2012 Consumer Confidence Report

Water System Name: **Monarch Nut Co. System 5403140** Report Date: May 20, 2013

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2012.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Type of water source(s) in use: Groundwater

Name & location of source(s): Well 01

Drinking Water Source Assessment information:

Time and place of regularly scheduled board meetings for public participation:

For more information, contact: Erik Eklund Phone: (661) 725-6458

TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

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 are set by the U.S. Environmental Protection Agency (USEPA).

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

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 microbial 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.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

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

Variances and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

pCi/L: picocuries per liter (a measure of radiation)

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:

- *Microbial contaminants*, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, that 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, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that 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 USEPA and the state Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, and 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) 5	2	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or *E. coli*	(In the year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or *E. coli*	0	Human and animal fecal waste

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in the last sample set)	No. of samples collected	90th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb) 7/21/2010	5	0.47	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm) 7/21/2010	5	0.062	0	1.3	0.17	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	12/13/2010	69.4		none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	12/13/2010	170		none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

**Any violation of an MC or AL is asterisked. Additional information regarding the violation is provided later in this report.*

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL [MRDL]**	**PHG (MCLG) [MRDLG]**	**Typical Source of Contaminant**
Inorganic Contaminants						
Arsenic (ppb)	4/29/10-12/13/10	4.5	2.3-8.3	10	0.004	Erosion of natural deposits; runoff from orchards, from glass and electronics production waste
Barium (ppm)	12/13/10	0.14		1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Nitrate (as nitrate, NO_3) (ppm)	1/17/12-10/02/12	**84.03***	79.6-88.8	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Perchlorate (ppb)	6/22/10	2.0		6	6	Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts.
Radioactive Contaminants						
Gross Alpha Particle Activity (pCi/L)	1/17/12	4.55	1.28-2.13	15	(0)	Erosion of natural deposits
Synthetic Organic Contaminants including Pesticides and Herbicides						
Dibromochloropropane (DBCP) (ppb)	12/12/12	**0.53***		0.2	0.0017	Banned nematocide that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit
Disinfection Byproducts, Disinfectant Residuals, and Disinfection Byproduct Precursors						
TTHMs (Total Trihalomethanes (ppb)	7/24/12	ND		80	N/A	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	7/24/12	ND		60	N/A	Byproduct of drinking water disinfection
Chlorite (ppm) Distribution System	12/18/12 - 12/28/12	**1.1**	0.52 – 1.4	1.0	0.05	Byproduct of drinking water disinfection

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Iron (ppb)	12/14/10	120		300		Leaching from natural deposits; industrial wastes
Zinc (ppm)	12/13/12	0.07		5.0		Runoff/leaching from natural deposits; industrial wastes

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Total Dissolved Solids (TDS) (ppm)	4/10/12	454		1000		Runoff/leaching from natural deposits
(EC) (umhos/cm) Specific Conductance µS/cm	4/10/12	723		1600		Substances that form ions when in water; seawater influence
Chloride (ppm)	12/13/10	34.9		500		Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	12/13/10	72.6		500		Runoff/leaching from natural deposits; industrial wastes
Turbidity (Units)	12/13/10	0.6		5	none	Soil runoff
Color (Units)	12/13/10	5		15	none	Naturally-occurring organic materials
Odor-Threshold (Units)	12/13/10	1		3	none	Naturally-occurring organic materials

There are no PHGs, MCLGs, or mandatory standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetics.

**Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.*

Additional General Information on Drinking Water

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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Arsenic: While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Nitrate: Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

DBCP: Some people who use water containing DBCP in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.

Summary Information for Contaminants Exceeding an MCL, MRDL, or AL or Violation of Any TT or Monitoring and Reporting Requirement

Nitrate levels exceed MCL, RO units were removed as instructed by Tulare County a bottled water permit has been issued. Postings are in place and Monarch Nut is in compliance with Tulare County Environmental Health Department.

DBCP levels exceed MCL, Tulare County has issued a bottled water permit.

In 2012 Monarch Nut's water system was treated by a continuous chlorinator and/or Chlorite injection. In the event of a Coliform positive, the system is inspected for any defects and resamples are taken until the system is Coliform absent.

ATTACHMENT 7

Consumer Confidence Report
Certification Form

(to be submitted with a copy of the CCR to Health Dept.)

Water System Name: **Monarch Nut Co.**

Water System Number: **5403140**

The water system named above hereby certifies that its Consumer Confidence Report was distributed on 6/14/13 (*date*) to customers (and appropriate notices of availability have been given). Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the Department of Public Health.

Certified by:
Name: Erik Eklund
Signature: Erik Eklund
Title: EHS MANAGER
Phone Number: (661) 725-6458 Date: 6/14/13

To summarize report delivery used and good-faith efforts taken, please complete the below by checking all items that apply and fill-in where appropriate:

☐ CCR was distributed by mail or other direct delivery methods. Specify other direct delivery methods used: _____

☒ "Good faith" efforts were used to reach non-bill paying consumers. Those efforts included the following methods:

- ☐ Posting the CCR on the Internet at www._____
- ☐ Mailing the CCR to postal patrons within the service area (attach zip codes used)
- ☐ Advertising the availability of the CCR in news media (attach copy of press release)
- ☐ Publication of the CCR in a local newspaper of general circulation (attach a copy of the published notice, including name of newspaper and date published)
- ☒ Posted the CCR in public places (attach a list of locations) TIME CLOCK BREAK ROOM
- ☐ Delivery of multiple copies of CCR to single-billed addresses serving several persons, such as apartments, businesses, and schools
- ☐ Delivery to community organizations (attach a list of organizations)

☐ *For systems serving at least 100,000 persons*: Posted CCR on a publicly-accessible internet site at the following address: www._____

☐ *For privately-owned utilities*: Delivered the CCR to the California Public Utilities Commission