

Interpretation of Memorandum of Understanding for Non-Public Water Supplies

Question: What is a non-public water well?

Non-public water well is defined as any well constructed as a source of water supply for a water system which provides piped water to the public for human consumption, if such a system has less than 15 service connections or regularly serves less than 25 individuals, excluding individual water wells.

Question: What is a non-public health department regulated well?

A non-public health department regulated well has gone through the review process for the Memorandum Understanding for Non-Public Water Supplies and therefore falls under the regulating authority of the local county health department (i.e., local Health Authority).

Question: Within the MOU, what is the difference between new facilities and existing facilities?

New facilities include:

- Any proposed facility construction with a proposed construction of a water supply
- system.
- Any constructed facility with a proposed construction of a water supply system
- Any constructed facility with a constructed water supply system that is not permitted by EPD or approved by the local health departments.

Water supply systems determined by EPD to be non-public water systems, that are unapproved by local health departments must be remediated under the guidance of the local health department or replaced. If replaced, the new water well must comply with the guidelines of the MOU for Non-Public Water Systems Review Process for new facilities.

Question: What are the sampling criteria for non-public water supplies regulated through the health department?

- 1. Sampling compliance with the Sampling Requirements for Non-Public Water Supplies
 - a. Initial sampling must meet all acceptable MCLs and be negative for the presence of total/fecal coliforms prior to the approval of the water supply.
- 2. Inorganic chemical specified in the Review Process for Non-Public Water Supplies are sampled annually.
 - a. Concentrations exceeding recommended MCLs that pose a public health threat will result in the disapproval of the water supply and the facility should be closed.

MCLs that pose a public health threat include the following:

pH, Alkalinity (as CaCO3), Hardness (as CaCO3), Carbon dioxide, Zink, Chloride, Iron, Nitrate (as N), Nitrite(as N), Total Nitrate and Nitrite (as N), Total Dissolved Solids, Turbidity (NTUs), Manganese, Color (color units), Sulfate



- 3. Total/fecal coliform sampling is quarterly
 - a. A positive total or fecal coliform sample will require re-sampling within 24 hours to confirm the results of the original sample. If the second sample is positive for the presence of total or fecal coliform, the water supply will be considered disapproved and the facility should be closed. Disinfecting of the well should be initiated to disinfect the water supply and water supply system. There may be a possibility for the facility to continue to operate if an alternative source of potable water can be provided and is granted approval by the District Medical Director. An alternative water supply shall not be used for more than 7 days.
 - b. After disinfecting the well, a sample will be taken and analyzed for the presence of total/fecal coliform. Another sample will be taken in 30 days and analyzed for the presence of total/fecal coliform.
 - c. It is recommended that at least one sample be taken by the county environmentalist during the year at the time of the routine inspection of the facility and analyzed for the presence of total/fecal coliform.

Question: What steps should be taken if a non-public regulated well gets a positive result on the total/fecal coliform test?

If a water supply system yields a water sample positive for total or fecal coliform, the local county health department should return immediately to take another sample from the water system prior to chlorination. The chlorine residual should be tested first, prior to sampling to avoid a false negative result. If the second water sample is positive for total or fecal coliform, then the well should be disinfected following Chlorination Instructions for Non-Public Water Systems, the water supply will be considered disapproved, and the facility should be closed.

Question: Is it possible to use an alternate water source rather than closing the facility?

Acceptable alternative sources of potable water may be another water well that is approved by EPD or the local health department and in compliance with sampling requirements. Any other sources of potable water used to operate the facility must be approved by the District Medical Director.

Question: What steps should be taken if a second sample comes back positive for total/fecal coliform?

If after disinfection, a water sample is positive for total or fecal coliform; the water supply will be considered disapproved. The water supply system should be remediated or replaced by a licensed well contractor with guidance from the local health department. Note that any proposed well construction must start from the beginning of the review process for the Non-Public Water Systems outlined in the MOU – that is, first obtain a letter from EPD stating the water system is not a Public Water System.



Question: If I am installing a new well that will be serving a restaurant, at what point should I alert the County Health Department?

As with all new well installations, the local county health department must receive notification (Intent to Drill Form) from the water well contractor prior to drilling or construction of the well. The local health department must contact the EPD Regional Office. If the EPD Regional Office determines that the proposed water system is or will be a non-public water system, then the following information must be submitted to the local county health department for review.

Question: Where in Georgia Code does it require well drillers to contact the health department prior to construction?

OCGA 12-5-134 Standards for wells and boreholes

(1) In the case of individual and non-public water wells

(A) (i) The well should be located as far removed, and in a direction opposite to the ground-water flow, from known or potential sources of pollutants as a the general layout of the premises and surroundings permits; however, *prior to actual construction, the water well contractor shall notify the county health department of the intent to drill a water well, providing such information as is required on forms prepared by the council.* The well shall not be located in areas subject to flooding unless the well casing extends at least two feet above the level of the highest known flood of record. Except as otherwise provided in division (ii) of this subparagraph, all new wells must be located at least the following horizontal distances from the following structures:

- i. Not less than ten feet from a sewer line
- ii. Not less than 50 feet from a septic tank
- iii. Not less than 100 feet from a septic tank absorption field
- iv. Not less than 150 feet from a cesspool or seepage pit, and
- v. Not less than 100 feet from an animal or fowl enclosure

Question: What exactly does the review process for non-public water supplies include?

Review Process for Non-Public Water Supply

- 1. A letter from EPD stating the water system is not a Public Water System
- 2. A map showing the geographical location of the project, location of the governmentally owned and operated public water system closest to the site, and a layout of the proposed facilities showing the location of the proposed well(s), storage tank(s) water treatment facilities, etc., as applicable must be included. Connection shall be made to a public water system when such system is available within two hundred feet of the property line through a public access easement.



- 3. If the owner of the water system is other than the owner of the establishment, submit a business plan, contract, or trust agreement as needed which adequately addresses the source and amount of water provided.
- 4. For new facilities, a drilled well meeting the construction requirements established under the most current Rules for Safe Drinking Water is required. Engineering plans and specifications for the proposed water supply system, prepared by a professional engineer licensed to practice in the State of Georgia, may be required for review and approval.
- 5. For new facilities, a Well Data Sheet for each source, completed and signed by a water well contractor licensed to construct wells in the State of Georgia must be submitted for review.
- 6. Each new water system must be metered at the facility
- 7. For existing facilities, a sanitary survey of the existing constructed facilities must be made by a water well contractor, licensed in the State of Georgia, or county environmental health specialist to evaluate the well construction and protection.
- 8. Physical and chemical "screening" of the untreated water from each water source (well) must be performed for the following parameters by an approved water laboratory, and a copy of the results provided to the local health department. (EPD Test W-33).
- At least one untreated water sample must be collected from each source and submitted to an approved water laboratory for microbiological analyses. (Total and Fecal Coliform). A copy of the results must be submitted to the local health Department.
- 10. Physical and chemical sampling must be performed annually. Microbial sampling must be performed quarterly. Sample results shall be submitted to the county health department. Failure to meet physical, chemical or microbial potable water standards will result in disapproval of the water supply for use in foodservice establishments, tourist facilities or public swimming pools.



| TEST W-33 ITEMS WANTED | MAXIUM CONTAMINANT | FREQUENCY OF TESTING |
|--|-----------------------|----------------------|
| | LEVEL (mg/l) | |
| * pH | <6.5 | onnuolly |
| 1 | <0.3 | annually |
| phosphorus (P) | - | annually |
| Potassium (K) | - | annually |
| Calcium (Ca) | - | annually |
| Magnesium (Mg) | - | annually |
| * Manganese (Mn) | 0.05 | annually |
| * Iron (Fe) | 0.3 | annually |
| Aluminum (Al) | 0.05-0.2 | annually |
| Boron (B) | - | annually |
| Copper (Cu) | 1 | annually |
| * Zinc (Zn) | 5 | annually |
| Sodium (Na) | - | annually |
| Chromium (Cr) | 0.01 | annually |
| Cadmium (Cd) | 0.005 | annually |
| Nickel (Ni) | 0.1 | annually |
| Molybdenum (Mo) | - | annually |
| *Hardness | - | annually |
| * Sulfate (SO ₄) | 250 | annually |
| * Nitrate (NO ₃) | 45 | annually |
| * Chloride (Cl) | 250 | annually |
| Soluble Salts | | annually |
| * Alkalinity | - | annually |
| * Carbon dioxide (CO ₂) | - | annually |
| * Nitrate – Nitrogen (NO ₃ -N) | 10 | annually |
| * Nitrite – Nitrogen (NO2-N) | 1 | annually |
| * TDS (Total Dissolved | 500 | annually |
| Solids) | | |
| * Color | 15 color units | annually |
| * Turbidity | 5 units | annually |
| * Total Nitrate (NO ₃₊ NO ₂ as | 10 (as N) | annually |
| N) | • • • | |
| * Total Coliform | presence or absence | quarterly |
| * Fecal Coliform | presence or absence | quarterly |

UGA Cooperative Extension Test W-33



"DHR Biological Testing Memorandum"

SAMPLING REQUIREMENTS NON-PUBLIC WATER SUPPLY

Samples will be taken at the facility. Samples shall be submitted to and analyzed by an approved laboratory.

The University of Georgia laboratory available through the county extension office may perform inorganic (W-33) analysis.

The County Health Department may conduct Total Fecal Coliform analysis.

Initial Sampling must meet all acceptable MCLs and be negative for the presence of total fecal coliforms prior to the approval of the water supply.

Compliance Sampling

Inorganic chemicals specified are sampled annually.

Concentrations exceeding recommended MCLs that pose a public health threat will result in the disapproval of the water supply and the facility should be closed.

Total Fecal Coliform sampling is quarterly.

A positive total or fecal coliforms sample will require re-sampling within 24 hours to confirm the results of the original sample. If the second sample is positive for the presence of total or fecal coliforms, the water supply will be considered disapproved and the facility should be closed. Disinfecting of the well should be initiated to disinfect the water supply and water supply system. There may be a possibility for the facility to continue to operate if an alternative source of potable water can be provided and is granted approval by the District Medical Director. An alternative water supply shall not be used for more than 7 days.

After disinfecting the well, a sample will be taken and analyzed for the presence of total fecal coliform. Another sample will be taken in 30 days and analyzed for the presence of total fecal coliform.

As part of the quarterly sampling requirement, the Department recommends that at least one sample be taken by the county environmentalist during the year at the time of routine inspection of the facility and analyzed for the presence of total / fecal coliform.