DEPARTMENT OF THE NAVY
NAVAL SUBMARINE BASE
1063 USS TENNESSEE AVENUE
KINGS BAY, GEORGIA 31547-2606

IN REPLY REFER TO:
11345
Ser PRB4/627
June 28, 2018

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Georgia Environmental Protection Division
Watershed Protection Branch
Drinking Water Compliance Unit
2 Martin Luther King Jr. Drive, SE
Floyd Towers East, Suite 1152
Atlanta, GA 30334

SUBJECT: 2017 CONSUMER CONFIDENCE REPORT CERTIFICATION FORM
GA WATER SYSTEM N° GA-0390013; NAVAL SUBMARINE BASE (SUBASE)
KINGS BAY, GEORGIA

SUBASE Kings Bay is forwarding enclosure (1) which is the form certifying preparation and distribution of the 2017 Consumer Confidence Report (CCR) for the public water supply owned and operated by SUBASE Kings Bay. Enclosures (2) through (6) are the various customer notification methods that were used by SUBASE Kings Bay.

Please address any questions pertaining to this report to the undersigned at (912) 573-4048 and all correspondence should be addressed to the Commanding Officer (Attn: PRB4), 910 USS Hunley Avenue, Building 2015, Naval Submarine Base, Kings Bay, GA 31547-2606.

Sincerely,

JAMES L. COLTER
Environmental Program Director
Public Works Department
By direction of the
Commanding Officer

Enclosures:
1. CCR Certification Form
2. 2017 CCR Mailout Version to Zip Code 31558
3. 2017 CCR Bulletin Board Version
4. 2017 CCR Published in the Facebook Page, NSB Kings Bay, June 26, 2018
5. 2017 CCR published in the CNIC Web-page, NSB Kings Bay, June 26, 2018
6. 2017 CCR published in the Periscope Newspaper, NSB Kings Bay, June 26, 2018

Copy to:
GAEPD Atlanta GA (Ms. Thanh Vo)

GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Watershed Protection Branch
2 Martin Luther King, Jr. Drive
Suite 1152, East Tower
Atlanta, Georgia 30334

Georgia Environmental Protection Division Public Drinking Water Consumer Confidence Report Certification Form

Community Water System (CWS) Name: Naval Submarine Base, Kings Bay, GA

Georgia Public Water System I.D. Number: GA-0390013 Reporting Year: 2017

The CWS identified above does hereby confirm that a Consumer Confidence Report (CCR) has been distributed to its customers. The water system further certifies that the information contained in the report is accurate and consistent with the compliance monitoring data previously submitted for the same time period to the Division (EPD). In addition, if this report is being used to meet Tier 3 Public Notification requirements, as denoted by the checked box below, the CWS certifies that public notification has been provided to its consumers in accordance with the requirements of 40 CFR 141.204(d).

Certified and attested by the following person:
Signature: [signature]
Name: James L. Colter, PE
E-mail: James.colter@navy.mil
Date: 6/28/2018
Title: Installation Environmental Program Director
Phone: (912) 573-4048

☐ The CCR includes text which provides mandated Public Notice for a monitoring violation (check box, if yes)

EPD requests the following material in order to gather information on distribution methods utilized by Community Water Systems. Please mark and/or fill out all items which apply to your CCR program or means of report distribution.

For ALL community water systems, indicate the method(s) used for CCR notification and/or distribution:

Note: For systems serving **>10,000** persons, a "good faith effort" must be made to your "other" water system consumers by three or more of the following methods (mark all methods utilized):

☒ CCR is posted on the Internet at a publicly available site:
https://www.cnic.navy.mil/regions/cnrse/installations/navsubbase_kings_bay/om/environmental_support/water.html

☐ Notification of Electronic CCR with direct URL
☐ utility bill ☐ email ☐ publication in newspaper ☐ other (e.g., bill insert, newsletter, postcard)

☒ Electronic Delivery of CCR
☐ Direct e-mail delivery of CCR (☐ attached ☐ embedded ☒ direct URL to CCR)
If the CCR was provided by a direct URL, please provide the direct URL Internet address:
https:// www.facebook.com/usbkingsbay and https://webkb.wh.nads.navy.mil:9011/EnvirDiv_files/EnvirDiv.htm

☐ Electronic Delivery with customer option to request paper CCR

☒ US Postal Service mailing to all consumers within the service area (attach list of zip codes used) 31558 and 31547

☐ Advertised availability of CCR to local news media (attach announcement used)

☐ Published CCR in local newspaper (attach physical copy of paper publication)

☐ Posted CCR notice of availability in prominent public location(s) (attach list)

☐ Directly delivered individual CCR copies to all residents in the community

☐ Directly mailed individual CCR copies to each customer receiving a water bill

☐ Included notice of availability with water bill

☒ Other direct delivery methods were utilized such as (please list below):
Posted on building/barrack occupants bulletin boards within all buildings and barracks located on SUBASE Kings Bay, GA

Indicate the number of "consumers served" or "population served" by your water system:

☐ **<500** consumers served
☒ **501 - 9,999** consumers served
☐ **10,000 - 99,999** consumers served
☐ **>100,000** consumers served

Send completed CCR certification form AND a copy of final CCR to the following address:
GA EPD, Drinking Water Compliance Unit
2 Martin Luther King, Jr. Drive, SE
Floyd Towers East, Suite 1152
Atlanta, GA 30334

Important Due Dates: ***July 1-Deadline for CCR to EPD and Consumers***
October 1-Deadline for CCR Certification Forms to EPD

Enclosure (1)

Summary of Water Quality Information

The Kings Bay Community Water System is owned and operated by Naval Submarine Base, Kings Bay Georgia for supplying the water needs of housing, training and submarine support activities.

To report leaks or concerns with your water:
For Family Housing Areas: 882-1211 or 882-2653
For SUBASE Immediate Needs Call SCADA: 573-2724
Routine work orders by Building Managers: 573-2300

The Kings Bay Water Source

Three (3) 900-foot-deep artesian wells from the Upper Floridan Aquifer located on the Naval Submarine Base (SUBASE) Kings Bay provide our water. They are housed in secure buildings to protect them from outside sources that could contaminate our water supply. A Source Water Assessment Plan (SWAP) completed in May 2003 by the Georgia Environmental Protection Division indicates our wells are at low risk for contamination. The plan also explains procedures for protecting our water supply. In the USA drinking water can come from a number of sources including rivers, lakes, streams, ponds, reservoirs, springs and wells. Groundwater from "confined" aquifers such as the Upper Floridan is considered to be among the best water available to consumers. As water moves over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, can pick up substances resulting from the presence of animals or from human activity. Our testing does not show this to be a problem with our water supply.

Testing to Keep You Safe

The water we provide is constantly tested. Each year, more than 10,000 tests are run to ensure safe, high quality potable water for our customers. This report provides you with the information you need to know about the sources of SUBASE's drinking water, what is in it and how it compares to regulatory agency standards. All plant operators and lab technicians hold state certifications. The Safe Drinking Water Act (SDWA) requires all water systems to provide their customers with an annual water quality report such as this. The tests reported here are from January 1 through December 31, 2017 except for a few tests as noted in this report that are not done annually. Your SUBASE Kings Bay Water Department is committed to providing you with clean and safe water. We are pleased to report again this year our water meets the standards of the SDWA without any exceptions.

How We Produce Water

The SUBASE Kings Bay Water System provides treated water 24 hours every day. Water is treated to remove contaminants by membrane filtration, aeration, chlorination and fluoridation. Water testing is performed throughout the system on a variety of schedules ranging from daily to annually, depending on the test. The last inspection conducted by Georgia Environmental Protection Division in May 2015 found no problems.

Ensuring Safe Water

To insure that tap water is safe to drink, EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. EPA also requires a cross connection control program be established and implemented to prevent unprotected or improper connections to water distribution systems that could result in potential contamination or pollution to the water system. Bottled water is regulated by the U. S. Food and Drug Administration and must provide the same protection for public health as public water supplies. Drinking water and bottled water may reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained at:

EPA Safe Drinking Water Hotline (800) 426-4791
Or on-line at www.epa.gov/safewater.

Vulnerability to Contaminants

Some people may be more susceptible to contaminants in drinking water than the general population. People with compromised immune systems (such as those undergoing chemotherapy), have had organ transplants, have HIV/AIDS, or other immune system disorders, may have increased risk to infection. 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 microbial contaminants are available from

EPA Safe Drinking Water Hotline (800) 426-4791
Or on-line at www.epa.gov/safewater.

Water Conservation
USING WATER EFFICIENTLY

Water conservation is always a good idea. A good way to think of it is using water efficiently. It's a gift that we can give ourselves that provides for the future. This takes added importance when drought conditions exist Georgia. The past few years have been quite dry and these conditions appear to be continuing.

Coastal Georgia also has an additional set of issues besides drought. High withdrawal rates in some areas have resulted in saltwater intrusion into water resources used along the coast. This is already causing restrictions on growth and greater regulation of groundwater supplies along the coast which SUBASE is subject to just as local communities are.

SUBASE is complying with Presidential Executive orders mandating reductions for water usage at all facilities. The goal is to reduce usage by 2% per year through 2025. We have exceeded this ambitious goal, but the help of every person at SUBASE is needed to continue to meet it.

There are many simple ways to be efficient in use of water in daily activities. Let's use them and reap the benefits. One good information source for water savings at home is: https://epd.georgia.gov/water-conservation

An additional benefit when we conserve water is the energy savings that nearly always accompanies it. When you find a new way to be water efficient, **SHARE** it with your neighbors.

Drought Conditions in Georgia

Because of the abundance of winter rainfall this past winter in Georgia, EPD has dropped the Level 1 Drought Response restrictions. However, everyone must continue to follow the non-drought outdoor water use requirements that include:

- Landscape watering may only be done before 10:00 AM and after 4:00 daily. This is done to limit evaporation during the warmest part of the day.
- Hydrants may only be used for firefighting or other public health & safety purposes.

For more information on watering see the following web site: https://epd.georgia.gov/water-conservation.

THE WATER TREATMENT PLANT

Naval Facilities Engineering Command upgraded the Water Treatment Plant to a state of the art treatment plant that alleviates trihalomethanes (THMs) of concern in the water chlorination process. With eight successful years of operation completed in 2017 we continue with excellent results in reducing THMs as shown in the table below.

Definitions of Terms and Abbreviations in this Report

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

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

Maximum Contaminant Level Goal (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.*

Secondary Maximum Contaminant Level (SMCL): *reasonable goals for drinking water quality. Exceeding SMCLs may adversely affect odor or appearance, but there is no known risk to human health.*

Maximum Residual Disinfectant Level (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 microbiological contaminants.*

Maximum Residual Disinfectant Level Goal (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.*

N/A: *Not Applicable.*

N/D: *Not Detected. The contaminant was not detected.*

ppb or µg/l: *parts per billion or micrograms per liter (µg/l) (Note that one ppb is equivalent to one second in 32 years)*

ppm or mg/l: *parts per million or milligram per liter (mg/l) (Note that one ppm is equivalent to one second in 12 days)*

pCi/l: *picoCuries per liter is a measure of the amount of radioactivity in a sample.*

Potential Contaminants

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. SUBASE results are shown in Table 5.

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. SUBASE results are shown in Tables 1, 3 and 4.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses. SUBASE results are shown in Table 2.

Organic chemical contaminants, including synthetic and volatile organic chemicals (VOCs), which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems. SUBASE results are shown in Table 2 and are only those which are byproducts of the water disinfection process.

Radioactive contaminants, which can be naturally occurring or be the results of oil and gas production and mining activities. SUBASE results are shown in Table 6.

TABLE 1 – Inorganic Contaminants Detected In Water Distributed to Customers

Parameter	Barium	Copper	Chlorine	Fluoride
Units	ppb	ppb	ppm	ppm
Sample Date	2017	2017	2017	2017
MCL / [SMCL]	2,000	1,300	4 [2]	4
MCLG	N/A	1,300	N/A	4
Highest Level Detected	11	7.4	3.0	1.12
Range of Detections	11	7.4	0.8 – 3.0	0.08 – 1.12
Violation (Yes / No)	No	No	No	No
Possible Sources of Contaminant	Barium, Copper & Fluoride: Erosion of natural deposits; Fluoride is an additive that promotes strong teeth. Chlorine is an additive used to control microbes.			

For copies of this report or for more information on it, please contact Mr. Scott Bassett, Kings Bay's Public Affairs Office, at (912) 573-4714/4718.

Enclosure (2)

Table 2: Detected Organic Contaminants

Parameter	Units	Sample Date	MCL	MCL G	Kings Bay Results[1]	Range of Detections	Violation (Yes/No)	Likely Source of Contamination
TTHMs[1]	ppb	2017	80	N/A	42.03 (4QRA)	35.9 – 48.1	No[1,2]	By-product of drinking water chlorination
HAA5s[1]	ppb	2017	60	N/A	7.4 (4QRA)	4.8 – 9.2	No[1,2]	
TTHMs[1] Site 2	ppb	2017	80	N/A	47.3(4QRA)	31.9 – 62.3	No[1,2]	
HAA5s[1] Site 2	ppb	2017	60	N/A	9.3 (4QRA)	7.8 – 11.3	No[1,2]	

1. Total Trihalomethanes (TTHMs) and Total Haloacetic Acids (HAA5s) is the sum of detected concentrations of individual byproducts which form because chlorine, which is used for disinfection, also reacts with low concentrations of organic materials present in the raw water. The data are evaluated by averaging the current quarter result with the previous three quarters to obtain a Four Quarter Running Average (4QRA). A violation occurs when the 4QRA exceeds the MCL.
2. **Trihalomethane Health Effects**: Some individuals who drink water containing Trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous systems and may have an increased risk of getting cancer. As can be seen in the table, our results are very much lower than the applicable standard.

Table 3: Unregulated Inorganic Monitoring Results [1]

Parameter	Units	Sample Date	SMCL	MCLG	Kings Bay Results	Range of Detections	Violation (Yes/No)	Likely Source of Contamination
Sodium	ppm	2017	N/A	N/A	14.0	N/A	No	Erosion of natural deposits
Sulfate	ppm	2017	250	N/A	52.2	N/A	No	

1. Based on this value Kings Bay's water has 3.3 mg of sodium per 8 oz. serving. This is provided for individuals on sodium restricted diets.

Table 4: Lead and Copper (Tap Water) Monitoring Results **

Parameter	Units	Sample Date	Action Level	MCLG	90% Percentile	No. of Sites Exceeding AL	Violation (Yes/No)	Likely Source of Contamination
Lead (ppb)	ppm	8/2017	15	0	Not Detected	0 of 10	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppb)	ppm	8/2017	1300	1300	96.8	0 of 10	No	

**Testing is required every 3 years.
The single exceedance for Lead in 2014 was in a sink in Room 131 of Quarters Building #1044 which was under renovation at the time and unoccupied. It was resampled in 2017 and lead was not detected in the sample results received back from the laboratory.
USEPA and Georgia EPD have asked that we inform you about the health effects of lead as outlined below:
Health Effects of Lead: If present at elevated levels, 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. The Kings Bay Community Water System 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 two 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, or steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800) 426-4791 or at https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water

Table 5: Bacteriological Monitoring Results [1]

Biological Parameter (Presence or absence of bacteria in sample)	Units	Sample Date	MCL	MCLG	Kings Bay Results	Violation (Yes/No)	Likely Source of Contamination
Total Coliform	(Number of Detections)	2017	0	0	0	No	Naturally present in the environment
Fecal Coliform		2017	0	0	0	No	Warm blooded animals

1. Thirty sample points routinely tested at Kings Bay. Ten points are sampled each month with a total of 143 regular and special tests in 2017.

Table 6: Radionuclides Table**

Parameter	Units	Sample Date	MCL	MCLG	Kings Bay Results	Range of Detections	Violation (Yes/No)	Likely Source of Contamination
Alpha Emitters	pCi/l	2013	15	0	<3	N/A	No	Erosion of natural deposits
Radium 226	pCi/l	2013	5	0	<1	N/A	No	
Radium 228	pCi/l	2013	5	0	<1	N/A	No	

pCi/l: = *picoCuries per liter is a measure of the amount of radioactivity in a sample.*
**Testing is required every 5 years.

DEPARTMENT OF THE NAVY
Kings Bay Community Water System
Public Affairs Office / Public Works Department
1063 USS Tennessee Avenue
Kings Bay, GA 31547
Official Business

Consumer Confidence Report

2017

Kings Bay Community Water System

Georgia ID N° GA0390013

Published June 2017
by the
Naval Submarine Base, Kings Bay
Public Works Department
Environmental Division

Kings Bay Community Water System 2017 Consumer Confidence Report

The Kings Bay Community Water System is owned and operated by Naval Submarine Base Kings Bay, Georgia for all SUBASE activities. **To report leaks or concerns with your water: Call 882-1211 or 882-2653 for Family Housing Areas: For all other SUBASE Immediate Needs, Call SCADA: 573-2724. For routine work orders, Building Managers shall call 573-2300.**

The Kings Bay Water Source

Three (3) 900-foot-deep artesian wells from the Upper Floridan Aquifer located on the Naval Submarine Base (SUBASE) Kings Bay provide our water. They are housed in secure buildings to protect them from outside sources that could contaminate our water supply. A Source Water Assessment Plan (SWAP) completed in May 2003 by the Georgia Environmental Protection Division indicates our wells are at low risk for contamination. The plan also explains procedures for protecting our water supply. In the USA drinking water can come from a number of sources including rivers, lakes, streams, ponds, reservoirs, springs and wells. Groundwater from "confined" aquifers such as the Upper Floridan is considered to be among the best water available to consumers. As water moves over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, can pick up substances resulting from the presence of animals or from human activity. Our testing does not show this to be a problem with our water supply.

Testing to Keep You Safe:

The water we provide is constantly tested. Each year, more than 10,000 tests are run to ensure safe, high quality potable water for our customers. This report provides you with the information you need to know about the sources of SUBASE's drinking water, what is in it and how it compares to regulatory agency standards. All plant operators and lab technicians hold state certifications. The Safe Drinking Water Act (SDWA) requires all water systems to provide their customers with an annual water quality report such as this. The tests reported here are from January 1 through December 31, 2017 except for a few tests as noted in this report that are not done annually. Your SUBASE Kings Bay Water Department is committed to providing you with clean and safe water. We are pleased to report again this year our water meets the standards of the SDWA without any exceptions.

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Ensuring Safe Water

To insure that tap water is safe to drink, EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. EPA also requires a cross connection control program be established and implemented to prevent unprotected or improper connections to water distribution systems that could result in potential contamination or pollution to the water system. Bottled water is regulated by the U. S. Food and Drug Administration and must provide the same protection for public health as public water supplies. Drinking water and bottled water may reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained at: EPA Safe Drinking Water Hotline (800) 426-4791 Or on-line at www.epa.gov/safewater.

Water Conservation: USING WATER EFFICIENTLY

Water conservation is always a good idea. A good way to think of it is using water efficiently. It's a gift that we can give ourselves that provides for the future. This takes added importance when drought conditions exist Georgia. The past few years have been quite dry and these conditions appear to be continuing.

Coastal Georgia also has an additional set of issues besides drought. High withdrawal rates in some areas have resulted in saltwater intrusion into water resources used along the coast. This is already causing restrictions on growth and greater regulation of groundwater supplies along the coast which SUBASE is subject to just as local communities are.

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An additional benefit when we conserve water is the energy savings that nearly always accompanies it. When you find a new way to be water efficient, **SHARE** it with your neighbors.

Vulnerability to Contaminants

Some people may be more susceptible to contaminants in drinking water than the general population. People with compromised immune systems (such as those undergoing chemotherapy), have had organ transplants, have HIV/AIDS, or other immune system disorders, may have increased risk to infection. 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 microbial contaminants are available from: EPA Safe Drinking Water Hotline: (800) 426-4791 Or on-line at www.epa.gov/safewater.

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For more information on watering see the following web site: https://epd.georgia.gov/water-conservation.

WATER TREATMENT PLANT:

Naval Facilities Engineering Command upgraded the Water Treatment Plant to a state of the art treatment plant that alleviates trihalomethanes (THMs) of concern in the water chlorination process. With eight successful years of operation completed in 2017 we continue with excellent results in reducing THMs as shown in the table below.

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Maximum Contaminant Level Goal (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.*

Secondary Maximum Contaminant Level (SMCL): *reasonable goals for drinking water quality. Exceeding SMCLs may adversely affect odor or appearance, but there is no known risk to human health.*

Maximum Residual Disinfectant Level (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 microbiological contaminants.*

Maximum Residual Disinfectant Level Goal (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.*

N/A: *Not Applicable.*

N/D: *Not Detected. The contaminant was not detected*

ppb or µg/l: *parts per billion or micrograms per liter (µg/l) (Note that one ppb is equivalent to one second in 32 years)*

ppm or mg/l: *parts per million or milligram per liter (mg/l) (Note that one ppm is equivalent to one second in 12 days)*

pCi/l: *picoCuries per liter is a measure of the amount of radioactivity in a sample.*

Potential Contaminants

Microbial contaminants, such as viruses and bacteria which can come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. SUBASE results are shown in Table 5.

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. SUBASE results are shown in Tables 1, 3 and 4.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses. SUBASE results are shown in Table 2.

Organic chemical contaminants, including synthetic and volatile organic chemicals (VOCs), which are by-products of industrial processes and petroleum production, but can also come from gas stations, urban stormwater runoff and septic systems. SUBASE results are shown in Table 2 and are only those which are byproducts of the water disinfection process.

Radioactive contaminants, which can be naturally occurring or be the results of oil and gas production and mining activities. SUBASE results are shown in Table 6.

Results of Testing

Table 1: Inorganic Contaminants Detected

Parameter	Units	Sample Date	MCL / [SMCL]	MCLG	Highest Level Detected	Range of Detections	Violation (Yes / No)	Possible source of Contaminants
Barium	ppb	2017	2,000	N/A	11	11	No	Barium, Copper & Fluoride: Erosion of natural deposits; Fluoride is an additive that promotes strong teeth. Chlorine is an additive used to control microbes.
Copper	ppb	2017	1,300	1,300	7.4	7.4	No	
Chlorine	ppm	2017	4 [2]	N/A	3.0	0.8 – 3.0	No	
Fluoride	ppm	2017	4	4	1.12	0.08 – 1.12	No	

Table 2: Detected Organic Contaminants

Parameter	Units	Sample Date	MCL	MCLG	Kings Bay Results[1]	Range of Detections	Violation (Yes/No)	Likely Source of Contamination
TTHMs[1]	ppb	2017	80	N/A	42.03 (4QRA)	35.9 – 48.1	No[1,2]	By-product of drinking water chlorination
HAA5s[1]	ppb	2017	60	N/A	7.4 (4QRA)	4.8 – 9.2	No[1,2]	
TTHMs[1] Site 2	ppb	2017	80	N/A	47.3(4QRA)	31.9 – 62.3	No[1,2]	
HAA5s[1] Site 2	ppb	2017	60	N/A	9.3 (4QRA)	7.8 – 11.3	No[1,2]	

1. Total Trihalomethanes (TTHMs) and Total Haloacetic Acids (HAA5s) is the sum of detected concentrations of individual byproducts which form because chlorine, which is used for disinfection, also reacts with low concentrations of organic materials present in the raw water. The data are evaluated by averaging the current quarter result with the previous three quarters to obtain a Four Quarter Running Average (4QRA). A violation occurs when the 4QRA exceeds the MCL.

2. **Trihalomethane Health Effects**: Some individuals who drink water containing Trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous systems and may have an increased risk of getting cancer. As can be seen in the table, our results are very much lower than the applicable standard.

Table 3: Unregulated Inorganic Monitoring Results [1]

Parameter	Units	Sample Date	SMCL	MCLG	Kings Bay Results	Range of Detections	Violation (Yes/No)	Likely Source of Contamination
Sodium	ppm	2017	N/A	N/A	14.0	N/A	No	Erosion of natural deposits
Sulfate	ppm	2017	250	N/A	52.2	N/A	No	

1. Based on this value Kings Bay's water has 3.3 mg of sodium per 8 oz. serving. This is provided for individuals on sodium restricted diets.

Table 4: Lead and Copper (Tap Water) Monitoring Results **

Parameter	Units	Sample Date	Action Level	MCLG	90th Percentile	No. of Sites Exceeding AL	Violation (Yes/No)	Likely Source of Contamination
Lead (ppb)	ppm	8/2017	15	0	Not Detected	0 of 10	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppb)	ppm	8/2017	1300	1300	96.8	0 of 10	No	

**Testing is required every 3 years.

The single exceedance for Lead in 2014 was in a sink in Room 131 of Quarters Building #1044 which was under renovation at the time and unoccupied. It was resampled in 2017 and lead was not detected in the sample results received back from the laboratory.

USEPA and Georgia EPD have asked that we inform you about the health effects of lead as outlined below:

Health Effects of Lead: If present at elevated levels, 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. The Kings Bay Community Water System 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 two 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, or steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (800) 426-4791 or at https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water.

Table 5: Bacteriological Monitoring Results [1]

Biological Parameter (Presence or absence of bacteria in sample)	Units	Sample Date	MCL	MCLG	Kings Bay Results	Violation (Yes/No)	Likely Source of Contamination
Total Coliform	(Number of Detections)	2017	0	0	0	No	Naturally present in the environment
Fecal Coliform		2017	0	0	0	No	Warm blooded animals

1. Thirty sample points routinely tested at Kings Bay. Ten points are sampled each month with a total of 143 regular and special tests in 2017.

Table 6: Radionuclides Table**

Parameter	Units	Sample Date	MCL	MCLG	Kings Bay Results	Range of Detections	Violation (Yes/No)	Likely Source of Contamination
Alpha Emitters	pCi/l	2013	15	0	<3	N/A	No	Erosion of natural deposits
Radium 226	pCi/l	2013	5	0	<1	N/A	No	
Radium 228	pCi/l	2013	5	0	<1	N/A	No	

pCi/l: = *picoCuries per liter is a measure of the amount of radioactivity in a sample.*

**Testing is required every 5 years.

For copies of this report or for more information on it, please contact Mr. Scott Bassett, Kings Bay's Public Affairs Office, at (912) 573-4714

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The 2017 Kings Bay Kings Bay Community Water System Consumer Confidence Report can be found at the link below.

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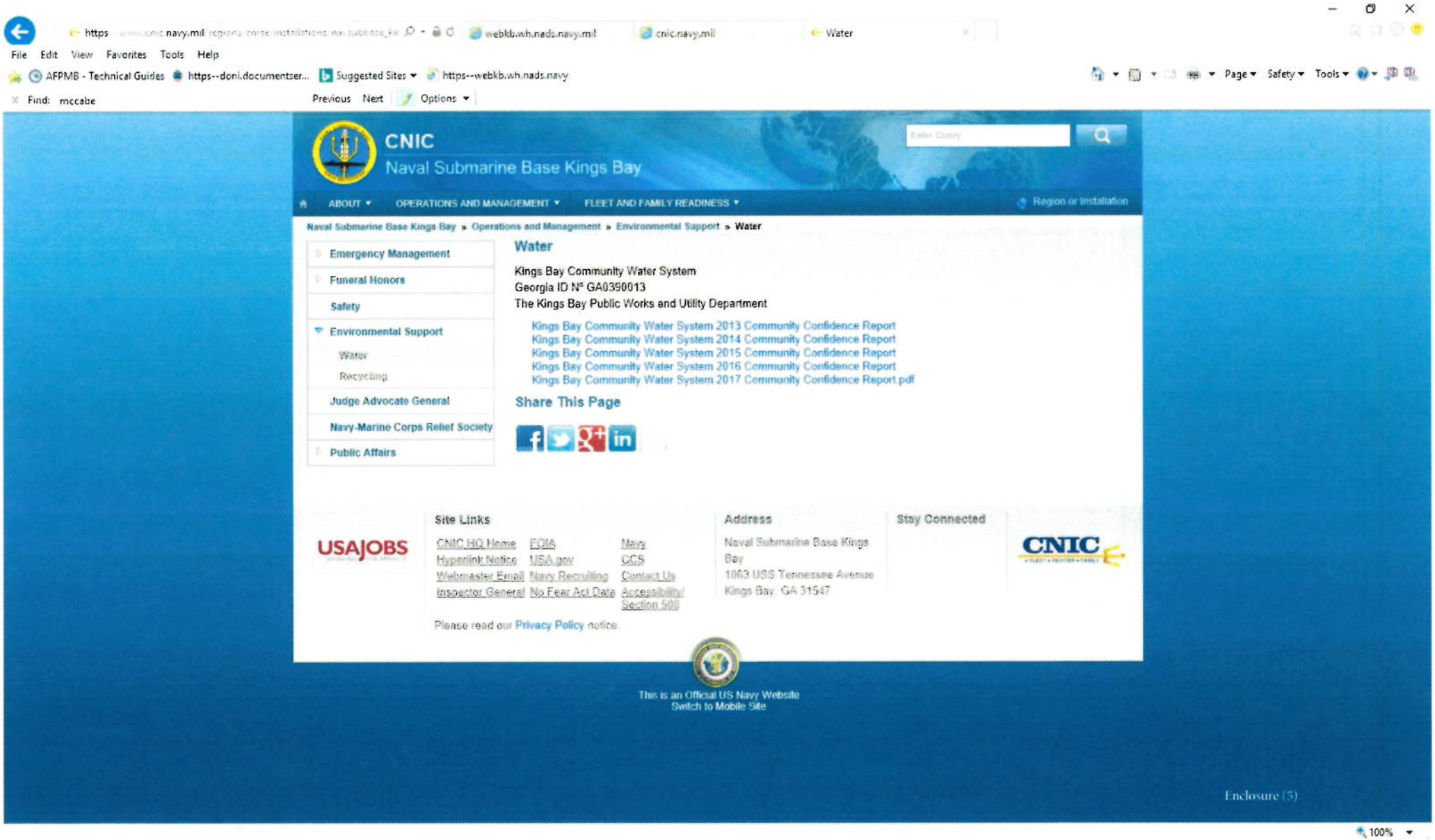
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The Kings Bay Public Works and Utility Department
Kings Bay Community Water System 2013 Community Confidence Report
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2 November 2016	IEMT Meeting Minutes
15 February 2017	IEMT Meeting Minutes
24 May 2017	IEMT Meeting Minutes
5 October 2017	IEMT Meeting Minutes

Environmental Links of Interest	
ECATTS Training Website	2017 CCR Broadsheet
GAEPD Scrap Tire Info	SUBASE BMH's Handbook MAR 2016
GAEPD Scrap Tire Forms	Georgia Environmental Health & Safety
DLA Compressed Gas Cylinder Turn-in	EPA Consolidated List of Lists (EPCRA)
DLA Compressed Gas Cylinder Info & NSN	Navy Afloat Compliance

EARTH DAY – APRIL 22 EACH YEAR (Get Involved)

Dear Future Generations: Sorry

Over the next five years the Earth Day Network has an ambitious goal to plant 7.8 billion trees starting this year. This is the first of five major goals they are undertaking in recognition of the five-year countdown to their 50th anniversay. Trees assist in combating climate change by absorbing excess and harmful CO2 from the atmosphere, they also help us breathe clean air by absorbing odors, pollutant gases and filter particulates out of the air by trapping them on their leaves and bark. So before you cut down a tree or damage it beyond salvagability, think about the significant contribution it is making in maintaining our planet green, sustainable, and helping you breathe. The Redwood

Do your part and GET INVOLVED with Earth Day activities in or around your community or volunteer time to help clean-up our parks, waterways, roads, and other public locations to help Mother Earth always look her best and make ever lasting impressions on all who visit our community or utilize our valuable natural resources!! Mother Nature is Speaking

FY-2015 CNIC EXTERNAL ENVIRONMENTAL AUDIT (EEA) FINDING STATUS

The CNIC EEA was conducted at SUBASE Kings Bay, GA during the period 22-26JUN2015. A total of 55 EMS/compliance program findings were written from the audit. The following is the current Plan of Action and Milestones (POA&M) corrective action status of the findings, as of 05OCT17 seven (7) findings remain in-progress to have corrective action completed to resolve each:

SUMMARY OF COMBINED EEA AND PM FINDINGS								
	Total Findings							Admin

Enclosure (6)