Executive Director's & President's Message

An organization must invest in its future so that it will continue to efficiently serve its customers. Not just investing money in people and equipment, but investing time to plan for tomorrow. The future brings change and we must be ready to respond to it. Our mission is cleaning wastewater for the Greater Cleveland area. We have invested more than one billion dollars to expand the capacity and improve the capability of our wastewater collection and treatment facilities. This type of continuous improvement, but we also investing our resources in ways that will result in equally beneficial long-term dividends.

We stay ahead of the multitude of state and federal environmental rules and regulations that affect our operations. Environmental protection is a complex business. Both federal and state environmental protection agencies have recently developed direction regarding combined sewer overflow control. We are concluding a three-year study to determine cost-effective approaches to meet the policy guidelines.

There must be a balance between regulations governing water quality standards and the cost of achieving them. We may not always agree with the direction of some proposed laws and will speak out to protect our customers from unnecessary costs. Our resources are finite and we must scrutinize their use to provide the highest return.

We consistently strive to improve operating efficiency. A significant portion of our operating costs are attributable to supplying energy for our treatment processes. We recently restored the purchase of natural gas, which resulted in reduced costs.

We work with various groups who are dedicated to environmental protection to address water quality concerns. Understanding the main function of each group brings to the table helps us to understand the many facets of a problem and ultimately arrive at a solution.

We aim to be the best at our work. We set high standards for ourselves. As a result we have been recognized for our achievements on local, state, national and even international levels. We celebrate this recognition as an affirmation of our direction and progress. Enhancing this reputation represents a challenge which we enthusiastically accept.
Staying Ahead of the multitude of state and federal environmental rules and regulations that impact our operations

ADVOCATING SENSIBLE REGULATIONS

The District prides itself in having a conscientious staff of experts who monitor proposed environmental regulations. Monitoring allows us to ensure that if the proposed regulations become law, they provide valid, cost-effective environmental benefits. Through our affiliation with the Association of Metropolitan Sewerage Agencies and other member agencies around the country, we work diligently to understand how proposed regulations will affect wastewater treatment facilities.

One of the principle ways the District advocates sensible regulations is by providing written comments.

The four-year process for the development of biosolids regulations provides an example of our involvement in the regulatory process. When the process began in 1989, we provided basic data about the operations we use to remove and process the solids received at our plants. Through AMSA, we followed the process of regulation development, provided supplemental information, and participated with other AMSA agencies to fund an independent technical evaluation of the regulations. One of our engineers served as chairman of the AMSA task group that managed the study and development of AMSA comments. U.S. EPA has credited AMSA's work as playing an important role in developing substantially improved regulations.

The new regulations require all treatment facilities to meet new emission standards, and analyze, monitor and report their biosolids disposal. Biosolids can be incinerated, distributed, and marketed, placed in biosolids-only landfills or on surface disposal sites. We incinerate ninety percent of our biosolids and conduct air emissions tests on the incinerators to assure their compliance with the new regulations. Test results from the District's seven incinerators showed that they comply with the new biosolids regulations. Since the incinerators are already in compliance, we will not have to make a major reinvestment in the facilities to meet these new regulations.

INCREASING MBE AND WBE OPPORTUNITIES

The District takes a proactive position in the support of the Minority Business Enterprise Program (MBE) and the Women's Business Enterprise Program (WBE).

Two years ago, as part of a consortium of local governments, we helped develop a disparity study to evaluate the level of minority subcontractor awards in the Greater Cleveland area. The study showed the need for additional minority contractor awards and as a result the District increased its MBE and WBE goals to further assist the effort.

Additionally, the District participated in the Greater Cleveland Roundtable to help develop the minority and women's subcontractor certification process. Joint certification makes the application process easier and more accessible.

By pursuing these activities, the District assures that all segments of our community have equal opportunity to do business with us.

ENSURING SAFETY THROUGH QUICK RESPONSE

The District leads the way in securing the safety of our employees and the communities we serve. This is demonstrated by our immediate and voluntary response to the Nuclear Regulatory Commission's (NRC) discovery of Cobalt-60, a radioactive material, at the Southerly Wastewater Treatment Plant.

In the spring of 1991, the NRC found low levels of Cobalt-60 in some of the incinerator ash deposited at Southerly. The District's investigation revealed that a manufacturer of medical equipment was the probable source of the Cobalt.

We took steps to protect our employees and customers and filed a lawsuit to recover the cost of remediation. Since the discovery, the District has voluntarily complied with all of the NRC's suggested actions to ensure the safety of District employees and to protect the environment.

In addition to working with the NRC, the District has sought the guidance of an independent radiological consultant concerning safety, remediation, and the prevention of any future occurrence. The District has gone over and above the NRC requirements to assure safety of our employees and the general public.

In 1993, the District acted quickly to address the Cobalt-60 issue. Specifically, we:
- conducted studies to characterize the materials, and
- placed ground water monitoring wells to assure radioactive material is not migrating to other areas.

In specific instances, the NRC allows the discharge of radioactive wastes to the sewer system. We have petitioned the NRC to establish a new regulation to require any licensed discharger to provide a 24-hour notice to treatment facilities before discharging radioactive material. We have also requested that the NRC require each licensed discharger to maintain insurance to cover the cost of any damage from radioactive discharges.
The term pollution prevention defines a fundamental shift in environmental protection. It means to stop a source from generating waste which would become pollution.

The District has embraced this ideology since the early 1970's when it began monitoring electroplaters and suggesting procedural changes. This monitoring was not only to prevent pollution, but to encourage conservation of other resources.

Today, our efforts continue as we work to educate industry, hospitals, dental clinics, and most recently, radiator repair shops about using less toxic materials and how to reduce pollutant discharges.

The District has actively participated both locally and nationally with organizations committed to pollution prevention. We have also completed the third year of a comprehensive recycling program that removes aluminum, oil, lead/acid batteries, paper products, antifreeze, and scrap metals from the waste system.

1993 Recycling Efforts

**PAPER PRODUCTS**

- Office Paper
- Corrugated Cardboard
- Printed Materials
- Computer Paper

**ALUMINUM & AUTOMOTIVE PRODUCTS**

- Lead Batteries
- Beverage Cans 3,000 lbs.
- Motor Oil 705 gal.
- Antifreeze 262 gal.

**SCRAP METALS**

- Copper
- Iron
- Aluminum
- Steel

48,548 Total Pounds

167,831 Total Pounds

A new state law requires government agencies to follow the same Occupational Safety and Health Administration guidelines as private industry. Because we already have implemented procedures that meet and often surpass these guidelines, the District is prepared for this new law.

An example of how we are leading the way is the recent formation of confined space rescue teams at each of our wastewater treatment facilities. We have taught our personnel the proper techniques for confined space rescues and have developed in-house resources to assist with the training. A converted construction trailer serves as a training area where employees fully equipped with air masks and tanks practice safety drills while it is filled with smoke. We provide this training to local firefighters and Hazmat response teams, improving their life saving capabilities and fostering intergovernmental cooperation. We even presented an orientation program to a local SWAT team in the event of a fugitive chase through sewers.

The success of these efforts has also been shared on a state and national level with presentations to the All Ohio Safety Congress and the National Safety Council.

Instrument Technician Joseph Russo assists Plant Maintenance Mechanic Gary Esow with adjustment of his self-contained breathing apparatus equipment.
The area's earliest type of sewer, the combined sewer, was designed to overflow into area waterways during wet weather. This is a problem because these overflows contaminate waterways with bacteria and floatable debris. The District began its Combined Sewer Overflow (CSO) control program in the 1970's. However, our CSO Facilities Plan Phase I Study which began in 1991, marks the beginning of an expanded program for CSO control.

A first element of the study identified non-structural or minor structural changes that could improve the existing CSO control system operation and resulted in recommendations with an estimated cost of $2 million. They include:

- Upgrade equipment to improve system maintenance.
- Fine-tune computer controls to improve system operation.
- Make structural modifications in sewers to minimize blockages that lead to overflows.
- Install permanent flow monitors at overflow locations and within the combined sewer system.

We also performed detailed studies to address water quality concerns in various drainage areas. Using computer modeling of the collection system and receiving waters, we simulated system performance during wet weather to understand CSO discharge characteristics and their impact on water quality. From the data, we developed preliminary costs and CSO control alternatives. We will refine these alternatives and use them as the foundation for an area-wide master plan for CSO abatement. In the Mill Creek and Field Creek Watersheds, the current study has identified efforts which can proceed as high-impact early action projects.

In concert with the above effort, a combined sewer code was developed. The code regulates communities with combined sewers. It requires them to develop and implement sewer inspection, cleaning and repair programs to help minimize overflows. A permit program will be used to administer the code.

In the late 70's and early 80's, the Cuyahoga Valley Interceptor (CVI) was built to service southern and southeastern communities. The Cuyahoga Valley Interceptor Lift Station at Southerly delivers flow from these communities to the Southerly Wastewater Treatment Plant.

In anticipation of increasing flows, the CVI Lift Station was built with provisions for expanded capacity. Our engineers intended to expand the pump station's capacity as community flows increased. That time has come— as indicated by sporadic flooding in the lift station.

The expansion project will double capacity by installing parallel pumps and adding a new force main to Southerly's headworks.

The District's Southerly biosolids handling system and the Easterly biosolids force main have reached the end of their useful service life and need to be replaced to maintain reliable and efficient operation.

The District took over operation of the wastewater collection and treatment facilities in 1972. From 1975 to 1980, we rebuilt the Southerly biosolids system and continued to upgrade it in the following years. However, after nearly 20 years, parts of the system have reached the end of their useful service life. This year we completed a study to determine how to best improve the system. As a result, we awarded a $4.3 million design contract for Phase I of the Southerly Solids System Improvements in December 1993.

Solids handling system improvements will provide additional treatment capacity, improve performance capabilities and decrease mechanical repair time. The project will be built in four phases and is scheduled for completion in 1999. We anticipate investing more than $110 million to renovate or replace old equipment, and install new equipment.

This year, our 55-year-old biosolids force main was down for 1,274 hours. This substantial downtime, which was nearly 15 percent of our operating time, prompted us to begin replacing it.

Construction began in August 1993 and is slated to end in March 1995. The renovated and expanded pump station will enable us to better serve our customers.
ELECTRONICALLY INTEGRATING RESOURCES

Efficiently managing resources through the use of an integrated computer-based information system is the primary objective of the Electronic Information Services Development Program. This program began in April 1991, and during the past year, our employees' hard work brought this objective closer to reality.

In January, we began generating payroll using the new human resource management application. At the same time, we switched from cash to accrual accounting using the financial management application. We have been transforming written human resource records to computerized records throughout the year.

We've also altered our strategy to upgrade the maintenance and inventory management component of the system. The team handling this task is evaluating new options to help us better manage equipment.

At the beginning of the year, a small number of users began evaluating expanded use of the data highway. Previously, we had installed the communication network linking our Administrative Offices and Environmental and Maintenance Services Center. Later, we connected Westerly and the Annex, which houses Engineering and Operations Administration. The two remaining locations, Southerly and Easterly, will complete the network once they are connected in 1994.

CUTTING ENERGY EXPENSES

Approximately 22 percent of our operating costs are for energy. So when District employees discovered a way to save money on natural gas, we jumped at the opportunity. We expected a savings, but were surprised when the savings exceeded our initial expectations.

We began to buy natural gas from a wholesaler in October 1993, and have been saving $30,000 per month ever since. If natural gas prices continue to increase, our yearly savings may reach a half million dollars.

Prior to this arrangement, we bought our gas from the East Ohio Gas Company and had them transport it as well. But since the East Ohio Gas Company had to buy the gas from wholesalers, we had to pay a markup price.

Now that we buy directly from the wholesaler, everyone benefits. The East Ohio Gas Company doesn't have to pay for the gas, therefore, we pay no mark up cost. The East Ohio Gas Company only transports and stores the gas for us.

We did not pursue this arrangement earlier because we were afraid of losing our 'human needs' status with the East Ohio Gas Company. Losing that status could have made us vulnerable to curtailments. As a result, we would lose our priority access to gas supplies. However, the East Ohio Gas Company and our wholesaler worked diligently to make sure that we would have adequate prepaid quantities of gas available to us. All parties benefit from this cost saving arrangement and we are actually better prepared than we were before. There is always gas available for our use.

PROCESS CHANGE ENSURES COMPLIANCE

There is light at the end of the tunnel at Westerly Wastewater Treatment Plant where every aspect of construction to renovate and convert it from a physical/chemical plant to a biological plant is underway. The improvements are necessary to help the plant meet its biochemical oxygen demand limits. As a physical/chemical plant, the treatment process used chemicals, pressurized sand filters, and carbon columns. Westerly was one of the first in the country to try this process. However, like other similar plants it did not meet all permit limitations.

To convert Westerly to a biological plant, we are adding trickling filters and biological solids contact tanks, converting two of the four clarifiers to sec-

Financial Position (in $ millions)

| EQUITY & LIABILITIES = $1,056.8 |
| ASSETS = $1,056.8 |

| REVENUES = $107.6 |
| EXPENSES = $88.0 |

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In 1993, we decommissioned the Berea and Brook Park Wastewater Treatment Plants in our continuing efforts to improve water quality in the Rocky River. They are two of the four plants whose flows are being accommodated by the newly-built Southwest Interceptor. Middleburg Heights was the first of these four wastewater treatment plants to go out of service in December 1992. Strongsville “A” is scheduled to shut down in July 1994.

Increasingly stringent EPA regulations have made it impractical for small plants to meet required discharge standards. So instead of investing large amounts of money to upgrade the plants, it was more cost effective to route the flow to the Southerly Plant via the Southwest Interceptor. There, the wastewater can receive advanced treatment.

**1993 Plant Performance Data**

**Easterly Wastewater Treatment Plant**
14021 Lake Shore Boulevard
Treated 1575 MG of wastewater
Pumped 639.2 million gallons of sludge to Southerly
Discharges effluent to Lake Erie

**Strongsville “A” Wastewater Treatment Plant**
2270 Sprague Road, Strongsville
Treated 3,512 MG of wastewater
Discharges effluent to Blvdgett Creek
(tributary to West Branch of Rocky River)

**Southerly Wastewater Treatment Plant**
6000 Canal Road, Cuyahoga Heights
Treated 125.7 MG of wastewater
Processed 99,461 wet tons of filter cake, incinerated 99,461 wet tons and treated 2,830 wet tons to land fill.
Processed sludge from Easterly, Strongsville “A” and Berea plants
Discharges effluent to the Cuyahoga River

**Berea Wastewater Treatment Plant**
400 Barrett Road, Berea
Treated 2.4 MG of wastewater
Discharges effluent to East Branch of Rocky River
(Average shown is through October 1996)
Plant flow re-directed to Southwest Interceptor

**What's Next?**

The District monitors a number of legislative decisions that affect our environment. Our opinion and commentary on proposed legislation are frequently sought due to our extensive knowledge about wastewater treatment and Northeast Ohio’s waterways. We are involved in a variety of environmental issues that could impact local waterways or our operations.

Part of the reason the District is able to effectively address environmental issues is because we are active in the legislative process. Our involvement is strengthened by maintaining membership in numerous professional and environmental organizations. In conjunction with these groups, we help initiatives become laws.

Given our responsibilities as wastewater treatment professionals, it is imperative that we play an active role in the issues that affect our waterways.

We are assisted in these efforts by the following groups:
- Association of Metropolitan Sewerage Agencies
- Association of Ohio Municipal Wastewater Agencies
- Build Up Greater Cleveland
- Citizens League of Greater Cleveland
- Cuyahoga River Remedial Action Plan
- Greater Cleveland Growth Association
- Municipal Engineers Association of Northeast Ohio
- Northeast Ohio Area Wide Coordinating Agency
- Water Environment Federation
- Water Environment Research Foundation
DEBATING COMPONENTS OF THE GREAT LAKES GUIDANCE

A newly proposed regulatory program, known as The Great Lakes Water Quality (GLWQ) Guidance, is expected to substantially change the way toxic materials are regulated. The District has been involved in the debate over the GLWQ Guidance since its onset and we applauded the open process that encourages public participation. While we support parts of the initiative, we encouraged the revision of those proposals which lack sufficient scientific basis.

We took an active role in soliciting others to become involved. By publishing a special newsletter, we informed nearly 4,000 individuals and organizations about the guidance and urged them to provide comments.

The District submitted 186 pages of technical comments that were prepared jointly with 11 other publicly owned treatment works and the Association of Metropolitan Sewerage Agencies. Subsequently, U.S. EPA received over 25,000 pages of comments.

Our principle objections to the Guidance include the following:
- It only focuses on point sources of pollutants.
- It lacks adequate science in some areas.
- Total costs have not been considered.
- Uniform standards proposed are not flexible enough to be cost effective.
- Also we expressed concern that the role of Remedial Action Plans (RAPs) should not be diminished by the

Guidance. We believe that RAPs can provide significant guidance to the overall Great Lakes protection strategy. Congress has also authorized the preparation of Lakewide Management Plans which will look at the unique features and problems of the individual Great Lakes.

Though we support new efforts to protect the Great Lakes, we hope the final Guidance will be revised to reflect our concerns.

NEW TOXICS PROGRAM PROVIDES ENCOURAGEMENT

The Great Lakes Toxics Reduction Effort, which was announced by U.S. EPA earlier this year will be helpful in addressing non-point source issues at a regional level. The District is looking forward to helping make this new program a success.

We plan to watch this effort closely and encourage early goal setting to help avoid the weaknesses apparent in the currently proposed Great Lakes Water Quality Guidance. We hope the new program is bold enough to deal with the full range of non-point sources that affect the Great Lakes. Additionally, we hope it will not duplicate the proposed guidance's error of excluding Canada as a full partner in planning for reduced loadings.

REACHING CONSENSUS ON RIVER STANDARDS

Prior to 1991, the Cuyahoga River Ship Channel was one of the few river segments in the country without water quality standards. Working within the process of Remedial Action Planning (RAP), the District has played a significant leadership role in understanding the river and setting reasonable goals to further improve its water quality.

Factors which had blocked earlier attempts to set standards were a large range of pollution sources, complex hydraulic interactions with the lake, and use of the river by a wide variety of interests. Also dredging and sheetpiling have reduced the life sustaining capacity of the water.

To investigate and improve these circumstances, Ohio EPA, with encouragement from RAP, initiated a study process. The District helped by conducting supporting studies and coordinating community technical comments. Further, through the RAP process the District played a major role coordinating the public's involvement in developing proposed standards. In 1993, the result was a unique standard tailored to the Cuyahoga River.

The District is pleased that the standard is based on scientific study, the unique conditions of the channel, and the community's goals. We believe this approach of tailoring policy and standards to fit specific problems is an important theme for solving other water pollution problems.

A freighter passing through the ship channel of the Cuyahoga River.

SUPPORTING PRACTICAL ENVIRONMENTAL POLICY

The District supports the National Combined Sewer Overflow (CSO) policy advocated by the U.S. EPA. The U.S. EPA drafted CSO policy provides guidance to communities and agencies with CSOs to help them meet the requirements of the Clean Water Act. The Ohio EPA recently revised its CSO Strategy to complement the U.S. EPA policy. As participants in the development process for both efforts, the District provides the Ohio and U.S. EPA with insight about practical issues the District faces. We feel the policy should be flexible enough to fairly address a wide range of local situations.
Aiming to be the best at our work

AT TRACTING INTERNATIONAL ATTENTION

When you have something that you are proud of, you enjoy sharing it with others. We have something that people from around the world wish to learn more about or even duplicate.

The District's Southern Wastewater Treatment Plant and Environmental and Maintenance Services Center draw attention from industry leaders on an international scale. Visitors from Russia, the new German states, Japan, Croatia, Brazil, Mexico and the Ukraine observed and learned about the District's facilities, procedures and staff.

In the fall, the United States Information Agency requested that a group of Russian scientists tour the Southernly plant during their visit to America. German environmental specialists did the same. Excellence in the wastewater treatment process at a state-of-the-art facility are reasons why the District is presented as a model organization.

The Tokyo Metropolitan Government sent 13 members to visit Southernly in July. They hope to use some of our innovation as they expand and improve the Tokyo wastewater system.

SHARING ENVIRONMENTAL KNOWLEDGE

To help customers learn about the District, its functions and environmental concerns, we participate in various programs and special events.

More than 40 employees assisted with the "Cuyahoga Caravan" public tours in October. Hosted by the Cuyahoga River Remedial Action Plan, the tours created an awareness of water quality issues in the Cuyahoga River area. The event featured a two-hour walking tour of Southernly. More than 120 visitors learned about the treatment process and many functions of our organization.

Also in October, the District participated in local college job fairs and provided four college students the opportunity to attend the Ninth National Environmental Career Conference in Tampa, Florida. We educate college students about potential careers at the District at the college job fairs. The Environmental Career conference offered students who are studying environmental sciences a unique opportunity to meet with hundreds of industry experts.

District employees frequently are invited to speak about their area of expertise. An example was a presentation of the District’s in-house safety training program offered at the National Safety Congress & Exposition in Chicago, Illinois. In addition, the District provided speakers to many community organizations and gave guided plant tours throughout the year.

EMPLOYEES RECOGNIZED FOR OUTSTANDING ACHIEVEMENTS

The District's commitment to excellence was readily apparent throughout the year. Efforts to educate the public earned the District the 1993 Public Information and Education Award from the Association of Metropolitan Sewage Agencies (AMSA). The District's 20th Anniversary Poster and Booklet were honored at AMSA's annual awards banquet in Baltimore, Maryland.

Employees who have served the District since its inception in 1972 are interviewed throughout the booklet. The employees describe how the District has enhanced water quality in Cleveland with advanced technology, construction of new sewers, employee development and training, safety procedures and various programs.

In September, Robert Dominak, Project Engineer, and David Schwark, Plant Maintenance Mechanic, both earned Greater Cleveland Public Works Performance awards. The annual awards are given for exemplary efforts in serving the public sector.

Dominak was recognized for managing the design of the Southernly plant improvements and for his expertise in sludge incineration, odor control and protective coatings systems.

Schwark was recognized for his contribution to implementing the new Occupational Safety and Health Administration (OSHA) ruling that addresses confined space entry and for helping other employees learn to use personal protection equipment in confined areas.

In Anaheim, the District team took second place in their respective division and seventh overall. The competition included 35 teams from the United States and Canada.

The teamwork and excellence demonstrated by these employees are a great source of pride to the District. The teams' efforts exemplify a high level of commitment to superior performance throughout our organization.
The Mission of the Northeast Ohio Regional Sewer District is to enhance public health and welfare through the efficient, cost-effective conveyance and treatment of wastewater. This is accomplished by an organization—dedicated to professionalism, fairness and consistency—that anticipates and responds to the changing environmental needs of the community.

S E N I O R  M A N A G E M E N T
