## Water Quality Analysis

The following chart lists the highest recorded level in Michigan City in 2011 and the highest allowed by the USEPA. Michigan City water has met all EPA requirements.

| DATE | CONTAMINANT | MCL | MCLG | UNIT | RESULT | MIN | MAX | ABOVE AL #REPEATS | VIOLATES | LIKELY SOURCES |
|---|---|---|---|---|---|---|---|---|---|---|
| 10/04/2011 | Barium | 2 | 2 | mg/l | 0.023 | 0.023 | 0.023 | | No | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| Valid until 12/31/2013 | Lead (90th percentile) | 15 (AL) | 0 | mg/l | ND | ND | 0.023 | | No | Corrosion of household plumbing systems. Erosion of natural deposits |
| Valid until 12/31/2013 | Copper (90th percentile) | 1.3 (AL) | 0 | mg/l | 0.32 | 0.010 | 0.540 | | No | Erosion of natural deposits; Corrosion of household plumbing systems: Leaching from wood preservatives |
| 2011 | Fluoride | 4 | 4 | mg/l | | 0.80 | 1.10 | | No | Water additive which promotes strong teeth; Erosion of natural deposits; Discharges from fertilizer and aluminum factories |
| 10/04/2011 | Nitrate (as N) | 10 | 10 | mg/l | | 0.29 | | | No | Erosion of natural deposits, runoff from fertilizers, leaching from septic systems-sewers |
| 11/13/2007 | Nitrate+Nitrite (as N) | 10 | 10 | mg/l | | 0.35 | | | No | Erosion of natural deposits, runoff from fertilizers, leaching from septic systems-sewers |
| 2011 | Total Trihalomethanes | 80 | 0 | ug/l | 15.2 | 5.5 | 25.2 | | No | By-product of drinking water chlorination |
| 2011 | Total Haloacetic Acids | 60 | 0 | ug/l | 1.3 | ND | 2.5 | | No | By-product of drinking water chlorination |
| 2010 | Total Organic Carbon | TT | TT | mg/l | 1.98 | 1.5 | 2.5 | | No | Naturally present in the Environment |
| 10/04/2011 | Sodium | N/A | N/A | mg/l | 8.4 | | | | No | Metals; Erosion of natural deposits |
| 2011 | Turbidity (lowest percentage) | TT ** | TT** | % | 100% | 100% | 100 % | | No | Soil runoff |
| 2011 | Turbidity (Maximum level) | 1 | 1 | NTU | 0.06 | 0.02 | 0.1 | | No | Soil runoff |
| 2011 | Chloramine residual | 4 MRDL | | mg/l | 1.00 | 0.15 | 1.85 | | No | Water additive (disinfectant) used to control microbiological organisms |
| 10/04/2011 | Chromium | 0.1 | 0.1 | mg/l | 0.0034 | <0.003 | 0.0034 | | No | Erosion of natural deposits: Discharge from metal refineries |
| 2011 | Total Coliform 40/month | 0 | 0 | mg/l | 3 | >5% | 7.5% | 3 | Yes | Naturally present in environment |

## Definitions

**MCL:** Maximum Contaminant Level, the highest level of a contaminant that is allowed in drinking water.
**MCLG:** Maximum Contaminant Level Goal, the level of a contaminant in drinking water below which there is no known or expected risk to health.
**MRDL:** Maximum Residual Disinfectant Level, the highest level of disinfectant allowed in drinking water.
**MRDLG:** Maximum Residual Disinfectant Level Goal, the level of drinking water disinfectant below which there is no known or expected risk to health.
**AL:** Action level, the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
**TT:** Treatment Technique, a required process intended to reduce the level of a contaminant in drinking water.
**NTU:** Nephelometric Turbidity Unit, is the measure of clarity of the water
**mg/l:** milligrams per liter, a measurement for concentration equivalent to ppm = one part per million
**ug/l:** micrograms per liter, measurement for concentration equivalent to ppb = one part per billion
**pCi/l:** picocuries per liter, a measurement of radiation
**P*:** Potential violation, one that is likely to occur in the near future, subject to other applicable requirements.
**ND:** Not detected, the result was not detected at or below the analytical method detection level.

**Special Note on Lead:** 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. Our system is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 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.

**Special Note on Turbidity:** ** The turbidity treatment technique (TT) requires that at least 95% of the total combined effluent turbidity samples shall not exceed 0.3 NTU (1.0 NTU for slow sand and diatomaceous earth filtration systems). At least 95% is required to be in compliance. In addition, the maximum turbidity level cannot exceed 1.0 NTU at anytime.