regulations change and must constantly be re-read, a time consuming process. US EPA guidance also often comes late., e.g., lead testing protocols arrived from the agency two months after the program was to have been in place at the locality.

   Drinking water staff noted that they sometimes get conflicting information from US EPA. The City asked both US EPA HQ and Region 9 for advice on the lead regulations, and got different answers from each of the two.

9. Numerous agencies are involved in water supply regulation in California, causing confusion for City officials, staff and residents regarding who is requiring them to do what.

City staff are not certain of the State's organizational structure for drinking water programs, in part because of recent State reorganizations. The situation is further complicated by having regional water districts. Sometimes neighboring jurisdictions report to different water districts. For example, Riverside reports to the San Diego office, while neighboring San Bernardino reports to the San Bernardino office even though the two localities draw their water from the same area.

Most local governments in California expect the State to tell them what to do. They didn't realize they had to respond to US EPA requirements even before the State regulations were in place.

Wastewater Treatment Program

The City Public Works Department provides the municipal wastewater treatment service, which serves approximately 80,000 residential users as well as commercial and industrial users. It handles all of the City's sewage waste, which accounts for approximately 80% of the plant's intake, and services an additional 20,000 to 30,000 residents from neighboring communities.

The City's plant is located within the City limits. It discharges to the Santa Ana River, an ephemeral stream with continual flow due only to wastewater treatment plant discharges. Water from the Santa Ana River is eventually dammed into a reservoir where it filters through the ground and provides drinking water for Orange County.

The plant's current discharge permit was issued in May 1992 and expires in May 1995. It took 1 year for the service to negotiate the permit with the State, as requirements kept changing. The 1992 permit was more stringent than the plant's previous permit, containing lower discharge levels for metals and nitrogen. The plant is presently meeting the permit's requirements.

The plant has been expanding its capacity over the past ten years in response to changing requirements. Roughly $70 million dollars have been spent over the last 5 years on capital improvements. These funds were raised through revenue bonds and fees.

The service used to rely heavily on consultants but found that it is much more cost-effective to build in-house expertise. The waste water treatment service staff size has increased 20% over the last 3 to 4 years to its current level of 105. The service is also increasing staff training in order to keep up with requirements and equipment.

The plant houses a full-service laboratory. Approximately 80% of testing is done in-house. The plant is interested in expanding the lab in order to handle all tests in-house.

The City runs an industrial pretreatment program with responsibility for inspection and enforcement. Between 9 and 10 staff work in the industrial program, and the program is funded primarily by monthly service fees. According to the City, the State has pointed to Riverside's efforts as a model pretreatment program.

- The City used to sell dried sludge from the plant to a manufacturer for the production of fertilizer for land application, but tightening regulations on pollutants allowable in sludge for land application eliminated the City's market for the material.

The wastewater program is operated entirely as an enterprise fund; revenues come from monthly charges and hookup fees. The service relies on two rate structures:

1. Residential (Single and multi family) - fixed monthly rate; not based on flow (i.e., amount of water used). The average residential waste water fee is $12 to $13 per month.

2. Commercial/Industrial - the rate is based on the quantity and quality of discharge.

Rates have increased faster than inflation, especially for industrial users, because the plant's costs have increased as a result of mandatory requirements. There was an 11% rate increase last year to catch up with increasing costs. There has not been any recent, major public opposition to rate increases.

Wastewater Treatment Information Sources

Information typically comes from State and national associations such as the Association of Metropolitan Sewerage Agencies (AMSA), and local associations which are useful for networking such as the Santa Ana River Dischargers Association. The City also gets some information from the Regional Water Quality Control Board.

The City complimented the US EPA on its pretreatment guidance document, but generally relies on consultants for technical assistance.

Local Government Perception of Wastewater Treatment Problems

1. The plant discharges to the Santa Ana River, an ephemeral stream which has a Class III trout stream classification and a fishable/swimmable use designation despite the fact that it is a warm water stream with a sandy substrate (in which fish like salmon and trout cannot live) with continuous flow due only to treatment plant effluent discharges. This classification has enormous implications for the plant's permit limits and all other aspects of operation.

2. The City has been disputing the applicability of US EPA's CWA 304(l) metals requirements for the control of priority pollutants to the Santa Ana River. The City's effort has been on-going for a couple of years, conducting studies to prove its position and spending thousands of dollars on consultants and lawyers.

   Service managers complain that US EPA establishes a national standard for all areas, such as CWA 304 (l) requirements , and can't or won't relax it for areas such as the Santa Ana River where there seems to be little justification for the standard. Additionally, no one has been able to explain to the service why 304(l) requirements are even more stringent than drinking water standards for the same constituents.

   The City explained that its position is supported by the Regional Water Quality Control Board, but is not being accepted in US EPA Region 9.

   In the meantime, the plant is subject to interim standards which are even more stringent than the disputed requirements and cannot be achieved without significant capital outlays. The City argues that interim standards should also be based on reasonable, site-specific requirements with the contingency that the MCLs will be lowered if there's harm to the ecosystem.

3. The plant's permit limits for nitrogen have become more stringent. Even though the plant presently denitrifies its effluent, it needs to reduce the nitrate levels even further to comply with limits.

   This represents a major cost issue for the plant. The plant must construct additional treatment capacity to achieve the required reductions, and is deciding whether to modify in-plant equipment and facilities or create and refurbish wetland areas for denitrification.

   The City is interested in pursuing the wetlands option as an innovative approach to meeting requirements. It is hoped that the wetlands option will completely solve the denitrification problem, helping to reclaim lost habitat while cleaning effluent. The City also believes that the wetlands project would be no more costly than building a traditional physical plant. State funds would be necessary to undertake this option, and are being pursued despite some concern that a major storm may wash away the wetlands and the City would lose it's investment.

   However, the City's efforts to date to establish de-nitrification wetlands have been a regulatory nightmare. If wetlands construction proves too difficult a regulatory hurdle, the City might just abandon the idea.

4. The City complained that US EPA requirements for obtaining waivers or exemptions are so cumbersome and complex as to be of little practical utility. The wastewater service pursued an exemption from certain metal limits, and its experience illustrates the difficulties.

   The service asked to recalculate its lead and copper limits because the present limits account for the impact on salmon and trout, species which do not exist in the river. US EPA took a long time to respond, but eventually determined that the City could not selectively remove just salmon and trout from its calculations; it would have to remove all non-native fish, and substitute new native species after having conducted the appropriate testing to determine acute and chronic toxicity exposures for these new species. In other words, from the City's perspective, US EPA set extreme terms for granting flexibility which it knew were beyond the City's capabilities.

5. Service managers noted that sampling requirements are increasing; what were once quarterly tests must now be conducted monthly. Detection limits are also being tightened; present mercury limits are below detection limits of the plant's lab equipment. The additional lab requirements increase the need for more process control testing, and raise the costs of operation.

6. Service managers noted that regulatory requirements consume capital funds needed to meet other service needs. The waste water treatment service's capital budget is used to fund mandate-related plant and equipment modification, while basic service needs for office and training space and lab expansion go unmet; City council will not approve expenditures for such needs since capital improvements to meet regulatory requirements are given top priority.

7. One of the plant managers expressed his impression that US EPA is pushing privatization of waste water treatment, which sends out a message that public operators aren't doing a good job. Plant operators feel US EPA's message diminishes their credibility in the eyes of City officials, and the plant operators "don't need that kind of additional pressure".

   Another plant manager expressed his shock at the level of distrust evidenced by the US EPA in his interactions with them. The relationship is not one between regulators; the City's actions are all suspect in US EPA's eyes.

   The service expressed an interest in having someone with technical expertise visit the site on a friendly basis to offer assistance, rather than only seeing EPA officials at "audit" time. The City would like to work in partnership with the Regional Office, and be able to meet annually to discuss issues and ways to improve the plant's operation.

8. The City cited several examples of regulated entities which were not required to comply equally with requirements. The City lost an industrial laundry which discharged only 300 gallons every 3 months, yet was being required to discharge water that was cleaner than what it received.

9. The City has found that the three key regulatory actors, the Regional Water Control Board, the State Water Control Board, and US EPA's Regional Office, do not trust each other or work well together. The City often gets caught in the middle of inter-agency politics and disputes.

   This dynamic was particularly evident and destructive during the "Use Attainability Analysis" of the Santa Ana River, where shouting matches ensued between representatives of the various agencies at working meetings. Lack of cooperation increased the study's cost and duration; it was eventually completed after two years for a cost of $2 million.

   Service managers also mentioned the lack of cooperation between US EPA HQ and the Region 9 Regional Office which results in mixed messages to the municipality.

10. Another problem cited by service managers is that US EPA, State and Regional authorities require the City to proceed or take action without providing guidance regarding the authorities' acceptance or rejection criteria. For example, US EPA and the State told the City during testing that the City's proposed methodology looked OK, but they wouldn't know if the test results would be acceptable until they'd been formally submitted. This leaves the City vulnerable to being sanctioned after the fact for not meeting unspecified criteria.

11. Plant managers couldn't recall when they last received notice from US EPA regarding regulations; they wondered if the agency has a list for regular notification of changes. The City is on the Air such a list for the South Coast Quality Management District's (SCAQMD), and consequently, they're receiving almost too much information.

    The City also finds that interpretation of the regulations is confusing. While one plant manager has had good luck finding US EPA staff people to interpret the Code of Federal Regulations (CFR), he has found that some of the guidance manuals contradict the CFRs.

    The City complained about having to pay to purchase agency Guidance manuals from the National Technical Information Service (NTIS); such costs can run as much as $1,000.

    The City also suggested that US EPA should provide information which is organized according to regulatory issues and changes that impact waste water treatment plants (eg: general laboratory requirements, POTW requirements); it is extremely difficult,

time consuming and inefficient to wade through volumes of information looking for those tidbits which apply to the plant. Executive summaries might also be a helpful way to guide the reader.

The City mentioned that it would be nice to have a list of information sources or contacts for various issues; the City has developed one such contact by luck, having met a helpful US EPA Region 9 wastewater program staffer at a conference.

Municipal Solid Waste Program

Residential service is provided in Riverside through a combination of public and private collection; 70% of residences are municipally serviced, and the remaining 30% have private collection under franchise to the City. Commercial and industrial collection is private.

The City offers 3 types of residential service: curb, driveway, and backyard. The City moved to once-a-week residential pick-up in June 1992, cutting back from previous levels of twice a week. The City holds special collections twice a year, although it is thinking of switching to appointments. The City does not pick-up white goods.

The City is looking for ways to reduce solid waste service costs, and is weighing two options. The City has initiated a pilot project with automated garbage pick-up; they anticipate a cost savings, and this could serve as an alternative to privatizing the collection service. It is also considering privatizing the entire City.

The City owns a municipal landfill, but it is closed and longer accepts waste. There is interest in using landfill methane gas and waste water digester gas to co-generate power for the sewage treatment plant.

The City dumps its refuse in a county-owned landfill which is nearing its capacity. The City is working with the County to establish a transfer station in anticipation of the landfill's closure. A private developer has proposed turning Eagle Mountain Mine, 120 miles east of Los Angeles, into a landfill and shipping regional waste to the landfill by train. However, it is not known if this plan will materialize.

State recycling mandates require 25% waste stream diversion by January 1, 1995 and 50% by January 1, 2000. Recycling collection occurs once a week for "green waste" (yard clippings etc.). There is interest in establishing a formal "drop-off" program for newspaper collection, perhaps with igloos in shopping center parking lots.

The City is working with the County to establish a Materials Recovery Facility (MRF) which will allow the City to process a greater variety of recyclables. The County will own the facility, issue the necessary revenue bonds and recoup costs in fees; a private

company will operate the facility; and the City will be the silent partner, providing waste and fees. Together, the MRF and "greenwaste" recycling programs are expected to bring the City's recycling rate close to the State's mandated 50% recycling limit.

Riverside County holds infrequent Household Hazardous Waste collection days as the collections are extremely costly.

The City indicated that its waste removal service is run as an enterprise fund. Fiscal year 1992 expenditures were $8.2 million with revenues of $8.6 million; fiscal year 1993 estimated expenditures are $7.7 million with estimated revenues of $7.7 million. Rate increases and/or fund balances are used to cover shortfalls if they occur.

The rate structure for solid waste services consists of flat fees for each of the three different types of municipal service. Private haulers pay a franchise fee to the City to haul trash, helping to off-set some municipal trash collection costs. Tipping fees are presently $31.50 per ton. The City expects this rate will rise to between $55 and $60 per ton when the MRF goes on-line. The MRF will increase residential rates by $2.50/month.

The City charges $0.50/month for residences and a 5% surcharge on commercial/industrial disposers to cover the cost of landfill closure. The City does not expect this fee to rise.

Local Government Perception of Municipal Solid Waste Problems

1. Officials mentioned that the lack of markets cause a real problem for recycling programs, especially for yard waste. Markets are needed to help recoup program costs and to avoid the need to store collected materials.

2. The City fears a large increase in cost when its current landfill closes as trash will then have to be hauled to a different landfill approximately fifteen miles away , east of Moreno Valley. It is hoped that the MRF will eliminate this problem when it opens in 1995 or 1996.

OTHER ENVIRONMENTAL PROGRAMS

Stormwater Program

The City of Riverside has joined in a regional effort to address stormwater control requirements. This effort is being led by the Riverside County Flood Control District, which has an approved NPDES stormwater permit. The City of Riverside and six other municipalities are co-permittees. A consultant was hired by the County to assemble the

actual permit, but the County Flood Control District itself serves as the lead agency on technical issues. Each community is responsible for implementation of the permit program.

The Deputy Director of the City's Public Works Department, a civil engineer, heads up the City's stormwater planning efforts. One new street maintenance worker will be hired to implement the cleaning and inspections BMPs. The City is estimating $300,000 in program expenses for implementation the first year.

Program funding was raised through development of an innovative funding mechanism by the Riverside County Flood Control District. It has authorized and established a Community Service District Area, comprised of all of Western Riverside County. Within this Area are special assessment zones which coincide with municipal boundaries, and within which communities are permitted to add their own assessments to the property tax. The City of Riverside assesses $3 per parcel annually on the tax bill to cover the costs of stormwater management.

The City relinquishes some degree of autonomy and control in this intergovernmental arrangement; it must apply to the County Board of Governors for any increases in the assessments it charges. However, it gains the economies of scale offered by a regional approach and access to funds through the service district.

The City expressed its opinion that the stormwater requirements are designed for heavy-industry, which does not exist in Riverside. However, the City likes the overall approach of the stormwater management program which gives flexibility to localities through its emphasis on the development of BMPs suited to local conditions.

The City feels that the technical problems associated with controlling stormwater are not unsurmountable. The County Flood Control District provides coordination and workshops for the municipalities, and the State provides technical assistance.

Staff learned about stormwater mandates from the Federal Register, the City's lobbyist in Washington, and consultants.

There has been no City contact with US EPA regarding stormwater. US EPA has not provided the City with guidance or other materials, and the stormwater staff doesn't feel the need for any as the existing intergovernmental relations are working thus far. Stormwater staff doesn't feel the need for the City to have direct input into the regulatory development process.

Local Government Perception of Stormwater Program Problems

1. The City experienced a lack of accurate information when it was trying to determine what the stormwater regulations required of them. The City initially understood that stormwater permits, like wastewater NPDES permits, would specify water quality limits for various constituents. The State didn't have a program established and were not able to provide assistance to the City.

2. The City is convinced that there will be a portion of stormwater that won't be of adequate quality and will require treatment. The City is concerned about high costs associated with stormwater treatment, as it is anticipating large capital expenditures for the construction of large retention basins and artificial wetlands at outfalls. If required to implement such measures, the City would have to float a revenue bond and raise the $3 per parcel assessment to as much as $40 per parcel.

Air Program

Riverside is in a non-attainment area, and has the dubious distinction of once having being designated the "Smog Capital" of the country.

Air quality is an important concern of City officials. The City planning department is primarily responsible for air quality planning, and has assigned one staff member to these issues. In addition to working on City implementation of air quality improvement measures, this staff member also spends about 30% of his time in regional and sub-regional workgroups which try to develop viable programs.

The Clean Air Act of 1990 (CAA) established national health standards for various air pollutants, and required States to develop implementation plans to attain these standards. Under the authority of California's 1991 Air Quality Plan, the South Coast Air Quality Management District established a number of strategies, mainly transportation-related, that communities can adopt in order to reduce the amount of air pollution being generated. The District also promulgated Regulation 15 (Reg 15), which sets differing carpooling and trip reduction targets for various non-attainment areas.

As an employer with greater than 100 employees, the City must comply with Reg 15. It is doing so, and is able to provide some incentives to encourage car pooling such as parking spaces and permits, bus passes, even free bicycles. These incentives are funded out of the normal budget process.

The City-owned electric utility is also effected by air regulations as part owner of the power generating plants. However, there are no special fees or assessments required to cover associated costs; these costs are simply factored in as part of the rate fee.

The AQMD also looks to locals for land use and transportation planning to limit sprawl, promote public transportation, car pooling, etc. The City is using ordinances to deal with collectives like shopping centers where individual employers may employ less than 100 people, but the aggregate exceeds the regulatory threshold.

Within the City transportation planning is typically facility-specific and occurs in the public works department. The City is involved in some transportation planning through the local Council of Governments and the Riverside County Transportation Commission.

The SCAQMD would also like the municipalities to pick up the enforcement function, but City governments do not have the resources. Over time, local responsibility for implementation will increase but only if the equity issues are addressed (see specific problems below).

The City's air quality management activities are funded through a $4 pass-through of the State vehicle registration fee to the locality. About 30% of the registration fee goes to the AQMD, about 40% to the localities, and 40% to a discretionary pool which is used primarily to fund various demonstration projects. This source provides about $200,000 annually to Riverside.

This is the second year for this funding source; prior to that time, very little was done on the issue due to insufficient resources. In this era of decreasing resources, the City is active in air quality issues because of dedicated funding.

There is some transportation funding from the City and some from the County transportation commission through gas tax, sales tax for transportation-related improvements. Such projects include High Occupancy Vehicle (HOV) lanes, commuter rail to Los Angeles, but most money goes for lane widening to increase capacity.

Air Program Information Sources

Depending on the issue, the City turns to the Western Riverside Council of Governments (WRCOG) or the Southern California Association of Governments (SCAG) for the bulk of their information and assistance. The City is trying to decipher US EPA regulations on conformity; it is active in providing information to WRCOG.

None of the communities deal with US EPA directly; interaction, including pass-though of guidance, occurs with the AQMD and the Air Resources Board (ARB). The City provides comments on federal requirements to the WRCOG and the SCAQMD, which pass the information through to US EPA.

City interaction with the county is pretty limited; the county used to do more planning, but this function was devastated through the recession and loss of revenues from development fees.

Local Government Perception of Air Program Problems

1. City officials noted that communities are conservative and cautious; they don't want to create an economic disadvantage compared to the town next door by adopting "burdensome" air quality control measures. Communities may take measures such as encouraging flex time, but will not do anything which negatively impacts business. The strategies proposed in the air quality plan make sense only if everyone was required to adopt them simultaneously. Equity concerns are the primary barriers preventing greater movement on this problem.

2. City officials argued that the internal combustion engine is the biggest contributor to air quality degradation. Since there aren't any viable alternatives and no one can force people out of their cars, the requirements like Regulation 15 only marginally help alleviate the problem with carpooling ordinances and minor behavior changes. National leadership is required to clean up the internal combustion engine or develop transportation alternatives.

3. Most of the air quality "measures" are employer-based. However, in the Riverside area, most of the air quality problems are "home-based" as they relate to commuting patterns. Home-based measures are not well received by the AQMD, who says the US EPA will not accept such measures as they aren't enforceable. The challenge is to come up with creative, effective approaches and solutions which the bureaucracy will not disapprove as "non-enforceable".

4. It is hard to convince public officials that new source off-sets, increased gas tax, ride-sharing options are required and necessary if this hasn't been the case before. US EPA enforcement threat also hangs over localities, but unless the threat becomes more real, it is not likely to force communities to overcome their reluctance.

5. The City sees implementation of the 1991 Air Quality Plan as a new effort; various measures and aspects of the program are still in development. The City is therefore reluctant to act too fast and get out ahead of the program, especially since there are political and competitive costs for that type of activity.

6. There needs to be an on-going commitment to funding. If localities are expected by the State and federal agencies to be full partners, funding is going to have to be provided; general funds are not available. The community made a point of noting that discussion of economics did not reflect a lack of commitment by the City;

Riverside is particularly sensitive to the issue because air flow and pollution from other parts of the region ends up in Riverside.

7. The City would not like to see US EPA come out with air quality mandates and then walk away. The City criticized the Fish and Wildlife Service for having done so by placing a species of rat on the endangered species list and leaving the local governments to face implementation problems alone, i.e., how to handle development conflicts and issues. If mandates create a problem, there should be on-going dialogue to help craft a solution.

PROGRAMMATIC SUCCESSES/INNOVATIONS

Riverside's waste water treatment plant was named "Plant of the Year" in Southern California last year. It was the first facility on the Santa Ana River to install tertiary treatment. The City is also proud that the State points to Riverside's industrial pre-treatment program as a model.

LOCAL GOVERNMENT PERCEPTION OF CROSS-CUTTING PROBLEMS

The following section presents some issues, concerns or problems which were raised by more than one program.

The drinking water and wastewater programs complained that US EPA too often follows a one-size fits all approach to writing and issuing regulations. Irrelevant and frequently costly requirements are therefore being unnecessarily imposed on local governments.

Virtually all of managers interviewed indicated that they had very little interaction with US EPA regional or Head Quarters personnel, with the exception of the waste water pretreatment director and plant compliance manager who did not speak too favorably of their interactions (details are provided in the Intergovernmental Relations and Partner sections below). The greatest needs from the agency were for clear information and technical assistance.

The Drinking Water program was most direct about explicitly addressing the need for input into the regulatory development process. While it had provided some testimony on radon issues directly, most other programs felt that their input was being conveyed only indirectly through other regulatory agencies or professional associations.

Two programs complained that they simply do not have faith in the validity of some requirements; they are challenging the credibility of the regulatory agencies on these issues.

Only the wastewater program mentioned that certain needs were being unmet (more office, lab and storage space) due to the diversion of funds for mandate-related capital improvements.

Only the drinking water program complained about the ever-increasing number and stringency of regulations.

Several programs complained about equity issues; not all members of the regulated community is held to the same standards or levels of accountability.

Virtually all of the programs and services were subject to regulation by various State regional and central regulatory bodies. The large number of actors sometime leads to confusion and contradictory requirements. Poor relations between the various regulatory bodies also creates a wide variety of problems.

None of the programs expressed a severe present financial crisis, although a few were facing potential factors in the future which would dramatically increase costs.

This topic addresses an aspect of intergovernmental relations in which the local government does not feel like it is being treated as a partner in the regulatory process (a spin on Regulator/Regulatee).

MESSAGES/RECOMMENDATIONS to EPA

Case community officials conveyed a number of messages to the EPA regarding opportunities for changing or improving the regulatory climate in which local governments operate.

1. Officials of the drinking water service argued that US EPA needs to reconsider who its customers are. Along with Congress, US EPA needs to consider the local governments (i.e., the program implementors) as its customers. US EPA should provide a service to its customers, as well as dictate regulations.

2. Regarding State primacy issues, they noted that US EPA should also allow States to be <u>less</u> stringent than US EPA, and that perhaps locals should be allowed to decide on what programs/services they want.

3. Wastewater officials asked US EPA to "be reasonable". They would like the agency to clearly communicate what local governments are expected to do, but to also provide flexibility. The City would like to work in partnership with the Regional Office, and be able to meet annually to discuss issues and ways to improve the plant's operation.

4. Municipal solid waste officials feel that recycling markets are key to the success of recycling programs, and that national leadership by US EPA is required to develop them.

5. Air quality planning officials argued that alternatives to the internal combustion engine is essential to cleaning up the air, and that US EPA must assert strong national leadership to ensure their development.

APPENDIX C: ECONOMIC AND DEMOGRAPHIC DATA

APPENDIX C: Case Study Community Economic and Demographic Statistics (1990 data unless otherwise noted)

City	NELIGH	MORGAN CITY	FREDERICK	ROCKFORD	RIVERSIDE
State	Nebraska	Louisiana	Maryland	Illinois	California
EPA Region	7	6	3	5	9
Form of Government	Mayor-Council	Mayor-Council	Mayor-Council	Mayor-Council	Mayor-Council-Manager
POPULATION					
1990 Population	1,742	14,531	40,148	139,426	226,505
Percent under 18 years old	27%	29%	24%	26%	29%
Percent over 65 years old	27%	11%	12%	15%	9%
1980 Population	1,893	16,114	28,086	139,712	170,876
Growth Rate (1980 to 1990)	-8%	-10%	43%	0%	33%
INCOME					
Per Capita Income	$9,879	$10,577	$15,410	$14,109	$14,235
Household Income	$20,680	$22,664	$34,891	$28,232	$34,801
EMPLOYMENT					
Unemployment Rate	3%	11%	3%	6%	7%
HOUSING					
Total Housing Units	771	5,838	16,611	58,146	80,240
Total Occupied Housing Units	694	5,192	15,671	54,839	75,463
Percent Occupied Housing Units	90%	89%	94%	94%	94%
Percent Owner Occupied Units	74%	62%	45%	60%	56%
Median Value	$29,200	$50,100	$113,400	$56,300	$134,800
Percent Renter Occupied Units	26%	38%	55%	40%	44%
Median Rent	$146	$194	$517	$291	$512
PROPERTY VALUE					
Total Assessed Value (AV)	$24,485,048	$42,983,318	$648,762,040	$896,653,000	$6,631,489,000
Per Capita AV	$14,056	$2,958	$16,159	$6,431	$29,277
AV notes	Full Market Value	10% of Market Value	NA	33% of Market Value	NA

NA = not available

City	NELIGH	MORGAN CITY	FREDERICK	ROCKFORD	RIVERSIDE
DEBT					
Total Municipal Debt	$167,000	$17,935,000	$59,543,985	$72,883,991	$455,201,000
Debt applicable to debt limit	$167,000	$4,615,000	$40,433,578	$30,720,184	$285,000
State Debt limit	NA	NA	NA	8.65% of debt to AV	NA
City Debt limit	NA	NA	8% of debt to AV	6.92% of debt to AV	15% of AV
Debt Ratio (debt to AV)	0.68%	10.74%	6.23%	3.43%	0.00%
REVENUES AND EXPENDITURES					
Total Revenues	$1,590,960	$21,028,444	$65,075,634	$77,022,369	$351,296,000
Total Expenditures	$1,763,874	$20,054,355	$41,224,573	$79,990,425	$339,485,000
Balance over/(under)	-$172,914	$974,089	$23,851,061	-$2,968,056	$11,811,000
Enterprise Revenues	$1,134,500	$13,911,795	$4,947,408	$17,462,811	$192,536,000
Enterprise Expenditures	$1,244,683	$13,211,766	$4,328,461	$17,684,314	$172,523,000
Balance over/(under)	-$110,183	$700,029	$618,947	-$221,503	$20,013,000
FY '92 Drinking Water Rev.	$96,133	$1,350,000	NA	$12,000,000	$17,312,789
FY '92 Drinking Water Exp.	$83,273	$534,205	$1,327,350	$10,000,000	$20,593,772
FY '91 Drinking Water Rev.	$125,818	$1,350,000	NA	$10,400,000	$16,985,000
FY '91 Drinking Water Exp.	$103,620	$530,966	$1,287,445	$9,000,000	$18,312,000
FY '92 Wastewater Rev.	$75,408	$615,000	NA	NA	$19,700,000
FY '92 Wastewater Exp.	$59,712	$534,000	$1,470,683	NA	$17,900,000
FY '91 Wastewater Rev.	$78,210	$615,000	NA	NA	$17,000,000
FY '91 Wastewater Exp.	$48,010	$551,912	$1,424,637	NA	$18,100,000
FY '92 Municipal Solid Waste Rev.	$43,611	$567,000	NA	$6,327,660	$7,700,000
FY '92 Municipal Solid Waste Exp.	$44,479	$749,912	NA	$6,274,191	$7,700,000
FY '91 Municipal Solid Waste Rev.	$27,391	$472,500	NA	$5,838,732	$8,600,000
FY '91 Municipal Solid Waste Exp.	$34,687	$746,440	NA	$5,815,219	$8,200,000
PWSS program delegation	State Primacy	State Primacy	State Primacy	State Primacy	State Primacy
NPDES program delegation	Delegated to State	not delegated	Delegated to State	Delegated to State	Delegated to State
MSW program delegation	not delegated	not delegated	not delegated	not delegated	not delegated

NA = not available

APPENDIX D: LIST OF INTERVIEWEES

I. MUNICIPAL AND STATE INTERVIEWEES

Officials of Neligh, Nebraska

Office of the Mayor
City Superintendent's Office
City Power Board

Officials of the Antelope County Economic Development Board
Officials of the Antelope County Board of Supervisors
Officials of the Nebraska Department of Environmental Quality

Officials of Morgan City, Louisiana

Office of the Mayor
City Attorney's Office
Finance Office
Public Works Department
Utility Department
Drinking Water Service
Wastewater Treatment Service

Officials of the Louisiana Department of Health

Officials of Frederick, Maryland

Office of the Mayor
Public Works Department
Airport Department
Wastewater Treatment Service
Drinking Water Service
Planning Department
Board of Aldermen

Officials of the Maryland Department of the Environment

Officials of Rockford, Illinois

Office of the Mayor
City Administrator's Office
City Attorney's Office
Public Works Department
Drinking Water Service
Property and Equipment Department

Officials of the Rock River Sanitary District, Illinois
Staff of Winnebago Reclamation Service, Illinois

Officials of Riverside, California

City Manager's Office
Public Works Department
Public Utilities Department
Drinking Water Service
Wastewater Treatment Service
Planning Department

II. PILOT STUDY INTERVIEWS

Officials of Federalsburg, Maryland

Office of the Mayor
City Manager's Office
Wastewater Treatment Service
Drinking Water Service
Building Inspection/Code Enforcement Office

Officials of the Caroline County Board of Commissioners
Officials of the Maryland Department of the Environment
Officials of the National Rural Water Association

III. ASSOCIATION and OTHER INTERVIEWEES

Representatives of the:

American Waterworks Association
Association of Metropolitan Sewerage Agencies
Environmental Financial Advisory Board
Government Finance Officers Association
International City Managers' Association
National Association of Towns and Townships
National Association of Counties
Rural Community Assistance Corporation
Solid Waste Association of North America

APPENDIX E: LIST OF ABBREVIATIONS

ADA	Americans with Disabilities Act
AMSA	Association of Metropolitan Sewerage Agencies
AQMD	Air Quality Management District (California)
ARB	Air Resources Board (California)
AWWA	American Waterworks Association
BAT	best available technology
BMP	best management practices
BOD	biological oxygen demand
CAA	Clean Air Act Amendments of 1990
CalEPA	California Environmental Protection Agency
CEPPO	Chemical Emergency Preparedness and Prevention Office
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERI	Center for Environmental Research Information
CFR	Code of Federal Regulations
CIGL	Congressional and Intergovernmental Liaison
CLP	Contract Laboratory Program
CMSA	consolidated metropolitan statistical area
Cu	copper
CWA	Clean Water Act
DHS	Department of Health Services
DOT	US Department of Transportation
EEOC	US Equal Employment Opportunity Commission
EFAB	Environmental Financial Advisory Board
EPA	US Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
FAA	Federal Aviation Administration
FDA	US Food and Drug Administration
FR	Federal Register
FY	fiscal year
HOV	high occupancy vehicle
HQ	headquarters

I&I	inflow and infiltration
ICMA	International City/County Management Association
IEPA	Illinois Environmental Protection Agency
IOC	inorganic compound
LDEQ	Louisiana Department of Environmental Quality
MCL	maximum contaminant level
MDE	Maryland Department of the Environment
MGD	millions of gallons per day
MRF	Materials Recovery Facility
MSW	Municipal Solid Waste
NACEPT	National Advisory Council for Environmental Policy and Technology
NACO	National Association of Counties
NDEQ	Nebraska Department of Environmental Quality
NDOH	Nebraska Department of Health
NETCSC	National Environmental Training Center for Small Communities
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NPS	Non-point Source
NSFC	National Small Flows Clearinghouse
NTIS	National Technical Information Service
OAQPS	US EPA, Office of Air Quality Planning and Standards
OAR	US EPA, Office of Air and Radiation
OARM	US EPA, Office of Administration and Resource Management
OCEM	US EPA, Office of Cooperative Environmental Management
OE	US EPA, Office of Enforcement
OGWDW	US EPA, Office of Groundwater and Drinking Water
OMB	US Office of Management and Budget
OPPE	US EPA, Office of Policy, Planning and Evaluation
ORD	US EPA, Office of Research and Development
ORIA	US EPA, Office of Radiation and Indoor Air
ORME	US EPA, Office of Regulatory Management and Evaluation
OROSLR	US EPA, Office of Regional Operations and State/Local Relations
OSHA	US Occupational Safety and Health Administration
OSPED	US EPA, Office of Strategic Planning and Environmental Data
OSPRE	US EPA, Office of Science Planning and Regulatory Evaluation
OSW	US EPA, Office of Solid Waste
OSWER	US EPA, Office of Solid Waste and Emergency Response
OW	US EPA, Office of Water
OWEC	US EPA, Office of Wastewater Enforcement and Compliance

Pb	lead
PED	US EPA, Program Evaluation Division
POTWs	publicly-owned treatment works
PPM	parts per million
PRP	potentially responsible party
PWSS	Public Water System Supervision
QC	quality control
RCRA	Resource Conservation and Recovery Act
RCFCD	Riverside County Flood Control District
RIFS	remedial investigation and feasibility study
ROD	records of decision
RRWRD	Rock River Water Reclamation District
SARA	Superfund Amendments and Reauthorization Act
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District (California)
SCORE	Small Community Outreach and Education
SF	Superfund
SIU	significant industrial user
SDWA	Safe Drinking Water Act
SOW	statement of work
SOCs	synthetic organic compounds
SRF	State Revolving Loan Fund
TCE	trichloroethylene
THM	trihalomethane
UST	underground storage tank
UV	ultraviolet
VOC	volatile organic compound
WRCOG	Western Riverside Council of Governments
WHPP	wellhead protection program
WRS	Winnebago Reclamation Services

APPENDIX F:

A CATALOG OF EPA ACTIVITIES RELATED TO LOCAL GOVERNMENTS

Program Evaluation Division
Office of Regulatory Management and Evaluation
Office of Policy, Planning and Evaluation

August 1993

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A CATALOG OF EPA ACTIVITIES RELATED TO LOCAL GOVERNMENTS

INTRODUCTION

This Catalog identifies some of the Agency's recent independent and cooperative efforts that focus on, or provide assistance to, local governments. Some are externally focused, involving interaction with local governments either directly or indirectly through States or other organizations. Other efforts, such as Agency reports and studies, are internally focused. The catalog, organized by activity categories, includes a brief description of each activity, who is involved, and a point of contact for further information.

This list does not provide a historical perspective nor does it serve as an all inclusive detailed directory of these types of activities. The compilation of this catalog does not necessarily imply that these activities are being effectively or frequently used by local governments, are cost effective, or have helped resolve the concerns of local government.

At the suggestion of EPA's Small Communities Coordinator, the Program Evaluation Division (PED) in the Office of Policy, Planning and Evaluation compiled this general list. The entries are based on information obtained from internal EPA interviews conducted during the course of PED's study on "Local Government Implementation of Environmental Mandates." The central purpose of that study is to better inform Agency management of the most significant problems local governments experience in implementing environmental mandates. (The study is described further under "Internal Agency Efforts" in this catalog.)

I. EPA TASK FORCES, COMMITTEES, AND GROUPS

o **Local Government/Small Community Dialogue Group**
Local Government/Small Community Advisory Committee
Contact: Lou Kerestesy, (202) 260-4381, and Denise Zabinski, (202) 260-4719, Office of Regional Operations and State/Local Relations (OROSLR)
The Local Government/Small Community Dialogue Group held four meetings in the latter part of 1992 with local and State officials to analyze and define critical implementation problems. The group developed problem statements and action items in the areas of financing environmental requirements, regulatory cost and benefit data/information needs, and regulatory flexibility.

In November 1992, the Local Government/Small Community Advisory Committee was chartered under the Federal Advisory Committee Act to replace the Dialogue Group. The central purpose of the Committee is to increase the Agency's understanding of local government implementation concerns that can be used in developing policies and regulations which result in efficient programs at all levels. Membership will be drawn from local and State governments, public interest groups, environmental organizations, regulators and other federal departments and agencies. As of June 1993, not all members of the Advisory Committee have been appointed nor has there been a Committee meeting.

o **Local Government and Small Community Cluster**
Contact: Lou Kerestesy, OROSLR, (202) 260-4381
The Local Government and Small Community Cluster is an internal EPA discussion group which can advise Agency management on ways to improve working relationships among Headquarters, Regions, States, and local governments.

o **Small Town Environmental Task Force**
Contact: Ann Cole, Small Community Coordinator, OROSLR, (202) 260-4719
Section 109 (Small Town Environmental Planning Program), Title I, of the Federal Facility Compliance Act of 1992 requires that the Agency establish a program to assist small communities (populations of less than 2,500 individuals) in planning and financing environmental facilities. Part of this program would include the establishment of the Small Town Environmental Planning Task Force. The Task Force will be comprised of small town representatives, federal and State government agencies, and public interest groups (nominees have not yet been named). According to the Act, the Task Force shall: identify regulations that pose significant compliance problems for small towns; identify ways to improve working relationships between EPA and small towns; review proposed regulations and suggest ways to improve the ability of small towns to comply; and identify and promote regionalization of environmental treatment systems and infrastructure serving small towns to improve economic conditions.

- **State and Local Environmental Committee**
  Contact: Joseph Sierra, Office of Cooperative Environmental Management (OCEM), (202) 260-6839
  The State and Local Environmental Committee is part of the National Advisory Council for Environmental Policy and Technology (NACEPT), a public advisory committee providing extramural policy information and advice to the Administrator and other Agency officials. The principal objective of this committee is to foster improved State and local government capacity for carrying out their environmental management responsibilities. The committee recently focused on pollution prevention programs, and published the report, "Building State and Local Pollution Prevention Programs" in December 1992 (described further under "Internal Agency Efforts" in this catalog).

- **Region 1 Communities Workgroup**
  Contact: Gerry Levy, Region 1, Water Management Division, (617) 565-3484
  Region 1's Communities Workgroup consists of representatives of the Air, Water, Waste and Government Relations programs who are charged with recommending to the Regional Leadership Team an approach for coordinating the regulatory responsibilities of local communities. The Team is putting together an integrated timeline of major program requirements, recommending methods for case screening/information sharing between programs, and will be presenting its recommendation in late July, 1993.

- **Region 8 Small Community Work Group**
  Contact: Charles Gomez, Region 8, Office of Regional Administrator, Office of External Affairs, (303) 294-1108
  The mission of the Region 8 Small Community Work Group is to enhance the identification and resolution of environmental problems in communities with fewer than 5,000 residents through improved education, communication, coordination, and outreach by networking with private and government agencies. Members of the Work Group include representatives from EPA program offices that impact small local governments, other applicable federal and State agencies, small local government officials or representatives, and organizations that assist small governments with environmental issues. Examples of Work Group activities include: a multi-media workshop, conferences, a local government survival kit (publications/videos), guides, and handbooks.

II. TECHNICAL ASSISTANCE

Financial Planning and Assistance

- **Environmental Financial Advisory Board (EFAB)**
  Contact: George Ames and Vera Hannigan, Office of Administration and Resource Management (OARM), Office of Comptroller, (202) 260-6685
  The Environmental Financial Advisory Board has examined several policy initiatives that would help build and strengthen State and local financing capacity, enabling states and localities to successfully meet their financing challenges and achieve environmental goals. For example, EFAB supported the State and Local Capacity Task Force in producing the guidance document, "Alternative Financing Mechanisms for Environmental Programs" (listed below under "Guides/Handbooks"). EFAB has also published several advisories that address financial issues related to local government environmental budgetary needs such as: "Small Community Financing Strategies for Environmental Facilities" (August 1991) and "Public Sector Options to Finance Environmental Facilities" (March 1992).

- **Public-Private Partnership Program**
  Contact: George Ames and Vera Hannigan, OARM, Office of Comptroller, (202) 260-6685
  The Public-Private Partnership Program was set up in 1989 to help State and local governments develop new ways to manage and finance required environmental improvements. Through this program, the Agency has fostered public-private partnerships in local communities and has developed publications to help local officials manage and finance their environmental programs. Examples of these documents are listed below under "Guides/Handbooks".

General Outreach and Assistance

- **Regional Small Community Coordinators**
  Contact: Ann Cole, Small Community Coordinator, OROSLR, (202) 260-4719
  A small community coordinator is located in all ten EPA Regional Offices. While the responsibilities and efforts of these coordinators may vary among Regions, the coordinators generally provide outreach, information exchange, technical support, and workshops designed to address small community issues.

- **Peer Match Program for Local Governments**
  The peer match program is funded by an Agency grant through the International City/County Management Association (ICMA). This program enables elected officials and top managers in local government to meet and exchange hands-on knowledge of how other communities are meeting environmental challenges. The program currently focuses on the following programs:

  Municipal Solid Waste Management (MSW)
  Contact: Tim Jones, Office of Solid Waste and Emergency Response (OSWER), Office of Solid Waste (OSW), (202) 260-7920
  Through the MSW Peer Match Program, EPA provides technical assistance and information exchange among local communities.

  Emergency Planning and Community Right-to-Know
  Contact: Kathy Jones, OSWER, Chemical Emergency Preparedness and Prevention Office (CEPPO), (202) 260-8353
  Through the Emergency Planning and Community Right-to-Know Peer Match Program, EPA coordinates and sponsors meetings for local managers in need of advice from their experienced counterparts.

- **Region 2 Small Community Workshops**
  Contact: Berry Shore, Region 2, External Program Division, (212) 264-4914
  Region 2 awarded a grant to the Water Environment Federation to hold New Jersey and New York workshops in the Fall of 1993 on problems small communities face in complying with environmental regulations. The workshops will focus on the significant financial and administrative problems that communities with populations smaller than 5,000 people face in complying with federal environmental regulations. The primary audience of the workshop will be federal, state, and local public officials with responsibilities for administering environmental, health, and public works programs.

- **Region 7 Indoor Air Quality Outreach**
  Contact: Janette Lambert, Region 7, Congressional and Intergovernmental Liaison (CIGL) (913) 551-7768
  Region 7 has established a network of public officials who have an interest in indoor air quality. Free training is conducted for state, city and county health officials on "Orientation to Indoor Air Quality."

- **Region 7 Quarterly Environmental Meetings**
  Contact: Janette Lambert, Region 7, CIGL (913) 551-7768
  Region 7 holds quarterly environmental meetings in cities in Iowa, Kansas, Missouri, and Nebraska for elected officials, environmentalists, business/industry, and media. The open forums focus on a specific issue presented by Region 7 staff.

- **Region 9 State/Local Capacity Demonstration Project**
  Contact: Jack Colbourn, Region 9, (415) 744-1239
  In response to recommendations of EPA's State Capacity Task Force, Region 9 has entered into a Memorandum of Understanding with Pima County Department of Environmental Quality to implement a demonstration project to improve and enhance their working relationship and to jointly address environmental problems and prevent pollution during a time of limited resources. EPA will provide the budget, technical training, management, technical assistance, and assistance in the development of innovative financing options. Pima County will provide staff to implement the multi-year pollution prevention program, a report on alternative financing mechanisms and environmental equity for state/local agencies, and guidance and technical assistance to other state/local agencies. This demonstration project is intended to provide a model for other state and local environmental agencies.

- **Region 9 Local Agency Groundwater Protection Pilot Projects in California**
  Contact: Cynthia Brouwers, Water Management Division, Region 9, (415) 744-1839
  Region 9 is awarding grants to local governments in California to protect existing and future underground sources of drinking water through wellhead protection and regulation of shallow injection wells, spills, and other potential sources of groundwater contamination. The grants are being made in recognition of the significant role local governments play in managing groundwater resources in their communities. EPA will fund start-up costs of groundwater protection programs, with the expectation that these programs will be self-sustaining once the grant period is completed.

- **Region 9 Local Government Water Projects**
  Contact: Sam Ziegler, Water Management Division, Region 9, (415) 744-1990
  Region 9 has several projects underway to assist in developing local government capacity to protect critical aquatic resources, and in essence achieve objectives related to pollution prevention. The following projects are two examples of these efforts:

  Through EPA cooperative agreements, the San Francisco Estuary Project established a network of nine watershed demonstration projects in the Fall of

1992. Region 9 coordinates these projects with state, federal and local agencies and non-governmental organizations who are utilizing various approaches to watershed protection. Special emphasis is being placed on integrating state and federal resource protection efforts with local land use decision-making.

The North Bay Initiative is a cooperative effort to coordinate resource protection within the north San Francisco Bay area. The state and federal agencies have agreed to work together with the local community to prepare an area specific resource management plan that will address wetlands and watershed protection and related issues. The process of developing the plan will stress full public participation to ensure that the plan provides a framework that improves the effort of local governments working in concert with federal and state agencies aimed at protecting critical environmental resources.

o **Region 10 Small Communities Program**

Contact: James Werntz, Region 10, Water Division, (206) 553-2634

In response to feedback from representatives of small towns, Region 10 has focused on improving its responsiveness to small community environmental needs and initiated the Region 10 Small Communities Program. This effort embodies three goals: (1) to help ensure that communities understand, support and comply with federal and state requirements; (2) to educate EPA staff and managers about issues and opportunities at the local level; and (3) to assist communities in planning for and achieving environmental and economic sustainability.

Examples of activities to achieve these goals are:

- Region 10 actively participates in Oregon's and Washington's Rural Development Councils.
- The Region's Small Community Work Group meets monthly to raise awareness and build advocacy for small community concerns at the program level.
- Region 10 will be conducting several pilot projects to test environmental priority-setting methodologies that would enable small communities to more effectively target scarce resources to the greatest environmental risks.

o **Region 10 Sustainable Development Initiative**

Contact: Gary O'Neal, Region 10, Office of the Regional Administrator, (206) 553-1792

Region 10 has established an initiative to enhance the use and understanding of sustainable development in the Pacific Northwest. This effort is organized into four modules: communities, geographic areas, business and industry, and the knowledge and information base. Projects to be done in the communities module include: (1) incorporating a sustainable development focus into pilot projects for

small community environmental planning; and (2) developing and implementing a program to help communities develop an "infrastructure" of skills, tools, and information that will enable progress toward sustainability.

- **Small-Community Outreach & Education (SCORE)**
  Contact: Sylvia Bell, Office of Water (OW), Office of Wastewater Enforcement and Compliance (OWEC), (202) 260-7255
  The Agency's Office of Water initiated SCORE in 1988 to help small communities build and maintain self-sufficient wastewater facilities that meet clean water standards. SCORE enlists expertise and resources from federal, State, and sub-state agencies, public interest and advocacy groups, and educational institutions to produce workshops, directories and other publications, exhibits, toll-free telephone help, information networks, outreach demonstration projects and technical assistance. The National Small-Flows Clearinghouse, the National Environmental Training Center, and the Rensellaerville Small Town Environment Program are examples of SCORE programs and are described elsewhere in this list.

- **Small Towns Environment Program**
  Contact: Sylvia Bell, OW, OWEC, (202) 260-7255
  The Small Towns Environment Program is a national self-help initiative of The Rensellaerville Institute (New York) in partnership with the Agency aimed at enabling small towns to solve water and wastewater problems while building local capacity. The Agency funds The Rensellaerville Institute to provide workshops and seminars, educational resources and materials, and a revolving loan fund to provide construction finance with low interest rates. The approaches used in the program include: changing water use behavior and separation of solid waste at the source; administering projects directly rather than through outside agents; using local resources; controlling costs; and choosing technologies suited for small towns.

- **Watershed Protection Activities**
  Contact: Janet Pawlukiewicz, OW, Office of Wetlands, Oceans, and Watersheds (OWOW), (202) 260-9194
  The Agency's role in watershed activities ranges from modest support to very active, primary leadership. A major part of watershed protection is the Agency's involvement with local governments as a stakeholder. The Agency provides support to local governments by: organizing watershed projects through task forces or committees and gaining stakeholder support and involvement. For example, the Canaan Valley Task Force, consisting of federal, State, and local private and public representatives, organized community support to successfully meet current challenges of watershed protection and economic growth. EPA also funds watershed projects such as the Merrimack River, Platte River Basin, and Casco Bay projects that result in local government support.

- **National Solid Waste Assistance Program (SWAP)**
  Contact: Henry Ferland, OSWER, OSW, (202) 260-3384
  The SWAP, initiated in 1993, is a central source of municipal solid waste information in the U.S. used by local officials. The program provides telephone access to journals, reports, studies, proceedings, periodicals, case studies, curricula, films, and videos that focus on topics such as recycling, legislation and regulation.

- **Buy Recycled Campaign**
  Contact: Henry Ferland, OSWER, OSW, (202) 260-3384
  In 1990, in conjunction with the U.S. Conference of Mayors, the Agency funded the "Buy Recycled Campaign" offering technical assistance to communities to establish procurement programs/procedures to encourage purchasing of recycled products. This project seeks to formalize local procurement guidelines through the promotion of model ordinances, development of a reference document on State/local access purchasing contracts, and case studies on State/local access contracts.

- **The Superfund Assistance Program**
  Contact: Tim Fields, OSWER, Superfund Revitalization Team, (202) 260-4039
  Through a grant to the International City/County Management Association (ICMA), the Superfund Assistance Program serves communities facing potential liability under CERCLA (Comprehensive Environmental Response, Compensation and Liability Act). The program provides a "first aid kit" and other guidance to help local governments meet the legal, financial, and political challenges associated with Superfund cleanups.

- **NACO Radon Action Program**
  Contact: Kristy Miller, Office of Air and Radiation (OAR), Office of Radiation and Indoor Air (ORIA), (202) 233-9441
  In July 1991, EPA entered into a cooperative aggrement with the National Association of Counties (NACO) intended to educate county officials about radon and provide counties with tools to reduce radon risks in the communities. As part of their Model County Program, NACO has invited 50 high risk counties to participate in adopting effective local measures to address the radon health risk. For example, Alachua County, Florida has launched a local public service advertising campaign about the health risks of radon that generated media time and resulted in hundreds of homes being tested.

- **Reach Out Pennsylvania Pilot Project -- Toxic Release Inventory (TRI)**
  Contact: Deborah Williams, Office of Prevention, Pesticides and Toxic Substances, (202) 260-4136
  Within the past year, the Agency held focus meetings in Pennsylvania with diverse local representatives including local libraries, public interst groups, civic and labor organizations, local health officials, poison control centers and academia to provide input for developing ideas for meeting TRI information and training needs. In response to this input, project activities have been developed to focus on educating these diverse local groups through mailings, a newsletter and training workshops. Because EPA has placed the TRI at over 4,000 libraries nationwide, training efforts have been focused toward librarians.

Training

- **National Environmental Training Center for Small Communities (NETCSC)**
  Contact: Sylvia Bell, OW, OWEC, (202) 260-7255
  NETCSC, located at West Virginia University, is part of the SCORE program. Its mission is to work with existing training institutions to collect and develop training materials and resources designed to help small communities achieve a clean environment in the areas of drinking water, wastewater, and solid waste.

- **Onsite Assistance Program (Wastewater Treatment)**
  Contact: Richard Barber, OW, OWEC, (202) 260-5823
  The Onsite Assistance program helps small wastewater treatment plants achieve permits through grants given to State environmental training centers. The community does not pay for the onsite assistance, and the States act as consultants by providing over-the-shoulder operator training and technical assistance.

- **Wellhead Protection Area Training Kit**
  Contact: Janette Hansen, OW, Office of Ground Water and Drinking Water (OGWDW), (202) 260-7077
  The Wellhead Protection Area Training Kit is intended to teach government officials about wellhead protection through local management tools, financing mechanisms, identification of contamination sources, and methods for defining wellhead protection areas.

- **Air Pollution Training for Local and State Governments**
  Contact: Ron Townsend, OAR, Office of Air Quality Planning and Standards (OAQPS), (919) 541-2498
  In FY 1992, this program provided training to more than 5,000 students in a combination of classroom, self-study, video, and satellite courses. More than 4,000 of these students were employees of local and state air agencies. Highlights of the training program are:

- A satellite broadcasting network, implemented through a cooperative agreement with North Carolina State University, brings technical training and current topics into the work place of the local and state air pollution control agencies. Thirty-one presentations are scheduled for broadcast during the later part of 1993.

- Courses to train new local and state operating permits personnel are being offered through the University of Cincinnati and the University of Texas at Arlington and EPA facilities. A full curriculum has been established to provide comprehensive training for the permit engineers and specialists.

Technology Transfer

- **State and Local Assistance Program**

  Contact: Lawrence Martin, Office of Research and Development (ORD), Office of Science Planning and Regulatory Evaluation (OSPRE), (202) 260-7667

  The State and Local Assistance Program seeks to : (1) improve the effectiveness and efficiency of environmental protection programs; (2) reduce the costs associated with environmental program implementation; and (3) enhance the coordination of Agency, State, local, and private sector resources directed to environmental research and development. As part of this program, the Center for Environmental Research Information (CERI) conducts seminars and workshops, and produces publications for local governments. Among them are:

  - Seminars on use, costs, design, performance, and operations and maintenance of low cost alternative sewer systems for small communities;
  - Seminars on multi-media environmental regulatory impact and self-auditing assessment to set priorities for multi-media planning efforts in small communities;
  - A Workshop series with State government representatives on building State capacity to provide technical assistance to local governments through public-private partnerships with Agency labs, the private sector, and local government participants;
  - A report summarizing pilot workshops addressing water and wastewater technology suited to small communities, including case studies.

  ORD's State and local assistance program also includes a cooperative agreement with the Conference of Mayors and the National Association of Counties. This agreement provides information sharing and coordination between the Agency and local governments to develop municipal solid waste management strategies and technology, including comparative risk assessment for municipal solid waste management options.

III. GUIDES/HANDBOOKS

o **The Guide to Federal Environmental Requirements for Small Governments**
Contact: Ann Cole, OROSLR, (202) 260-4719
This guide is a reference book of federal regulations and programs that typically apply to small communities, and is expected to be published in 1993 and updated annually. It is designed to help local officials become familiar with requirements that may apply in their jurisdictions and provide an easy-to-use listing of contacts for assistance and information. While geared primarily toward officials of small governments, the information should be useful to officials from larger communities as well.

o **"HELP! EPA Resources for Small Communities"**
Contact: Ann Cole, OROSLR, (202) 260-4719
This guide is designed to help local officials of smaller jurisdictions find technical, educational, and financial assistance easily and quickly. The information is derived from a 1990 inventory of Agency publications and activities available to small communities.

o **Handbooks produced by the Center for Environmental Research Information**
Contact: Lawrence Martin, ORD, OSPRE, (202) 260-7667
The Center for Environmental Research Information has developed a number of guides, including:
- Handbook for smaller communities addressing low cost upgrading of wastewater treatment systems
- Small communities decision-makers guide to multi-media environmental management

o **Environmental Finance Program Publications**
Contact: George Ames and Vera Hannigan, OARM, Environmental Finance Program, Office of Comptroller, (202) 260-6685
As part of the Environmental Finance Program described above (see "Technical Assistance, Financial Planning and Assistance" in this catalog), several documents have been published to assist local officials manage and finance their environmental programs through public-private partnerships. Examples are:
- "Financing Models for Environmental Protection -- Helping Communities Meet Their Environmental Goals," developed by International City/County Management Association (ICMA) as part of a grant with the Agency. OARM, 202-B-92-006, September 1992
- "Public-Private Partnership Case Studies -- Profiles of Success in Providing Environmental Services," OARM, 20M-2005, September 1990
- "Solid Waste Contract Negotiation Handbook," prepared for EPA by the Bureau of Government Research, University of Oregon. OARM, 220-B-92-004, May 1992
- "Public-Private Partnerships for Environmental Facilities -- A Self-Help Guide for Local Governments," 20M-2003, May 1990

- **"Alternative Financing Mechanisms for Environmental Programs," State Capacity Task Force, OARM, August 7, 1992**

  Contact: George Ames and Vera Hannigan, OARM, Environmental Finance Program, Office of Comptroller, (202) 260-6685

  This document contains over 80 financing techniques and provides information aimed at resolving two types of funding shortfalls: State capacity (program personnel) and capital infrastructure needs. The findings in this report are intended to help State and local governments narrow their search for alternative financing mechanisms appropriate for their environmental financing needs.

- **"The Clean Air Act 1990: A Guide to Public Financing Options," prepared by the Environmental Financial Advisory Board for the Clean Air Act Advisory Committee, EPA**

  Contact: George Ames, OARM, Environmental Finance Program, Office of Comptroller, (202) 260-6685, and Tina Parker, OAR, Office of the Assistant Administrator (OAA), (202) 260-6584

  This guide examines opportunities identified under the provisions of the Clean Air Act and within current air program financing arrangements for State and local authorities to meet the funding requirements of the Act.

- **"Everything You Wanted to Know About Environmental Regulations ... But Were Afraid to Ask," A Guide for Very Small Communities. September 1991**

  Contact: Charles Gomez, Region 8, Office of the Regional Administrator, Office of External Affairs, (303) 294-1108

  Prepared for use by government officials of communities with populations of 1,000 or less, this handbook provides a summary of basic environmental requirements and Agency guidance in place in mid-1991. The handbook is meant to serve as a quick guide to the environmental programs that typically apply to very small communities and is not intended to be a definitive statement of the specific ways in which a community may assure environmental compliance. The handbook is being updated and will be republished in mid-1993.

- **Wellhead Protection Implementation Training Publications**

  Contact: Janette Hansen, OW, OGWDW, (202) 260-7077

  The Wellhead Protection Training Program provides many guidance documents to assist States, Indian tribes and local governments in managing, defining and financing wellhead protection programs. Specifically, the following documents focus on local government needs:

  - "Wellhead Protection Programs: Tools for Local Governments," April 1989
  - "Local Financing for Wellhead Protection," June 1989
  - "Citizens Guide to Water Protection," April 1990
  - "Guide to Ground Water Supply Contingency Planning for Local and State Governments," May 1990.

- **Municipal Solid Waste Siting Guidebook**
  Contact: Henry Ferland, OSWER, OSW, (202) 260-3384
  The 1990 Municipal Solid Waste Siting Guidebook presents a strategy for resolving the conflicts that often emerge during the siting process for new waste disposal facilities. Public officials are the primary audience for this guide.

- **Regional Approaches to Municipal Solid Waste Management**
  Contact: Henry Ferland, OSWER, OSW, (202) 260-3384
  The Agency, in conjunction with the National Association of Regional Councils, is developing case studies and a guide on Regional Approaches to Solid Waste Management that will assist local communities seeking regional solutions. This project is scheduled to be completed by the end of 1993.

- **Chemical Emergency Preparedness Program Publications**
  Contact: Kathy Jones, OSWER, CEPPO, (202) 260-8353
  The Chemical Emergency Preparedness Program publishes guidance and technical assistance bulletins to help States conduct training to local governments. Some examples of the many documents published by the program to assist local communities are:

  - "It's Not Over in October! A Guide for Local Emergency Planning Committees: Implementing the Emergency Planning and Community Right-to-Know Act of 1986" (OSWER-90-004), September 1988
  - "Toxic and Hazardous Chemicals Title III and Communities: An Outreach Manual for Community Groups" (EPA 56-1-89-002), September 1989
  - "Risk Communication About Chemicals in Your Community: A Manual for Local Officials" (EPA 230/09-89-066) December 1989
  - "Developing a Hazardous Material Exercise Program: A Handbook for State and Local Officials" (NRT-2), National Response Team, September 1990

- **"The Clean Air Act 1990: A Primer on Consensus - Building"**
  Contact: Nancy New, OAR, OAA, (202) 260-3846
  This primer is designed to assist local and state pollution control agencies, organizations and individuals embarking on collaborative decision-making processes to implement the Clean Air Act of 1990. The primer includes cases about consensus-building processes used to improve air quality such as Denver's establishment of a Metropolitan Air Quality Council to address the "Brown Cloud."

IV. DATA/INFORMATION SYSTEMS, NETWORKS, AND CLEARINGHOUSES

o **Environmental Finance Information Network (EFIN):**
Contact: George Ames and Vera Hannigan, OARM, Environmental Finance Program, Office of Comptroller, (202) 260-6685
EFIN is a database and contact service that can be accessed through the Local Exchange (LEX) and the National Conference of State Legislatures LEGISNET networks. EFIN provides: (1) a directory of local, State and federal government contacts for information about specific funding options and programs; (2) news and updates on environmental financing issues; (3) case studies of successful finance methods for environmental programs used by local governments; (4) a question/answer bulletin; (5) abstracts of publications; (6) a calendar of national conferences, workshops and training seminars; and (7) a telephone hotline (202)260-0420 to supplement EFIN by answering questions or making referrals to other databases, clearinghouses, and hotlines.

o **"Solid Waste Options"**
Contact: Lawrence Martin, ORD, OSPRE, (202) 260-7667
"Solid Waste Options" is a self-auditing and decision-making software tool intended to assist in developing integrated municipal solid waste planning in small communities.

o **Environmental Software Package -- Region 5**
Contact: Judy Beck, Region 5, Office of the Regional Administrator (312) 353-9391
Through a grant to Purdue University, Region 5 has developed a variety of environmental software systems to assist and educate citizens, educators, farmers, developers, and state and local governments. These user-friendly software systems may be transferred by discs to users without charge. Some of the systems directly useful to local officials and communities are:

- Principles & Design of Onsite Waste Disposal with Septic Systems -- An instructional program to teach the basics of on-site treatment.
- RWaste II Residential Waste Treatment Evaluation -- This system selects a wastewater treatment technology and does a preliminary system design. A useful tool for local regulatory staff.
- The Lead Contamination Information System -- The program provides facts about lead in drinking water and presents techniques for reducing lead exposure.
- Wetlands Education System -- Topics covered include the definition and classification of wetlands.
- Alternatives for Unsewered Communities -- This program is an extensive guide to the facilities planing process for small communities.
- Municipal Pollution Prevention Diagnostic Planner -- This program serves as an early warning system for wastewater treatment plant operators.

- National Primary Drinking Water Regulations Personal Computer Application -- This system provides user-friendly access to federal drinking water regulations and a consolidated information directory with names and addresses of key federal and State regulators.

- National Primary Drinking Water Regulations Implementation-- Version 2 is expected to be available in Fall of 1993 -- This system will helps the user to better understand and estimate the impacts of federal drinking water requirements on public drinking water systems during the period of January 1, 1993 through December 31, 2001.

o **National Small Flows Clearinghouse (NSFC)**
Contact: Sylvia Bell, OW, OWEC (202) 260-7255
In 1977, the NSFC was established at West Virginia University by the Agency under the Clean Water Act. As a participant in the SCORE program, NSFC's mission is to promote the use of appropriate, low-cost wastewater systems for small communities. The clearinghouse provides various services to local governments including a hotline, computerized bulletin board, training, workshops, and technical publications.

o **Wellhead Protection Implementation Computer Models**
Contact: Janette Hansen, OW, OGWDW, (202) 260-7077
Through the Wellhead Protection Implementation Training Program, two computer models are available to State and local governments from the International Ground Water Modeling Center in Golden, Colorado:
- WHPA Version 2.1: A ground water flow model developed for the Agency and designed to assist State and local technical staff delineate wellhead protection areas.
- VIRALT Version 2.1: A ground water flow and contaminant transport model designed to assist in determining whether public water supply wells are vulnerable to viral contamination.

o **Computer-Aided Management of Emergency Operations (CAMEO)**
Contact: Kathy Jones, OSWER, CEPPO, (202) 260-8353
This software package is designed to provide State and local managers with a tool to manage information about hazardous materials, and to help planners, first responders, and emergency teams plan for a safe response to chemical accidents. CAMEO's data base contains over 3,000 chemicals and includes fire and explosion hazards, fire fighting techniques, first aid, health effects, and spill cleanup procedures.

o **Technical Information Centers for Local and State Air Pollution Control Employees**
Contact: Jerome Mersch, Source Receptor Analysis Branch (919) 541-5635, Karen Blanchard, Pollution Assessment Branch, (919) 541-5647 OAR, OAQPS
This program provides a series of technical assistance centers to support state and locals on issues such as control technologies, air toxics, and risk. The program also provides

an electronic bulletin board that includes air quality models, technical data, policy and guidance documents. A special area of the electronic bulletin board has been established so that only state and local air pollution control officials can communicate among themselves.

V. INTERNAL AGENCY EFFORTS AND STUDIES RELATED TO LOCAL GOVERNMENTS

o **Small Community Information and Data Program**

Contact: Mel Kollander, OROSLR, (202) 260-3941

The goals of this program are to: (1) produce a database of environmentally-related characteristics of small communities and their governments; (2) support the Regulatory Flexibility Act requirement to assess the impact of proposed rules; (3) assess the overall impact of Agency regulations on small communities; and, (4) help identify opportunities to streamline or modify regulations to achieve intended environmental benefits while responding to concerns of small communities.

o **"Local Government Implementation of Environmental Mandates"**

Contacts: Len Fleckenstein (202) 260-5359 and Andy Spielman, (202) 260-5354, OPPE, Office of Regulatory Management and Evaluation (ORME)

This study is aimed at defining specific problems being encountered by local governments in implementing or complying with EPA mandates. The purpose of this project is to better inform Agency management, based upon a limited data set of five case studies, of the most significant problems local governments experience in implementing environmental mandates. The study report is expected to be completed August 1993.

o **Urban/Local Comparative Risk Projects**

Contacts: Hannah Schoenbach (202) 260-2699 or Lawrence Molloy (202) 260-2702, OPPE, Office of Strategic Planning & Environmental Data (OSPED)

Urban/Local Comparative Risk Projects are designed to identify high risk environmental problems and assist cities and counties in developing realistic action plans to reduce these risks. Central to these efforts is "environmental equity," the issue of increased risk burdens borne by low income and ethnic groups. Thus far, the City of Seattle has completed a comparative risk project and is now conducting an "environmental equity" analysis. Other projects are planned for the future.

o **Regulatory Flexibility for Small Entities**

Contact: Terry Sopher, OPPE, ORME, (202) 260-5494

This pilot program is designed to encourage the Agency to adopt regulatory alternatives which minimize adverse impacts on small entities to the extent that they are consistent with environmental goals and statutory mandates. Under this pilot, the Office of Water, the Office of Air and Radiation, the Office of Solid Waste and Emergency Response, and the Office of Prevention, Pesticides and Toxic Substances have been requested to nominate two rules each for a regulatory flexibility analysis to develop model approaches

to regulatory development that minimizes burdens on small entities while achieving environmental goals.

- **Regulatory Flexibility Guidelines**
  Contact: Terry Sopher, OPPE, ORME, (202) 260-5494
  The Regulatory Flexibility Guidelines were revised March 1992 to require the Agency to consider regulatory alternatives if a rulemaking would have "any" impact on "any" small entity. Under the previous guidelines, this requirement only applied when a rule had "significant" impact on a "substantial" number of small entities. A second objective of the new guidelines is to encourage the involvement of small entities in rulemakings that would effect them.

- **"Building State and Local Pollution Prevention Programs," Office of the Administrator, December 1992**
  Contact: Joseph Sierra, OCEM, (202) 260-6839
  This report was written as a part of the activities of the NACEPT's State and Local Environment Committee. The Committee examined the status and trends of State and local pollution prevention programs and analyzed issues affecting progress in making pollution prevention the dominant strategy for environmental protection. The report provides six major recommendations to take advantage of early success in government efforts to promote pollution prevention and build greater momentum for action.

- **"A Preliminary Analysis of the Public Costs of Environmental Protection: 1981-2000," May 1990, OARM**
  Contact: George Ames and Vera Hannigan, OARM, Environmental Finance Program, Office of Comptroller, (202) 260-6685
  This study documents the costs of environmental protection for the Agency, the States, and local governments and uses these data to: (1) examine differences between current expenditures and future costs of environmental protection; (2) assess trends in the distribution of costs among the Agency, the States, and local governments; and (3) identify the financial impact of environmental policies on local governments, capital markets, and households.

- **Enforcement In the 1990's Project -- Utilizing Local Government, October 1991**
  Contact: Rebecca A. Barclay, Office of Enforcement (OE), Office of Compliance Analysis and Program Operations, (202) 260-9055
  The objective of this project was to determine the circumstances under which it is feasible and beneficial to broaden the role of local government in environmental enforcement, and to identify the opportunities and limitations for doing so. Four programs (Underground Storage Tanks, Wastewater Pretreatment, Small Quantity Hazardous Waste Generators, and the Emergency Preparedness and Community Right-to-Know Act) were studied. The recommendations in this report stem from lessons learned in these programs and interviews.

- **General Strategy for Enhancing Partnerships with Local Governments in Environmental Enforcement, March 1993**
  Contact: Rebecca A. Barclay, OE, Office of Compliance Analysis and Program Operations, (202) 260-9055
  This strategic plan was shaped, in part, by recommendations resulting from the "Enforcement In the 1990's Project" (listed above) on expanding the roles of local governments in enforcement because of their existing roles and expertise; their proximity to the ever greater number of small facilities and businesses subject to environmental regulation; and their potential to respond rapidly to problems. The purpose of this strategy is to promote partnerships with larger local governments in compliance monitoring and enforcement of state and federal environmental programs where interests, capability and resources already exist. In the near term, EPA and the States will work with localities to select a small number of programs and priorities and will develop partnerships with a limited number of interested local governments.

- **Baltimore Urban Environmental Initiative**
  Contact: Dominique Lueckenhoff, Region 3, Chesapeake Bay Program Office, (215) 597-6529
  The Agency, the State of Maryland, and the City of Baltimore are working together on this effort to identify, rank, and target actions to reduce and prevent environmental risks to urban areas. Environmental education and pollution prevention are critical components of these actions. The planned approach is to use risk-based targeting and strategic planning to develop and implement solutions to persistent environmental problems and concerns, such as lead, radon, and ground-level ozone. Public input from neighborhood communities is being surveyed.

- **Municipal Solid Waste Focus Group**
  Contact: Tim Jones, OSWER, OSW, (202) 260-7920
  The purpose of the MSW Focus Group is to learn how local governments obtain their MSW information and what the Agency could do to improve the quality and delivery of its MSW products. The group met in December 1992 and March 1993 to provide an opportunity to hear about the issues and how Agency outreach can be more effective. The group includes officials from the U.S. Conference of Mayors, the National Association of Counties, and the Agency.

- **Kansas City Attainment Case Study**
  Contact: Nancy New, OAR, OAA, (202) 260-3846
  As an approach intended to help local communities, this case study is part of an ongoing effort to identify, describe and encourage successful collaborative approaches to achieving air quality, and to reaching attainment, on an area by area basis. The purpose of this case study is to provide an account of the Kansas City Metropolitan Area's attempt to be redesignated -- a case from which lessons may be applied by each nonattainment area within the local context.