This document is a template only. Users are encouraged to customize it to fit their individual needs

PURPOSE: To investigate, evaluate and mitigate microbial hazards associated with ag water use and application in leafy green fields. Assess ag water sources, storage, and conveyance as well as determine ag water system type(s).

SCOPE AND FREQUENCY: Complete this procedure each season as follows:

- Prior to use water in a leafy green operation (Pre-Season Assessment)

RESPONSIBILITY: This assessment must be completed by a food safety professional or by designated food safety personnel. A food safety professional must update and revise this SOP annually or as needed.

PROCEDURE:

1. Evaluate water source, conveyance and storage:

   - Review (or create) a detailed water system description and determine if there are any characteristics, conditions or activities that may lead to microbial contamination. In addition to assessing water system components currently in use, also consider components such as abandoned wells and ancillary equipment that are not in use as they can potentially serve as contamination conduits.

   - Inspect ag water sources and distribution system(s). Consult Appendix A regarding particular components and guidelines to conduct such inspections and/or work with experience professionals to:
     - Inspect ag water sources (irrigation wells, water reservoirs, water in canals, irrigation laterals and ditches) and assess their condition, surrounding areas and potential issues. If a potential issue is identified, document it and implement a remedial action.
     - Inspect water conveyance equipment, system maintenance and storage areas. Review equipment components and implement remedial actions as needed.

   - Review maintenance and irrigation system flushing records.

2. Determine water system type(s):

   Once an assessment of your ag water systems is performed, determine which type(s) of water is under your control. There are the two types of ag water systems:

   - Type A water is an ag water system that is unlikely to contain indicators of fecal contamination either due to natural hydrogeologic filtration or through controlled USEPA and state regulated treatment.
   - Type B water is all other ag water systems including surface water sources and open conveyance systems.

3. Utilize Table 1 in Appendix A, assessment findings and information related to delivery systems (open or closed), and method/timing of application (within or greater than 21 days) to determine your system type, microbial indicator, and treatment methods if needed.

4. If you determine that your system delivers Type B water and you chose to operate as such until 21 days prior to the scheduled harvest, make sure only Type A water is utilized 21 or less days prior to the scheduled harvest event if an overhead irrigation is employed. You may choose to convert Type B water to Type A water via treatment or utilize another water source/system that meets Type A water definition/criteria. If you choose a different water source/system to irrigate 21 days or less prior to the scheduled harvest, conduct a water system assessment. If you choose to treat your water, follow water treatment considerations highlighted in Appendix A.

5. Document inspection findings and remedial actions associated with the assessment of ag water sources, irrigation system conditions, and maintenance records.

VERIFICATION:

A Food Safety Professional must verify that this water system assessment was performed as outlined in this procedure.

EQUIPMENT/TOOL REQUIRED:

- A copy of this SOP
- Appendix A
- Ag water system assessment form
- Pen / pencil or electronic devices

SAFETY CONSIDERATIONS:

Follow your worker safety polices to safely perform this assessment.

RECORD KEEPING:

Ag water system assessment forms should be kept for a minimum of 2 years or as determined by the company policy. These forms must be completed and signed as soon as feasible after completion.