# 2014 Consumer Confidence Report

Water System Name: **Monterey Bay Nursery 270.2336.002** Report Date: 2/23/2015

*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, 2014 and may include earlier monitoring data.*

**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: Well

Name & general location of source(s): 748 San Miguel Canyon Road; Watsonville, CA 95076

Drinking Water Source Assessment information: See attached; dated March, 2003

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

For more information, contact: Manuel Morales Phone: ( 831) 724.6361

## 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**: State Board 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 (µg/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 Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

**Tables 1, 2, 3, 4, 5, 7, and 8 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 State Board 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.) 0 | 0 | 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) | **Sample Date** | **No. of samples collected** | **90th percentile level detected** | **No. sites exceeding AL** | **AL** | **PHG** | **Typical Source of Contaminant** |
|---|---|---|---|---|---|---|---|
| Lead (ppb) | 7/9/2013 | 2 | ND | | 15 | 0.2 | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Copper (ppm) | 7/9/2013 | 2 | 0.207 | | 1.3 | 0.3 | 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) | 5/7/2008 | 62 | | none | none | Salt present in the water and is generally naturally occurring |
| Hardness (ppm) | 5/7/2008 | 262 | | none | none | Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring |

***Any violation of an MCL 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** |
| Hexavalent Chromium VI (ppb) | 11/4/2014 | 2.0 | | 10 | 0.02 | Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits |
| Gross Alpha Particle Activity (pCi/L) | 11/6/2007 | 1.25 | 0.00-2.73 | 15 | (0) | Erosion of natural deposits |

| 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** |
| Conductivity (umho/cm) | 5/7/2008 | 729 | | 1,600 | none | Substances that form ions when in water; seawater influences |
| Total Dissolved Solids (ppm) | 5/7/2008 | 435 | | 1,000 | none | Runoff/leaching from natural deposits |
| Chloride (ppm) | 5/7/2008 | 46 | | 500 | none | Runoff/leaching from natural deposits; seawater influence |
| Turbidity (units) | 5/7/2008 | 0.25 | | 5 | none | Soil runoff |
| Color (units) | 5/7/2008 | <2 | | 15 | none | Naturally-occurring organic materials |
| Sulfate (ppm) | 5/7/2008 | 47 | | 500 | none | Runoff/leaching from natural deposits; industrial wastes |
| Zinc (ppm) | 5/7/2008 | 0.071 | | 5 | none | Runoff/leaching from natural deposits; industrial wastes |

| TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS | | | | | |
|---|---|---|---|---|---|
| **Chemical or Constituent** (and reporting units) | **Sample Date** | **Level Detected** | **Range of Detections** | **Notification Level** | **Health Effects Language** |
| | | | | | |

***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).

Lead-Specific Language for Community Water Systems: 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. [INSERT NAME OF UTILITY] 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 or at http://www.epa.gov/safewater/lead.

## Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

| VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT | | | | |
|---|---|---|---|---|
| **Violation** | **Explanation** | **Duration** | **Actions Taken to Correct the Violation** | **Health Effects Language** |
| | | | | |
| | | | | |

## For Water Systems Providing Ground Water as a Source of Drinking Water

| TABLE 7 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES | | | | | |
|---|---|---|---|---|---|
| **Microbiological Contaminants** (complete if fecal-indicator detected) | **Total No. of Detections** | **Sample Dates** | **MCL [MRDL]** | **PHG (MCLG) [MRDLG]** | **Typical Source of Contaminant** |
| *E. coli* | (In the year) | | 0 | (0) | Human and animal fecal waste |
| Enterococci | (In the year) | | TT | n/a | Human and animal fecal waste |
| Coliphage | (In the year) | | TT | n/a | Human and animal fecal waste |

## Summary Information for Fecal Indicator-Positive Ground Water Source Samples, Uncorrected Significant Deficiencies, or Ground Water TT

| SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLE |
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| **SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES** |

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| VIOLATION OF GROUND WATER TT | | | | |
|---|---|---|---|---|
| **TT Violation** | **Explanation** | **Duration** | **Actions Taken to Correct the Violation** | **Health Effects Language** |
| | | | | |
| | | | | |

## For Systems Providing Surface Water as a Source of Drinking Water

| TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES | |
|---|---|
| Treatment Technique [(a)]<br>(Type of approved filtration technology used) | |
| Turbidity Performance Standards [(b)]<br>(that must be met through the water treatment process) | Turbidity of the filtered water must:<br>1 – Be less than or equal to _____ NTU in 95% of measurements in a month.<br>2 – Not exceed _____ NTU for more than eight consecutive hours.<br>3 – Not exceed ____ NTU at any time. |
| Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1. | |
| Highest single turbidity measurement during the year | |
| Number of violations of any surface water treatment requirements | |

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

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

** Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided below.*

## Summary Information for Violation of a Surface Water TT

| VIOLATION OF A SURFACE WATER TT | | | | |
|---|---|---|---|---|
| **TT Violation** | **Explanation** | **Duration** | **Actions Taken to Correct the Violation** | **Health Effects Language** |
| | | | | |
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| | | | | |

## Summary Information for Operating Under a Variance or Exemption

# Drinking Water Source Assessment

*Water System*

**MONTEREY BAY NURSERY WS**

Monterey County

*Water Source*

**WELL 02**

*Assessment Date*

**March, 2003**

*Assessment Completed By*

**Monterey County**

California Department of Public Health
Drinking Water Field Operations Branch
LPA Monterey County

| | |
|---|---|
| **District No.** | **57** |
| **System No.** | **2702336** |
| **Source No.** | **002** |
| **PS Code** | **2702336-002** |

# Vulnerability Summary

**District Name** Monterey County **District No.** 57 **County** Monterey
**System Name** MONTEREY BAY NURSERY WS **System No.** 2702336
**Source Name** WELL 02 **Source No.** 002 **PS Code** 2702336-002

**Completed by** Monterey County **Date** March, 2003

According to CDPH records, this Source is Groundwater. This Assessment was done using the Default Groundwater System Method.

A source water assessment was conducted for the **WELL 02**

of the **MONTEREY BAY NURSERY WS** water system in **March, 2003**.

The source is considered most vulnerable to the following activities not associated with any detected contaminants:

Chemical/petroleum processing/storage

## Discussion of Vulnerability

There have been no contaminants detected in the water supply, however the source is still considered vulnerable to activities located near the drinking water source.The well for the water system is located in an agricultural area therefore, the well may be vulnerable to synthetic organic compounds and nitrates.

A copy of the complete assessment may be viewed at:

Monterey County Health Department
1270 Natividad Road
Room 109
California, CA 93906

You may request a summary of the assessment be sent to you by contacting:

Sandy Ayala
Environmental Health Specialist
(831)755-8924
(831)755-8929 (fax)
ayalasa@co.monterey.ca.us

# Vulnerability Ranking

**District Name** Monterey County **District No.** 57 **County** Monterey

**System Name** MONTEREY BAY NURSERY WS **System No.** 2702336

**Source Name** WELL 02 **Source No.** 002 **PS Code** 2702336-002

**Completed by** Monterey County **Date** March, 2003

The following PCAs were identified in the assessment and are listed in priority order based on risk to the water supply. Refer to the last page for more information.

| Zone | PCA (Risk Ranking) | * | PCA Risk Points | Zone Points | PBE Points | Vulnerability Score |
|---|---|---|---|---|---|---|
| A | Chemical/petroleum processing/storage (VH) | | 7 | 5 | 3 | 15 |
| A | Machine shops (H) | | 5 | 5 | 3 | 13 |
| A | Pesticide/fertilizer/petroleum storage & transfer areas (H) | | 5 | 5 | 3 | 13 |
| A | Septic systems - low density [<1/acre] (H in Zone A, otherwise L) | | 5 | 5 | 3 | 13 |
| A | Wells - Agricultural/ Irrigation (H) | | 5 | 5 | 3 | 13 |
| A | Above ground storage tanks (M) | | 3 | 5 | 3 | 11 |
| A | Fertilizer/Pesticide/Herbicide Application (M) | | 3 | 5 | 3 | 11 |
| A | Parking lots/malls [>50 spaces] (M) | | 3 | 5 | 3 | 11 |
| A | Transportation corridors - Road Right-of-ways [herbicide use areas] (M) | | 3 | 5 | 3 | 11 |
| A | Wells - Water supply (M) | | 3 | 5 | 3 | 11 |
| B5 | Lagoons/liquid wastes (H) | | 5 | 3 | 3 | 11 |
| B5 | Pesticide/fertilizer/petroleum storage & transfer areas (H) | | 5 | 3 | 3 | 11 |
| B5 | Chemical/petroleum processing/storage (VH) | | 7 | 0 | 3 | 10 |
| B10 | Chemical/petroleum processing/storage (VH) | | 7 | 0 | 3 | 10 |
| A | Transportation corridors - Roads/Streets (L) | | 1 | 5 | 3 | 9 |
| B5 | Crops, irrigated [Berries, hops, mint, orchards, sod, greenhouses, vineyards, nurseries, vegetable] (M) | | 3 | 3 | 3 | 9 |
| B5 | Fertilizer/Pesticide/Herbicide Application (M) | | 3 | 3 | 3 | 9 |
| B5 | Parking lots/malls [>50 spaces] (M) | | 3 | 3 | 3 | 9 |
| B5 | Transportation corridors - Road Right-of-ways [herbicide use areas] (M) | | 3 | 3 | 3 | 9 |
| B10 | Pesticide/fertilizer/petroleum storage & transfer areas (H) | | 5 | 1 | 3 | 9 |
| B5 | Wells - Agricultural/ Irrigation (H) | | 5 | 0 | 3 | 8 |
| B10 | Lagoons/liquid wastes (H) | | 5 | 0 | 3 | 8 |
| B10 | Wells - Agricultural/ Irrigation (H) | | 5 | 0 | 3 | 8 |

*** = A contaminant potentially associated with this activity has been detected in the water supply.**

# Explanation of Source Water Assessments and Definition of Terms

A source water assessment was recently completed for this drinking water source. The assessment identifies the vulnerability of the drinking water supply to contamination from typical human activities. The assessments are intended to facilitate and provide the basic information necessary for a local community to develop a program to protect the drinking water supply.

A summary of the complete assessment is provided here. For more information, contact the agency or individual that prepared the assessment (shown in summary). You may also contact the local Department of Public Health Drinking Water Field Operations Branch district office (http://www.cdph.ca.gov/programs/Documents/DDWEM/OriginalDistrictMapCDPH.pdf).

Additional information about assessments can be found at: http://www.cdph.ca.gov/certlic/drinkingwater/Pages/DWSAP.aspx

Terms used in this summary:

Source Water Assessment: An assessment is an evaluation of a drinking water source to determine the "possible contaminating activities" (PCAs) to which the source is most vulnerable. The assessment includes: a delineation of protection zones around the source; an inventory of the types of PCAs within the source protection zones; and an analysis to determine the PCAs to which the source is most vulnerable. The information is compiled into a report that includes a map, calculations, checklists, and a summary of the findings.

Possible Contaminating Activity (PCA): A PCA is a current or historic human activity that is an actual or potential origin of contamination for a drinking water source. PCAs include activities that use, store, produce or dispose of chemicals that have the potential to contaminate drinking water supplies. There are 110 types of PCAs in the California DWSAP program.

PCA Risk Ranking: Each type of PCA is assigned a risk ranking (Very High, High, Moderate, or Low). The risk ranking is based on the contaminant(s) typically associated with that PCA, the likelihood of release from that type of facility based on historical experience, and the mobility of the contaminant(s).

PCA Inventory: The PCA inventory is a review using local knowledge, databases, and on-site evaluations to identify the occurrence and approximate location of PCAs in the source water zones. The inventory for the basic DWSAP assessments is a presence-absence review. If a type of PCA occurs in a zone, a "Yes" is noted in the inventory for that zone, regardless of whether there is one or many of that type of facility within the zone. If a PCA has been associated with a contaminant detected in the water supply, a notation is made in the PCA inventory.

Source Water Zones or Areas: These are areas located around and typically adjacent to a drinking water source that have been identified as initial protection areas.

For groundwater sources, there are typically three concentric circular zones around a source (Zones A, B5 and B10). The sizes of the are determined based on characteristics of the source. PCAs located in the inner Zone A are considered more of a risk to the water supply than PCAs located in the middle Zone B5. Similarly, PCAs located in Zone B5 are considered more of a risk than PCAs located in the outer Zone B10.

For surface water sources, the watershed is defined as the overall protection area, and as an option, zones are defined closer to the source. Two types of zones are typically established. Zone A is the area within and near the surface water body and its tributaries. Zone B is an area within 2,500 feet of the intake, not including areas in Zone A. For surface water sources, PCAs located in Zone A are considered a greater threat than PCAs located in Zone B. PCAs located on the watershed outside of the zones are considered to be of less risk to the water supply. If zones have not been defined, PCAs are considered to be of equal risk regardless of location on the watershed.

Physical Barrier Effectiveness (PBE): The PBE for a source is an evaluation of the ability of the source and the surrounding area to prevent the movement of contaminants into the source. The PBE is based on the construction and operation features of the source, and the characteristics of the surrounding area. A source is assigned a PBE of Low, Moderate or High, where High indicates that the physical barriers of the source and site are very effective in preventing the movement of contaminants. By design, typical groundwater sources will have Moderate PBE, while typical surface water sources will have Low PBE. This is due to the greater exposure of surface water sources to contamination.

Vulnerability Ranking: The vulnerability ranking is a summary of the PCAs identified in the assessment prioritized by the risk that they pose to the water supply. The prioritization is based on the risk associated with a PCA, the zone in which it occurs, and the PBE of the source.
In the vulnerability ranking, points are assigned as follows:

| PCA risk ranking | Very High = 7 | High = 5 | Moderate = 3 | Low = 1 | Unknown in any zone = 0 |
|---|---|---|---|---|---|
| Zone (Groundwater) | A = 5 | B5 = 3 | B10 = 1 | | |
| Zone (Surface water with zones) | A = 5 | B = 3 | Watershed = 1 | | |
| Zone (Surface water without zones) | Watershed = 5 | | | | |
| Physical Barrier Effectiveness | Low = 5 | Moderate = 3 | High = 1 | | |

The points for each type of PCA in each zone are totaled to give a vulnerability score, and the PCAs are ranked in order from the highest score to the lowest score. PCAs associated with detected contaminants are ranked at the top, regardless of vulnerability score. By definition, groundwater sources are not considered vulnerable to PCAs with scores less than 8, and surface water sources are not considered vulnerable to PCAs with scores less than 11. It should be noted that the vulnerability ranking scores do not have a direct quantitative value. Rather, the points are used only to relatively rank the types of PCAs for an individual source.

Note: Some of the summaries do not include a vulnerability ranking. If the assessment was done on paper and the details were not entered into the database, the vulnerability ranking is not available here. In addition, alternate methods of determining vulnerability were allowed in some cases, and the vulnerability ranking is not in the database.

Vulnerability Summary: The source is considered most vulnerable to the PCAs with the highest score, and to PCAs associated with detected contaminants. These PCAs are noted in the vulnerability summary. Further details or discussion may be provided in the vulnerability discussion.