# Annual Drinking Water Quality Report

## Pittsboro Water Company
## IN5232019

Annual Water Quality Report for the Period of January 1 to December 31 2009

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by PITTSBORO WATER COMPANY is purchased surface water from Indianapolis Water. All Source Water Assessment Plans (SWAP) or Well Head Protection Plan (WHPP) should be obtained through Indianapolis Water.

For more information regarding this report contact:
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If you would like to learn more, please attend any of our regularly scheduled town council meetings. They are held on the third Tuesday of every month at 7:00 pm.

Este informe contiene información muy importante sobre el Agau que bebe. Tradúzacalo ó hable con alguien que lo Entienda bien.

**Source Water Information**

| Source Water Name | Type of Water | Location |
|---|---|---|
| INDIANAPOLIS- 5249004 | SW | South Well Fields |

***What's in my drinking water before it is treated?***
The source of drinking water (both tap water and bottled water) includes rivers, lakes, streams, ponds, reservoirs, spring, and wells. As water travels over the surface of the land or though the ground, it dissolves naturally-occurring minerals and in some cases, radioactive material, and can pickup 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, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants such as salts and metals, which can be naturally-occurring or result from urban storm water 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 storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.
- Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively 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. We are responsible for providing 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 http://www.epa.gov/safewater/lead

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Also the Food and Drug Administration (FDA) regulations has established limits for contaminants in bottled water which must provide the same protection for public health. The presence of contaminants in drinking water does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPAs Safe Drinking Hotline at (800) 426-4791.

***What if I have special health considerations?***
Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791

***What is Cryptosporidium?***
Cryptosporidium is a microscopic organism that lives in the intestines of animals and people. When ingested, this microscopic pathogen may cause a disease called tosporidiosis, which has flu like symptoms. Although there has been no cryptosporidium found in treated finished drinking water, it is found in source water such as White River, Fall Creek, and Eagle Creek Reservoir. IW utilizes a stringent monitoring program, testing source water and finished drinking water as well as using online monitors that measure the clarity of water, which helps determine the likeliness of the microbes presence in the drinking water prior to sending it out to purchase water systems.

***How is the water treated?***
IW's ground water treatment plants aerate and filter water to remove dissolved iron and manganese. IW's surface water treatment plants physically remove solids or other contaminants through coagulation, flocculation, sedimentation, and filtration. Chlorine is added to destroy any bacteria present and to maintain a level of disinfectant as the water travels through the distribution systems. Fluoride is added to help strengthen resistance to cavities. A small amount of ammonia is used to minimize byproducts of the disinfection process and to allow chlorine to persist in the system. For a few weeks each year, when the water system is cool, no ammonia is added in order to help maintain good water quality. This chlorine residual without ammonia is known as "free chlorine" is a more active form of chlorine. It has a more noticeable bleach or chlorine smell with the small level of chlorine.

***How hard is my water?***
As common with water in this region, IW water is considered hard due to the natural levels of minerals calcium and magnesium. The water hardness, expressed as calcium carbonate, typically ranges from 200 to 350 milligrams per liter or parts per million (ppm). This equates to 12 to 20 grains per gallon (the measure often referred to in determining water softener levels). Water hardness can vary depending on water source.

***What can I do to conserve water?*** Plenty! Water conservation measures taken today are critical to ensuring an adequate supply of treatable drinking water in the future. Simple steps you can take at home and in the office can go a long way to reducing your bill and, just as important, conserving water. Don't let the water run when you're brushing your teeth or shaving, run dishwashers and washing machines only when they're full, use a shut-off nozzle on your garden hose, and use a broom (not a hose!) to clean driveways and sidewalks. Also, regularly check for leaks in toilets and faucets. They can add up to hundreds of gallons of water wasted every month. And, listen to your lawn. It doesn't need as much water as you might think. Set automatic sprinklers to run every other day at most. A good thorough soaking once or twice a week is all your lawn needs to thrive. And take advantage of technology available to turn your irrigation system off when it's raining.

The Pittsboro Water Company routinely monitors for contamination in your drinking water according to federal and state laws.

This table shows the results for the town during the monitoring period of January 1 to December 31, 2009:

| Lead and Copper | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Contaminants** | Date Sampled | **MCLG** | **Action Level (AL)** | **90th Percentile** | **# Sites Over AL** | **Units** | **Violation** | **Possible or Suspected Source:** (Where did it come from?) |
| **Copper** | **9/23/09** | **1.3** | **1.3** | **.783(.05 to .854)** | **0** | **ppm** | **NO** | **Corrosion of household plumbing systems** |
| **Lead** | **9/23/09** | **0** | **15** | **.005** | **0** | **ppm** | **NO** | **Erosion of natural deposits, Corrosion of household plumbing systems** |

| Microbiological Contaminants | | | | | |
|---|---|---|---|---|---|
| **Contaminant:** | **MCLG:** (goal) | **MCL, TT or AL:** (amount allowed) | **Levels Found:** (detected results system wide) | **Compliance Achieved?** | **Possible or Suspected Source:** (Where did it come from?) |
| **Coliform, E. coli** | **0** | **0** | **0** | **YES** | **Human and animal fecal waste** |
| **Total Coliform** | **0** | **0** | **0** | **YES** | **Naturally present in environment** |

This table shows the results for the Indianapolis Water during the monitoring period of January 1 to December 31, 2009:

| Section I – Contaminants Detected (2008 Treated Drinking Water Data) | | | | | |
|---|---|---|---|---|---|
| **Contaminant:** | **MCLG: (goal)** | **MCL, TT or AL: (amount allowed)** | **Levels Found: (detected results system wide)** | **Compliance Achieved?** | **Possible or Suspected Source: (Where did it come from?)** |
| **Disinfection Byproducts** | | | | | |
| **HAA5 (ppb) Haloactetic Acids** | **0 ppb** | **60 ppb (AL)** | **39 ppb (ND-71) flow weighted. Annual average** | **YES** | **Byproducts of disinfection with chlorine** |
| **TTHMs (ppb) Trihalomethanes** | **0 ppb** | **80 ppb** | **47 ppb (5.1 -88) flow weighted. Annual average** | **YES** | **Byproducts of disinfection with chlorine** |
| **Inorganics** | | | | | |
| **Arsenic (ppb)** | **0 ppb** | **10 ppb** | **ND (not detected)** | **YES** | **Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes** |
| **Antimony (ppb)** | **6 ppb** | **6 ppb** | **ND** | **YES** | **Discharge from refineries, fire retardants, ceramics, electronics, solder** |
| **Barium (ppm)** | **2 ppm** | **2 ppm** | **0.12 ppm (0.036 - 0.41 ppm)** | **YES** | **Discharge of drilling wastes; Discharge from metal refineries; Erosion of Natural Deposits** |
| **Chromium (ppb)** | **100 ppb** | **100 ppb** | **2.0 ppb (ND - 16.0 ppb)** | **YES** | **Discharge from steel and pulp mills ; Erosion of natural deposits** |
| **Copper AL (90th percentile of customer taps sampled)** | **1.3** | **1.3** | **0.09 ppm (0 of 58 > AL)** | **YES** | **Corrosion of household plumbing systems** |
| **Cyanide(ppb)** | **200 ppb** | **200pb** | **ND** | **YES** | **Discharge from steel/metal/plastic and fertilizer factories.** |
| **Fluoride (ppm)** | **2ppm** | **2ppm** | **0.88 ppm (0.23 - 1.5 ppm)** | **YES** | **Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories** |
| **Lead AL (90th percentile of customer taps sampled)** | **0 ppb** | **15 ppb AL** | **8 ppb (0 of 54 > AL)** | | **Erosion of natural deposits, Corrosion of household plumbing systems** |
| **Nitrate (ppm)** | **10 ppm** | **10 ppm** | **10 ppb (3 of 58 > AL)** | **YES** | **Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion from natural deposits** |
| **Disinfection Byproducts** | | | | | |
| **HAA5 (ppb) Haloactetic Acids** | **0 ppb** | **60 ppb (AL)** | **39 ppb (ND - 71 ppb) Flow weighted Annual average** | **YES** | **Byproducts of disinfection with chlorine** |
| **TTHMs (ppb) Trihalomethanes** | **0 ppb** | **80 ppb** | **47 ppb (5.1 - 88 ppb) Flow weighted Annual average** | **YES** | **Byproducts of disinfection with chlorine** |
| **Turbidity** | | | | | |
| **Turbidity (NTU)** | **NA** | **1 NTU (TT)** | **0.24 (Maximum)** | **YES** | **Soil Runoff** |
| **Turbidity (% below TT)** | **NA** | **95 % < 0.3 NTU (TT)** | **100%** | **YES** | **Soil Runoff** |
| **Other Organics** | | | | | |
| **Cis-1,2-Dichlorthylene (ppb)** | **70 ppb** | **70 ppb** | **1.1 ppb (ND - 1.6 ppb)** | **YES** | **Discharge from industrial sources** |
| **Tetrachloroethylene** | **0 ppb** | **5 ppb** | **ND** | **YES** | **Leaching from PVC pipes, Discharge from factories and dry cleaners** |
| **2,4-D (ppb)** | **70 ppb** | **70 ppb** | **ND** | **YES** | **Herbicide Runoff** |
| **Atrazine (ppb)** | **3ppb** | **3 ppb** | **0.62 ppb (ND - 2.9 ppb)** | **YES** | **Herbicide Runoff** |
| **Di(2-ethylhexyl) phthalate** | **0 ppb** | **6 ppb** | **ND** | **YES** | **Discharges from rubber and chemical factories** |
| **Dalapon (ppb)** | **200 ppb** | **200 ppb** | **ND** | **YES** | **Herbicide Runoff** |
| **Simazine (ppb)** | **4 ppb** | **4 +ppb** | **0.16 ppb (ND - 0.91 ppb)** | **YES** | **Byproducts of disinfection with chlorine** |
| **Radionuclides** | | | | | |
| **Radium 228 pci/l** | **0** | **5** | **0.86 (ND - 1.4)** | **YES** | **Erosion of natural deposits** |
| **Unregulated Parameters** | | | | | |
| **Hardness (ppm)** | **NA** | **NA** | **323 ppm (146 - 498 ppm)** | **YES** | **Erosion of natural deposits** |
| **Iron (ppm)** | **NA** | **NA** | **0.0041 ppm (ND - 0.066 ppm)** | **YES** | **Erosion of natural deposits** |
| **Manganese (ppm)** | **NA** | **NA** | **0.0030 ppm (ND - 0.040 ppm)** | | **Erosion of natural deposits** |
| **Nickel (ppb)** | | **NA** | **1.5 ppb (ND - 2.2 ppb)** | **YES** | **Natural Deposits; Mine/Refinery discharge** |
| **pH (standard units)** | **NA** | **NA** | **7.86 (7.04 - 8.99)** | **YES** | **NA** |
| **Sodium (ppm)** | **NA** | **NA** | **39 ppm (12 - 117 ppm)** | **YES** | **Erosion of natural deposits; leaching** |
| **Sulfate (ppm)** | **NA** | **NA** | **72 ppm (24 - 194 ppm)** | **NA** | **NA** |
| **Metolachlor (ppb)** | | | **0.10 ppb (ND - 0.10 ppb)** | **YES** | **Broad spectrum herbicide used for general weed control in non-crop areas; widely used on crops such as corn, cotton, peanuts, grass for seed production, nurseries, hedgerows, fencerows, and landscape planting** |
| **N-Nitrosodimethylamine (NDMA)** | | | **ND - 0.0045 ppb** | **YES** | **(See nitrosamines note below)** |
| **Residual Disinfectants** | | | | | |
| **Chlorine (MRDL)** | **NA** | **4.0 ppm (MRDL)** | **1.4 (0.04 - 2.3 ppm)** | **YES** | **Disinfectant & Treatment Additive** |
| **Microbiological Contaminants** | | | | | |
| **Coliform, E. coli** | **0** | **0** | **0** | **YES** | **Human and animal fecal waste** |
| **Total Coliform** | **0** | **5% present in monthly samples** | **1.6 % highest month system wide** | **YES** | **Naturally present in environment** |
| **Cryptosporidium (org/10L)** | **NA** | **NA** | **0** | **YES** | **Untreated water source** |
| **Gardia (org/10L)** | **NA** | **NA** | **0** | **YES** | **Untreated water source** |
| **Untreated Source Water Data:** | | | | | |
| **Cryptosporidium (org/10L)** | **NA** | **NA** | *** 1 / 0.25 / 0.33 / 0.75** | **YES** | **Untreated water source** |
| **Gardia (org/10L)** | **NA** | **NA** | *** 2.4 / 2.4 / 0.08 / 2.8** | **YES** | **Untreated water source** |
| **Total Organic Carbon (TOC)** | **NA** | **NA** | **4.2 ppm (2.9 - 6.7 ppm)** | **YES** | **Naturally present in the environment** |

*Nitrosamines can form as intermediates and byproducts in chemical synthesis and manufacture of rubber, leather, and plastics; can form spontaneously by reaction of precursor amines with nitrosating agents (nitrate and related compounds), or by action of nitrate-reducing bacteria. Foods such as bacon and malt beverages can contain nitrosamines; there is also evidence that they form in the upper GI tract.*
**Untreated source water data (in order) from the following plant intakes: White River/ Fall Creek/ T.W. Moses/ White River North*

Definitions:
*Action Level Goal or ALG:* The level of a contaminant in drinking water below which there is no known or expected.
*Action Level or AL*: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
*Maximum Contaminant Level Goal or MCLG:* The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGS allow for a margin of safety.
*Maximum Contaminant Level or MCL:* The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best Available treatment technology.
*Maximum residual disinfectant level goal or MRDLC:* The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect or MRDLG: the benefits of the use of disinfectants to control microbial contaminants.
*Maximum residual disinfectant level or MRDL:* The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.
*Average or Avg:* Regulatory compliance with some MCLs are based in running annual average of monthly samples.
*ppm:* milligrams per liter or parts per million- or one ounce in 7,350 gallons of water/
*ppb:* micrograms per liter or parts per billion – or one ounce in 7, 350,000 gallons of water.
*NA:* not applicable
*ND:* not detected
*Treatment Technique or TT:* A required process intended to reduce the level of a contaminant in drinking water.
*Variances and Exemptions*: State or EPA permission not to meet an MCL or treatment technique under certain conditions.
*Turbidity*: The measure of the cloudiness of water. IW monitors turbidity as it is a good indicator of the effectiveness of the filtration system.