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| **Company logo** | **Company name** | | |
| **WATER CONTROL AND MANAGEMENT** | | |
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**Objective**

Preventing water from becoming a source of contamination for produce.

**Control measures**

With the purpose of clear comprehension of this procedure, **agricultural water is defined as** all water that has or is likely to have contact with the product and/or food contact surfaces. For example:

* + Used for irrigation
  + Frost protection
  + Fertigation
  + Chemical application
  + Ice-making
  + Sanitation of equipment and tools
  + Handwashing
  + And others

This definition applies both to water that is used **before** harvest (for example, irrigation water and applications) and to water used **after** harvest. Taking this definition into account, the following are control measures that must be followed within the facilities:

* Agricultural water used in the facility is free of microorganisms that can affect human health and that affect the product’s safety.
* There is a map with the location of the agricultural water sources, distribution system, storage and/or deposits.
* Agricultural water sources have the appropriate protection against animals, pests, runoff and chemicals.
* At the operation, visual inspections and microbiological analyses of the water source are carried out to verify that its sanitary quality is adequate. The frequency of microbiological analyses depends on the type of water source:
  + **Municipal water.** Test results are obtained annually from the local water authority or are tested by the operation at least once a year.
  + **Well water.** The water is tested once during the growing season. If fecal coliforms are present, the well is treated with a sanitizer to reduce pathogen levels and retested.
  + **Superficial water.** The water is analyzed 3 times during the growing season: the first during growing, the second at the stage where the crop requires more water consumption, and the third during or close to the harvest stage.
* Analyses of agricultural water are carried out by a third-party laboratory that follows good laboratory practices (GLP) and uses an adequate method of analysis and sampling.
* Agricultural water meets the microbiological requirements mandated byapplicable local or national law or industry standards, depending on its intended use, and all results are recorded on the Record of Sample Results (RECORD-04). (Consult local regulations and industry standards)
* If the facility has a drinking water provider, the water analyses that prove compliance are obtained.
* The facility performs a water quality risk assessment to determine if water quality is appropriate for the crops (including uses such as irrigation, fertigation, chemical applications, etc.). The risk assessment should include water quality, irrigation/application method, and crop that comes into contact with the water. The results of the risk assessment should be used to determine whether corrective actions are necessary or if the water is suitable for its intended use.
* If required, agricultural water is treated to ensure it has the appropriate sanitary quality for its intended use. This is documented in RECORD-06.
* Equipment designed to treat water (such as chlorine injectors, filtration systems, and backflow devices) is inspected and maintained to ensure efficient operation.
* Water sources and distribution systems (including storage tanks, pipes, pumps, etc.) are tested once a year, at the beginning of the season or when deemed necessary and maintained so that it does not become a source of contamination to product, the water sources or the equipment and so that it does not create unsanitary conditions.
* If it is detected that the water source or any other point of water distribution does not meet microbiological standards, its use is suspended. Corrective actions are taken until the water is found suitable for the intended use. (RECORD-02).
* There are drinking water dispensers available for the workers.
* Agricultural water used in postharvest applications **meets** the microbiological requirements of the US EPA Drinking Water Regulations. For example, water used for:
  + Ice
  + Humidity control
  + Post-harvest applications (for example, to mix with fungicides)
  + Washing tanks or tubs
  + Hydrocooling
  + Transport
  + And others
* If the operation works with products that are known to be susceptible to infiltration, the temperature of the product and the water used in the washing tanks, flume conveyors, etc. is monitored. (RECORD-05).
* Ice used to cool the product is made, transported and stored in hygienic conditions. The ice handling and storage record (RECORD-07) is used to document it.