GAPP WATER TESTING REQUIREMENTS FOR Packing Sheds, Field Pack, and Worker Hygiene

The Georgia Good Agricultural Practices Program requires that all water used in packing sheds, field pack operations and worker hygiene-both field and shed-will be tested and must meet the current drinking water standard of no total Coliform or *E. coli*. Test must be conducted by the University of Georgia Feed and Environmental Water Testing laboratory. All water samples will be collected by a Georgia Crop Improvement Association Inspector or the Georgia Fruit and Vegetable Growers Association field representative using the University of Georgia Water Testing Laboratory protocol.

The GAPP recommends the use of the "Water Well Standards Act of 1985 as Modified 1995" and Georgia Farm *A* SYST "Improving Drinking Water Well Condition" publication as resource guides to improving well safety. Both publications are found in the resource section of the GAPP Manual.

Water testing is an annual requirement.

Should the well not meet the standard the following steps must be used and documented before retesting: (use attached form for documentation)

- Review recent history:
- Has there been a recent plumbing problem or repairs on the system that may have introduced bacteria?
- Have there been recent heavy rains or flooding that may have contributed to bacteria being introduced into the well?
- Inspect system for broken pipes, holes, cracks, loose caulking, etc. Is there a concrete curbing around the well at least 4 inches thick extending at least 2 feet in all directions sloping away from the well? Has a well assessment been conducted through the GEORGIA FARM *A* SYST program? See resource section of GAPP Manual for contact information.
- Are back flow preventers installed and working?
- Follow disinfection of Wells Guidelines.
- Retest well.

GUIDELINES FOR DISINFECTION OF WELLS

Drilled, Bored, Hand Dug

The method of disinfecting a well consists of a commonly used piping system that introduces a chlorine solution into the well casing and circulating the solution in the system. Ordinary laundry bleaches, which have approximately 5% available chlorine, are satisfactory for making the disinfecting solution.

DRILLED WELLS

The quantity of chlorine needed to disinfect a well is based on 50 parts of chlorine per million parts of water. This is about the same as 1.25 pints of 5% chlorine solution (laundry bleach) for each 100 ft. of water in a 4 inch to 6 inch drilled well. For smaller casing sizes, use about .25 pints of laundry bleach for each 25 feet of water in the well. The chlorine solution should be diluted with about 6 gallons of water. Pour the solution into the casing and not into the pump.

DUG AND BORED WELLS

Dug and bored wells which have become contaminated should be pumped down as far as possible and cleaned. Then, allow the well to fill with water and disinfect. Use 5% chlorine solution (laundry bleach) at the rate of .5 pints for each foot of water in a 1-3 foot diameter well, 1 pint for 4 ft. diameters, 1.5 pints for five ft., 2 pints for 6 ft., 3.5 pints for 8 ft., and 5 pints for 10 feet.

After the chlorine disinfection solution has been added to the well, run water from each tap until the chlorine odor is noticeable. Then, do not pump for 24 hours. After this standing period, run water through the system until the chlorine odor is gone.

These are only guidelines, owner may wish to contact county extension agents or well company for additional procedures.

RETESTING OF WELL WATER Documentation and retesting of well water that failed GAPP minimum requirements

Review recent history:

Has there been a recent plumbing problem or repairs on the system that may have introduced bacteria?

Have there been recent heavy rains or flooding that may have contributed to bacteria being introduced into the well?

Inspect system for broken pipes, holes, cracks, loose caulking, etc. Is there a concrete curbing around the well at least 4 inches thick extending at least 2 feet in all directions sloping away from the well? Has a well assessment been conducted through the GEORGIA FARM *A* SYST program?

Are back flow preventers installed and working?

Follow disinfection of Wells Guidelines in the GAPP Resource Handbook.

Retest taken and submitted _____ Date

Evaluations, inspections, corrective actions and retest by

Person Responsible