

Green Growers

HACCP Plan

Product:

Weekly vegetable box delivered to the door.

Co Address:**HACCP Team:**Scope of Study:**1) Biological Safety**

The main aim of this HACCP study is to avoid the introduction of significant levels of microbiological contamination into any product and to reduce the potential for growth.

2) Physical and Chemical Safety

To avoid the introduction of physical and chemical contaminants onto any product.

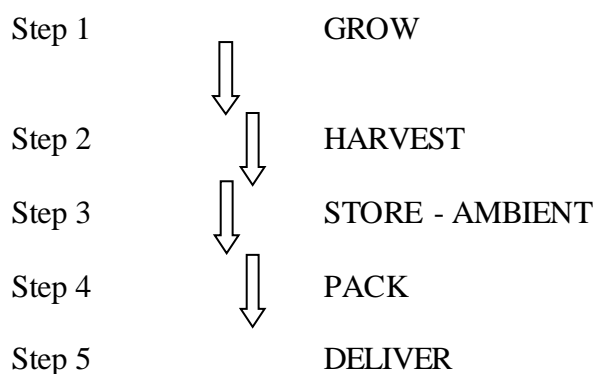
Date of Preparation:**Process:****Details of Process**

GG grow seasonal vegetables (e.g. root vegetable, brassicas and salad crops) without chemicals or pesticides. We deliver weekly boxes to our customers throughout our region.

Details of Storage and Distribution

We have a small shed for storing our vegetables and for packing our boxes. This shed is maintained and kept clean and tidy inside. It was built as a dairy and has marble worktops and tiled floors and walls. Most of our vegetables are picked on the day of delivery, but some may be lifted and then stored for distribution over the winter such as potatoes, alliums etc. At present we use our car for deliveries. We plan next year to use a trailer.

Process Flow Diagram



Risks and General Controls:

Step No	Food Safety Hazard and Cause	* Likelihood	* Health Affects Severity	Control Measures
1. Grow	Biological: Pathogens from manure or irrigation water.	Low Low	High Low	Follow FSA 'managing farm manures for food safety guidance'. Use of potable water via soil drip system and limited hand-watering.
	Physical/Chemical: From machinery or neighbours spray	Low	Low	Limited use of machinery, keep maintained. Schedule with neighbours
2. Harvest	Biological: Contamination from people or soil.	Low	Low	Personal Hygiene Plan - observe standard of hygiene appropriate to task: adequately clean hands, equipment and footwear (e.g. no manure, oils etc), use of indoor toilet, not harvesting when ill etc. Avoid harvesting in very wet conditions to avoid excess soil contamination / dry and brush clean if necessary.
	Physical/Chemical: Machines / equipment used for harvest or from people	Low	Low	Keep maintained and ensure adequate standard of hygiene. Ongoing visual checks and hand picking of product.
3. Store	Biological: contamination from pests e.g. mice.	Low	Low	Maintain buildings and keep vigilant; regular inspections and immediate action if problems arise. Keep clean & tidy. In use at least weekly.
	Physical/Chemical: n/a	n/a	n/a	n/a
4. Pack	Biological: Contamination from people	Low	Low	Personal Hygiene Plan - observe standard of hygiene appropriate to task: adequately clean hands, equipment and surfaces, not packing when ill etc.
	Physical/Chemical: Contamination people / building or equipment.	Low	Low	Keep maintained and ensure adequate standard of hygiene. Ongoing visual checks and hand packing of product.
5. Deliver	Biological: Contamination from vehicle	Low	Low	Keep clean and ensure adequate standard of hygiene.
	Physical/Chemical: Contamination from vehicle	Low	Low	Keep clean and ensure adequate standard of hygiene.

*L = Low *H= High

CCP Determination

Q1: Does the process step reduce contamination to an acceptable level? *If 'yes' this is a CCP. If no, go to Q2.*

Q2: Could the product become contaminated in excess of acceptable levels or increase to unacceptable levels? *If 'no' this step is not a CCP. If 'yes' go to Q3.*

Q3: Will a subsequent process step reduce contamination to an acceptable level? *If 'yes' this step is not a CCP. If 'no' this step is a CCP.*

Step	Q1	Justification for decision	Q2	Justification for decision	Q3	Justification for decision	CCP No
1. Grow	Yes	Pathogen risk reduces over time as manure is composted due to action of heat etc					1
Manure							
Water	No	No processing of water takes place that would destroy pathogens.	No	Water used is potable (house supply). Soil drip feed and controlled overhead watering only	n/a	n/a	n/a
2. Harvest	No	No processing of veg that would destroy pathogens takes place.	No	Majority of veg to be washed & cooked before use. Salads are labelled as requiring washing. No products supplied are ready to eat. All product individually handled.	n/a	n/a	n/a
3. Store	No	No processing of veg that would destroy pathogens takes place.	No	Frequency of checking (min of weekly when packing), maintenance of building & hygiene standards. All product individually handled	Yes	All product individually handled during packing so pest issues would be seen at that point	n/a
4. Pack	No	No processing of veg that would destroy pathogens takes place.	No	Majority of veg to be washed & cooked before use. Salads are labelled as requiring washing. No products supplied are ready to eat. All product individually handled.	n/a	n/a	n/a
5. Deliver	No	No processing of veg that would destroy pathogens takes place.	No	Majority of veg to be washed & cooked before use. Salads are labelled as requiring washing. No products supplied are ready to eat. Maintenance of vehicle & hygiene standards.	n/a	n/a	n/a

Summary of CCPs

Process Step	CCP No.	Critical Limits	Monitoring				Corrective Action		
			Procedure	Frequency	Responsibility	Records	Procedure	Responsibility	Records
Grow	1	Minimise risk of pathogen contamination from manure by thorough composting	FSA 'managing farm manures for food safety guidance' Tend to store for at least 1 year before use.	Ongoing – annual preparation of growing site	Grower	Diary notes re manure delivery and use	Compost manure for longer / change crop rotation or harvesting to minimise risk	Grower	Dairy notes re planting / cropping etc