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**SUBJECT:** Food Defense Plan Guide

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## **DEVELOPING A FOOD DEFENSE PLAN – A GUIDE**

While currently there is not a U.S. Department of Agriculture (USDA) requirement that agencies administering USDA commodities have a Food Defense Plan, it is recommended. All agencies should take precautions by developing and implementing a Food Defense Plan to safeguard their food supply.

This guide is being provided to help all the Recipient Agencies, school, TEFAP, etc., and warehouses understand the need for securing and protecting food operations from bioterrorism and to assist them in drafting a food defense plan. At the end of this guide, we have listed a number of publications that may provide additional assistance and suggestions. While most of these are geared specifically toward school food service and warehouse operations, TEFAP agencies may find some of the information helpful as they develop their own plans.

### **What is Food Defense?**

Food defense (or food biosecurity) and food safety are not the same thing. Food defense focuses on protecting the food supply from intentional contamination with a variety of chemicals, biological agents or other harmful substances by people intent on causing harm.

Food safety addresses the accidental contamination of food products during processing or storage by biological, chemical or physical hazards. The main types of food safety hazards are microbes, chemicals and foreign objects.

Recipient Agencies and warehouses are encouraged to assess their agency's vulnerabilities and develop a written Food Defense Plan that spells out policies and procedures that minimize the risk of intentional contamination of food.

### **Why Develop a Food Defense Plan?**

A Food Defense Plan helps agencies identify steps that can be taken to minimize the risk that food products under their control will be intentionally contaminated or tampered with. A plan increases preparedness. Although there should be a plan in place at all times, it may be particularly helpful during emergencies. During a crisis, when stress is high and response time is at a premium, a documented set of procedures improves employees' ability to respond quickly and provides a step by step reminder of action that needs to be taken. A Food Defense Plan helps maintain a safe working environment for the employees and volunteers and safeguards food items.

This guide has been developed to assist Recipient Agencies in developing a cost-effective Food Defense Plan that specifically addresses the needs of their facilities, sites, etc. By completing the appropriate pages, agencies will have created your functional plan. Not everything contained in this document may be appropriate or practical for every facility. We encourage all the agencies

to review this guidance and determine which preventive measures suit their operation and develop a plan that best meets their needs.

### **Who Might Adulterate a Food Product?**

Threats can come from an internal source as well as an external one. Examples of the types of individuals who might be motivated to adulterate food products include disgruntled employees, cleaning crew, contractors, temporary employees and volunteers, members of terrorist or activist group, truck drivers, suspect suppliers, visitors, etc.

### **Steps in Developing a Food Defense Plan**

We recommend using the following steps when developing a Food Defense Plan. Following and completing the steps and forms provided as a template, will assist the Recipient Agencies in developing a plan for their own facilities.

#### **Step 1 – Conduct a Food Defense Assessment**

Choose a person or team to be responsible for the Food Defense Plan. As they conduct their assessment to identify the vulnerable areas, they must consider potential internal and external threats. The assessment should look for vulnerable points in the establishment and determine what the risk factor is for each point. The results of the assessment should be kept confidential and shared on a “need to know” basis only.

Team members read each question on the Facility Food Defense Assessment and check the response that best describes how their agency operates. Not all questions will be appropriate for all facilities. If a question does not apply, check “N/A”. An answer of “No” to a question is a sign that additional security measures may be needed.

#### **Step 2 – Develop a Food Defense Plan**

Once vulnerable areas or procedures have been identified, it’s time to develop cost-effective preventive actions that can be taken to minimize those vulnerabilities. At a minimum, the Food Defense Plan should address:

- Storage security
- Shipping and receiving security
- Water and ice supply

Once the defense measures have been identified, it’s time to create a written plan to implement the defense measures. Review the questions on the Facility Food Defense Assessment form. For each item responded with a “No” answer, develop a potential security measure. Once the security measures have been identified, prioritize them by giving them a rating of high, medium, or low. Develop a schedule for implementing each one based on its priority rating. Identify the person responsible and the target date for implementing each corrective action. Make sure each person clearly understands what is required to complete the assigned tasks, when each task

should be completed, and who will be responsible for implementing each task. As each task is completed, this should be noted.

### **Step 3 – Implement the Food Defense Plan**

The Food Defense Plan is implemented when the defense measures in the plan are in place and used as intended. Key elements of an effective plan implementation include assigning responsibilities, training staff, conducting drills, developing contact lists, and checking any recall plan. Once the Food Defense Plan has been written, answer the questions on the Food Defense Plan Checklist to help ensure that it is functional and up-to-date.

Assigning Responsibilities. Each individual's food defense responsibilities should be clearly stated in the plan. If possible, assign responsibility for food defense to a single employee who understands the security requirements.

Staff Training. Train staff and volunteers, if applicable, on all provisions of the plan to ensure they are aware and know their responsibilities. Training should address access control procedures, access to restricted areas, protecting critical components, and procedures for reporting suspicious activities.

Plan Testing. Test and verify the effectiveness of the plan periodically and at least annually to evaluate the effectiveness of the defense measures. Document findings, the corrective action taken to prevent from occurring again, date and name of person responsible for implementing.

Food Defense Plan Evaluation and Revision. Ensure that the defense measures implemented continue to be effective. Review the plan at least once a year and revise as needed.

Emergency Contact Numbers. The Plan should include current contact information for all employees, including upper management, and volunteers, local law enforcement (police/sheriff departments), county health department, suppliers, Florida Division of Emergency Management State Warning Point (800-320-0519), and any other deemed appropriate.

### **Other Resources For Assistance in Developing Food Defense Plan**

#### Schools Food Authorities:

School Food Authorities (SFAs) are encouraged to review the USDA's Food and Nutrition Services "A Biosecurity Checklist for School Foodservice Programs – Developing a Biosecurity Management Plan". It is an excellent source of information for SFAs writing their plan.

<http://healthymeals.nal.usda.gov/hsmrs/biosecurity.pdf>

School Food authorities only: The National Food Service Management Institute, Biosecurity Checklist for School Food Service Programs website, allows SFAs to customize the USDA's "Biosecurity Checklist for School Foodservice Programs" for their own program. Provides a mechanism for schools to develop their own program using the forms and templates provided.

<http://foodbiosecurity.nfsmi.org/index.php>

TEFAP Recipient Agencies:

Review the guidance provided by the Food and Drug Administration in their publication “Retail Food Stores and Food Service Establishments: Food Security Preventive Measures Guidance”. In addition to retail food stores, it provides guidance to operators of food service establishments such as food banks and church kitchens. <http://www.cfsan.fda.gov/~dms/secgui11.html>

Although not all the elements may be relevant to non-school RAs, TEFAP agencies may find helpful some of the suggestions and checklists in the USDA’s Food and Nutrition Services “A Biosecurity Checklist for School Foodservice Programs – Developing a Biosecurity Management Plan”. <http://healthymeals.nal.usda.gov/hsmrs/biosecurity.pdf>

Warehouses:

For information, check the Food and Drug Administration’s publication “Importers and Filers: Food Security Preventive Measures Guidance”. This guidance is designed to assist operators of food storage warehouses as well as food importing establishments and filers. It identifies the kinds of preventive measures that they may take to minimize the risk that food under their control will be subject to tampering or other malicious, criminal or terrorist actions. <http://www.cfsan.fda.gov/~dms/secguid7.html>

**STEP 1 - FOOD DEFENSE ASSESSMENT**  
**OUTSIDE SECURITY**

1. What food defense measures does your agency have in place for the exterior of the building?

	YES	NO	N/A
Are the agency's grounds secured to prevent entry by unauthorized persons ( <i>e.g.</i> by locked fence, gate or entry/exit doors)?			
Is there enough lighting outside the building to properly monitor the facility at night/early morning?			
Do emergency exits have self-locking doors and/or alarms?			

2. Are the following secured with locks, seals, or sensors when unattended (after hours/weekends) to prevent entry by unauthorized persons?

	YES	NO	N/A
Outside doors and gates?			
Windows?			
Roof Openings?			
Vent Openings?			
Trailer (truck) bodies?			
Railcars?			

3. Does your facility have food defense procedures for people and/or vehicles entering the site and/or parking in your lot?

	YES	NO	N/A
Does the property have a controlled or guarded entrance?			
Are <u>employee/volunteer</u> vehicles identified using placards, decals, or some other form of visual identification?			
Are authorized <u>visitor/guest</u> vehicles identified using placards, decals, or some other form of visual identification?			

**GENERAL INSIDE SECURITY**

4. Does your facility have food defense measures inside the establishment?

	YES	NO	N/A
Is there an emergency lighting system in the facility?			
Does your facility have <u>monitored</u> security cameras (CCTV)?			
Does your facility have an emergency alert system that is tested <u>regularly</u> ?			
Are the locations of controls for emergency alert systems clearly <u>marked</u> ?			
Are all restricted areas (i.e., areas where only authorized employees <u>have access</u> ) clearly <u>marked</u> ?			
Are visitors, guests, volunteers and other non-employees ( <i>e.g.</i> contractors, salespeople, truck drivers) restricted to non-product areas <u>unless accompanied by an authorized employee</u> ?			
Does local law enforcement (including the fire department) have <u>up-to-date copies of facility layouts/blueprints</u> ?			
Are procedures in place to check toilets, maintenance closets, personal <u>lockers, and storage areas for suspicious packages</u> ?			
Do you regularly take inventory of potentially dangerous tools and <u>utensils (e.g., knives)</u> ?			
Do you regularly take inventory of keys to secured/sensitive areas of <u>the facility</u> ?			
Do you recover all keys, uniforms, and identification badges from <u>former employees or volunteers</u> ?			
Are ventilation systems constructed in a manner that provides for <u>immediate isolation of contaminated areas or rooms</u> ?			

5. Are the controls for the following systems restricted (*e.g.*, by locked door/gate or limiting access to designated employees) to prevent access by unauthorized persons?

	YES	NO	N/A
Heating, Ventilation, and Air Conditioning systems?			
Propane Gas?			
Water Systems?			
Electricity?			
Disinfection systems?			
Clean-in-place (CIP) systems or other centralized chemical systems?			

6. Does your facility have food defense procedures in place for its computer systems?

	YES	NO	N/A
Is the access to the system password-protected?			
Are firewalls built into the computer network?			
Is the system using a current virus detection system?			

**STORAGE SECURITY**

7. Which of the following food defense procedures does your facility have in place for its storage areas?

	YES	NO	N/A
Is access to raw product storage areas, including cold and dry storage areas restricted ( <i>e.g.</i> , by locked door/gate or other) to designated employees?			
Is an access log maintained for product storage areas?			
Do you conduct regular security inspections of storage facilities (including temporary storage vehicles)?			
Do you maintain records on facility security inspections results?			
Is the inventory of restricted ingredients (i.e., nitrites, etc.) checked against the actual use of such ingredients on a regular basis?			
Is the inventory of products regularly checked for unexplained additions and withdrawals from existing stock?			
Do you have procedures to discard food or ingredients that are not properly sealed and labeled?			

8. Which of the following food defense procedures does your facility have in place for the storage of hazardous materials/chemicals such as pesticides, industrial chemicals, cleaning materials, sanitizers and disinfectants?

	YES	NO	N/A
Is the access to inside and outside storage areas for hazardous materials/chemicals such as pesticides, industrial chemicals, cleaning materials, sanitizers and disinfectants restricted in some manner to allow use by designated employees only?			
Is a regular inventory of hazardous materials/chemicals maintained?			
Are discrepancies in daily inventory of hazardous materials/chemicals immediately investigated?			
Are the storage areas for hazardous materials/chemicals constructed and safely vented in accordance with national or local building codes?			
Are hazardous chemicals stored away from food storage and preparation areas?			
Is a procedure in place to receive and securely store hazardous chemicals?			
Are employees trained to use chemicals properly to prevent accidental contamination and human exposure?			
Is a procedure in place to control disposition of hazardous chemicals?			

**SHIPPING AND RECEIVING SECURITY**

9. Does your facility have food defense procedures in place for its shipping and receiving operations?

	YES	NO	N/A
Are trailers on the premises maintained under lock and /or seal when not being loaded or unloaded?			
Is the loading and unloading of vehicles transporting food products closely monitored?			

10. Does your facility have food defense procedures in place for handling outgoing shipments?

	YES	NO	N/A
Are outgoing shipments sealed with tamper-evident seals?			
Are the seal numbers on outgoing shipments documented on the shipping documents?			

11. Which of the following food defense procedures does your facility have in place for handling incoming shipments?

	YES	NO	N/A
Is access to loading docks controlled to avoid unverified or unauthorized deliveries?			
Is advance notification from suppliers (by phone, email or fax) required for all incoming deliveries?			
Are suspicious alterations in the shipping documents immediately investigated?			
Are all deliveries checked against the roster of scheduled deliveries?			
Are unscheduled deliveries held outside facility premises pending verification?			
Are off-hour deliveries accepted?			
If off-hour deliveries are accepted, is prior notice of the delivery required?			
If off-hour deliveries are accepted, is the presence of an authorized individual to verify and receive the delivery required?			
Are less-than-truckload (LTL) or partial load shipments vehicles checked?			
Are incoming shipments inspected at the receiving dock for evidence tampering?			
Are seals on delivery trucks checked?			
Are the seal numbers verified with the Bill of Lading?			

	YES	NO
12. Does the facility allow returned goods to enter the site? If answer is no, skip to #14.		

13. Which of the following food defense procedures does this facility have in place for returned goods?

	YES	NO	N/A
Are all returned goods examined at a separate designated location in the facility for evidence of possible tampering?			
Are records maintained of returned goods?			

**WATER AND ICE SECURITY**

14. Which of the following food defense procedures does your facility have in place for its water and ice supply?

	YES	NO	N/A
Is access to outside water supply restricted? ( <i>e.g.</i> , by locked door/gate or limiting access to designated employees)			
Is access to ice-making equipment restricted?			
Is access to ice storage facilities restricted?			
Is access to storage tanks for potable water restricted?			
Are <u>potable</u> water lines periodically inspected for possible tampering? (i.e., visual inspection for physical integrity or infrastructure etc.)?			
Are <u>non-potable</u> water lines inspected for possible tampering (i.e., visual inspection for physical integrity of infrastructure, connection to <u>potable lines</u> , etc.)?			
Have arrangements been made with local health officials to ensure immediate notification of the facility if the potability of the public water supply is compromised?			

**PERSONNEL SECURITY**

15. Which of the following food defense procedures does your facility have in place for ensuring that personnel adhere to the security requirements?

	YES	NO	N/A
Are background checks conducted on all employees and contractors (both permanent and seasonal) who will be working in sensitive operations?			
Do all facility employees receive training on security procedures as part of their orientation training?			
Are employees, visitors, and contractors (including construction workers, cleaning crews, and truck drivers) identified in some manner at all times while on the premises?			
Does your facility control access by employees/volunteers and contractors entering the site during <u>working</u> hours ( <i>e.g.</i> coded doors, receptionist on duty, swipe card, etc.)?			
Does your facility control entry of employees/volunteers and contractors into the site during <u>non-working</u> hours ( <i>e.g.</i> , access limited by key card or code number)?			
Does your facility have a way to restrict temporary employees/volunteers and contractors (including construction workers, cleaning crews, and truck drivers) to areas of the site relevant to their work?			
Is there some manner to identify personnel with their specific functions/assignments/departments ( <i>e.g.</i> , corresponding colored uniforms)?			
Is an updated shift roster (i.e., who is absent, who the replacements are, and when new employees are being integrated into the workforce) kept by management for each shift?			
Does your facility allow personal items within production areas?			
Do you inspect employee lockers?			
Are employees and/or visitors restricted as to what they can bring into the facility?			
Are employees prohibited from removing company-provided clothing or protective gear from the premises?			
Do you have an emergency contact list of authorities?			
Do you have procedures for communicating with the public, media, etc. when necessary?			



**Examples of Potential Vulnerabilities and Food Defense Measures**

<b>PROCESSING SECURITY</b>	
<b>Sample Vulnerabilities</b>	<b>Potential Food Defense Measures</b>
Temporary employees with access to critical process areas.	Train permanent employees on food defense to raise their food defense awareness. Consider the use of color-coded uniforms, hats, jackets, etc. ( <i>e.g.</i> blue uniforms only in raw product area).

<b>STORAGE SECURITY</b>	
<b>Sample Vulnerabilities</b>	<b>Potential Food Defense Measures</b>
Cleaning supplies, pest control chemicals and other hazardous material may become agents.	Secure access to all points of building entry during non-operating hours. Control use and storage of hazardous materials by locking in area away from other inventory. Allow access to only those who should have access.

<b>SHIPPING AND RECEIVING SECURITY</b>	
<b>Sample Vulnerabilities</b>	<b>Potential Food Defense Measures</b>
Truck drivers on dock with access to plant	Have drivers sign-in and escort them at all times while inside the facility.

<b>WATER AND ICE SECURITY</b>	
<b>Sample Vulnerabilities</b>	<b>Potential Food Defense Measures</b>
Threat agents are introduced into ice used in emulsification or other applications.	Secure ice storage facilities.

STEP 2 - FOOD DEFENSE PLAN

For

Agency Name \_\_\_\_\_

Area	Identified Vulnerability	Planned Defense Measure to Counter Vulnerability
Outside Security		
Inside Security		
Storage Security		
Shipping/Receiving Security		
Water/Ice Security		
Personnel Security		

**STEP 3 - IMPLEMENT THE FOOD DEFENSE PLAN**

	YES	NO	N/A
Is there a designated person or team to implement, manage and update the Food Defense Plan?			
Have appropriate personnel been trained in food defense?			
Do you conduct regular food defense drills?			
Is the Food Defense Plan reviewed (and revised if necessary) periodically?			
Are the details of food defense procedures kept confidential?			
Is the emergency contact information for local, state, and federal government homeland security authorities and public health officials included in the food defense plan?			
Is the contact information reviewed and updated regularly?			
Have you or someone in you facility initiated contact with these authorities?			
Are procedures for responding to <u>threats</u> of product contamination included in the plan?			
Are procedures for responding to <u>actual incidents</u> of product contamination detailed in the plan?			
Does the plan have procedures to ensure that adulterated or potentially harmful products are held at the facility?			
Does the plan have procedures for handling and disposal of contaminated products according to your local EPA authorities?			
Are employees encouraged to report signs of possible product contamination, unknown or suspicious persons in the facility, or breaks in the food defense system?			
Does the plan contain evacuation procedures?			
Are procedures in place to restrict access to the facility to authorized personnel only during an emergency?			
Does the facility have a documented recall plan that is updated regularly and ensures the segregation and proper disposition of recalled products?			

**QUARTERLY/YEARLY PLAN TESTING**

DATE	AREA TESTED	RESULTS	SIGNATURE	CORRECTIVE ACTION TAKEN	DATE ACTION TAKEN	SIGNATURE

**FOOD DEFENSE PLAN ASSESSMENT AND REVISION**

DATE	REASON FOR ASSESSMENT				SIGNATURE	

**EMERGENCY CONTACT NUMBERS**

PERSON, AGENCY OR ORGANIZATION	PHONE NUMBER
Facility/Site Emergency Contact	
Local Police Department	
Local FBI Office - Weapons of Mass Destruction Coordinator	
City/County Department of Health	
State Department of Health	
State Department of Emergency Response or Homeland Security	
USDA Food Safety and Inspection Service (FSIS) District Office	
FSIS Inspector in Charge (IIC)	
Suppliers	
Customers	
Other	