Republic of the Philippines
OFFICE OF THE SECRETARY
Elliptical Road, Diliman
1100 Quezon City

ADMINISTRATIVE ORDER
No. 05
Series of 2022

SUBJECT: **FOOD SAFETY GUIDANCE DOCUMENT FOR URBAN AND PERI-URBAN FARMS/GARDENS**

WHEREAS, pursuant to Food Safety Act (RA 10611), it is a declared policy of the State shall maintain a farm to fork food safety regulatory system that ensures a high level of food safety, promotes fair trade and advances the global competitiveness of Philippine foods and food products;

WHEREAS, the country is faced with pressing issues due to food safety from food safety hazards that can be present in urban and peri-urban areas;

WHEREAS, the Urban Agriculture (UA) or the practice of agriculture in limited space in the metropolis, is seen as an intervention in achieving food security as well as ensuring that foods and food products from the urban and peri-urban farms or gardens are safe for human consumption;

NOW THEREFORE, this Administrative Order provides the guidelines in the implementation of food safety plan and control measures for urban and peri-urban farms and gardens.

SECTION I. INTRODUCTION

A. RATIONALE:

In view of the increasing development of urban agriculture and continued adoption of interested stakeholders to urban and peri-urban gardening, a food safety guidance document will help to assess the identified site to comply with food safety requirements and ease the monitoring of possible hazards present in the chosen field or area to be utilized for urban farming.

It is important to understand the risk of exposure and risk of contamination in urban environments because of a wide variety of systems under urban agriculture in a different range and possession, ranging from small garden communities, peri urban farming, small farming, urban gardens, and building of vertical farms or greenhouse and other industrialized farming facilities.

B. OBJECTIVE:

To ensure food safety and encourage farm owners/workers to have their food safety plan and help them identify possible food safety hazards and minimize the risk of contamination at the urban farms.

C. OVERVIEW:

Food safety hazards can be identified as a chemical, biological or physical contamination. It can be introduced at any stage of the food chain, from primary producers, through food manufacturers, transport and storage operators, to retail and food service outlets. Adequate control is therefore needed throughout the food chain.

It is important for all urban and peri-urban farmers to be aware of the food safety practices that can minimize the risk of contamination from possible potential food hazards. The following are the possible source of contamination that can be identified in an urban farm-level:

1. Soil Contaminants - It is very important to have a history of the use of the land where produce is being grown. Soil tests for heavy metals will begin to show the extent of the contamination. Urban soils may have a higher risk of containing pollutants. There may also be an elevated risk of pathogen exposure associated with improper treatment and storage of compost and raw manure.
2. Contaminated water – sources of dirty water may include contaminated irrigation water, handwashing water, produce wash water or standing water that may attract pests. Water sources should be checked for possible chemical and microbial contamination. If risks are found, water testing is recommended. Appropriate treatment should follow depending on the level of the contaminants.

3. "Visitors" - refers to domesticated and wild or stray animals as well as neighbors and people who may be carriers of pathogens. Greenhouses may need to be periodically checked for evidence of entry and locked to ensure entry of only authorized personnel.
4. Uncleaned Surfaces - this includes unsanitary tools and equipment, harvest buckets, boxes, hoses on the ground, packing tables, wash basins, sinks, and vehicles for transport. Other resources such as use of cost-effective recycled materials needs to be kept sanitary with frequent washing and sanitizing.
5. Health and Hygiene – Contamination can be associated with sick individuals and people who fail to follow proper hygiene practice and use of poorly maintained sanitary facilities. Provision of proper sanitation and hand-washing facilities and appropriate areas for eating, smoking and storage of personal items outside the production area must be in place.
6. Processing and storage areas – Unkempt areas may invite unwanted pests. Fix or fill in any cracks or defects in the processing and storage building to keep out pests. Ideal storage conditions of the harvested products should also be determined.
7. Transport of fresh produce – unsanitary food containers and vehicles may harbor microbial and chemical contaminants. The containers and vehicles to be used must be clean, sanitized and have gone through washing and rinsing. Fresh produce should also be placed in clean sealed containers and it is highly encouraged to keep at ideal temperature to minimize the loss of quality.

SECTION II. IMPLEMENTATION STRATEGY

A. Recommended Food Safety Practices:

Prior to Planting

1. Keep records of all farm activity for traceability, especially food safety practices.
2. Ensure the water source is clean and free from any debris. Water can also be tested for microbial and chemical composition. You may submit samples at the Bureau of Soils and Water Management (BSWM) - Laboratory Services Division (LSD) or to any accredited testing laboratory.
3. Train farmers/workers about proper hygiene and sanitation.
4. Evaluate the field for evidence of animal entry. Mitigation procedures such as fencing, noisemakers, etc. can be done.

5. Assess adjacent lands for possible sources that might contaminate the production area. Take necessary corrective action if needed.
6. Soil testing can also be done through the BSWM - LSD or to any accredited testing laboratory.

During Production Stage and Harvest

1. Provide proper sanitation and hand washing facilities outside the field area.
2. Allocate an area for eating, smoking and storage of personal items.
3. Minimize standing water in the area for it attracts pests and disease carrying insects. Continue to look for signs of unauthorized entry of wild animals and do not allow pets or domesticated animals to wander in the production area.
4. Clean and sanitize tools and equipment to be used in the field.
5. Ensure the water source is clean and free from any debris. Water source, including application to water soluble fertilizers and agricultural chemicals should be protected for possible contamination and away from sewage or septic tank systems. Usage of equipment, including sprayers must be clean and are in good condition. Water can also be tested for microbial and chemical composition. You may submit samples at the Bureau of Soils and Water Management (BSWM) - Laboratory Services Division (LSD).
6. Monitor employees for symptoms of illness and wounds. Sick employees must refrain from working. Continue to emphasize proper hygiene.
7. Remove potentially contaminated harvest (i.e rotten or unhealthy looking produce)

Post-Harvest Processing and Storage

1. Clean facilities, equipment and food contact surfaces thoroughly and sanitize before use and as needed during use.
2. Use potable water or chlorinated water for washing, rinsing or sanitizing.
3. Fix any cracks or defects in the processing and building area to keep out pests.
4. Establish pest control program or may adapt integrated pest management methods.
5. Use air-conditioned or refrigerated rooms if necessary.
6. Do not use or allow materials such shoes or boots and equipment or tools used in the field in the packing area.
7. Store packaging materials in a clean and covered place.

Transportation

1. Check and keep a record of the cleanliness and condition of the delivery vehicle including the grooming of the delivery personnel.
2. Ensure that transport vehicles are clean and sanitary and if possible use refrigerated trucks to minimize moisture loss of fresh produce.
3. Ensure that each package leaving the packing area can be traced to the field of origin and date of packing.

Record-keeping / Traceability

Documentation is very important to ensure that recommended food safety practices are complied with. Some of the important things to be recorded are as follows:

1. Planting date - varieties, suppliers, etc.
2. Application of fertilizers, pesticides or any other inputs
3. Water test dates and results
4. Worker's training -type of training, dates, attendance or certificate
5. Equipment maintenance - date, type of maintenance, cleaning
6. Harvest date
7. Cleaning schedule for processing and storage facilities
8. Pest control program and monitoring schedule
9. Package identification

Testing or Analysis

Analysis of the harvested products can be done randomly or if there is any suspected contamination. Soil and water tests should also be done prior to planting and during production if necessary. Fresh produce or harvested products can be submitted and be tested of the Bureau of Plant Industry or any accredited food safety laboratory. Soil and water analysis testing can be done by the Bureau of Soils and water Management or any accredited laboratory.

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Food Safety Plan

Farmers/growers could create their own food safety program (see annex A) in order to minimize the possible hazards that they could identify in their urban farm and take the necessary corrective plan of action.

Food safety awareness is an effective tool for designing and implementing strategies for preventing food-borne illness and food outbreaks.

SECTION III. MONITORING AND EVALUATION

Quarterly and semestral evaluations shall be conducted in order to constantly monitor food safety and provide technical assistance to beneficiaries and partners.

The DA-NUPAP Monitoring Team can conduct collection and sampling of produce from identified urban and peri-urban farms/gardens with food safety hazards, and if deemed necessary.

SECTION IV. EFFECTIVITY CLAUSE

This Order shall take effect immediately upon its approval of the Secretary.

Issued this 8th day of February, 2022.

WILLIAM D. DAR, PhD.
Secretary

ANNEX

SAMPLE FOOD SAFETY PLAN

FOOD SAFETY PLAN

Farm's Name: _____

Location: _____

Crop(s): _____

Process Flow/Steps	Potential Hazard(s)	Reasons for Significance	Critical Control Points (CCPs)	Preventive/ Corrective Actions	Verification	Record(s)
Farm Operations						
Site Selection & Planting	Heavy metal contamination	Contaminated produce can affect the consumer's health	MLs	- Area is assessed for risk (previous use of land, surroundings, etc.) - Soil Analysis	Inspection and review of records	Results of Analyses, procedure and records of site selection/planting
Site Selection & Planting	Microbiological contamination	Contaminated produce can affect the consumer's health	Presence of *Salmonella, E Coli* and other pathogens			
Site Selection & Planting	Pesticide Residue contamination	Contaminated produce can affect the consumer's health	MRLs			
Irrigation	Microbial Contamination from the water	Contaminated produce can affect the consumer's health	Presence of *Salmonella, E Coli* and	Water Analysis for source of water	Inspection and review of records	Results of Water Analysis and procedure for irrigation

			other pathogens			
Fertilizer Application	Inorganic – heavy metal contamination	Contaminated produce can affect the consumer's health	ML for Heavy Metals	Proper usage (correct dosage)	Inspection and review of records	Fertilizer application records/ inventories/procedure for fertilizer application
Fertilizer Application	Organic – microbial contamination from unfermented fertilizer	Contaminated produce can affect the consumer's health	Presence of *Salmonella, E Coli* and other pathogens	Application of completely decomposed organic fertilizer	Inspection and review of records	Fertilizer application records/ inventories/procedure for fertilizer application
Pesticide Application	Chemical contamination from overused crop protection product (pesticide residue)	Contaminated produce can affect the consumer's health	MRL for Pesticides used	Trained workers/sprayer only permitted to use chemicals for spraying. Chemical records are kept on file. Judicious use of pesticides	Inspection and review of records Monitoring of MRL of each pesticides	Chemical application records/ inventories/procedure for application of pesticides/ Pesticide Management Manual
Harvesting	Microbiological Contamination from personnel handling the crop	Contaminated produce can affect the consumer's health	Presence of *Salmonella, E Coli* and other pathogens	All staff trained on Good hygienic practices. Personnel Hygiene procedures in place	Inspection and review of procedures and continues training for personnel	Procedure for harvesting, certificate of trainings of personnel, inspection records
Packing Facility Operations						

Receiving of Harvested Crops	Microbiological Contamination from personnel handling the crop	Contaminated produce can affect the consumer's health	Presence of *Salmonella, E Coli* and other pathogens	All staff trained on Good hygienic practices. Personnel Hygiene procedures in place	Inspection and review of procedures and continues training for personnel	Procedure for harvesting, certificate of trainings of personnel, inspection records
Washing at the packing area	Microbiological Contamination from wash water	Contaminated produce can affect the consumer's health	Chlorine level (ppm) in washing tub pH level of water	Setting of limit for allowable level of Chlorine concentration and pH in the washing tub (allowable limit). Calibration of measuring equipment. Water Analysis	Inspection and review of procedures, monitoring of chlorine and pH level, checking of the results of water analysis	Procedures, records of measuring equipment calibration and inspection & monitoring records
Washing at the packing area	Microbiological Contamination from wash water and personnel handling the crop	Contaminated produce can affect the consumer's health	Presence of *Salmonella, E Coli* and other pathogens	All staff trained on Good hygienic practices. Personnel Hygiene procedures in place	Inspection and review of procedures and continues training for personnel	Procedure for washing, certificate of trainings of personnel, inspection records
Post-harvest treatment *(Application of Chemicals)*	Chemical contamination from overused crop protection product (pesticide residue)	Contaminated produce can affect the consumer's health	MRL for Fungicides used	Trained workers/applicator only permitted to use chemicals for postharvest treatment. Chemical records are kept on file. Judicious use of chemicals(fungicides)	Inspection and review of records Monitoring of MRL of each chemical	Chemical application records/ inventories/procedure for application of pesticides/ Pesticide Management Manual

Packing of Produce	Microbiological Contamination from personnel handling the crop.	Contaminated produce can affect the consumer's health	Presence of *Salmonella, E Coli* and other pathogens	Personnel entering the facilities are inspected and trained to practice good hygiene. Personnel Hygiene procedure in place. Proper instructions are visible to all staff and visitors.	Inspection, review of procedures and records	Procedures and monitoring records
Packing of Produce	Microbiological Contamination from the materials used for packing	Contaminated produce can affect the consumer's health	Presence of *Salmonella, E Coli* and other pathogens	All crates, materials used for packing are regularly sanitized	Inspection and Regular checking of packaging/packing materials used	Procedures, records of packing and monitoring records
Packing of Produce	Physical Contamination from personnel with no PPEs (mask, hair net, gloves)	Contaminated produce can affect the consumer's health	Presence of physical hazards	Personnel entering the facilities are inspected and trained to wear proper PPEs. Personnel Proper Hygiene procedure in place. Proper instructions are visible to all staff and visitors.	Inspection and review of procedures, records, regular checking of packing area and personnel's hygiene	Procedures, records of packing and monitoring records
Storing of produce in the warehouse or storage	Microbiological Contamination from uncleaned storage and unmonitored temperature level	Contaminated produce can affect the consumer's health	Temperature at the storage area Presence or Growth of Microbial pathogens	Setting of allowed temperature limit to avoid the growth of microbial contaminants	Inspection and review of procedures, monitoring of temperature level	Procedures, records of measuring equipment calibration and inspection & monitoring records

Transporting	Microbiological Contamination from uncleaned transport vehicle	Contaminated produce can affect the consumer's health	Presence of *Salmonella, E Coli* and other pathogens	Sanitation for all vehicle used for transporting of produce.	Inspection and review of procedures, records, regular checking of vehicle	Procedures, records of inspection and monitoring

Prepared by:

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Designated Staff