

DEPARTMENT OF THE AIR FORCE 102D INTELLIGENCE WING (ACC) MASSACHUSETTS AIR NATIONAL GUARD OTIS AIR NATIONAL GUARD BASE MASSACHUSETTS

29 June 2016

MEMORANDUM FOR: Commonwealth of Massachusetts

Department of Environmental Protection Southeast Regional Office Courtland Ridings - Consumer Confidence Report 20 Riverside Drive

Lakeville, MA 02347

FROM: Bioenvironmental Engineering (BE)

156 Reilly Street, Box 12

Otis ANG Base, MA 02542-1330

SUBJECT: Consumer Confidence Report for CY2015

- 1. Please find the attached Consumer Confidence Report (CCR) Certification for calendar year <u>2015</u>. In accordance with AFI 48-144, para 1.9.2.8., BE prepares, coordinates and distributes Consumer Confidence Reports as necessary to comply with applicable regulatory requirements. In addition, per 310 CMR 22.00: Drinking Water, para 22.16A: Consumer Confidence Reporting Requirements, section 2, each community water system established after January 1, 1999, must deliver its first CCR to its customers by July 1_{st} of the year after its first full calendar year in operation and *annually thereafter*.
- 2. The additional attachments include the CCR Certification, CY2015 CCR, delivery to occupied base housing units as of June 2016, the direct URL and good faith delivery method locations.
- 3. For any further information and/or questions, please contact the undersigned at (508) 968-4078. Additionally, technical information may be obtained by calling the Water Superintendent, Mr. Richard Souza at (508) 968-4058.

KEITH DELGADO, MSgt, MA ANG Bioenvironmental Engineering Technician

Attachment(s):

- 1. CCR Certification
- 2. CCR Reporting Year 2015
- 3. Occupied Base Housing as of June 2016
- 4. Direct URL
- 5. Good Faith Delivery Locations



Massachusetts Department of Environmental Protection Bureau of Resource Protection – Drinking Water Program

Otis Air National Guard Base at Joint Base Cape Cod

Consumer Confidence Report Certification

For calendar year 2015

A. PWS Information

PWS Name

Buzzards Bay

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.





City/Town

The community water system named above hereby certifies that its Consumer Confidence Report (CCR) was distributed to customers, appropriate agencies, and notices of availability have been given in compliance with 310 CMR 22.16A. Furthermore, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to MassDEP. I certify under penalty of law that I am the person authorized to fill out this form and the information contained herein is true, accurate, and complete to the best of my knowledge and belief.

| 4096001 |
|--|
| PWS ID# |
| MSgt Keith Delgado |
| Name |
| Bioenvironmental Technician (BE) |
| Title |
| 508-968-4078 |
| Phone # |
| 29 June 2016 |
| Date |
| K S (|
| Signature of Owner/Responsible Party or Certified Operator |
| |

B. Public Notice Certification

CCR delivery by newspaper or postings does not meet PN requirements. PN must be directly delivered (by hand, land, electronic).

| Is this system using this CCR to provide Tier 3 Public Notice? | ☐ Yes X No |
|---|--|
| What PN is included? Violation UCMR3 Other | List other |
| Did you have a consultation with MassDEP ? ☐ Yes ☐ No | Consultation date |
| The PN can be found on page of the CCR. | Date of PN Occurrence |
| ☐ I am reporting multiple Tier 3 PNs. I have listed the addition | al PN information at the end of this form. |
| | |

The public water system indicated above hereby affirms that a Tier 3 public notice has been provided within this CCR to consumers in accordance with 310 CMR 22.16(4) including: delivery, content, format requirements, notification deadlines, and that the public water system will meet future requirements for notifying new billing units and new customers of the violation.

If you did not sell water to another community PWS skip Section C.

C. For Systems Selling Water to Other Community Water Systems

My system delivered the applicable information required at 310 CMR 22.16A(3), to the buying system(s) no later than April 1st of this year, or by the mutually agreed upon date specifically included in a written contract between the parties.

D. Annual Cross Connection Education

Is this CCR being used for your system's annual cross-connection education?

X Yes
No
If no, what methods did you use to meet your annual CCCP requirements (citation)?

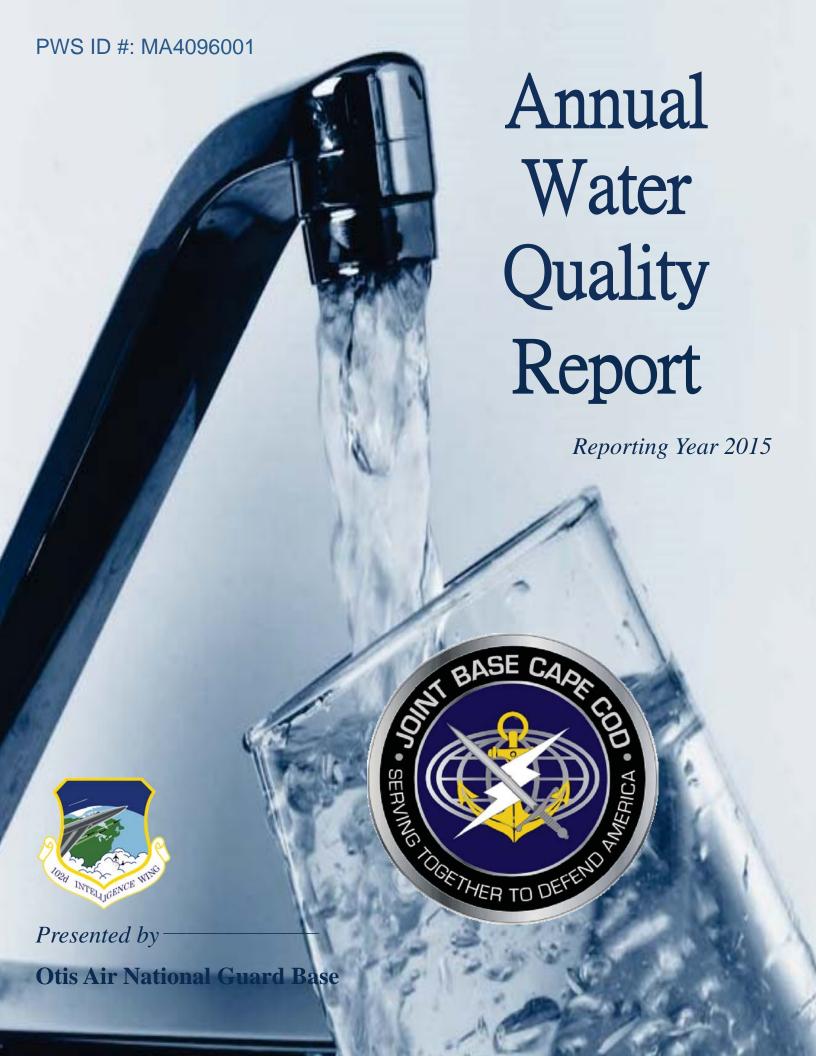
Continued on next page

ALL distribution (posting, land or e-delivery,

E. Consumer Delivery Methods – Based on Population Served

| oublication, and good faith efforts) must be | For systems serving fewer than 500 persons: (Choose #1 or #2) Date of delivery/publication 1. My system used one or more of the following methods to notify customers that the CCR would not | | | | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|--|--|--|--|
| completed on or pefore July 1 st . | Ш | 1. My system used one or more of the following methods to notify customers that the CCR would not be mailed directly to them but is available to them upon request. (A copy of the notice is attached). | | | | | | | | | | | |
| | | ☐ Land mail ☐ Door-to-door ☐ Newspaper ☐ eMail ☐ Post notices | | | | | | | | | | | |
| | | Locations of posted notices | | | | | | | | | | | |
| | | 2. My system provided a copy of the CCR to each customer by the following methods(s): | | | | | | | | | | | |
| When email is used or delivery, any | | ☐ Published the full CCR in a local newspaper (the published report is attached). | | | | | | | | | | | |
| or delivery, any eturned emails must be redelivered by land delivery | | ☐ Land mailed or hand-delivered the CCR to consumers. | | | | | | | | | | | |
| deally within 3 days out before July 1. | 3 | eMailed with PDF of CCR or eMailed with embedded CCR (email is attached) | | | | | | | | | | | |
| , | | Posted the CCR on the web and sent the direct URL to customers by way of mail or email (notice is attached). | | | | | | | | | | | |
| | | List URL | | | | | | | | | | | |
| nstructions for customers to request a hard copy must also be included in e-delivery. | | r systems serving between 500 and 9,999 persons: 29 June 2016 | | | | | | | | | | | |
| | | ☐ Land mailed or ☐ eMailed a notice of availability of the CCR with a direct URL | | | | | | | | | | | |
| When a URL is used it must be a | | See Attachment 3/4 List the URL if used. | | | | | | | | | | | |
| direct link to the document. | | 2.My system provided the CCR to each customer by publishing the full report in a newspaper (a copy of the published CCR is attached) and provided notice to consumers of this action by either: Published a notice of this in a local newspaper Land mailed a notice of this to consumers. e-Mailed a notice of this to consumers. | | | | | | | | | | | |
| | Fo | r systems serving 10,000 or more persons: Date of delivery/publication | | | | | | | | | | | |
| | | My system provided a copy of the CCR to each customer by: | | | | | | | | | | | |
| | | ☐ Land mail☐ eMail with PDF☐ eMail with embedded CCR☐ Land mailed or☐ eMailed a notice of availability of the CCR with a direct URL | | | | | | | | | | | |
| | | List the URL if used. In addition to one of the delivery methods checked above, my system serves greater than 100,000 persons and, as required, has posted the CCR on a publicly accessible Internet site: www. List the URL used | | | | | | | | | | | |
| | F. | Good Faith Delivery Methods (minimum of 3 is required) | | | | | | | | | | | |
| | | To reach people who drink our water but are not billed customers the following were conducted in addition to the required delivery: | | | | | | | | | | | |
| | X | Posted the CCR on a publicly accessible Internet site at the following address. (Only for systems under 100,000 population who did not use this method as their primary method) http://www.102iw.ang.af.mil/shared/media/document/AFD-160629-010.pdf List the URL used. | | | | | | | | | | | |
| | | Mailed the CCR to all postal patrons within the service area (list of zip codes used is attached). | | | | | | | | | | | |
| | | | | | | | | | | | | | |

| | | Mailed a postcard listing the URL where the CCR can be found, to all postal patrons service area (list of zip codes used is attached). www. | within the |
|---|----|--|--------------------------------|
| | | List the URL used. | |
| | | Advertised availability of the CCR in the following news media (the announcement is Radio Newspaper Television / cable Social media Digital signboard | attached): |
| | | Published the CCR in local newspaper (the published CCR is attached). | |
| | X | Posted the CCR in public places i.e., post office, town hall, library (a list of locations See Attachment 5 | is attached). |
| | X | Delivered multiple CCR copies to single-bill addresses serving several persons i.e., businesses, large private employers (a list of locations is attached). | apartments, |
| | | See Attachment 3 Delivered multiple CCR copies to community organizations (A list of organizations is | attached.) |
| | | Posted the CCR or a notice of availability at locations within the apartment/condo co locations is attached). | mplex (list of the |
| | | Other | |
| | | | |
| | G. | Mandatory Agency Delivery Requirements | |
| Agencies and consumers must receive CCR on or | X | 1. Delivered 1 copy of CCR and the Certification Form to local board of health. (Contact your board of health as to whether they would prefer land or e-delivery of CCR.) $_{ m To:~102~MDG/SGPH}$ | 29 June 2016 Date completed |
| pefore July 1. | X | Delivered 1-copy of CCR and the Certification Form to MA Dept. of Public Health. | 29 June 2016 Date completed |
| When emailing, scan documents nto 1 PDF file. | | Hardcopy to: 250 Washington St.; Boston, MA 02108 or PDF emailed to: dph.ccr@massmail.state.ma.us | Date completed |
| Make sure Cert orm is the first page. | X | 3. Delivered 1-copy of CCR, the Certification Form, and all the attachments check-marked in this form to the MassDEP Boston Office at: Hardcopy to: CCR Program, 1 Winter St5 th Fl.; Boston, MA 02108 or PDF emailed to: Program.Director-DWP@state.ma.us . | 29 June 2016 Date completed |
| | | 4. If not emailed to the MassDEP Boston Office, delivered 1-copy of CCR, the Certification Form, and all the attachments check-marked in this form to your MassDEP regional office at: | 29 June 2016 Date completed |
| Only one email is necessary. If the CCR is e-delivered of the Boston office to will also be accessible to the regional office as well. No need to e-deliver to regional office. | | ☐ Hardcopy to: MassDEP-WERO; Statehouse West 4th Floor; 436 Dwight Street.; Springfield, MA 01103 ☐ Hardcopy to: MassDEP-CERO; 8 New Bond St; Worcester, MA 01606 ☐ Hardcopy to: MassDEP-NERO; 205-B Lowell St.; Wilmington, MA 01887 ☒ Hardcopy to: MassDEP-SERO; 20 Riverside Dr.; Lakeville, MA 02347 | |



Continued Commitment

We are once again proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2015. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users. Please remember that we are always available to assist you should you ever have any questions or concerns about your water.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIW/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/hotline

Where Does My Water Come From?

Our drinking water supply is provided entirely by groundwater. J-Well (4096001-01G), which is located on Herbert Road, is our primary pumping station. We are also connected to the Upper Cape Regional Water Supply Cooperative. The Cooperative's water sources come from three wells located in the northeastern corner of Joint Base Cape Cod. On average, we provide up to 300,000 gallons of high-quality water every day. All of the Otis public water supply is drawn from the Sagamore Lens of the Cape Cod single-source aquifer. This lens runs from the Cape Cod Canal eastward into the town of Yarmouth. To learn more about our watershed on the Internet, go to the U.S. EPA's Surf Your Watershed Web site at http://cfpub.epa.gov/surf/locate/index.cfm.

How is My Water Treated and Purified?

Our drinking water is treated with potassium carbonate, sodium fluoride, and sodium hypochlorite. The water in this geographic area is naturally acidic, with an average pH of 5.9 (7.0 is neutral). Acidic water can be harmful to the distribution system. Potassium carbonate is used to buffer the water to as close to a neutral pH as possible. At the request of the U.S. Coast Guard, which is the owner and operator of the family housing area, sodium fluoride is added to the water. This compound has proven effective in strengthening teeth. Finally, sodium hypochlorite is used to disinfect the water supply by killing bacteria.

Cross Connection Control and Backflow Prevention

Otis ANGB makes every effort to ensure that the water delivered to your home and business is clean, safe, and free of contamination. Our staff works very hard to protect the quality of the water delivered to our customers throughout the entire treatment and distribution system. But what happens when the water reaches your home or business? There is still a need to protect the water quality from contamination caused by a cross-connection.

What is a Cross-Connection?

A cross-connection occurs whenever the drinking water supply is or could be in contact with potential sources of pollution or contamination. Cross-connections exist in piping arrangements or equipment that allow the drinking water to come in contact with non-potable liquids, solids, or gases (hazardous to humans) in event of a backflow.

What is Backflow?

Backflow is the undesired reverse of the water flow in the drinking water distribution lines. This backward flow of water can occur when the pressure created by equipment or a system, such as a boiler or air-conditioning, is higher than the water pressure inside the water distribution line (backpressure), or when the pressure in the distribution line drops due to routine occurrences such as water main breaks or heavy water demand causing the water to flow backward inside the water distribution system (backsiphonage). Backflow is a problem that many water consumers are unaware of. And every water customer has a responsibility to help prevent them.

What Can I Do to Help Prevent a Cross Connection?

Without the proper protection something as simple as a garden hose has the potential to contaminate or pollute the drinking water lines in your house. In fact, over half of the country's cross-connection incidents involve unprotected garden hoses. There are very simple steps that you, as a drinking water user, can take to prevent such hazards:

- -Never submerge a hose in soapy water buckets, pet watering containers, pool, tubs, sinks, drains, or chemicals.
- -Never attached a hose to a garden sprayer without the proper backflow preventer.
- -Buy and install a hose bib vacuum breaker on every threaded water fixture. The installation can be as easy as attaching a garden hose to a spigot. This inexpensive device is available at most hardware stores and home-improvement centers.
 - -Identify and be aware of potential cross-connections to your water line.
 - -Buy appliances and equipment with a backflow preventer.

The Benefits of Fluoridation

Fluoride is a naturally occurring element in many water supplies in trace amounts. In our system, the fluoride level is adjusted to an optimal level averaging one part per million (ppm) to improve oral health in children. At this level, it is safe, odorless, colorless, and tasteless. There are over 3.9 million people in 140 Massachusetts water systems and 184 million people in the U.S. who receive the health and economic benefits of fluoridation.

Tap Water vs. Bottled Water

hanks in part to aggressive marketing, the bottled water industry has successfully convinced us all that water purchased in bottles is a healthier alternative to tap water. However, according to a four-year study conducted by the Natural Resources Defense Council, bottled water is not necessarily cleaner or safer than most tap water. In fact, about 25 percent of bottled water is actually just bottled tap water (40 percent according to government estimates).

The Food and Drug Administration is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water. For instance, the high mineral content of some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for about **70 percent** of all bottled water sold in the United States.

People spend 10,000 times more per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could spend up to \$1,400 annually. The same amount of tap water would cost about 49 cents. Even if you installed a filter device on your tap, your annual expenditure would be far less than what you'd pay for bottled water.

For a detailed discussion on the NRDC study results, check out their Web site at: www.nrdc.org/water/drinking/qbw.asp

What Are PPCPs?

When cleaning out your medicine cabinet, what do you do with your expired pills? Many people flush them down the toilet or toss them into the trash. Although this seems convenient, these actions could threaten our water supply.

Recent studies are generating a growing concern over pharmaceuticals and personal care products (PPCPs) entering water supplies. PPCPs include human and veterinary drugs (prescription or over-the-counter) and consumer products, such as cosmetics, fragrances, lotions, sunscreens, and household cleaning products.

Over the past five years, the number of U.S. prescriptions increased 12 percent to a record 3.7 billion, while nonprescription drug purchases held steady around 3.3 billion. Many of these drugs and personal care products do not biodegrade and may persist in the environment for years.

The best and most cost-effective way to ensure safe water at the tap is to keep our source waters clean. Never flush unused medications down the toilet or sink. Instead, check to see if the pharmacy where you made your purchase accepts medications for disposal, or contact your local health department for information on proper disposal methods and drop-off locations.

You can also go on the Web at www.Earth911.com to find more information about disposal locations in your area.

Stormwater Pollution Prevention

Stormwater discharges have been identified as a significant source of water pollution in numerous nationwide studies of water quality. Each area operated by the 102d Intelligence Wing has been evaluated and categorized, and Best Management Practices (BMP) have been implemented at industrial areas to ensure that processes do not adversely impact any stormwater runoff. BMPs include good housekeeping practices, minimization of exposure, spill prevention measures, construction of secondary containment structures, management of stormwater runoff, and employee training. For the 102d, mandatory quarterly visual monitoring is conducted at each outfall area. The results of these examinations have not shown any detrimental effects on the quality of stormwater from the activities conducted by the 102d.

Lead in Drinking Water

f 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. We are responsible for providing you with high-quality drinking water but we 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 or at www.epa.gov/safewater/lead.

Source Water Assessment and Protection

SWAP Explanation

The Source Water Assessment and Protection (SWAP) program, established under the federal Safe Drinking Water Act, requires every state to inventory land uses within the recharge areas of all public water supply sources; to assess the susceptibility of drinking water sources to contamination from these land uses; and to publicize the results to provide support for improved protection.

What is my system's ranking?

A susceptibility ranking of high was assigned to this system due to the absence hydrogeological barriers (i.e., clay) that can prevent contaminant migration.

Where can I see the SWAP report?

Information on obtaining the complete SWAP report is available by contacting the water supply superintendent at (508) 968-4102. The report is also available online at www.mass.gov/dep/water/drinking/4096001.pdf.

Potential Sources of Contamination

Being a military facility, Otis ANG Base, has the potential of having fuel, chemicals, and other material(s) as possible sources of contamination.

Brown, Red, Orange, or Yellow Water

Brown, red, orange, or yellow water is usually caused by rust. The different colors can be attributed to varying chemical oxidation states of the iron (rust) and by varying concentrations of the rust in the water. There are two major sources that can cause water to be rusty:

- •The water mains, or
- The water pipes in your building.

Rusty water occurs from sediment or rust from the inside walls of the water mains. The rust can be disturbed and temporarily suspended in water with unusual water flows from water main breaks or maintenance or by flushing of a hydrant.

This discolored water is not a health threat.

When the water is discolored it is recommended to either not wash laundry or to use a rust stain remover or regular detergent but not chlorine bleach as it will react with the iron to form a permanent stain.

The other major cause of brown, red, orange or yellow water is rusty water pipes in your building.

Water that is being discolored by rusty pipes is not a health hazard.

Substances That Could Be in Water

Environmental Protection Agency (U.S. EPA) prescribe regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) 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 these contaminants does not necessarily indicate that the water poses a health risk. 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. Substances that may be present in source water include

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and which may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Community Participation

On-base residents are also invited to raise any questions or concerns regarding drinking water at the Base Cape Cod community meeting. The date and time of this annual event will be posted in the Otis Notice.

Additionally, an electronic version of this publication will be available online at the 102d IW website: http://www.102iw.ang.af.mil/news/index.asp

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call the water supply superintendent, Mr. Richard Souza, at (508) 968-4102.

| REGULATED SUBSTANCES | | | | | | | | |
|-------------------------------------|-----------------|---------------|-----------------|--------------------|-------------------|-----------|---|--|
| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | MCL [MRDL] | MCLG [MRDLG] | AMOUNT DETECTED | RANGE LOW-HIGH | VIOLATION | TYPICAL SOURCE | |
| Asbestos (MFL) | 2013 | 7 | 7 | ND | NA | No | Decay of asbestos cement watermains; Erosion of natural deposits | |
| Chlorine (ppm) | 2015 | [4] | [4] | 2.43 | 0.01-2.43 | No | Water additive used to control microbes | |
| Fluoride ¹ (ppm) | 2015 | 2 | 2 | 1.15 | 0.38-1.15 | No | Water additive that promotes strong teeth | |
| Haloacetic Acids [HAAs] (ppb) | 2015 | 60 | NA | 2.64 | ND-2.64 | No | By-product of drinking water disinfection | |
| TTHMs [Total Trihalomethanes] (ppb) | 2015 | 80 | NA | 12.3 | ND-12.3 | No | By-product of drinking water disinfection | |
| Perchlorate (ppb) | 2015 | 2 | NA | ND | ND | No | Rocket propellants, munitions, flares, fireworks, blasting agents | |
| Nitrate (ppm) | 2015 | 10 | 10 | 0.11 | ND-0.11 | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits | |
| Nitrite (ppm) | 2014 | 1.0 | 1.0 | ND | NA | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits | |
| Barium (ppm) | 2015 | 2 | 0.002 | 0.002 | NA | No | Natural erosion; drilling wastes | |
| Gross Alpha (pCi/L) | 2012 | 15 | NA | 1.07 | NA | No | Natural erosion | |
| Combined Radium (pCi/L) | 2015 | 5 | 0 | 1.10 | 0.623-1.10 | No | Natural erosion | |
| Turbidity ² (NTU) | 2013 | TT | NA | 0.22 | NA | No | Soil runoff | |
| Total Coliform Bacteria | 2015 | 1 | 0 | 0 | NA | No | Naturally present in the environment | |

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | AL | MCLG | AMOUNT DETECTED (90TH PERCENTILE) | SITES ABOVE AL/TOTAL SITES | | TYPICAL SOURCE |
|-----------------------------|-----------------|-----|------|-----------------------------------|----------------------------------|----|--|
| Copper (ppm) | 2015 | 1.3 | 1.3 | 0.600 (Q2) 0.295 (Q4) | 1/40 (Q2) 0/40 (Q4) | No | Corrosion of household plumbing systems; Erosion of natural deposits |
| Lead (ppb) | 2015 | 15 | 0 | 0.00 (Q2) 1.00 (Q4) | 1/40 (Q2) 1/40 (Q4) | No | Corrosion of household plumbing systems; Erosion of natural deposits |

UNREGULATED SUBSTANCES³

| SUBSTANCE (UNIT OF MEASURE) | YEAR SAMPLED | AMOUNT DETECTED | TYPICAL SOURCE |
|-----------------------------|-----------------|--------------------|---|
| Sodium (ppm) | 2015 | 19.6 | Some sodium is always expected to be present in groundwater |
| Chloroform (ppb) | 2015 | 3.60 | Trihalomethane; by-product of drinking water chlorination |
| Bromodichloromethane (ppb) | 2015 | 2.70 | Trihalomethane; by-product of drinking water chlorination |
| Dibromochloromethane (ppb) | 2015 | 3.40 | Trihalomethane; by-product of drinking water chlorination |
| Manganese (ppm) | 2014 | 0.01 | Erosion of natural deposits |
| Sulfate (ppb) | 2013 | 5.9 | Natural sources |
| Strontium (ppb) | 2014 | 22 | Milling processes, coal burning, and phosphate fertilizers |
| Chromium (ppb) | 2015 | ND | Discharge from pulp mills; erosion of natural deposits |
| Hexavalent Chromium (ppb) | 2014 | .28 | Industrial activities or from naturally occurring sources |

¹ EPA set 4 ppm as the MCL. Our state has a secondary contaminant level (SMCL) of 2 ppm for fluoride to better protect human health

Definitions

90th Percentile: Out of every 10 homes sampled, 9 were at or below this level.

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

MCL (Maximum Contaminant Level):

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.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual

Disinfectant Level): 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.

MRDLG (Maximum Residual

Disinfectant Level Goal): 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.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NA: Not applicable

MFL: Million Fibers per Liter

pCi/L: picocuries per liter (measure of radioactivity)

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

NTU: Nephelometric Turbidity Units

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

²Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of our water quality.

³Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. The purpose of monitoring unregulated contaminants is to assist the U.S. EPA in determining their occurrence in drinking water and whether future regulation is warranted.

| 5303 Arnold | 5389 Mitchell | 5653 Doolittle | 5713 White |
|----------------------------|----------------------------|-------------------|--------------------------|
| 5304 Arnold | 5392 Mitchell | 5656A Vincent | 5714 White |
| 5305 Arnold | 5393 Mitchell | 5656A Vincent | 5715 White |
| 5308 Arnold | 5394 Carpenter | 5656B Vincent | 5716 White |
| 5309 Arnold | 5395 Lindberg | 5656C Vincent | 5718 White |
| 5310 Arnold | 5396 Lindberg | 5657A Vincent | 5719 White |
| 5318A Tinker | 5410 Carpenter | 5657B Vincent | 5720 White |
| 5318B Tinker | 5411 Carpenter | 5657C Vincent | 5721 Scott |
| 5318B Tinker | 5416 Carpenter | 5658A Vincent | 5722 Scott |
| 5322 Tinker | 5417 Carpenter | 5658B Vincent | 5724 Scott |
| 5325 Tinker | 5420 Carpenter | 5658C Vincent | 5725 Johnson |
| 5328 Tinker | 5421 Carpenter | 5658D Vincent | 5726 Johnson |
| 5330 Tinker | 5422 Carpenter | 5665A Prince | 5728 Johnson |
| 5333 Tinker | 5426 Andrews | | 5729 Johnson |
| 5334 Tinker | 5428 Andrews | 5665B Prince | 5730 Johnson |
| 5336 Tinker | 5429 Andrews | 5666A Prince | 5731 Johnson |
| 5337 Tinker | 5430 Andrews | 5666B Prince | 5734 Johnson |
| 5339 Tinker | 5431 Andrews | 5666C Prince | 5735 Johnson |
| 5341 Tinker | 5432 Andrews | 5666D Prince | 5736 Johnson |
| 5344 Tinker | 5433 Andrews | 5666D Prince | 5737 Johnson |
| 5344 Tinker 5345 Tinker | 5434 Andrews | 5671A Davis | 5739 Kelly |
| 5346 Spaatz | 5434 Andrews 5435 Lemay | 5671B Davis | 5740 Kelly |
| 5340 Spaatz 5348 Spaatz | 5436 Lemay | 5671C Davis | 5740 Kelly 5741 Kelly |
| - | • | | • |
| 5349 Spaatz | 5437 Lemay | 5672B Davis | 5742 Kelly |
| 5350 Spaatz | 5438A Lemay | 5678A Wright | 5744 Kelly |
| 5351 Spaatz | 5438B Lemay | 5678B Wright | 5746 Kelly |
| 5352 Spaatz | 5438D Lemay | 5680A Wright | 5748 Kelly |
| 5353 Spaatz | 5440A Lemay | 5680B Wright | 5749 Kelly |
| 5354 Spaatz | 5440C Lemay | 5682A Wright | 5750 Kelly |
| 5355 Spaatz | 5440D Lemay | 5682A Wright | 5751 Kelly |
| 5356 Spaatz | 5600A Luffbury | 5682B Wright | 5752 Kelly |
| 5357 Spaatz | 5600A Luffbury | 5684A Peets | 5755 Kelly |
| 5359 Spaatz | 5600B Luffbury | 5684B Peets | 5756 Selfridge |
| 5371A Ogle | 5603A Luffbury | 5685A Peets | 5757 Kelly |
| 5371B Ogle | 5603A Luffbury | 5685B Peets | 5758 Selfridge |
| 5372A Ogle | 5603B Luffbury | 5687A Peets | 5759 Selfridge |
| 5372B Ogle | 5603B Luffbury | 5687B Peets | 5761 Selfridge |
| 5374A Ogle | 5603C Luffbury | 5701 White | 5762 Selfridge |
| 5374B Ogle | 5603C Luffbury | 5702 White | 5763 Kelly |
| 5376 Lindberg | 5603D Luffbury | 5703 White | 5764 Selfridge |
| 5377 Lindberg | 5641A Twining | 5704 White | 5765 Selfridge |
| 5378 Lindberg | 5641B Twining | 5705 White | 5766 Kelly |
| 5379 Harmond | 5646B Twining | 5706 White | 5767 Kelly |
| 5381 Harmond | 5648A Doolittle | 5707 White | 5768 Kelly |
| 5384 Mitchell | 5648B Doolittle | 5708 White | 5769 Kelly |
| 5385 Mitchell | 5648C Doolittle | 5709 White | |
| 5387 Mitchell | 5648D Doolittle | 5712 White | |

Attachment 4

From: USAF MA 102 IW Mailbox PA

To: <u>Delgado, Keith MSgt USAF 102 IW (US)</u>

Cc: Smith, Aaron D 2d LT USAF NG MAANG (US); Kavney, Andrew Patrick T SSgt USAF 102 IW (US); Meschwitz,

Steven G Lt Col USAF 102 IW (US); Cruz, David Capt USAF 102 IW (US); Souza, Richard A CIV USAF 102 IW (US); Ronald, Alan S CIV USAF 102 IW (US); Morisset, Daniel E CIV USAF (US); Deane, Thurman R CIV USAF 102 IW (US); Borges, Tanya M TSgt USAF 102 IW (US); Hirzel, Kerry L Maj USAF 102 IW (US); Dunn, Keven A Maj USAF 102 IW (US); Thomas, Cynthia M SMSgt USAF 102 IW (US); Carr, Brian S CIV USAF 102 IW (US);

Doyle, Shawn W Maj USAF 102 IW (US); Sandland, Timothy D CIV USAF 102 IW (US)

Subject: RE: Consumer Confidence Report (CCR) for CY2015

Date: Wednesday, June 29, 2016 2:25:15 PM

The report has been published on the official 102 IW website. The direct link to the document is

http://www.102iw.ang.af.mil/shared/media/document/AFD-160629-010.pdf and the commentary that the document is linked to, in order for it to show up with some prominence on the website, is here:

http://www.102iw.ang.af.mil/news/story.asp?id=123475283

102d Intelligence Wing Public Affairs 102 IW/PA 158 Reilly Street, Box 60 Otis ANGB, MA 02542

----Original Message----

From: Delgado, Keith MSgt USAF 102 IW (US) Sent: Wednesday, June 29, 2016 12:48 PM

To: Sandland, Timothy D CIV USAF 102 IW (US)

<timothy.d.sandland.civ@mail.mil>

Cc: Mcdavid, Veuril K SSgt USAF 102 IW (US) <veuril.k.mcdavid.mil@mail.mil>; Smith, Aaron D 2d LT USAF NG MAANG (US) <aaron.d.smith3.mil@mail.mil>;

Kavney, Andrew Patrick T SSgt USAF 102 IW (US)

<andrewpatrick.t.kavney.mil@mail.mil>; Meschwitz, Steven G Lt Col USAF 102

IW (US) <steven.g.meschwitz.mil@mail.mil>; Cruz, David Capt USAF 102 IW (US)

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<keven.a.dunn.mil@mail.mil>; Thomas, Cynthia M SMSgt USAF 102 IW (US)

<cynthia.m.thomas50.mil@mail.mil>; Carr, Brian S CIV USAF 102 IW (US)

<shawn.w.doyle.mil@mail.mil>

Subject: Consumer Confidence Report (CCR) for CY2015

102 IW/PA,

ANNUAL REQUEST: See the attached .pdf document of the Consumer Confidence Report (CCR) for Reporting Year 2015 and please publish for all consumers to view on the official 102 IW website. The CCR is required annually to be issued NLT 1 July. In addition to mailing/distributing the report to the consumers, the CCR can be made available by publishing, posting, and any other required methods. Therefore, IAW 48-144 para. 1.9.4. The Public

Affairs Office assists in the dissemination of the CCR (or equivalent). Lastly...in an effort to meet the MA Department of Environmental Protection's certification report, please respond w/ the eventual direct link to the report. If you have any questions and/or concerns, please do not hesitate to contact me or the CCR POC: Mr. Andrew Kavney at 508-968-4335 or 4078. Thanks.....KD

KEITH DELGADO, MSgt, MA ANG Bioenvironmental Engineering (BE) Technician 156 Reilly St., Box 12 Otis ANGB, MA 02542 Commercial: 508-968-4078 DSN: 557-4078 Fax: 4061

(.mil only) BE SharePoint Site:

 $Old - \underline{https://eis.ang.af.mil/org/102IW/MDG/BE/SitePages/Home.aspx} \\ New - \underline{https://eissp.ang.af.mil/org/102IW/MDG/BE/default.aspx} \\$

Good Faith Delivery Locations (living list)

- 102 IW/Public Affairs, 156 Reilly St. Box 60 Otis ANGB, MA 02542
- USGC Air Station Cape Cod Quarterdeck/Public Affairs, 3163 Burge Blvd. Buzzards Bay, MA 02542
- USCG Housing Department Attn: Terry Krout, Staff Symbol: Hou, Air Station Cape Cod, MA 02542

(See occupied units as of 30 June 2054)

- USCG Environmental Health and Safety, Building 5216 Air Station Cape Cod, MA 02542
- USCG Child Development Center (CDC), Bldg. 5205 Ent Street Buzzards Bay, MA 02542
- USCG Coast Guard Exchange Service (CGES) at Joint Base Cape Cod (JBCC), Bldg. 5203 Air Station Cape Cod, MA 02542
- USCG Coast Guard Exchange (CGX) Mini-Mart at Joint Base Cape Cod (JBCC), Bldg. 5204 Air Station Cape Cod, MA 02542
- MA Army National Guard HQ, 102 Generals Blvd. Training Site Camp Edwards, MA 02542
- MA Army National Guard Environmental and Readiness Center, Bldgs. 1203/1204 West Inner Rd. Camp Edwards, MA 02542
- The Impact Area Groundwater Study Program Office, PB0515 West Outer Rd. Camp Edwards, MA 02542
- AF Civil Engineering Center Installation Restoration Program, 322 East Inner Rd. Otis ANG, MA 02542
- US Geological Survey Toxic Substances Hydrology Program, Attn: Mr. Denis Leblanc 10 Bearfoot Rd. Northborough, MA 01532
- US Department of Agriculture, 1398 West Truck Rd. Buzzards Bay, MA 02542
- Joint Base Cape Cod Fire Department (MMR Fire), 3132 Richardson Rd. Otis ANGB, MA 02542
- MA Alternative Septic System Test Center, 4 Kittridge Rd. Otis ANGB, MA 02542
- Upper Cape Regional Transfer Station, Bldg. 33001 Generals Blvd. Otis ANGB, MA 02542
- Federal Aviation Administration North Atlantic Region, 156 Reilly St. Box 30 Otis ANGB, MA 02542