PURPOSE: Identify and evaluate food safety risks associated with environmental sources of human pathogens and unusual weather events or conditions that may adversely impact the integrity of produce fields before harvest and during harvest.

SCOPE AND FREQUENCY: This procedure must be completed within one-week prior to harvest and during harvest of leafy greens.

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:
Focus the pre-harvest and harvest environmental/weather assessment on unusual weather events or conditions that may impact environmental sources of human pathogens. Below are steps/considerations to conduct an environmental/weather assessment.

1. Evaluate unusual weather events and/or field conditions that may affect the potential for human pathogens to contaminate produce fields. These weather and field conditions may include, but are not limited to the following:
   - Changes in temperature
   - Extent and/or volume of precipitation
   - Wind speed and duration
   - Air quality issues as associated with high levels of dust particles
   - Crop stage
   - Crop damage
   - Equipment condition or exposure to adverse weather events or conditions (such as dust/debris deposited on machine, rain/hail on food contact surfaces, etc.)

2. Document your findings on areas, activities and events observed.

3. If you determine that any circumstances/events may cause contamination of the produce field, take actions to mitigate that risk. Appendix F of the Commodity Specific Food Safety Guidelines (CSFSG) for leafy greens includes a list of risk factors and suggested actions in response to changes in weather conditions. Some risk factors and actions include, but are not limited to the following:
   - Rain and wind: Monitor rain and wind to determine if it is light, medium or heavy and to assess potential contamination of the produce field before planting.
   - Runoff to fields: If runoff from adjacent land where uses pose a food safety risk (CAFO, hobby farm, manure or livestock compost operation) reaches fields and you determine it to be a high risk, implement no-harvest buffers in fields. Refer to the flooding section within the guidelines for additional remedial actions.
   - Runoff to water sources: If runoff from adjacent land may pose a food safety risk (CAFO, hobby farm, manure or livestock compost operation) reaches water sources and you determine it to be an unacceptably high risk, treat affected water sources as appropriate to comply with acceptance criteria. Conduct a water system
assessment (originally known as Sanitary Survey) and refer to the flooding section within the CSFSG for leafy greens for additional remedial actions

- Equipment/tools: If equipment/tools are affected by weather events, conduct repairs as needed, and clean and sanitize equipment before use.
- Water quality: If water treatment is needed, only use approved sanitizers and follow label instructions for accurate use and to avoid adverse environmental impacts. If turbidity is high, weight for particulates to settle.
- Crop damage: If severe weather-related crop damage is noted, take actions such as:
  - Implementing no-harvest buffers
  - Conducting crop testing
- Consider product testing before harvesting if excessive crop damage and/or soil on crops is noted and as a tool to detect gross-contamination. If damage to crops is extensive, do not harvest.
- If a food safety risk is identified and a remedial action cannot be taken to control or eliminate the risk, destroy the affected areas by disk ing under the crop.

VERIFICATION:
A Food Safety Professional must verify a pre-harvest assessment related to weather conditions is conducted as outlined in this procedure one-week prior to harvest and during harvest.

EQUIPMENT/TOOL REQUIRED:
- A copy of this SOP
- A Food Safety Assessment Form
- A pen / pencil or electronic devices

SAFETY CONSIDERATIONS:
Follow your worker safety polices to safely perform this assessment

RECORD KEEPING:
Food Safety 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.