

AG WATER SYSTEM INSPECTION CHEAT SHEET

From the FDA Assessment Tool & Factors to Consider resource.

Evaluating the Degree of Protection:

Ground/surface water Open/closed dist. System C-7, C-11, D-7, D-11	Is this water source/distribution system regularly monitored to identify any conditions that are reasonably likely to introduce known or reasonably foreseeable hazards into or onto covered produce or food contact surfaces?
Ground/surface water Open/closed dist. System C-7, C-11, D-7, D-11	Is this water source/distribution system regularly monitored for significant deficiencies, which if observed, are corrected (such as control of cross-connections and repairs to well caps, well casings, sanitary seals, piping tanks, and treatment equipment)?
Ground/surface water Open/closed dist. System C-7, C-11, D-7, D-11	Is this water source/distribution system and surrounding area kept free of debris, trash, domesticated animals, and other possible sources of contamination of covered produce to the extent practicable and appropriate under the circumstances?
Ground/surface water Open/closed dist. System C-7, C-11, D-7, D-11	Do regular maintenance activities occur to prevent this water source/distribution system from being a source of contamination to covered produce, food contact surfaces, or areas used for a covered activity?
Ground/surface water Open dist. System C-7, C-11, D-11	Are barriers such as earthen diversion berms or ditches present that may help minimize the influence of discharges or runoff from adjacent or nearby lands to this water source/open distribution system?
Ground/surface water Open dist. System C-7, C-11, D-11	Is this water source subject to discharges or runoff from surrounding lands?
Ground water C-7	If this ground water source a well, does it have a closed, tightly-fitting cap or sanitary seal to prevent potential contaminants from entering?
Ground water C-7	If this ground water source is a well, does it have an intact casing? If this ground water source is a well, does it have appropriate backflow prevention?
Surface water C-11 Open dist. system D-11	Is water from this source used when maintenance activities (such as dredging) occur that could negatively impact water quality?
Closed dist. system D-7	Does this closed distribution system allow backflow from, or cross connections between, piping systems that discharge waste water or sewage and piping systems?
Closed dist. system D-7	Are piping systems intact, properly constructed, and properly functioning?

For all elements (tables) of the assessment tool consider the likelihood of the introduction of known or reasonably foreseeable hazards:

- Is the activity in close proximity to water sources or distribution systems?
- Is the activity at higher elevation than water sources or distribution systems?
- Do these areas have physical barriers such as earthen diversion berms or ditches in place to help minimize discharges or runoff to water sources or distribution systems?
- Do these areas allow for discharges or runoff into water sources or distribution systems?

- Consider use of adjacent and nearby land (inspection consideration)

Source considerations:

- Well or spring influenced by surface water? Consider source as surface water rather than ground water.

Water application equipment, buildings, structures:

- Are there conditions that are reasonably likely to introduce known or reasonably foreseeable hazards into or onto covered produce or food contact surfaces? (Inspection considerations E-3 and E-13 in Assessment Builder Tool)

Animal considerations: *animals are a source of human pathogens

- Do these areas have fencing or other measures in place to prevent direct animal access to water sources or distribution systems?
- Are there practices in place (such as to prevent overflow of manure lagoons) to minimize their potential impact on water sources or distribution systems?
- Airborne transmission of fecal matter?
- Presence/location of animal attractants/habitats (heavy vegetation, wooded areas, water source, standing water)?

Biological Soil Amendments of Animal Origin considerations:

- Application, timing, location, transportation, consider accounting for unknowns.

Systems for the collection and/or disposal of human waste considerations:

- Does this system discharge human waste directly or indirectly (seepage) into water sources or distribution systems?
- May this system be negatively impacted by environmental conditions such as flooding and high winds that could result in it serving as a source of contamination to the environment (wind knocks over portable toilet).
- Is this system malfunctioning or otherwise not constructed or maintained to properly contain human waste?

Other water users:

- Recreational use, tailwater returned upstream, recycled/reused water, manufacturing, development, animal agriculture?

Other potential sources of known or reasonably foreseeable hazards:

- Dredging, urban development, recreational use, wind/dust, human/animal fecal matter, pooled water (attracts pests, increases microbial loads)?

Crop characteristics considerations:

- Proximity to ground/pooling water, plant structure (large surface area, surface texture), cultivation methods, damage from phytopathogens, susceptible to internalization/surface adhesion?

Environmental considerations:

- Heavy rain events (splash/runoff), physical damage/freezing (internalization), die-off impacted by temp/humidity/UV/**competition**, severe weather (flooding, drought, freeze, wind)?
*cloudy/cool/wet conditions increase microbial survival. *timing/frequency.