

Contact us

For technical questions about this report, call the water quality manager at (305) 650-0000. For general questions, call the public information officer at (305) 919-3756. To learn more about the Public Services Department, visit us on the web at:

Comuníquese

Esta publicación contiene información importante sobre el agua que usted bebe diariamente. Si no lo entiende, busque a alguien que se lo traduzca o le explique su contenido. Para más información, llame al (305) 919-3756 o visite nuestra página electrónica,

Kontaktè nou

Rapò sa gen enfòmasyon enpòtan sou dlo ke ou bwè. Si ou pa konprann li fè yon moun ki konprann li tradwil pou ou osnon esp-like ou li. Pou plis enfòmasyon, rele nimewo sa a (305) 919-3756 osnon vizite nou nan Internet adrès sa a:

www.nmbworks.com

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director's message

It's my pleasure to report that our water meets or exceeds all federal and state regulatory requirements. The following report shares our water quality results and what they mean to you.

The City of North Miami Beach has a duly certified laboratory and a professional staff who continuously monitor for contaminants in your drinking water. This report is based on the results of our monitoring for the period of January 1 to December 31, 2008.

We process water drawn from the Biscayne and Floridan aquifers at the Norwood Water Treatment Plant. Former Public Services Director Dr. Kelvin L. Baker spearheaded the recent expansion of the Norwood Water Treatment Plant, which now includes the most modern advances in water treatment available today, namely, nanofiltration and reverse osmosis. These state-of-the-art water treatment processes, along with the traditional lime-softening water treatment process, allow North Miami Beach to continue to provide its customers with the highest-quality water available.

Providing you with abundant and clean, high-quality water is our ultimate goal. It is also the direct result of what happens when adding quality leadership, operations, control and service into the equation.

I invite you to read on and learn more about the water we deliver to your tap. The City of North Miami Beach will continue to be proactive in our efforts to provide the highest-quality tap water to your homes or businesses. It is an honor to serve you.

Very truly yours,

Martin King, P.E.
Public Services Director



Dr. Kelvin L. Baker
City Manager

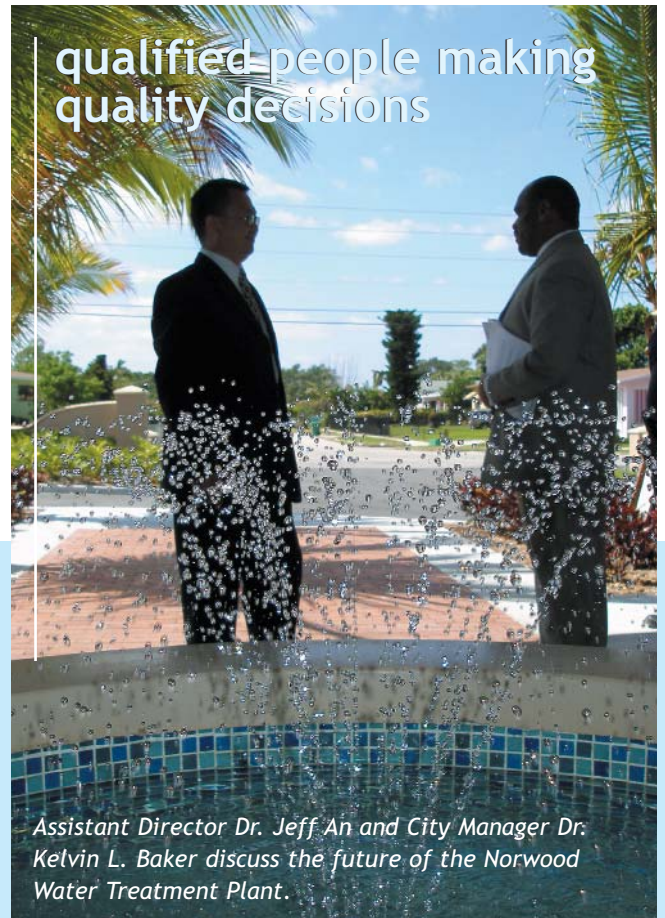
Under the leadership of Dr. Kelvin L. Baker, our water utility was upgraded with the latest advances in water treatment. From concept to final development, he managed all details of the plant expansion.

On September 9, 2008 he was sworn in to serve the City of North Miami Beach as City Manager.

important numbers

It is important to us that you are able to access the services you need most. We have provided a list of helpful contact numbers for each of our major services. Please feel free to call us with any questions you may have regarding the services we provide.

- After Hours/Emergency(305) 652-6460
- Public Services Department(305) 948-2967
- Call Before You Dig 811
- Community Relations(305) 957-3657
- Construction Projects(305) 919-3756
- Customer Service(305) 948-2960
- Distribution(305) 948-2936
- Engineering(305) 948-2980
- Meters & Backflow(305) 948-2936
- Norwood Water Treatment Plant(305) 650-0000
- Public Information(305) 919-3756
- Public Utilities Commission (PUC).....(305) 948-2983
- The PUC has an advisory role for the city's mayor and council. PUC meetings are normally held the second Thursday of each month in the Public Services Administration Building, 17050 NE 19th Avenue, second floor conference room, at 6 p.m.
- Water Quality Control(305) 654-7137
- Wastewater Management Facility(305) 624-1177
- Water Conservation.....(305) 957-3509



qualified people making quality decisions

Assistant Director Dr. Jeff An and City Manager Dr. Kelvin L. Baker discuss the future of the Norwood Water Treatment Plant.



Dr. Jeff An, P.E.
Assistant Director of Public Services

- ◆ Ph.D. in Environmental Engineering
- ◆ Florida Registered Professional Engineer
- ◆ 15 years in water and wastewater treatment
- ◆ Over 30 technical papers published



Godfrey Sooklal
Operations Manager II
WATER PRODUCTION

- ◆ Class 'A' Drinking Water License
- ◆ Certifications in Reverse Osmosis and Troubleshooting Membrane Systems
- ◆ Cisco Certified Networking Associate
- ◆ 10 years of laboratory experience and 33 years of operational experience, 20 of which is in water treatment



Renuka Mohammed Bajnath
Water Quality Manager
WATER QUALITY CONTROL

- ◆ M.B.A., Environmental Certification
- ◆ M.S. Environmental Science
- ◆ B.S. Microbiology
- ◆ Certificate in Biotechnology
- ◆ Over 10 years of environmental laboratory experience

Water Source

With the upgraded facilities at the Norwood Water Treatment Plant, the City of North Miami Beach now utilizes the latest water treatment technologies available and is drawing water from both the Biscayne Aquifer and an alternative water source, the Floridan Aquifer.



The Biscayne Aquifer is relatively shallow and is located approximately 10 to 200 feet underground. It is composed of porous limestone rock, which contains many tiny cracks and holes and is replenished when the rain percolates down through the ground.

North Miami Beach has a permit from the South Florida Water Management District to withdraw 26.31 million gallons per day (MGD) of water from the Norwood's Biscayne Aquifer well fields. Water from the Biscayne Aquifer is treated by Lime Softening and Nonofiltration.

In addition, our water production permit allows us to withdraw up to 12 MGD of water from the Floridan Aquifer, a deep aquifer located approximately 1,250 feet underground. Water withdrawn from the Floridan Aquifer is brackish and is treated with reverse osmosis filtration process.

From time to time we purchase a small amount of finished water from Miami-Dade Water and Sewer Department (WASD). We have included their water quality information on our water quality data report. WASD's water source is also from the Biscayne and Floridan aquifers.

Quality Control

North Miami Beach's water quality-control division oversees the laboratory and the many tests that are conducted to ensure safe, healthy drinking water. The laboratory is state-certified in microbiology.



The water treatment process consists of lime softening, multi-media filtration, nanofiltration, reverse osmosis, and disinfection. Water from different treatment processes are all blended together resulting in high quality water delivered to your home.

Annually, more than 184,000 tests are performed on North Miami Beach tap water. Constant testing ensures that the water delivered to your home or office is of the highest quality possible. Monthly, samples are taken from 137 different locations throughout the water service area and tested for bacteria, chlorine, cloudiness and iron.

North Miami Beach performed tests on 237 substances in 2008. Of the 237 substances the city is required to monitor, only 8 were detected in our water. The results are listed on the chart in this report. These results are still significantly below regulatory standards set by the United States Environmental Protection Agency (EPA) and the State of Florida. The city reports the results to the Florida Department of Health.

utility outreach programs

We want to hear from you! The Utility Customer Assessment and Water Use Assessment Surveys were created to obtain the thoughts, opinions and comments of the customers in our water service area. To obtain a survey, please call **(305) 919-3759**.



Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. North Miami Beach is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

Wellhead Protection Program

North Miami Beach monitors the well-field for possible pollution. The city has 31 monitoring wells installed around the water treatment plant and water supply wells. They serve as an early warning system by alerting professionals of any harmful contamination that might be present in the water.



Source Water Assessment and Protection Program (SWAPP)

The Florida Department of Environmental Protection (FDEP) is responsible for conducting a source water assessment for all public water systems in Florida. These assessments identify and assess any potential sources of contamination near your water supply.

In 2004, 2005, and 2008 the FDEP performed Source Water Assessments on our system. The assessment was conducted to provide information about potential sources of contamination in the vicinity of our wells. There are three potential sources of contamination identified for our system ranging from low to moderate susceptibility levels. The assessment results are available on the FDEP Source Water Assessment and Protection Program web site at:

http://www.dep.state.fl.us/swapp/DisplayPWS.asp?pws_id=4131618

Possible Contaminants

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

(A) Microbial contaminants, such as viruses and bacteria, which may come from

Continued on page 4

outreach

The Public Services Department promotes awareness and education of water issues through its community outreach and education initiatives. To schedule a speaker or presentation, please call (305) 919-3756.



quality
systems



Gary Garofalo
Operations Manager II
UTILITY ELECTRICAL SYSTEMS

- ◆ Master Electrician Certification/License, Dade, Broward, and Martin counties
- ◆ Electrical Certificate of Competency/License, Palm Beach County (Master Electrician)
 - ◆ Over 35 years of electrical industry experience

quality
management



Peter Johnson
Plant Systems Engineer

- ◆ M.S. Industrial and Systems Engineering
 - ◆ B.S. Mechanical Engineering
- ◆ 16 years in Computerized Maintenance Management Systems
 - ◆ Controls and Automation systems

quality
service



Greg Williams
Neighborhood Coordinator
◆ B.A. Organizational Leadership

sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

- (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

(E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Some Individuals May be More Susceptible to Contaminants

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 **1-800-426-4791**.



**qualified professionals
inspecting quality
systems**

Karl Thompson, P.E.
Assistant Director of Public Services

- ◆ Master of Engineering
- ◆ Master of Public Administration
- ◆ B.S. Civil Engineering
- ◆ Florida Registered Professional Engineer
- ◆ 20 years experience in utility and public infrastructure

water conservation

The water conservation program offers assistance to water customers by recommending measures to increase overall water use efficiency. From education to a **showerhead exchange program**, our water conservation specialist can help you discover long-term water and financial savings while helping the environment. To learn how to start saving water, please call **(305) 957-3509**.

Showerhead Exchange

Bring in your old water-wasting showerhead from your home and trade it in for a new, high-efficiency showerhead with pulsating massage settings. Please call **(305) 957-3509** for showerhead exchange locations.



- (a) **Armando Mendez** is one of our state certified operators who oversee and maintain the operations of the treatment systems.
- (b) **Kiersy Pena** and **Renuka Bajnath** test the water to ensure that you receive the best water possible.
- (c) Water Treatment Plant Operator **Mike Brown** monitors the membrane treatment process, which is fully automated and controlled with computers by our highly trained technicians.

The Norwood water treatment plant includes a training facility for water treatment plant operators and for other quality training purposes.



City of North Miami Beach 2008 Water Quality Report

(Finished water sampling and results from January 1 - December 31, 2008)

PARAMETER	MCL Violation	Federal Goal MCLG	Federal/ State MCL	North Miami Beach's Oeffler-Norwood Plant (a)	Year Tested	Miami-Dade Water and Sewer Department Main System (a)	Year Tested	Major Sources
Microbiological Contaminants								
Total Coliform (b)	N	0%	5%	0%	2008	0.50%	2008	Naturally present in the environment
Inorganic Contaminants								
Arsenic (ppb)	N	0	10	ND	2008	1.8 (ND-1.8)	2008	Erosion of natural deposits
Barium (ppm)	N	2	2	ND	2008	0.009 (0.006 - 0.009)	2008	Erosion of natural deposits
Copper (tap water) (ppm) (c)	N	1.3	AL=1.3	0.7 (0 homes out of 100 exceeded the AL)	2008	0.07 (0 homes out of 33 exceeded AL)	2008	Corrosion of household plumbing systems, erosion of natural deposits
Fluoride (ppm)	N	4	4	1.4 (0.3 - 1.4)	2008	0.7 (0.2 - 0.7)	2008	Erosion of natural deposits. Water additive to promote strong teeth when at optimum levels between 0.7 and 1.3 ppm
Lead (tap water) (ppb) (c)	N	0	AL=15	4.0 (3 homes out of 100 exceeded the AL)	2008	2.8 (1 home out of 73 exceeded AL)	2008	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as N) (ppm)	N	10	10	ND	2008	0.8 (ND - 0.8)	2008	Leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	N	NE	160	38	2008	43 (25 - 43)	2008	Salt water intrusion, leaching from soil
Volatile Organic Compounds								
cis-1,2 Dichloroethylene (ppb)	N	70	70	0.6 (0.3 - 0.6)	2008	ND	2008	Discharge from industrial chemical factories
Disinfection By-Products								
Haloacetic Acids (HAA5) (ppb)	N	NE	60	21.3 (5.6 - 26.1) (d)	2008	29 (5-68) (e)	2008	Byproduct of drinking water disinfection
Total Trihalomethanes (ppb)	N	NE	80	7.6 (3.0 - 9.20) (d)	2008	30 (3-85) (e)	2008	Byproduct of drinking water disinfection
Chloramine (ppm)	N	4	4	2.4 (0.1 - 4.0) (f)	2008	2.5 (ND-5.1) (f)	2008	Water additive used to control microbes
Radiological Contaminants								
Alpha Emitters (pCi/L)	N	0	15	ND	2008	3.4 (ND - 3.4)	2008	Erosion of natural deposits
Combined Radium (pCi/L)	N	0	5	ND	2008	0.7 (0.2 - 0.7)	2008	Erosion of natural deposits

LEGEND

(a) The lowest and highest values measured during the year are in parentheses. The number outside the parentheses is the highest detected level reported for the monitoring period, except for Disinfection Byproducts and Disinfection Residuals, where the running annual average is reported.

(b) The MCL for total coliform bacteria states that drinking water must not show the presence of coliform bacteria in more than 5% of monthly samples. A minimum of 137 samples for Total Coliform are collected each month from the City of North Miami Beach distribution system (390 samples from Miami Dade Main System) in order to demonstrate compliance.

(c) 90th percentile value reported. If the 90th percentile value does not exceed the AL (less than 10% of the homes have levels above the AL), the system is in compliance and uses the prescribed corrosion control measures.

(d) A total of 2 samples per quarter was collected under the Stage 1 D/DBP Rule for Total Trihalomethanes and Haloacetic Acids 5 from the North Miami Beach distribution system. Compliance is based on running annual average, computed quarterly, of quarterly averages of all samples collected in the system. The range of results is the range of individual sample results (lowest to highest) for all monitoring locations.

(e) A total of 48 samples for Total Trihalomethane and Haloacetic Acid testing are collected per year from the Miami Dade distribution system in order to demonstrate compliance with State regulations. Compliance is based on a running annual average. This is the value which precedes the parentheses.

(f) Compliance is based on a running annual average, computed quarterly from monthly samples collected during total coliform bacteria testing.

DEFINITIONS

Action Level or AL: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Disinfection: In treating water, it is the process by which water is exposed to a chemical for a specified period of time to kill pathogenic organisms.

Disinfection By-Product or DBP: A chemical produced by the disinfection process. Disinfection By-Products are regulated and are indicators of potential carcinogenic substances.

Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum residual disinfectant level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum residual disinfectant level goal or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Not Detected or ND indicates that the substance was not found by laboratory analysis.

Not Established or NE indicates the federal agency has not established a MCLG or MRDLG for that contaminant.

Parts per billion (ppb) or Micrograms per liter (µg/l) - one part by weight of analyte to 1 billion parts by weight of the water sample.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part by weight of analyte to 1 million parts by weight of the water sample.

Picocurie per liter (pCi/L) - measure of the radioactivity in water.