

Michigan Department of Environmental Quality
Water Division

**ANNUAL REPORT TO EPA
ON CAPACITY
DEVELOPMENT
PROGRAM — FY 2003**

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Water Division
525 West Allegan Street
P.O. Box 30630
Lansing, MI 48909-8130
517-241-1300

Michigan Annual Report to EPA on Capacity Development Program (CDP) — FY 2003

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List of Acronyms

Act 399	Safe Drinking Water Act, 1976 PA 399, as amended
AWWA	American Water Works Association
CCR	Consumer Confidence Report
CDP	Capacity Development Program
CWS	Community water system
DWP	Drinking water program
DWRF	Drinking Water Revolving Fund
ERP	Emergency response plans
EU	Enforcement Unit
FAP	Financial action plan
FY	Fiscal Year
LHD	Local Health Department
MCL	Maximum contaminant level
MDEQ	Michigan Department of Environmental Quality
MHC	Manufactured Housing Community
MMBA	Michigan Municipal Bond Authority
NCWS	Noncommunity water system
NOV	Notice of Violation
NTNCWS	Nontransient Noncommunity Water System
OTCU	Operator Training and Certification Unit
RFP	Request for Proposal
SDWA	Federal Safe Drinking Water Act
SNCs	Significant noncompliers
Strategy	Capacity Development Strategy for Existing Public Water System
TMF	Technical, Managerial, or Financial
UPEA	U.P. Engineers & Architects, Inc.
USEPA	U.S. Environmental Protection Agency
VA	Vulnerability assessments
WD	Water Division

Michigan Annual Report to EPA on Capacity Development Program (CDP) — FY 2003

1. Current Strategy and Plans for the Future

Michigan's CDP has been implemented by the Water Division (WD) through amendments to the Safe Drinking Water Act, 1976 PA 399, as amended (Act 399), and by application of capacity development polices and guidance documents. These authorities have been blended into our long-standing program of technical assistance. The following two documents that have been submitted to the U.S. Environmental Protection Agency (USEPA) describe our CDP:

- *New Community Water System Capacity Guideline Document*, dated May 1, 2000
- *Capacity Development Strategy for Existing Public Water Systems*, dated August 1, 2000 (Strategy)

The new systems program relies on two control points: construction permits and final inspection. New systems also include those that do not meet the definition of a community water system (CWS) at start-up but are designed to one day meet the definition, and those systems that are not currently a CWS that propose to extend the water system, thereby growing to become a CWS. One exception is a system that simply increases the number of users without altering or constructing water system infrastructure.

The following table outlines the status of the new CWSs and nontransient noncommunity water systems (NTNCWSs) during the first four fiscal years (FYs) of the CDP.

Table of New Systems	Type System	FY 2000	FY 2001	FY 2002	FY 2003
Total Number of New Systems • Proposed • Approved, or • Commenced Operation	CWS	52	23	16	21
	NTNCWS	10	26	35	8
Number of Proposed Systems • Not Yet Approved, and • Not Yet Commenced Operation	CWS	45	19	7	12
	NTNCWS	*			
Approved But Not Yet Commenced Operation	CWS	All approved systems have commenced operation. For manufactured housing communities (MHCs), the WD tracks when they are APPROVED to commence operation. MHCs may have other licensing criteria to meet with another state agency.			2
	NTNCWS				See note at left
Commenced Operation During the FY	CWS	7	6	9	9
	NTNCWS	10	26	35	8
Not in Compliance and Reason for Noncompliance	CWS	In compliance at end of FY	In compliance at end of FY	See note on next page	See note on next page
	NTNCWS			In compliance at end of FY	In compliance at end of FY

* The WD has delegated the authority to local health departments (LHDs) to review, approve, and issue construction permits. LHDs do not track the number of applications for permits.

Note: New NTNCWSs are all in compliance with the rules. Only one of the new CWSs in FY 2003 exceeded a drinking water standard. Whitmore Lake Apartments exceeded the total

coliform maximum contaminant level (MCL), they issued a boil water order and posted public notice, and quickly returned to compliance. A few systems have received monitoring and reporting violations. Misty Cove Apartments failed to collect a total coliform sample for the months of September 2002 and January 2003, and returned to compliance within days. The remaining violations appear unresolved, but violations are still being entered into the Safe Drinking Water Information System and won't be completed until the end of this quarter.

CWS

Generally, a construction permit is issued based on the technical capacity of the proposed system. However, the financial and managerial capacity requirements may still be pending while the system is under construction. Only after a final inspection and when the system has demonstrated capacity in all three areas is approval granted to commence operation. A New System Tracking Database tracks the progress of potential systems through the process.

The existing system strategy relies primarily on the capacity assistance component of the state's drinking water program (DWP), which the WD has traditionally referred to as technical assistance. Through routine system evaluations or capacity assessments, the WD staff determines which systems need capacity assistance. Based on the wishes of our stakeholders, the WD will not request a capacity assessment of an existing water system unless violations, deficiencies, or other factors indicate the system lacks technical or managerial capacity. Capacity assistance is provided through the WD staff or through other technical assistance providers to help communities build technical, managerial, or financial (TMF) capacity. If capacity assistance is not requested or ineffective, Michigan practices a program of escalated enforcement.

Plans for the future include continuing the strong tradition of technical assistance provided by the WD staff during visits, evaluations, meetings, and training. Due to Michigan Department of Environmental Quality (MDEQ) restructuring, the DWP has merged with another program with an established and experienced enforcement unit (EU). The (EU) is helping to further streamline and speed escalated enforcement on water systems. Additionally, the WD staff is continuing to encourage communities to use the services of other technical assistance providers, many times at no cost to the systems.

NTNCWS

The WD has delegated the authority to LHDs to review, approve, and issue construction permits. When water systems begin the permit application process, the LHD helps them outline their financial and managerial capacity. Prior to receiving approval to commence operation, NTNCWSs must submit a financial plan and a managerial plan that includes a contingency plan and designation of a certified operator, etc. The WD routinely measures the compliance status of noncommunity water systems (NCWSs), including NTNCWSs. This information is used to prioritize technical assistance as well as educational and enforcement efforts as described in the next section.

2. Methods or Criteria Used to Prioritize Systems and to Measure Improvements

The WD established methods and criteria to identify and prioritize existing systems for capacity assistance in the strategy cited above. These methods and criteria are still in place and are

also used to measure improvements in capacity, though some mechanisms have been refined and updated.

Compliance Information

Compliance data will be one baseline for measuring progress in the CDP. However, comparing compliance data from one year to the next becomes more difficult because of the rapidly increasing numbers of new rules and requirements each year.

With the onslaught of many new regulations that are likely to have a disproportionate impact on small systems, the number of systems in compliance may not tell the true story of improved capacity. Small systems make up the majority of systems in the state, and they make up the majority of systems in noncompliance. However, the majority of the population served by CWSs is supplied by large systems that generally comply with requirements. To put compliance data into perspective, it may be useful to compare the percent of population served by CWSs that are in compliance with health-based standards and monitoring and reporting requirements. During 2002, the percent of the population served by CWSs meeting all health-based drinking water standards ranged from a low of 98.3 percent to a high of 99.8 percent. During the first quarter of the calendar year, the city of Ann Arbor exceeded the turbidity standard for a short time. The remaining quarters were 99.3 percent or higher.

To show the trend toward compliance, the following table shows data from Michigan's Annual Compliance Reports for calendar years 2000 through 2002 submitted to the USEPA each July.

Percent of Systems in Violation								
	MCL				M/R			
	2000	2001	2002	Trend	2000	2001	2002	Trend
Chemical								
CWS	0.1	0.1	0.0	↓	1.6	0.6	1.0	
NCWS	0.4	0.1	0.1		6.4	5.3	4.5	↓
Combined	0.1	0.1	0.2		5.8	4.7	4.1	↓
Total Coliform								
CWS	5.7	5.3	5.0	↓	6.4	4.6	4	↓
NCWS	3.5	3.2	3.1	↓	13.6	10.5	9.7	↓
Combined	3.8	3.4	3.3	↓	12.7	9.8	9.1	↓
Lead & Copper								
CWS	0.2	0.1	0.0	↓	3.4	0.8	1.0	
NCWS	0.0	0.0	0.0		2.0	0.8	0.6	↓
Combined	0.0	0.0	0.0		2.1	0.8	0.6	↓
CCR					5.1	16.2	2.0	↓

Key to Table:

CCR: Consumer Confidence Report—Michigan requires day care centers and K-12 schools to provide an abridged annual water quality report instead of a CCR. That compliance data is not included here.

CWS: Community water system

MCL: Maximum contaminant level—This is a health-based drinking water standard.

M/R: Significant monitoring and reporting violations—They occur when no samples are taken or no results are reported during a compliance period or when follow-up monitoring was not performed after a positive total coliform sample.

NCWS: Noncommunity water system

SWTR: Surface Water Treatment Rule

TT: Treatment Technique

The above table reflects a decrease in the percent of systems in violation in most categories including the CCR rule. The CCR rule requires all CWSs to deliver an annual water quality

report (i.e., CCR) to their consumers. The WD staff provided considerable assistance to systems the first couple of years, and the rate of compliance was very high. Subsequently, however, systems were expected to produce their CCR with less assistance from WD staff. One year saw a spike in violations (2001), but quickly declined to only two percent of systems in violation in 2002.

As the CDP continues, other baselines will be established as the number of programs available to systems in need of assistance increases. It may also be relevant to track the amount of technical assistance provided by the WD staff and other technical assistance providers, such as the increasing opportunities to earn continuing education credits (CECs). We might also look at the percentage of systems with certified operators, and the number of TMF capacity assessments conducted.

Evaluations and Surveillance Visits

Evaluations, visits, and construction permits continue to receive attention in the field offices. The following table shows the number and percentage of these activities in the last three FYs for CWSs:

System Evaluations, Visits, and Construction Permits						
	FY 2001		FY 2002		FY 2003	
Evaluations Conducted	430		485		266	
	#	%	#	%	#	%
Satisfactory	323	75	347	72	192	72
Marginal	47	11	53	11	38	14
Deficient	27	6	35	7	21	8
Not Rated	33	8	49	10	15	6
Other			1	0		
Visits	1,385		1,302		1,069	
Permits (Received/Issued)	1,869 / 1,908		1,706 / 1,799		1,736 / 1,703	
Permits Issued Within 10 Business Days of Receipt	#	%	#	%	#	%
	1,378	72	1,335	74	1,261	74

This data reflects the following:

- A 54 percent decrease in the number of evaluations of water systems conducted—A major objective on the performance appraisal of the field staff is the percent of evaluations they are expected to conduct. The DWP was recently merged with another division and an early-out retirement option was made available to senior state employees. Staff from other programs, including senior staff, was moved to the DWP while others left the program. The district offices are not fully staffed due to an inability to attract qualified candidates, to hiring restrictions, and to current staff with responsibilities in more than one district. As a result, evaluations were not conducted at the expected rate of about 350 each year.
- A slight decline in the percent of evaluations that are rated marginal and deficient.
- To date, several evaluations are still pending in FY 2003 and some remain pending from FY 2002—the staff is expected to document evaluations and visits within 30 days. Greater efforts are being made to more accurately track evaluations.

- A nearly 22 percent decrease in the number of on-site visits to meet with operators and local officials, conduct evaluations, or check on progress of projects—as mentioned earlier, the district offices are not fully staffed. As a result, the number of on-site visits that staff can conduct is cut dramatically.
- Despite staff shortages and inexperience of new staff to the drinking water program, permit turnaround time has remained the same as FY 2002.

Escalated Enforcement

Integrated into staff performance objectives are specific targets to return systems to compliance. Violations are expected to be addressed in a timely manner and fines issued for those systems failing to conduct monitoring or meet standards.

When fines prove ineffective or continued violations represent a serious public health threat, our staff uses other enforcement tools. If it is determined that a system has not made satisfactory progress in resolving serious deficiencies since the last evaluation, escalated enforcement is warranted. These enforcement actions are usually initiated by Notices of Violations (NOVs), but in the most serious cases, could begin with an order. For example, repeated fines issued against Harbor Town Apartments in Southwest Michigan did not prevent further monitoring violations so the district staff initiated an NOV. Following the NOV, the MDEQ offered the system an administrative consent order, which also included other deficiencies. The system has entered into the consent order and has already completed several items, such as providing a sampling site plan and completing and implementing a cross connection control program. They are also performing their monitoring on time.

In addition to escalated enforcement, the MHC sector of the CWS program can issue Certificates of Noncompliance and Conditional Certificates of Compliance to MHCs, which are subject to licensure by another department of the state. These certificates provide input to the licensing department's decision to reissue or revoke a license to operate, based on health statutes and rules including drinking water. Certificates were issued to two community water systems in FY 2000, six in FY 2001, and eight in FY 2002 for drinking water deficiencies.

Examples of other measurements we may track in the future are:

- Number of systems returned to compliance prior to issuance of an NOV or escalated enforcement
- Number of deficient systems where an NOV or escalated enforcement is initiated
- Average length of time to return a system to compliance when an NOV or escalated enforcement is initiated
- Amounts of stipulated penalties to resolve a system's noncompliance

Operation and Maintenance Problems

The WD integrated an "important deadlines" module in our evaluation information tracking system. The WD district staff may use this module to track operation and maintenance

milestones established as a result of formal evaluations, visits, or consent or department orders that the WD expects the systems to meet to return to compliance. Examples of problems staff may need to track are:

- Hydrant and main flushing
- Valve turning program
- Pump and motor maintenance program
- Main break frequency information
- Wellhead protection program/source water protection plans
- Monthly operation reports
- Recordkeeping
- Clearwell and finished water reservoir maintenance programs

WD District Staff Input

This vital element remains the primary factor to prioritize systems for capacity assistance.

NTNCWS

The WD contracts with LHDs to provide noncommunity program services on a statewide basis. The contracts set standards of performance and hold LHDs accountable for enforcement of Act 399. The rates of compliance with requirements for NCWSs are tracked on a quarterly basis. Tracking is focused on monitoring and reporting, drinking water standards, sanitary survey frequency, and significant noncompliers (SNCs). In addition to the quarterly updates, all LHDs are evaluated annually to determine if they are meeting contract requirements. This includes acceptable rates of compliance for the systems in their jurisdiction, review of LHD records for selected NCWSs, and field verification at selected NCWSs. A LHD with a violation rate that exceeds a target level can be found to be in noncompliance with contract requirements. Those agencies must submit an acceptable corrective action plan describing steps that will be taken to improve NCWS compliance under their jurisdiction. Repeated failure to improve system compliance can result in termination of the contract and funding.

3. Summary of Activities to Help Existing Systems Improve Their Capacity

Technical Assistance

Technical assistance has been integral to Michigan's DWP for decades, although it was not always referred to as such. Assistance or consultation has been the preferred method to prevent systems from falling into noncompliance. At times, however, the district engineers serve as both technical assistance providers as well as regulators.

MDEQ Capacity Assistance

A primary objective of the WD is to provide excellent customer service. A means by which the WD measures the success of that objective is through technical assistance to CWSs through meetings, by telephone, and during site visits. Carsonville in eastern Michigan asked our district staff to talk with their council and operators about security issues. At the meeting, discussion ensued about other issues and, as a result, the village is moving ahead with a DWRf application to replace transmission mains, provide looping, and install arsenic treatment. Bay City, also in eastern Michigan, worked with our district staff on their Needs Survey and has moved toward submitting information for the DWRf for a new intake, treatment plant, and low lift station.

After a routine evaluation (sanitary survey), district engineers detail their findings and recommendations in a letter to the system within 30 days. Evaluation letters help systems understand the severity of the deficiencies and importance of acting on the engineer's recommendations. For example, the September 2003 evaluation for West Branch in eastern Michigan requested a general plan and an updated reliability study. The city has issued a request for proposal (RFP) and is currently soliciting bids for a new reliability study, and may consider amending the RFP to include completion of a general plan.

Many times, a one-time capacity assistance meeting is sufficient to keep systems in compliance. In other situations, the district engineers spend more time with the system to help solve more complicated concerns. Often, water system operators want to comply, but they do not have the financial resources or support from community leaders to make the changes that are necessary. However, when options are particularly expensive, or when acceptable alternatives are not readily available, the WD may be reluctant to begin enforcement. When these difficult cases arise, the WD increases surveillance activities and attempts to address potential enforcement action at the same time.

As a result, district staff may attend municipal board meetings or council meetings to discuss a compliance schedule with specific items and completion dates and discuss the possibility of formalizing the schedule in a compliance schedule that is incorporated into a consent order. Community leaders need to hear the benefits of agreeing to a course of action that allows them time to address their problems without further enforcement or fines. During this time, district staff will be more closely involved as a capacity assistance provider in helping the system meet the deadlines of the order.

Many of the district engineers are working more closely with community leaders and encouraging them to attend regional meetings and training sessions for waterworks professionals. Some are reluctant to attend, but once they do, they have a greater understanding of the demands of operating a water system. They also see the importance of certified operator continuing education.

Financial Assessments on Existing Systems

To help existing CWSs improve financial capacity, a pilot project was conducted in FY 2002 to recommend procedures, identify potential obstacles, and suggest strategies for the possible implementation of a program to assist water systems with financial concerns and problems. The pilot project selected systems that serve a population of less than 10,000, received a

deficient or marginal rating in a recent evaluation, and are not making satisfactory progress toward correcting the deficiencies due in some part to financial difficulties.

The WD commenced the financial assessment program in FY 2003 and selected 16 water systems, each serving less than 10,000 people. We widened the selection criteria from systems that received a less than satisfactory rating to systems that could benefit from a financial assessment. As a result, several systems that are currently in compliance, but are concerned about future challenges, such as meeting the new arsenic standard, are making progress toward that end with improving their financial capacity.

Following each assessment is a report summarizing the state of the system, the financial information, results of the visit with the system, and a financial action plan. The financial information requested before an on-site visit include the latest budget, recent audits, water rate and water use ordinances and resolutions, rate studies or feasibility studies, and contracts or service agreements with outside customers.

The assessments are conducted by a member of another division in the department who also conducts the financial assessments of the new systems. This staff person reviews the system's file or meets with the district engineer to get an idea of the state of the system and to ask the engineer what he or she would like to see accomplished by a financial assessment. The on-site meeting with the system usually includes the water operator or Department of Public Works Superintendent, the clerk, and council or board members. Together they discuss the system's financial goals, steps toward reaching the goals, or obstacles preventing them from accomplishing their goals.

The first final report has recently been completed, which includes a financial action plan (FAP). The report is included in the appendix of this report. The FAP states the one or two financial goals of the water system, lists the tasks to complete to reach those goals within given timeframes, and includes step-by-step procedures to complete each task. The FAP also includes tools the system can use to complete the tasks such as templates for water rate and water use ordinances, worksheets to plan for replacement needs and capital improvements, and sample rate methodologies. The system is expected to carry out the FAP and the MDEQ is available to assist when requested. The FAP is intended to also be a guide for the district engineer. If a system falls into noncompliance with Act 399 partly due to failure to carry out the FAP, then the engineer may choose to include the FAP tasks and timeframes into an administrative consent order.

The on-site portion of the first 16 systems will be almost complete by the end of this month. We will solicit the district staff to nominate another group of 16 systems shortly.

Index of Technical Assistance Providers

An index of technical assistance providers was recently completed as a result of a stakeholders meeting at which many of the listed agencies described the services they provide to the waterworks industry. This index periodically published in *Michigan Water Works News*, a newsletter of the MDEQ and the Michigan Section, American Water Works Association (AWWA). The index is a "yellow pages" of technical assistance providers for water systems, community leaders, and MDEQ district staff. This index is not all inclusive, but we hope it will serve as a starting point and grow as more organizations make themselves available to systems who need assistance in a capacity issue. Groups included in the index are:

- AWWA
- MDEQ - WD
- MDEQ - Environmental Assistance Division (designated Environmental Sciences and Services Division effective September 15, 2002)
- Michigan Rural Water Association
- Rural Community Assistance
- Rural Utilities Service

Services may include hands-on operational training, mentoring, rate studies, loans and grants, cross connection program training and planning, and CCR preparation. Many of these services are available at no cost to the system. District engineers are now able to refer systems to many of these providers.

Technical Assistance Provider Contract

Typically, a much greater percentage of systems that struggle with compliance are small systems. As a result, the WD has been using technical assistance set aside to fund a four-year contract with U.P. Engineers & Architects, Inc. (UPEA), to perform on-site visits to nearly 2,000 PWSs serving fewer than 10,000 people such as municipal systems, privately-owned systems, schools, day care centers, and MHCs, and to perform training for operators. To date UPEA has visited over 1,850 water systems and has trained over 500 NTNCWS operators of schools and day care centers. The on-site visits to privately-owned PWSs and schools have been well received and are beneficial.

Last year, UPEA completed a pilot project to conduct source water assessments during on-site visits. The pilot project included training UPEA staff and performing assessments at PWSs that were already scheduled to receive an on-site visit under the current contract. The UPEA has since completed over 500 site visit assessments throughout the state to calculate susceptibility scores. In addition, arsenic assessment work is also underway at NTNCWSs in several regions. The contract has been extended until September 2004 to complete this work.

Funding

Michigan's DWRP is co-administered by the MDEQ and the Michigan Municipal Bond Authority (MMBA). The MDEQ handles all programmatic issues, while the MMBA serves the DWRP Program with its financial expertise.

Prior to the creation of the DWRP, project financing for CWSs was left largely to the local unit of government or to individuals investing in their own systems. The DWRP provides a source of infrastructure financing.

To date, the DWRP has committed funds to provide for low interest loans for 77 projects totaling over \$197 million. Of those, funds for 15 projects totaling \$26.71 million were committed in FY 2002. The following table summarizes the loans since FY 1998:

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DWRF Projects	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Number of Projects Funded	24	21	7	10	15	22
Commitments of Funds (\$M)	\$53.24	\$51.38	\$27.64	\$26.71	\$38.15	\$73.29

This year resulted in the largest amount of DWRF money committed and the second most number of projects approved for funding since the beginning of the program (\$73.29 million for 22 projects). Since FY 2000 the number of projects has steadily increased by nearly 50 percent each year.

Of the 10 systems that received commitments for funds in FY 2001, five of them have completed their system upgrade projects, such as installing new wells, building a storage tank, replacing transmission mains, and purchasing new generators for standby power. Of the seven systems that received commitments in FY 2000, four projects have been completed including an installation of an ozone disinfection system to significantly reduce the risk of disinfection byproducts.

Training and Information

Operator Certification Continuing Education

Due to amendments to Act 399, a certified operator must be available at all CWSs, all NTNCWSs, and transient NCWSs that use certain types of treatment. As a result, more opportunities are being made available to train operators:

- Michigan's Operator Training and Certification Unit (OTCU) is in another division in the MDEQ and provides nearly 30 training courses each year. The OTCU certifies another 156 training providers that offer other opportunities for continuing education credits (CECs) including 150 on-line courses. Working with a contractor, the OTCU developed a computer program for training providers to submit attendee rosters electronically to OTCU via proprietary software. Implementation of the program is on a trial basis with a training provider. After it is determined that the program application is satisfactory, it will be rolled out to other approved training providers.
- Of the almost 5,000 certified operators, about half of them have already earned some or all the required CECs for their 3-year renewal period totaling over 4,400 hours. Most of the remaining certified operators are still in the beginning of their 3-year renewal cycle and will have many opportunities to earn their CECs. A vast majority of the operators in the beginning of their 3-year cycle were recently granted a restricted certification, explained more fully below, and serve NTNCWS. The operator turnover rate is very high in this category, and we expect many of them will not pursue CECs and will allow their restricted certificates to expire.
- For NTNCWSs and for CWSs with no treatment and a limited distribution system, the MDEQ created a new level of classification. To certify operators for the new Level 5 classification, an examination had to be developed. As a result, the OTCU built a database of questions for exams using criteria established by the Association of Boards of Certification. The first Level 5 examination was held in August 2002 and two more have been administered since that time. New Level 5 questions will be developed by stakeholders of subject matter experts and the MDEQ.

- A restricted certification option is available for existing operators of certain small systems to continue to operate at their current location if they receive additional training. Of the 1,703 NTNCWSs, 1,585 (93 percent) have met the certified operator requirements. Continuing education modules are being developed for operators holding restricted certifications. Four modules are planned in the initial phase. Two have been completed and pilot tested. When the modules are complete, LHDs will be given an opportunity to provide continuing education for operators and be reimburse by the MDEQ.
- For the last six years, the staff of the WD section responsible for oversight of the public water systems serving MHCs has provided training targeted for operators of these systems, many of which have restricted licenses. The audience is not only operators, but managers and owners of these CWSs. Many of these operators work at more than one system or may also work at NTNCWSs, so the training is improving the operation and maintenance of many more systems than the number of operators present. The training is slightly different each year to keep the operators interested and engaged. Topics of training for 2003 include:
 - Well basics
 - Visual tour through the state drinking water lab
 - Procedural update
 - New rules review
 - Arsenic treatment options
 - Water mains

Act 399

Act 399 gives us the authority to inspect and order a system to make changes to a system, to limit the expansion of a system, or to limit the water use. The enforcement tools available range from fines applied by policies through MDEQ orders to referring the case to the Michigan Department of Attorney General. As previously mentioned, we practice a program of escalated enforcement. The resource analysts in the CWS program track violations and initiate the administrative fines. The creation of the resource analyst position has allowed the WD to give greater emphasis to administrative fines, which is one step in the progressive enforcement and return to compliance process.

The WD has been discussing some rule changes to strengthen the CDP such as incorporating the requirement for a final inspection before commencing operation, which is now only required by policy and requiring general plans (water system maps) for all community systems regardless of size. Some of our own rules limit our ability to ensure adequate capacity in all systems. The rules requiring systems to prepare contingency plans and to provide standby power both exempt small systems serving fewer than 200 people or fewer than 50 service connections. However, because of our capacity development requirements, new systems, most of which are small, are not granted approval to commence operation without a contingency plan. Other requirements for new systems are a sampling site plan and an operations plan. As a result, only two community water systems that began operating after October 1999 have had a

monitoring and reporting or an MCL violation. More systems might have avoided violations if our rules did not exempt small systems from these public health measures.

Compliance and Enforcement

Evaluations and compliance information becomes the basis for enforcement. When systems fail to return to compliance, escalated enforcement including administrative consent orders and department orders can be initiated.

Before escalated enforcement is used, many systems are encouraged to return to compliance when they are assessed fines for violations. Michigan's administrative fines policy was updated in 2001 to include timely submittals of monthly operation reports and CCRs. The increase from 58 fines initiated in FY 2001 to 67 in FY 2002 was due primarily to fines for failure to submit a monthly operating report or a CCR. As a result, in FY 2003 a fewer number of systems violated those requirements, and we needed to initiate a fewer number of fines.

	FY 2001	FY 2002	FY 2003
Number of Fines Initiated	58	67	51
Number of Initiated Fines for Failure to Submit a CCR	0	10	3
Number of Initiated Fines for Failure to Submit an MOR	0	12	2

When a fine is not applicable or does not prevent further violations, the WD moves to NOV's and administrative consent orders. We initiated 12 administrative consent orders in 2003, 7 in 2002, and 16 in 2001. Most of these orders are establishing new systems and are not an escalated enforcement tool. However, others are for failure to comply with Act 399. Beginning in FY 2004, administrative consent orders will be tracked centrally so we will be able to spot trends in this powerful tool.

To help district engineers conduct escalated enforcement, the WD streamlined the various compliance and enforcement tools by developing templates for some of the tools, such as reminder letters and violation letters. Electronic templates are available to staff for NOV's, other violations, public notices, and boil water notices.

The restructuring of the MDEQ in late 2002 merged the drinking water program with another program, which has an established EU. The EU and the DWP staff are finalizing a 3-tiered package to help district staff prepare three of the most common types of administrative orders. The package will contain instructions and guidance to create a document ready for legal review. It is anticipated that the difficult process of completing escalated enforcement will be streamlined even further so that enforcement will be swift and effective.

As discussed in Section 2 of this report, the MHC sector of the CWS program issues Certificates of Noncompliance and Conditional Certificates of Compliance to MHC for drinking water deficiencies. Certificates of Noncompliance were issued to six community water systems in FY 2001, eight in FY 2002, and four in FY 2003 for drinking water deficiencies. Most of the deficiencies noted in the certificates address technical and managerial capacity such as isolation and construction of wells, and distribution system and storage tank requirements to assure a continuously adequate quantity and quality of water. Additionally, the MHC program issues Conditional Certificates of Compliance to systems that need to make improvements and upgrades to prevent noncompliance and maintain capacity. Examples of items that are

expected to be completed include implementing valve turning and hydrant flushing programs, completing an operations and maintenance manual, and properly plugging wells no longer in use.

Security

The WD received approximately \$835,600 from the USEPA to implement provisions of the federal Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Bioterrorism Act). A total of 16 two-day workshops will be available from November 2003 through March 2004 at locations around the state for about 250 PWSs serving between 3,300 and 50,000 people. The training will help systems to complete their vulnerability assessments (VA) and emergency response plans (ERP), which include a review of water system operations, hazardous chemicals delivery and storage facilities, and prioritized vulnerable facilities lists. One-day seminars will be available to PWSs serving fewer than 3,300 people later in 2004. Continuing education credits will be given for this training. Later in 2004, a small number of higher-risk systems will also receive direct on-site security training, including several NCWSs.

NTNCWS

The majority of the activities of the noncommunity program staff are to assist LHDs and NCWSs maintain compliance with the federal Safe Drinking Water Act (SDWA). These activities include:

- Written annual evaluation of LHD noncommunity program
- Quarterly compliance summary data to LHDs
- Individual technical assistance
- Group training and assistance with implementation including:
 - Source Water Assessment
 - Operator Certification
 - Lead/Copper Minor Revisions
 - Capacity Development
 - Consumer Confidence Reporting
- Support of a data system distributed to LHDs for reporting
- Support of a Website for LHD noncommunity program coordinators
- Development of a Noncommunity Program Manual
- Routine policy updates or clarification memos to LHDs
- Support of a website for NCWS owners

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- Enforcement assistance via letters, phone calls, site visits, and hearings
- Collection of civil fines issued by LHDs to NCWSs for monitoring or MCL violations
- Technical Assistance Contract to help schools and child care facilities comply with the SDWA
- Providing brochures, fact sheets, and other informational material

Using available resources and approaches, the following was accomplished statewide for all NCWSs based on data from one year ago:

- Monitoring and reporting violations decreased 1 percent.
- MCL violations decreased 0.5 percent.
- The sanitary survey backlog decreased 5 percent.
- Unaddressed SNCs decreased by 0.5 percent.
- The issuance of civil fines by LHDs for monitoring and reporting violations decreased 22 percent over last year.

Michigan will continue to use the tools described above to assist LHDs and NCWSs attain acceptable compliance levels. However, it is anticipated available resources will not keep pace with increasing regulation of NCWSs including; Operator Certification, Lead/Copper Minor Revisions, Capacity Development, Ground Water Rule, and Arsenic. New regulations not only present new opportunities for violations, they can also erode compliance with existing rules by diverting resources.

4. Summary

Michigan expects to see more systems with increased capacity in FY 2004, with continued increased emphasis put on:

- Surveillance visits and routine evaluations
- Use of technical assistance providers
- More efficient use of enforcement tools

Capacity assistance provided by the district engineers will continue to be the primary component of Michigan's CDP, with a greater emphasis placed on referring deficient and marginally rated systems to other technical assistance providers as well.

Appendix: Rose City Financial Assessment