Sea Isle City Department of Public Works

Water and Sewer Department

PURPOSE

- To provide potable water service to the residents and visitors of Sea Isle City, meeting all Safe Drinking Water Act Requirements and to provide sanitary sewer service while meeting the requirements of the Clean Water Act.

Regulatory: Water

- The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996. Originally, SDWA focused primarily on treatment as the means of providing safe drinking water at the tap.
- The 1996 amendments greatly enhanced the existing law by recognizing source water protection, operator training, funding for water system improvements, and public information as important components of safe drinking water. This approach ensures the quality of drinking water by protecting it from source to tap.
- SDWA applies to every public water system in the United States. There are currently more than 160,000 public water systems providing water to almost all Americans at some time in their lives.

Understanding the Safe Drinking Water Act

SAFE DRINKING WATER ACT • 1974-2004 • PROTECT OUR HEALTH FROM SOURCE TO TAP

The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply.

The law was amended in 1986 and 1996 and requires many actions to protect drinking water and its sources—rivers, lakes, reservoirs, springs, and ground water wells. (SDWA does not regulate private wells which serve fewer than 25 individuals.)

SDWA authorizes the United States Environmental Protection Agency (US EPA) to set national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water. US EPA, states, and water systems then work together to make sure that these standards are met.

Millions of Americans receive high quality drinking water every day from their public water systems, (which may be publicly or privately owned). Nonetheless, drinking water safety cannot be taken for granted.

There are a number of threats to drinking water: improperly disposed of chemicals; animal wastes; pesticides; human threats; wastes injected underground; and naturally-occurring substances can all contaminate drinking water.

Likewise, drinking water that is not properly treated or disinfected, or which travels through an improperly maintained distribution system, may also pose a health risk.

Originally, SDWA focused primarily on treatment as the means of providing safe drinking water at the tap. The 1996 amendments greatly enhanced the existing law by recognizing source water protection, operator training, funding for water system improvements, and public information as important components of safe drinking water. This approach ensures the quality of drinking water by protecting it from source to tap.

All public water systems must have at least 15 service connections or serve at least 25 people per day for 60 days of the year.

Drinking water standards apply to water systems differently based on their type and size:

Community Water System (there are approximately 54,000) - A public water system that serves the same people year-round. Most residences including homes, apartments, and condominiums in cities, small towns, and mobile home parks are served by Community Water Systems.

Non-Community Water System - A public water system that serves the public but does not serve the same people year-round. There are two types of non-community systems:

Non-Transient Non-Community Water System (there are approximately 20,000) - A noncommunity water system that serves the same people more than six months per year, but not year-round, for example, a school with its own water supply is considered a non-transient system.

Transient non-community water system (there are approximately 89,000) - A non-community water system that serves the public but not the same individuals for more than six months, for example, a rest area or campground may be considered a transient water system.

1996 SDWA Amendment Highlights:

Consumer Confidence Reports All community water systems must prepare and distribute annual reports about the water they provide, including information on detected contaminants, possible health effects, and the water's source.

Cost-Benefit Analysis US EPA must conduct a thorough cost-benefit analysis for every new standard to determine whether the benefits of a drinking water standard justify the costs.

Drinking Water State Revolving Fund States can use this fund to help water systems make infrastructure or management improvements or to help systems assess and protect their source water.

Microbial Contaminants and Disinfection Byproducts US EPA is required to strengthen protection for microbial contaminants, including Cryptosporidium, while strengthening control over the byproducts of chemical disinfection. The Stage 1 Disinfectants and Disinfection Byproducts Rule and the Interim Enhanced Surface Water Treatment Rule together address these risks.

Operator Certification Water system operators must be certified to ensure that systems are operated safely. US EPA issued guidelines in February 1999 specifying minimum standards for the certification and recertification of the operators of community and non-transient, noncommunity water systems. These guidelines apply to state Operator Certification Programs. All states are currently implementing EPA-approved operator certification programs.

Public Information & Consultation SDWA emphasizes that consumers have a right to know what is in their drinking water, where it comes from, how it is treated, and how to help protect it. US EPA distributes public information materials (through its Safe Drinking Water Hotline, Safewater web site, and Water Resource Center) and holds public meetings, working with states, tribes, water systems, and environmental and civic groups, to encourage public involvement.

Small Water Systems Small water systems are given special consideration and resources under SDWA, to make sure they have the managerial, financial, and technical ability to comply with drinking water standards.

Source Water Assessment Programs Every state must conduct an assessment of its sources of drinking water (rivers, lakes, reservoirs, springs, and ground water wells) to identify significant potential sources of contamination and to determine how susceptible the sources are to these threats.

Roles and Responsibilities:

SDWA applies to every public water system in the United States. There are currently more than 170,000 public water systems providing water to almost all Americans at some time in their lives. The responsibility for making sure these public water systems provide safe drinking water is divided among US EPA, states, tribes, water systems, and the public. SDWA provides a framework in which these parties work together to protect this valuable resource.

US EPA sets national standards for drinking water based on sound science to protect against health risks, considering available technology and costs. These National Primary Drinking Water Regulations set enforceable maximum contaminant levels for particular contaminants in drinking water or required ways to treat water to remove contaminants. Each standard also includes requirements for water systems to test for contaminants in the water to make sure standards are achieved. In addition to setting these standards, US EPA provides guidance, assistance, and public information about drinking water, collects drinking water data, and oversees state drinking water programs.

The most direct oversight of water systems is conducted by state drinking water programs. States can apply to US EPA for "primacy," the authority to implement SDWA within their jurisdictions, if they can show that they will adopt standards at least as stringent as US EPA's and make sure water systems meet these standards. All states and territories, except Wyoming and the District of Columbia, have received primacy. While no Indian tribe has yet applied for and received primacy, four tribes currently receive "treatment as a state" status, and are eligible for

Regulatory: Water

- The SDWA gives each State primacy for implementation of the Act.
- NJDEP has the responsibility of implementation.
- Because Sea Isle City operates a Public Community Water System, Sea Isle must comply with the Rules and Regulations which have since been promulgated by the EPA and the NJDEP.

Regulatory: Water

- The NJSDWA Rules and Regulations covers the following areas:
  - Primary and Secondary Drinking Water Regulations- requires specific testing for specific types of water systems.
  - Regulations on type of treatment, construction of water systems physical connections.
  - Regulations on how much water can be diverted and where it can be diverted from. Safe yield and capacity of the water system as well as the source.
  - Accountability of the Owners of the water system. Responsibility of the owners to have Licensed Operators and the financial means to operate the system.
  - Homeland Security

Federal and NJ State Primary and Secondary Drinking Water Standards as of February 2005

Volatile Organic Compounds

Contaminants	Maximum Contaminant Levels [MCL] [µg/l or ppb]
Benzene	1*
Carbon Tetrachloride	2*
1,2-Dichlorobenzene	600
1,3-Dichlorobenzene	600*
1,4-Dichlorobenzene	75
1,1-Dichloroethane	50*
1,2-Dichloroethane	2*
1,1-Dichloroethylene	2*
cis-1,2-Dichloroethylene	70
trans-1,2-Dichloroethylene	100
1,2-Dichloropropane	5
Ethylbenzene	700
Methyl tertiary Butyl Ether	70*
Methylene Chloride	3*
Monochlorobenzene	50*
Naphthalene	300*
Styrene	100
1,1,2,2-Tetrachloroethane	1*
Tetrachloroethylene	1*
Toluene	1,000
1,2,4-Trichlorobenzene	9*
1,1,1-Trichloroethane	30*
1,1,2-Trichloroethane	3*
Trichloroethylene	1*
Vinyl Chloride	2
Xylenes [total]	1,000*

* N.J. MCL [A-280]

Key: One milligram per liter [mg/l] = one part per million = one cent in $10,000 or one second in 12 days.
One microgram per liter [µg/l] = one part per billion = one cent in $10,000,000 or one second in 32 years.

Trihalomethanes 80 µg/l [ppb] running annual average
Total of Dichlorobromomethane, Chlorodibromomethane, Bromoform and Chloroform.

Haloacetic Acids 60 µg/l ppb running annual average
Total of Monochloroacetic, Dichloroacetic, Trichloroacetic, Bromoacetic and Dibromoacetic acids.

Bromate (plants using ozone) 10 µg/l (ppb) running annual average

Chlorite (plants using chlorine dioxide) 1,000 µg/l (ppb) daily/follow-up monitoring

Radionuclides Combined radium 226/228 mcl is 5 picocuries/l (pCi/l); gross alpha particle radioactivity (including radium 226 but excluding radon and uranium) MCL is 15 pCi/l; beta/photon emitters MCL is 4 mrem/yr; uranium MCL is 30 µg/l.

Turbidity No more than 5% of the samples may exceed 0.3 NTU, nor any sample exceed 1 NTU.

Coliform bacteria standards are based on the presence or absence of coliforms in a sample. The number of samples collected by a public water system is determined by the size of the population served. A system collecting at least 40 samples/month can have coliform in no more than 5% of the samples. A system collecting fewer than 40 samples/month can have no more than one coliform positive. Any number exceeding these amounts triggers an MCL exceedence.

Inorganics

Contaminants	Maximum Contaminant Levels [MCL] [µg/l or ppb]
Antimony	6
Arsenic	5 * #
Asbestos	7 X 10^6 fibers/l > 10µm
Barium	2,000
Beryllium	4
Cadmium	5
Chromium	100
Copper	1,300**[AL]
Cyanide	200
Fluoride	4,000
Lead	15**[AL]
Mercury	2
Nickel	+
Nitrate[as nitrogen]	10,000
Nitrite	1,000
[combined nitrate/nitrite	10,000]
Selenium	50
Thallium	2

**An [AL] action level is not an MCL. It is a trigger point at which remedial action is to take place.

+No MCL - Monitoring Required

Effective January 23, 2006

* N.J. MCL [A-280]

Synthetic Organic Compounds

Contaminants	Maximum Contaminant Levels [MCL] [µg/l or ppb]
Alachlor	2
Aldicarb	+
Aldicarb Sulfone	+
Aldicarb Sulfoxide	+
Atrazine	3
Benzo[a]pyrene	0.2
Carbofuran	40
Chlordane	0.5*
Dalapon	200
Dibromochloropropane [DBCP]	0.2
Di[2-ethylhexyl]adipate	400
Di[2-ethylhexyl]phthalate	6
Dinoseb	7
Diquat	20
Endothall	100
Endrin	2
Ethylene dibromide [EDB]	0.05
Glyphosate	700
Heptachlor	0.4
Heptachlor Epoxide	0.2
Hexachlorobenzene	1
Hexachlorocyclopentadiene	50
Lindane	0.2
Methoxychlor	40
Oxamyl	200
PCBs	0.5
Pentachlorophenol	1
Picloram	500
Simazine	4
Toxaphene	3
2,3,7,8-TCDD [Dioxin]	3 X 10^{-8}
2,4-D	70
2,4,5-TP [Silvex]	50

* N.J. MCL [A-280]

+No MCL - Monitoring Required

For a detailed explanation of the Safe Drinking Water Program, refer to the Federal Safe Drinking Water Act regulations [40 CFR Parts 141, 142, 143] and the New Jersey Safe Drinking Water regulations [N.J.A.C. 7:10-1 et seq.].

Secondary Standards

[primarily aesthetic]

Physical Characteristics	Recommended Upper Limit or Optimum Range
Color	10 color units (standard cobalt scale)
pH	6.5 to 8.5 (optimum range)
Odor	3 Threshold odor number
Taste	No objectionable taste

Chemical Characteristics	Recommended Upper Limit [mg/l or ppm]
ABS/L.A.S.	0.5
Aluminum	0.2
Chloride	250
Fluoride	2
Hardness (as CaCO3)	250
Iron	0.3
Manganese	0.05
Silver	0.1
Sodium	50
Sulfate	250
Total dissolved solids	500
Zinc	5

New Jersey Department of Environmental Protection
Division of Water Supply
Bureau of Safe Drinking Water
P.O. Box 426
Trenton, New Jersey 08625-0426
Tel. # 609-292-5550
Fax. # 609-292-1654

2/05

Standards for Safe Drinking Water in New Jersey

Public health is of paramount importance in the determination of what constitutes safe drinking water. Drinking water standards are developed by both Federal and State governments. Quality standards adopted into regulation are the minimum considered necessary for the maintenance of public health. The standards are set for biological contaminants, dissolved chemicals and suspended particulate matter. These contaminants are naturally occurring, the result of industrial and/or domestic pollution, or both. Some people consider the standards too lenient, and others believe they are too stringent.

The Bureau of Safe Drinking Water of the New Jersey Department of Environmental Protection (NJDEP) has principal responsibility to administer the programs and activities of the Federal Safe Drinking Water Act and the New Jersey Safe Drinking Water Act to ensure safe drinking water for both the citizens of New Jersey and its visitors.

Following are some frequently asked questions and answers regarding drinking water quality standards:

Does the federal government regulate drinking water quality?

Yes. The United States Environmental Protection Agency (USEPA) coordinates Federal Safe Drinking Water Act activities nationwide. However, in New Jersey, the NJDEP is the agency responsible for administering the Federal safe drinking water regulations. NJDEP regulates drinking water supplies under the authority of the Federal Safe Drinking Water Act and its amendments, and under the authority of the New Jersey Safe Drinking Water Act and its amendments. All Federal regulations are automatically adopted into New Jersey regulations by reference.

What chemical contaminants do the regulations protect against?

The regulated chemical contaminants fall into the following categories: inorganics, radionuclides, and synthetic organic chemicals including volatile organic chemicals, pesticides, herbicides, and disinfection by-products.A complete list of these regulated contaminants and the maximum permissible concentrations allowed in drinking water are listed in the insert to this brochure.

What biological contaminants do the regulations protect against?

The biological contaminants regulated in drinking water include coliform bacteria, which are found in the natural environment and in the gut of warm blooded animals. Other microorganisms such as *Legionella* bacteria, and parasites such as *Giardia* and *Cryptosporidium* are regulated indirectly through treatment requirements.

Water is disinfected to protect against waterborne bacterial diseases such as typhoid and cholera, and waterborne viruses. Waterborne parasites are removed from drinking water by a combination of disinfection and filtration, however, waterborne parasites are occasionally detected in treated water. Since some individuals with weakened immune systems may become seriously ill from waterborne parasites, these individuals, in consultation with their health care provider, might be advised to boil their drinking water (rolling boil for one minute).

Although not directly a biological contaminant, the cloudiness or turbidity of the water is also tested because it can harbor biological contaminants or it can interfere with the effectiveness of the disinfectant.

Is my water tested?

According to Federal law, all public community water systems and non-community water systems must test their water on a rigid schedule and at specific locations. Public community water systems include municipal water supplies and private water companies. Non-transient non-community water systems (e.g., schools, factories, office buildings, industrial parks) test for all regulated contaminants except radionuclides and disinfection by-products. Transient non-community water systems (e.g., highway rest stops, restaurants, motels, parks,) test for coliform bacteria, nitrates and nitrites.

Drinking water suppliers are required to notify customers if the levels of any monitored chemicals exceed the standards as described in the regulations. Notification can include public postings, the news media and mailings to individual customers, depending on the supplier.

Who sets these standards and how were they set?

The standards for drinking water quality in New Jersey are set by either the USEPA or the NJDEP. These standards, known as maximum contaminant levels (MCL), are the maximum permissible levels of all regulated contaminants allowed in public drinking water. All the MCLs in effect in New Jersey are adopted from Federal regulation except for 18 synthetic organic MCLs developed by New Jersey as a result of the 1984 amendments to the N.J. Safe Drinking Water Act. When standards are developed by both Federal and State drinking water agencies, the more stringent regulation applies.

One of the major reasons why New Jersey and Federal standards vary is that New Jersey law contains specific guidance for establishing MCLs that must be followed which differs from the Federal statuatory requirements. The USEPA is required to set maximum contaminant level goals [MCLG], non-enforceable health goals, at the level at which no known or anticipated adverse effects occur. For carcinogenic or cancer causing chemicals, the USEPA sets MCLGs at zero. MCLs must be set as close to MCLGs as feasible. The Federal MCLs take into account the limits of testing methodologies, the capability of water treatment technologies, and the results of cost benefits analysis.

Drinking water standards set by NJDEP are established for carcinogens based upon the goal of the cancer risk being no greater than a one in one million over a lifetime exposure period. For chemicals causing effects other than cancer (noncarcinogens), the goal is the elimination of all adverse health effects from lifetime exposure. The level established for the final standard may exceed these human health-based goals if there are limitations in testing methodologies and/or the capability of water treatment removal techniques. For noncarcinogens, costs may also be taken into consideration in standard setting.

Some standards are not numerical in nature and are called "treatment techniques." A treatment technique is established as a standard for a number of contaminants that are not readily measurable in water. The most notable ones are biological in nature and come from surface water. The treatment technique standards for *Giardia* and viruses are established as minimum levels of treatment that results in removal of these contaminants.

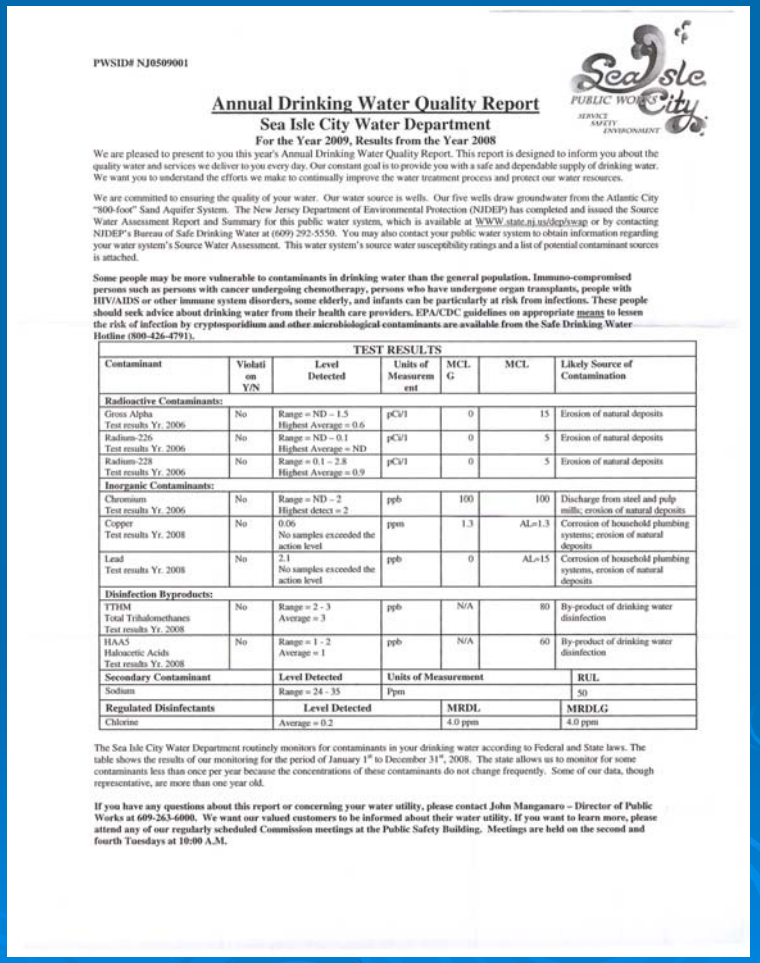
In addition to MCLs, the USEPA regulates drinking water through "action levels" (AL). To date, ALs have been established for lead and copper only. An AL is not an MCL. ALs are the measurements used for stating the concentration of lead and copper in public drinking water supplies that, if exceeded, determine whether a water system must install corrosion control treatment, monitor source water, replace lead service lines and undertake a public education/ notification program.

How will the standards improve my drinking water?

The standards lead to the improvement of drinking water through periodic tests, evaluation of results and corrective actions. The test results are sent to the NJDEP. If the level of any regulated contaminant is above the MCL, additional samples are taken to confirm that a problem exists. The supplier of that water is then required to eliminate the problem by changing to another water source or by improving water treatment. Fortunately, there are techniques to remove these contaminants from water at a reasonable cost. Treatment techniques vary depending on the contaminant[s]. Techniques include but are not limited to chemical precipitation, filtration, packed tower aeration (air stripping) and granular activated carbon. In addition to the mandated testing, NJDEP's Bureau of Safe Drinking Water also conducts random spot checks of public water systems.

Consumer Confidence Report

- Annual Drinking Water Quality Report
- Table shows samples taken during the monitoring period form January through December
- It will only display a contaminant if there has been one detected, even if it does not exceed the limit.



PWSID# NJ0509001

Annual Drinking Water Quality Report
Sea Isle City Water Department
For the Year 2009, Results from the Year 2008

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources.

We are committed to ensuring the quality of your water. Our water source is wells. Our five wells draw groundwater from the Atlantic City "800-foot" Sand Aquifer System. The New Jersey Department of Environmental Protection (NJDEP) has completed and issued the Source Water Assessment Report and Summary for this public water system, which is available at WWW.state.nj.us/dep/swap or by contacting NJDEP's Bureau of Safe Drinking Water at (609) 292-5550. You may also contact your public water system to obtain information regarding your water system's Source Water Assessment. This water system's source water susceptibility ratings and a list of potential contaminant sources is attached.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

TEST RESULTS

Contaminant	Violation Y/N	Level Detected	Units of Measurement	MCLG	MCL	Likely Source of Contamination
Radioactive Contaminants:						
Gross Alpha Test results Yr. 2006	No	Range = ND – 1.5 Highest Average = 0.6	pCi/l	0	15	Erosion of natural deposits
Radium-226 Test results Yr. 2006	No	Range = ND – 0.1 Highest Average = ND	pCi/l	0	5	Erosion of natural deposits
Radium-228 Test results Yr. 2006	No	Range = 0.1 – 2.8 Highest Average = 0.9	pCi/l	0	5	Erosion of natural deposits
Inorganic Contaminants:						
Chromium Test results Yr. 2006	No	Range = ND – 2 Highest detect = 2	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper Test results Yr. 2008	No	0.06 No samples exceeded the action level	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead Test results Yr. 2008	No	2.1 No samples exceeded the action level	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Disinfection Byproducts:						
TTHM Total Trihalomethanes Test results Yr. 2008	No	Range = 2 - 3 Average = 3	ppb	N/A	80	By-product of drinking water disinfection
HAA5 Haloacetic Acids Test results Yr. 2008	No	Range = 1 - 2 Average = 1	ppb	N/A	60	By-product of drinking water disinfection

Secondary Contaminant	Level Detected	Units of Measurement	RUL
Sodium	Range = 24 - 35	Ppm	50

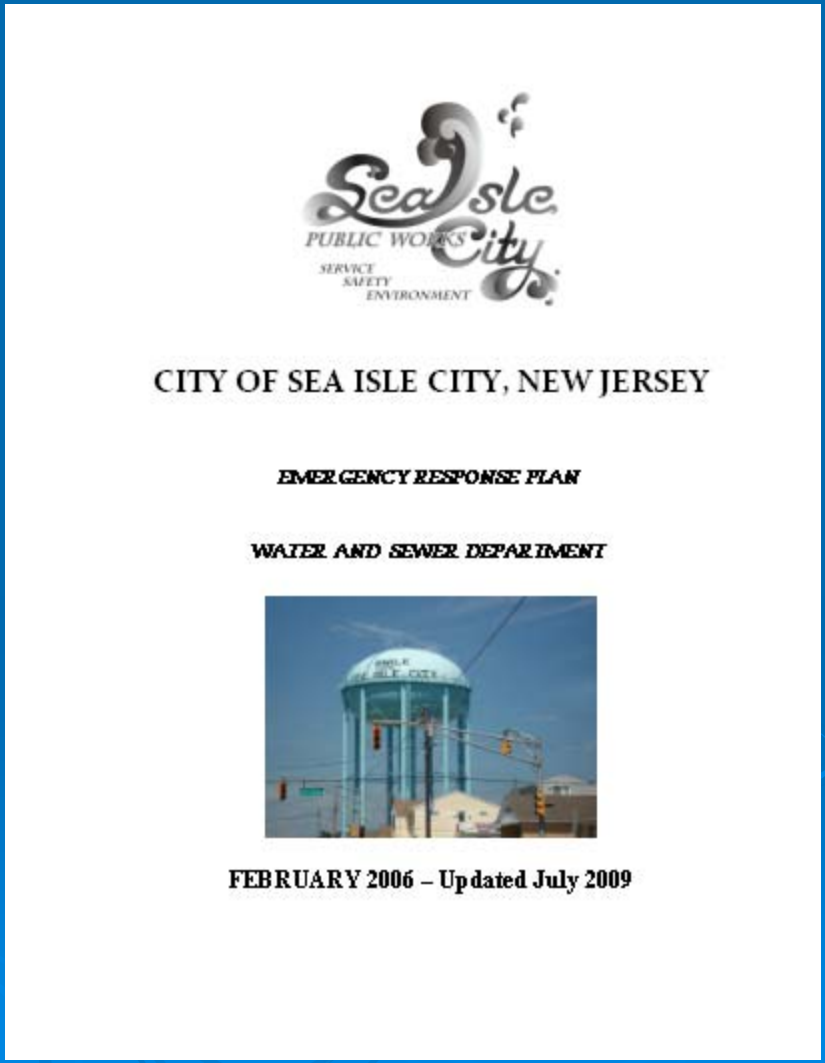
Regulated Disinfectants	Level Detected	MRDL	MRDLG
Chlorine	Average = 0.2	4.0 ppm	4.0 ppm

The Sea Isle City Water Department routinely monitors for contaminants in your drinking water according to Federal and State laws. The table shows the results of our monitoring for the period of January 1st to December 31st, 2008. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

If you have any questions about this report or concerning your water utility, please contact John Mangamaro – Director of Public Works at 609-263-6000. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Commission meetings at the Public Safety Building. Meetings are held on the second and fourth Tuesdays at 10:00 A.M.

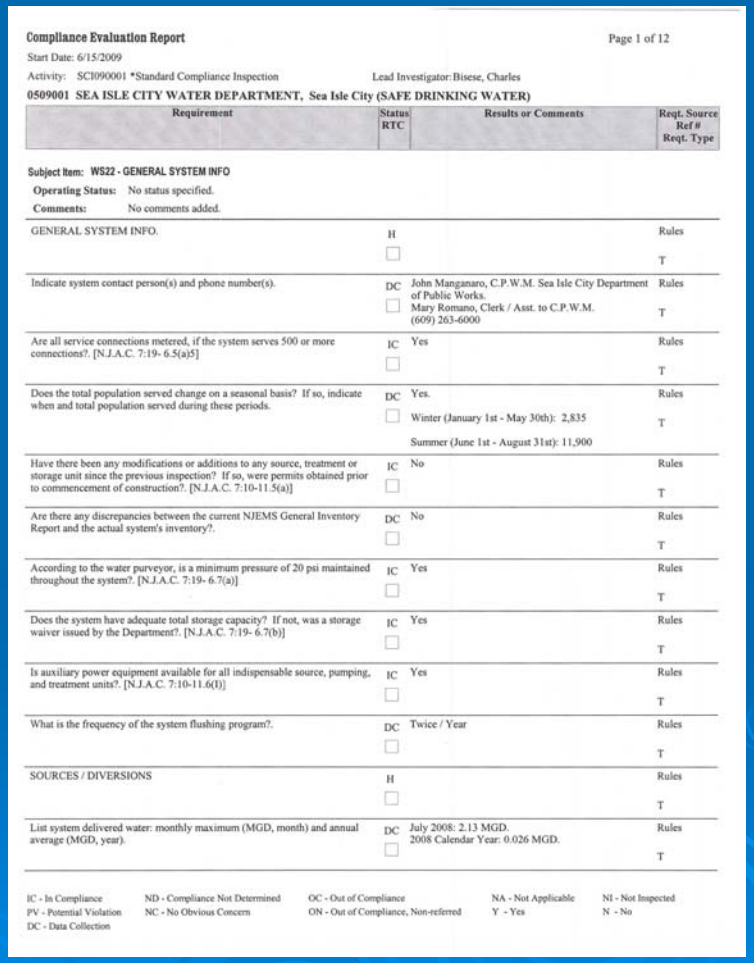
Emergency Response Plan

- Requirement under the Safe Drinking Water Act which spells out specific resources and procedures for the continued operation of the water utility under emergency situations
- ERP's have been in existence prior to 911. However, Homeland Security has re-emphasized the importance of the plan.



Compliance Evaluation Inspection- Water Supply

- Annual Inspection by the NJDEP, Southern Enforcement
- Review of Records and Physical Inspection of Facilities
- Inspection duration is 4 to 6 hours.



Compliance Evaluation Report Page 1 of 12

Start Date: 6/15/2009

Activity: SCI090001 *Standard Compliance Inspection Lead Investigator: Bisese, Charles

0509001 SEA ISLE CITY WATER DEPARTMENT, Sea Isle City (SAFE DRINKING WATER)

Requirement	Status RTC	Results or Comments	Reqt. Source Ref # Reqt. Type
Subject Item: WS22 - GENERAL SYSTEM INFO			
Operating Status: No status specified.			
Comments: No comments added.			
GENERAL SYSTEM INFO.	H		Rules T
Indicate system contact person(s) and phone number(s).	DC	John Manganaro, C.P.W.M. Sea Isle City Department of Public Works. Mary Romano, Clerk / Asst. to C.P.W.M. (609) 263-6000	Rules T
Are all service connections metered, if the system serves 500 or more connections?. [N.J.A.C. 7:19- 6.5(a)5]	IC	Yes	Rules T
Does the total population served change on a seasonal basis? If so, indicate when and total population served during these periods.	DC	Yes. Winter (January 1st - May 30th): 2,835 Summer (June 1st - August 31st): 11,900	Rules T
Have there been any modifications or additions to any source, treatment or storage unit since the previous inspection? If so, were permits obtained prior to commencement of construction?. [N.J.A.C. 7:10-11.5(a)]	IC	No	Rules T
Are there any discrepancies between the current NJEMS General Inventory Report and the actual system's inventory?.	DC	No	Rules T
According to the water purveyor, is a minimum pressure of 20 psi maintained throughout the system?. [N.J.A.C. 7:19- 6.7(a)]	IC	Yes	Rules T
Does the system have adequate total storage capacity? If not, was a storage waiver issued by the Department?. [N.J.A.C. 7:19- 6.7(b)]	IC	Yes	Rules T
Is auxiliary power equipment available for all indispensable source, pumping, and treatment units?. [N.J.A.C. 7:10-11.6(l)]	IC	Yes	Rules T
What is the frequency of the system flushing program?.	DC	Twice / Year	Rules T
SOURCES / DIVERSIONS	H		Rules T
List system delivered water: monthly maximum (MGD, month) and annual average (MGD, year).	DC	July 2008: 2.13 MGD. 2008 Calendar Year: 0.026 MGD.	Rules T

IC - In Compliance; ND - Compliance Not Determined; OC - Out of Compliance; NA - Not Applicable; NI - Not Inspected
PV - Potential Violation; NC - No Obvious Concern; ON - Out of Compliance, Non-referred; Y - Yes; N - No
DC - Data Collection

Regulatory: Wastewater

- The Clean Water Act (CWA) was passed in 1972. EPA, states, and Indian tribes focused mainly on the chemical aspects of the "integrity" goal. During the last decade, however, more attention has been given to physical and biological integrity. Also, in the early decades of the Act's implementation, efforts focused on regulating discharges from traditional "point source" facilities, such as municipal sewage plants and industrial facilities, with little attention paid to runoff from streets, construction sites, farms, and other "wet-weather" sources.
- Starting in the late 1980s, efforts to address polluted runoff have increased significantly. For "nonpoint" runoff, voluntary programs, including cost-sharing with landowners are the key tool. For "wet weather point sources" like urban storm sewer systems and construction sites, a regulatory approach is being employed.

Please note the actual document of the Clean Water Act is a 234 page long document that can be accessed at WWW.EPA.GOV

- **Summary of the Clean Water Act**
- **How do I...?**
- **Find regulatory info** :
  - by date
  - by topic
  - by business sector
- **Comment**
- **Comply with a rule**
- **Get updates**
- **Search state-specific laws/rules**
- **Quick Links**
- How EPA Writes Regulations
- Regulations and Proposed Rules
  - Federal Register Environmental Documents
  - Federal Register Database
  - Regulations.gov
  - EPA Dockets
- Regulatory Agendas & Plans
- Codified Regulations
  - Code of Federal Regulations (CFR)
  - Electronic Code of Federal Regulations (e-CFR)
  - CFR Title 40: Protection of the Environment
- Laws
  - Major Environmental Laws
  - THOMAS
  - U.S. House Committees
  - U.S. Senate Committees
- Significant Guidance Documents
- **33 U.S.C. §1251 et seq. (1972)**
- The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was significantly reorganized and expanded in 1972. "Clean Water Act" became the Act's common name with amendments in 1977.
- Under the CWA, EPA has implemented pollution control programs such as setting wastewater standards for industry. We have also set water quality standards for all contaminants in surface waters.
- The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters.
- See also:

Regulatory: Wastewater

- NJDEP has the responsibility of implementation of the Act for New Jersey.
- Cape May County MUA has the responsibility of Wastewater Treatment and is the regional permit holder
- Sea Isle City has the responsibility to convey the wastewater to the MUA in accordance with the New Jersey Pollutant Discharge Elimination System ("NJPDES") permit program rules which falls under the Clean Water Act.

Regulatory: Wastewater

- Sea Isle City, under the NJDEP Regulations is required to safely operate the Wastewater Collection in accordance to the "NJPDES“ permit system.
- Responsibilities include:
  - Collection and conveyance of wastewater
  - Maintain collection system and pump stations
  - Monthly operation reports to the CMCMUA

Compliance Inspection Evaluation- Wastewater Collection

- Annual Inspection by the NJDEP, Southern Enforcement
- Review of Records and Physical Inspection of Facilities
- Inspection duration is 3 to 4 hours.

Compliance Evaluation Report Page 1 of 10

Start Date: 6/15/2009

Activity: SCI090001 *Standard Compliance Inspection Lead Investigator: Bisese, Charles

92877 SEA ISLE CITY WASTEWATER COLLECTION SYSTEM, Sea Isle City (SANITARY COLLECTION SYSTEM)

Requirement	Status RTC	Results or Comments	Reqt. Source Ref # Reqt. Type
Subject Item: WCGN - Water - Collection System - General Information			
Operating Status: No status specified.			
Comments: No comments added.			
GENERAL INFORMATION .	H ☐		Rules T
What municipalities are served by this system?.	IC ☐	Sea Isle City	Rules T
What is the receiving treatment plant?.	DC ☐	Cape May County MUA-Seven Mile / Middle Twp. Regional WWTF.	Rules T
How many pump stations does the system own/operate?.	DC ☐	Four	Rules T
Are complete and up-to-date system maps available for review?.	DC ☐	Yes	Rules T
How many staff members are employed to perform routine work on the system? .	DC ☐	Four	Rules T
Are staff members assigned routine/scheduled preventative maintance tasks and provided with routine training?. [N.J.A.C. 7:14A- 6.12(a)4]	IC ☐	Yes	Rules T
What is the current annual budget for the system? .	DC ☐	~230 Million Dollars	Rules T
Does the budget provide money for operation and maintenance as well as for routine improvements/replacements?. [N.J.A.C. 7:14A- 6.12(a)2]	IC ☐	Yes	Rules T
What is the summer/winter population?.	DC ☐	Winter: 2835 Summer: 11,907	Rules T
What is the system classification?.	DC ☐	C-3	Rules T
LICENSED OPERATOR.	H ☐		Rules T

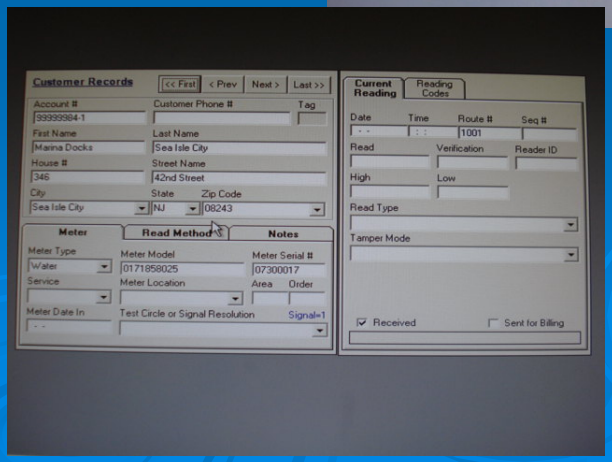
IC - In Compliance; PV - Potential Violation; DC - Data Collection; ND - Compliance Not Determined; NC - No Obvious Concern; OC - Out of Compliance; ON - Out of Compliance, Non-referred; NA - Not Applicable; Y - Yes; NI - Not Inspected; N - No

Water and Sewer Dept. Personnel

- Operations Manager – Andre Cipaldo
  - Paul LaRosa, Foreman of Water Distribution and Sewer Collection Systems
  - Robert Gansert, Foreman Water & Sewer (Weekend Crew)
    - Wastewater License Held: C-1
  - Michael Rutledge, Foreman Meters
  - Michael Welding, Meters
  - Jeffery Jones, Assistant Foreman Water & Sewer
  - Donald Teefy, Jr., Heavy Equipment Operator
    - Water and Wastewater Licenses Held: W-2, T-1 and C-1
  - Christopher Boyer, Laborer
  - Christopher McKinley, Laborer
  - Dan Adams, Laborer
  - Kyle Nugent, Geographic Information Systems Field Technician

Meter Division

- Computerized Water Meter Reading



Water Facilities

55th St. WTP

80th St WTP

Chlorine Residual Analyzer

Well Motor

500,000 Gal. Water Storage Tank

FACILITIES-Water Treatment Plants

- Source: 800 Foot Sands of the Kirkwood-Cohansey Formation
- Water is pumped from Four Locations
  - 40th St. WTP
  - 50th St WTP (to be replaced)
  - 55th St. WTP
  - 80th St. WTP

Capacity

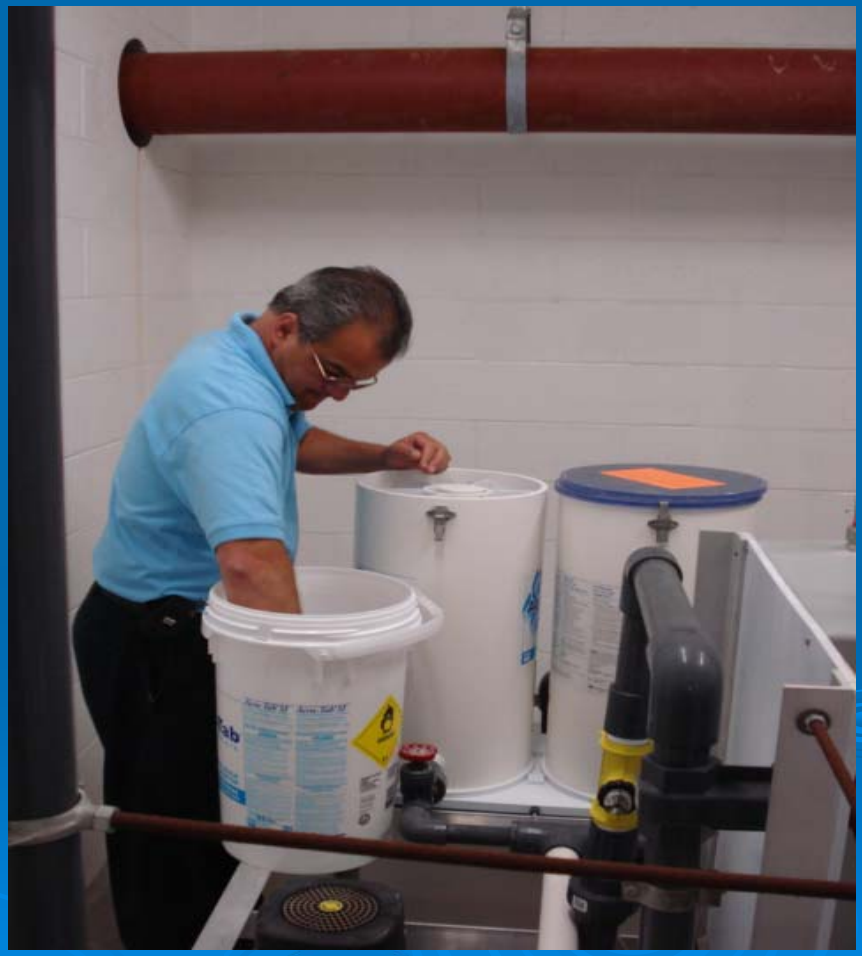
- Winter average day is less than 200,000 gallons of water per day
- Peak summer day varies from 2.8 mgd to 3.2 mgd The system currently has the ability to pump 2600 gpm or 3.74 mgd
- NJDEP requires that a system must meet it peak demand with it's largest treatment plant out of service. SIC will meet that requirement when the 50th Street WTP is reconstructed.

Water Treatment

- Aeration: Hydrogen sulfides occurs naturally in the raw water and gives water a rotten egg smell. Aeration strips the hydrogen sulfide from the water.

Water Treatment

- Chlorination is the process where chlorine is added to the water to ensure the water is bacteriologically safe. Available chlorine also combines with any remaining H2S, oxidizes it and further removes the affects of sulfides.
- SIC utilizes calcium chloride tablets w/ 70% available chlorine for safety reasons



Well Rehabilitation

- Well #5: Pulled in 2006. Wells should be pulled once every 5 to 10 years for inspection of equipment, televising and running a pump test to insure reliability of the resource.

SEWER DEPARTMENT

- 88th Street Pump Station
  - Pump Maintenance

Facilities-Wastewater

Equipment

All in a Days Work

- Repair Water Leaks
- Installation of new water service
- Flush and maintain fire hydrants
- Maintain water treatment plant pumps and motors
- Read and install new water meters
- Maintenance and mapping of GIS System
- Maintain wastewater pump stations
- Clean sanitary sewers
- Customer service

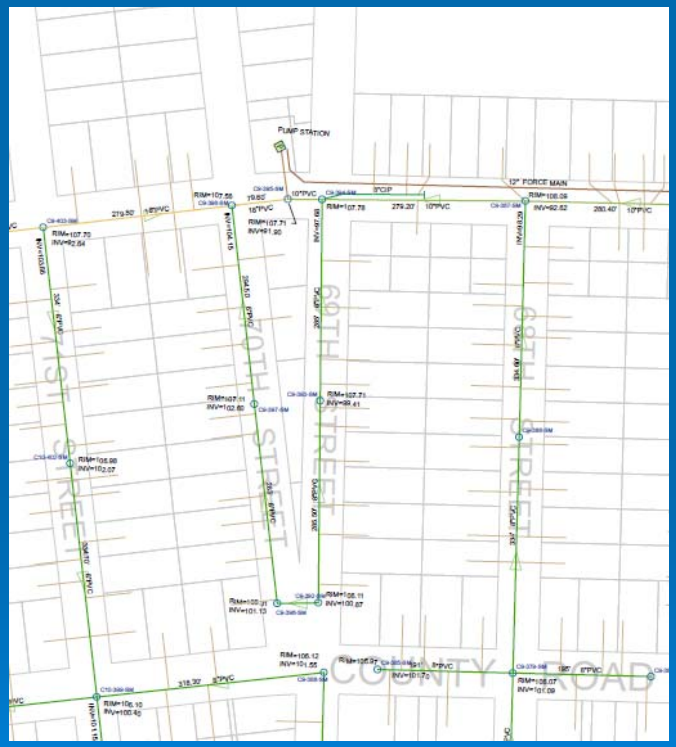
Hydrant Flushing

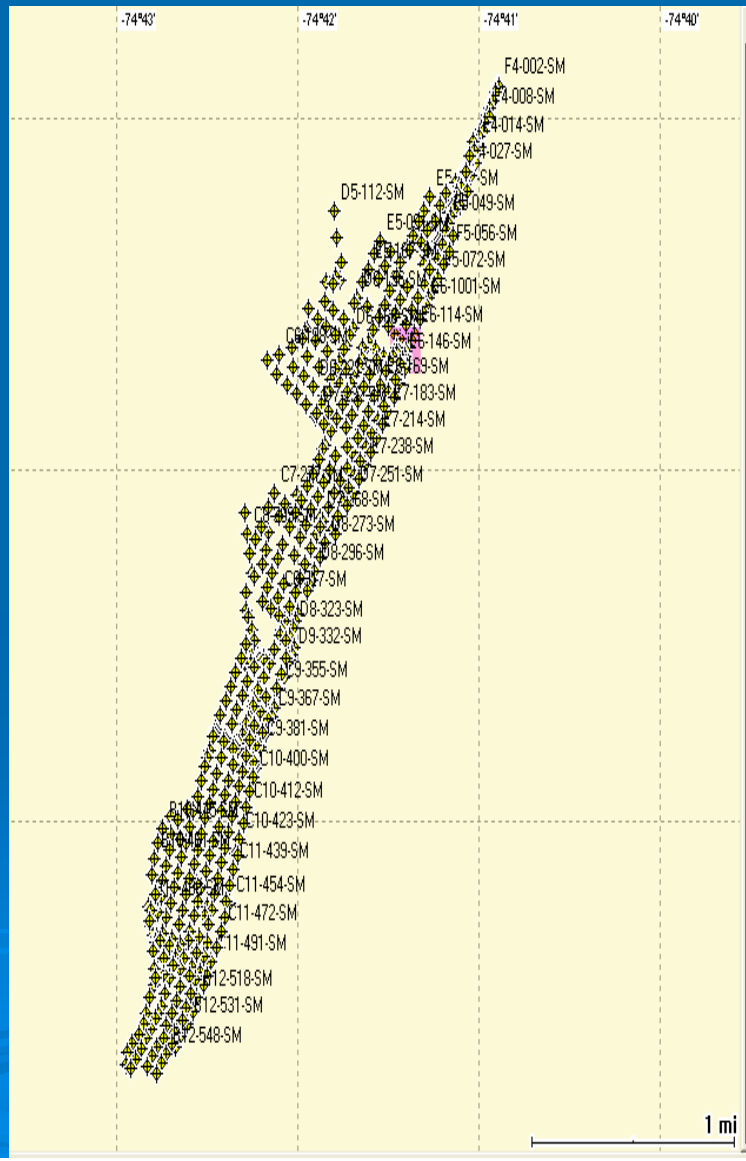
- All hydrants are flushed bi-annually to insure readiness for emergency use


CASE

GIS Mapping

- Constantly updated to keep current





Feature Properties

Property	Value
Feature	sanitary_north
Geometry	Point
Updated	No
Observation	
Date/Time	5/29/2009 8:54:54 AM
Duration (hh:mm:ss)	00:02:12
Current Position	
Latitude	39° 09' 20.40149" N
Longitude	74° 41' 24.11085" W
Height (m)	-33.180
Num. Sat.	10
PDOP	1.5
Correction	Post-processed
Accuracy Estimation	
Horizontal Error (ft)	2.539
Vertical Error (ft)	2.480
Attributes	
SAN_N	E6-127-SM

Clean Sanitary Sewers

- Combination sewer truck both vacuums the sanitary sewers as well as cleans them with a 2000 psi spray.

Sanitary Sewer Lateral Inspection

Sanitary Sewer Service: Responsibility

- The City is responsible for sanitary sewer service from the main to the face of the curb.
- Sanitary Sewer Laterals from the face of the curb to the structure are the responsibility of the property owner.
- In the event of a lateral blockage, the City will give a courtesy “plunge” if there is a cleanout. If there are repeated stoppages, a determination of responsibility will be made. If it is the City’s problem, the line will be cleaned.
- If necessary, inspected by the lateral camera.
- If necessary, the line will be repaired by the City.

Current Projects

- Inflow and Infiltration Study, Phase 2
  - Field work is complete, report is being written
- Geographical Information System (GIS)
  - Asset Management Program and Work Order Program being developed
  - Server is set up
  - Training on the system is greater than 50%
  - GPS locations have been completed by SIC personnel of the Sanitary Sewer System and the Water System. Currently obtaining GPS locations of the Storm Water System
  - All documents have been scanned.
  - Overall Project is about 90 to 95% Completed

Current Projects (Continued)

- 40th Street Public Works Building
  - Tentative occupation September, 2009
  - Location of Water and Sewer Operations and PW and W & S Administrative Offices
- 50th Street Water Treatment Plant
  - Working on Grant Funding for the Project
  - Bid- Fall of 2009
- Central Ave. Sanitary Sewer
  - Inspection of MUA line Complete, good condition
  - Conceptual agreement with the MUA to take over the responsibility of the line

Current Projects (Continued)

- 42nd Street Water and Sewer Upgrades
  - Increase the Water Main to an 8.0” Main
  - Replace sewer vents with cleanouts at curb line
  - Project has been awarded and Fall Construction

  Project includes small sections of water main replacements on 90th and 91st Streets