



**Guidelines
to the risk management
during post harvesting,
storing and transportation
of organic commodities**

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WHO IS ADRESSED WITH THESE GUIDELINES?



The **ORGANIC EXPORTER**

These guidelines are designed to help organic operators engaged in organic production and export to identify and better manage risk factors, which could appear during storing, transportation and handling organic commodities.



The **ORGANIC IMPORTER**

These guidelines are also helpful for the importer of organic products to understand and early evaluate any risks in the organic supply chain with which the importer plans to operate.

 **ORGANIC COMMODITIES (PRODUCTS)** used herein cover only organic arable crops (cereal, legumes and oil crops) including the products of their processing.

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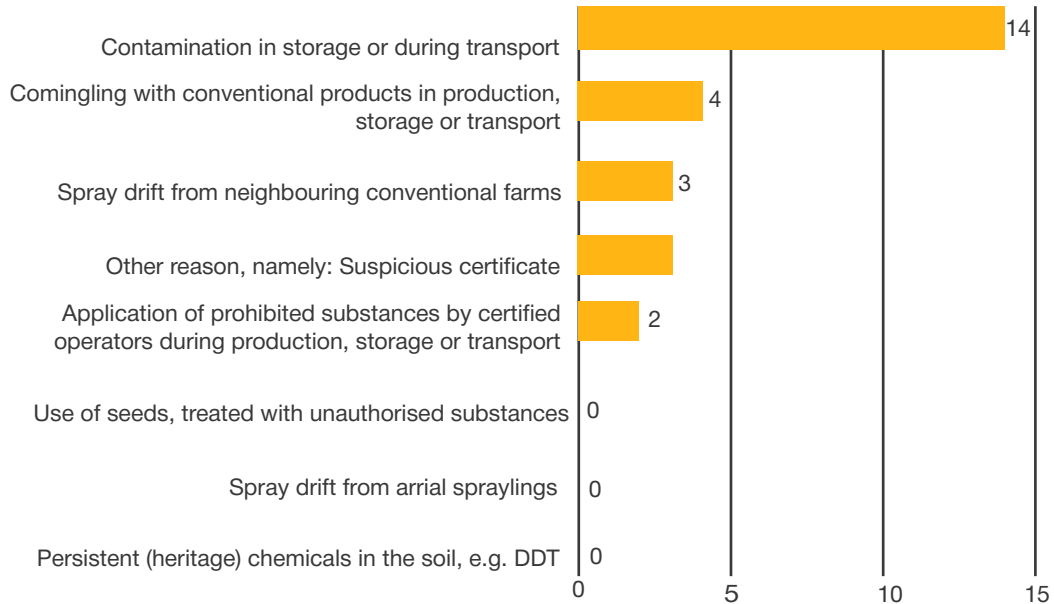
INTRODUCTION

The organic market is growing rapidly all across the world. The steady increasing demand for organic products has encouraged producers and other market actors to initiate or increase business activity in the organic raw material and processed food sector.

Meanwhile, organic supply chains have become longer, more complex and more diversified. Ukraine, with its large extension of land that can be used for agriculture as well excellent natural condition demonstrates a good potential for becoming one of the leading organic suppliers in the world. Keeping organic products from Ukraine residue-free along the whole supply chain is the responsibility and challenge for all organic operators involved in the value chain.

According to the certification bodies operating in Ukraine, product contamination during storing and transportation is the most frequent cause for irregularities found in the Ukrainian organic products for 2016 that arrive in the EU countries (see Figure 1).

Figure 1: Likely root causes of irregularities with Ukrainian organic imports, which are notified in the EU Organic Farming Information System (OFIS) for 2016.



PRACTICAL CASE 1

REASON FOR CONTAMINATION: the organic products were contaminated during storage at the group warehouse.

SOURCE OF CONTAMINATION: the non-organic products stored nearby.

SITUATION: the organic products were stored at a leased and isolated warehouse. There were some other warehouses nearby in which non-organic products placed by the other companies had been stored. In the course of storage, the door to the warehouse in which the organic products were stored was left open. The warehouses located nearby were cleaned and as a result of the doors left open, the dust containing unauthorized substances from the cleaning agents used settled on the organic products.

PRACTICAL CASE 2

REASON FOR CONTAMINATION: using the old warehouses.

SOURCE OF CONTAMINATION: a probable source is warehouse dust.

SITUATION: the organic company affected did not have its own infrastructure. The company collected the organic crop for the first time and leased a warehouse to store its organic products. The warehouse history was unknown. Before receiving the organic products, the warehouse underwent dry cleaning and white washing procedures. The dust samples were not tested due to lack of funds, and neither were fumigation procedures conducted at the warehouse. The certification body took the dust samples in the warehouse where the residues of active ingredients of insecticides were found. As a result, the residues of Actellic (an insecticide) were found in the products.

PRACTICAL CASE 3

REASON FOR CONTAMINATION: low level of knowledge of the personnel.

SOURCE OF CONTAMINATION: mixing organic and non-organic products.

SITUATION: this organic company is a member of the agricultural holding. The company does not have its own warehouses but plans to store the products at the warehouses which are used for storing the non-organic products grown within the agricultural holding. The warehouse was prepared for storing the organic products. Then an emergency situation occurred at the agricultural holding and the personnel were not properly informed. As a result, non-organic products were shipped to the same warehouse where the organic products were stored, and as a consequence the products were mixed. In the end, the organic crop lost its status.

Using this information as a starting point, this publication provides the reader with practical information and advice to avoid product contamination. In preparing this publication, up-to-date information and practical experience provided by different organic experts (exporters, representatives of certification bodies, local and international organic consultants) were gathered. These guidelines will enable organic exporters and importers to better understand the main risks associated with post harvesting processes and handling of organic commodities. In addition, the publication provides recommendations on assessing the risks involved as well as how to safeguard organic supply chains by creating an efficient Organic Risk Management System as part of the overall Quality Management System.

THESE GUIDELINES WILL PROVIDE:



Knowledge about the **challenges** involved with keeping organic commodity supply chains free from residues from the harvest to the final processor.



An overview of typical **risk factors** which may affect the **organic quality and status** of organic products.



Recommendations on setting up an efficient organic risk management system along the supply chain.



PART I. ORGANIC RISK MANAGEMENT

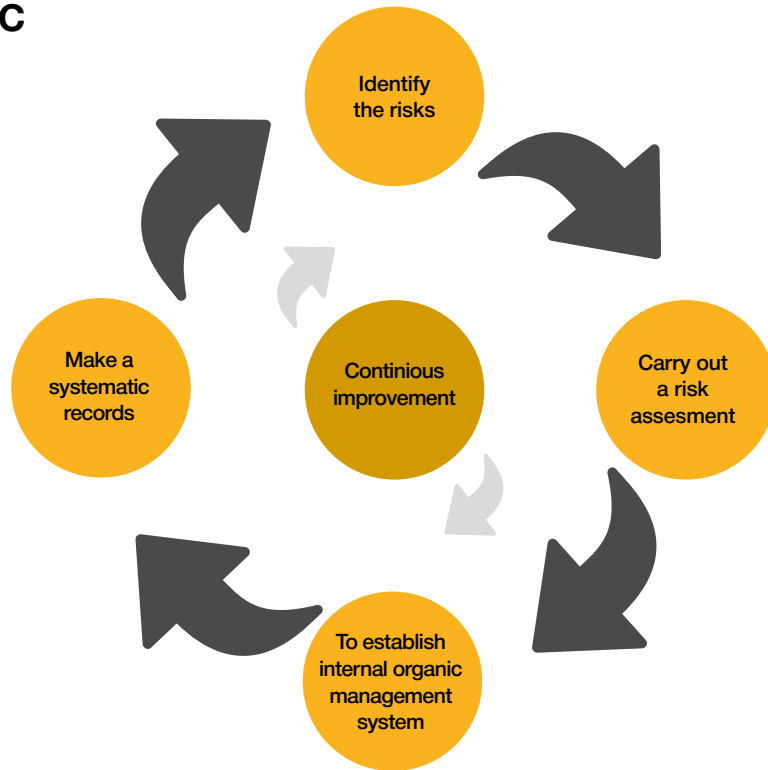
WHAT MAKES ORGANIC PRODUCTS DIFFERENT?

Organic products are different to other agricultural products for many reasons. The consumers of organic products are promised that they are buying food, which was not only produced in a way that protects the environment and maintains soil fertility, but is also healthy because it does not contain chemical residues. In order to keep this promise, there are special requirements regarding organic production and trade, which are defined in so-called organic standards. Hence, dealing with organic commodities requires special care in order to avoid any contamination by internal and external factors along the supply chain during the post harvest operation, which could affect the quality status of organic products. On the one hand, the organic production system is quite well regulated and strictly controlled. However, on the other hand, the standards contain little detailed information and few guidelines that an organic company could use as an instrument for designing and implementing an efficient organic risk management system.

DEFINITIONS:

ORGANIC STANDARDS - are legal acts, which contain specific and obligatory requirements that need to be met to sell products with organic labels. Organic standards differ depending on their status (international, national, private) and the respective market. In this publication, the term Organic Standards refers only to three such standards: EU Organic Regulations, USDA NOP Organic (USA) and Bio Suisse Private Standards (Switzerland).

4 SIMPLE STEPS TO ELABORATE AN EFFECTIVE ORGANIC RISK MANAGEMENT



More information about applicable Organic Standards are given in Annex 1 in these Guidelines

HOW TO MANAGE THE SPECIFIC RISKS WITH ORGANIC COMMODITIES?

Agricultural operators and traders often work in the environments surrounded by chemicals, which can easily contaminate organic commodities easily that were produced without using of any synthetic substances. In order to minimize the risk of contamination with prohibited substances, each company involved in the supply chain has to assume part of responsibility for keeping products residue free and thus maintaining its organic quality. Hence, it is important that every operator involved into the chain have sufficient knowledge and understanding about the potential risk factors within the own part of the supply chain (for example during storing, transportation or handling organic products). Therefore, the task of all organic operators is not only to know about relevant risks but also to control and prevent them.

DEFINITIONS:

RISK is a threat, that a batch of organic products could be harmed or contaminated at any stage of the supply chain, for example during storing, handling or transport.

RISK ASSESSMENT – is a careful examination of what factors along the supply chain could cause organic products to become contaminated in such a way that it could lead to a downgrade to conventional quality. Based on a risk assessment, an operator can judge, whether they have taken enough precautions to prevent contamination.

ORGANIC RISK MANAGEMENT SYSTEM – is a systematic, stepwise approach to conducting a risk assessment, enabling an operator to analyze and assess probable risk categories and to safeguard the organic supply chain from any potential risks and unpredictable consequences.

SYSTEMATIC RECORDS - are all operations and processes defined by an organic risk management system need to be written down in the internal documentation and the staff need to be trained in taking these records.

WHY IS IT IMPORTANT TO IDENTIFY AND MANAGE RISKS?



LEGAL REASONS

Organic regulations require that a risk assessment is carried out and a Quality Management System has to be implemented. The Organic Risk Management System is a part of the total Quality Management System. The presence and implementation of Quality Management Systems are subject to inspection by certification bodies and authorities.



FINANCIAL AND REPUTATION REASONS

There is considerable evidence by practitioners that an effective organic risk management helps minimize unpredictable financial losses. Each organic entity within an organic supply chain is under inspection and bears part of the responsibility of ensuring that unintentional negligence leads to a collapse of the whole supply chain. This can lead to the reputation of a company or the entire organic sector being damaged.



MORAL AND ETHICAL REASONS

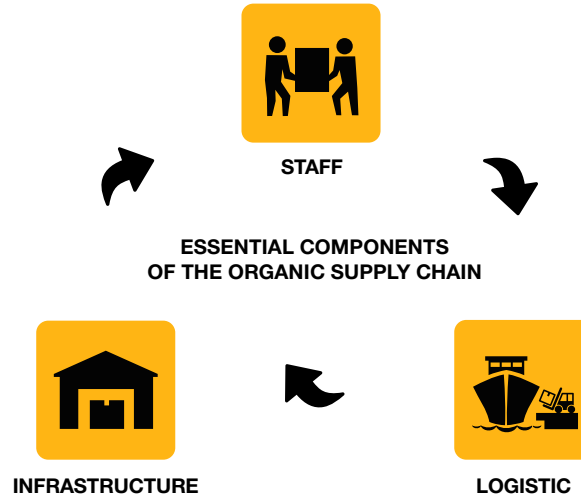
With an effective Organic Risk Management System in place, an organic operator sends a positive signal to other participants in the organic supply chain, helping them to be aware of possible risks and giving them a chance to assume responsibility and take action.



PART II. SUPPLY CHAINS

WHAT ARE ESSENTIAL COMPONENTS OF ORGANIC SUPPLY CHAIN?

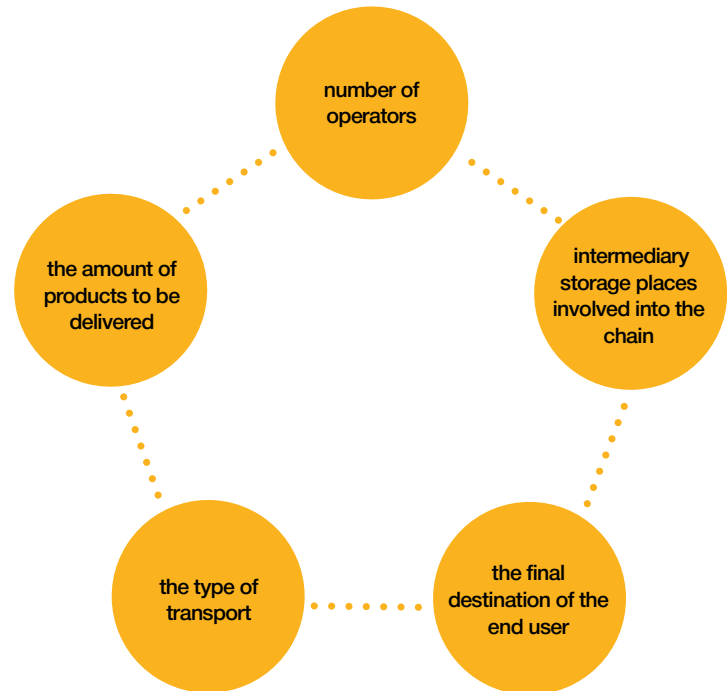
Each supply chain regardless its complexity, includes essential components, such as infrastructure, logistics and staff, which play a very important role in maintaining and controlling the organic quality and carrying out risk management.



WHAT MAKES ORGANIC SUPPLY CHAINS UNIQUE?

Organic supply chains can be quite heterogeneous. Taking into account possible risks factors, the managerial staff has to choose the safest and most appropriate supply chain. Let us imagine a farmer who has 1,000 tons of organic wheat to sell. Such an amount of wheat would be interesting to an intermediate buyer who would sell it in containers and transport via ships. The best option for a farmer to secure the organic quality of their product and maintain his reputation would be to sell the whole harvest in trucks and directly to end-processors. In doing so, the farmer secures their product and minimizes the risk of unpredictable contamination.

The supply chains may differ depending on:



WHAT IS THE SAFEST ORGANIC SUPPLY CHAIN?

LOWER RISK
SUPPLY CHAIN

■ **THE DIRECT SUPPLY CHAIN** represents the ideal scenario in which the products are packed into big bags and sealed directly at the producer's production facilities. These big bags are loaded into trucks or containers, which are delivered directly to the final processor, within the same country or abroad. This type of shipment is considered to be the safest of supply chains due to a small number of intermediary actors and activities involved and, a very low risk of contamination with prohibited substances. Small and medium organic producers mostly use direct supply chains in Ukraine.



Figure 2 : Direct supply chain

NOTE: Organic standards do not prohibit bulk transport in trucks, but this practice is not usual and recommended.

■ **INDIRECT SUPPLY CHAIN** is considered as medium risk chain. In this case, products are not packed and sealed at the producer's own facilities, but at the place of the trader or a logistic company. In indirect supply chain, products can be delivered in big bags in trucks or in containers using different means of transportation. The route covered by a products on their way from the producer to an end buyer thus becomes longer as there are more steps in the transport process. Such a chain could involve a number of intermediate buyers, either local or foreign. In these cases, the risk of contamination is higher, because some other operators take part in the process, often use their own vehicles or ships for transport, and have their own warehouses and organic quality management systems.

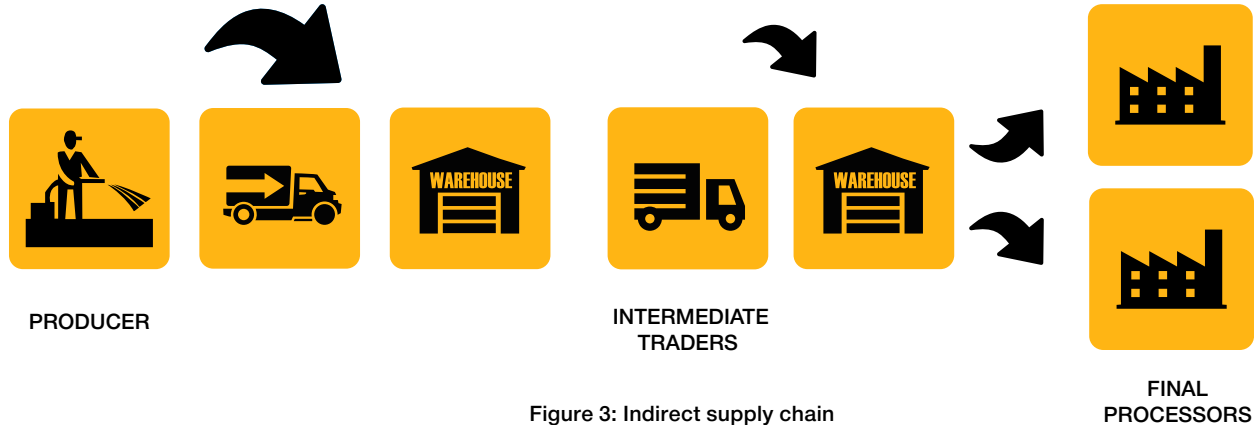


Figure 3: Indirect supply chain

**MEDIUM RISK
SUPPLY CHAIN**

HIGHER RISK
SUPPLY CHAIN

■ **THE SUPPLY CHAIN WHICH INVOLVE WATER LOGISTICS OF LARGE AMOUNTS OF PRODUCTS IN BULK** are considered as the riskiest supply chain for organic commodities leaving Ukraine. In this case, the risk increases because the products are trans-shipped in bulk through harbor terminals, which are also used for non-organic products. In addition, such chains usually involve several intermediate traders.

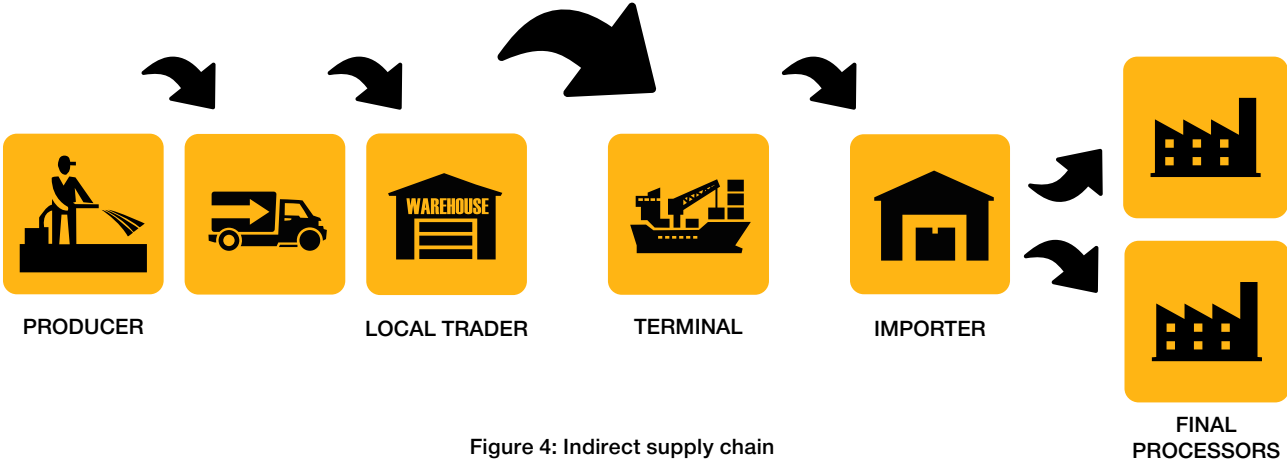


Figure 4: Indirect supply chain

TABLE 1: OVERVIEW OF SUPPLY CHAINS

In the table given not all sources of contamination, but the most typical ones.
Each real supply chain should be assessed individually.

Type of value chain	Primary mode of transport	Packaging used	Intermediary steps between producer and customer (complexity)	Contamination risk level	Potential sources of contamination	Size of Delivery/ (lot)
Direct	Truck	BigBag	None	Low	Big-bag damaged during transportation	Small and medium
Indirect	Truck	Big Bag	Intermediate buyers and warehouses	Medium	<ul style="list-style-type: none"> - Unclean intermediate storage facilities. - Equipment used by sub-contractors - Not trained/prepared personnel in terms of «Organic» 	Medium and large

Type of value chain	Primary mode of transport	Packaging used	Intermediary steps between producer and customer (complexity)	Risk level for contamination	Potential sources of contamination	Size of Delivery/ (lot)
Indirect	Ship	Container/bulk in liner-bag	Storage place of the logistic company	High	<ul style="list-style-type: none"> - Equipment used by the company during loading into trucks for delivery to the storage place of the logistic company - Cleanliness of trucks used for delivering in bulk - Equipment used by the logistic company during stuffing - unclean containers (or those which previously carried contaminating cargoes) - Broken liner- bag - Storage place of the logistic company - Untrained/prepared personnel at terminals 	Medium and Large
Indirect	Ship/Barge	Bulk	Intermediate storage in terminals in and outside Ukraine	High	<ul style="list-style-type: none"> - Equipment used by the company during loading into trucks for delivery to the storage at the terminal - Trucks' (used for delivery in bulk) cleanliness - Storage at the terminal, equipment used for loading at terminals, -Not properly cleaned barges for transshipment -Not properly cleaned holds of the vessel - Not trained/prepared personnel at terminals and vessel 	Very large

Traded goods, which are transported by railway is not covered by the publication due to a lack of experience for such deliveries in organic trade.

In the context of this publication, batches are characterized by their sizes as follows: small batches 20 – 500 t, medium batches 500 - 1000 t, big batches more than 1,000 t. Not all possible sources of contamination are presented in the table, but the most typical and relevant ones.



**PART III.
RISK ASSESSMENT
AND ORGANIC RISK
MANAGEMENT**

WHAT ARE THE RISKIEST POINTS?

Based on experiences, the following five points during the post-harvest handling pose the biggest risk for contamination of organic products with unauthorized substances:



1. TRANSPORT
(ESPECIALLY LOCAL INTERMEDIATE TRANSPORTATION IN BULK)



2. STORAGE



3. EQUIPMENT



4. TERMINALS AND WATER SHIPMENT
(RELEVANT FOR TRANSPORT ON WATER)



5. NOT EDUCATED PERSONNEL

Every organic company has to analyze and detect the risks it may be exposed to and attempt to find the ways to avoid or reduce them. Establishing an Organic Risk Management System will not guarantee full avoidance of any risk but it will make it possible to identify the risks, determine their extents and control them.

THE ORGANIC RISK MANAGEMENT SYSTEM IS COMPRISED OF A GREAT NUMBER OF MEASURES, WHICH CAN BE SHOWED AS THE FOLLOWING SEQUENCE OF STAGES:

- ! Being aware of, figuring out the reasons for and extent of influence of the risk;
- ! Analyzing and assessing the risk: minimizing and limiting the risks with the help of corresponding methods of management;
- ! Controlling the level of risks using the feedback mechanism on a permanent basis.

III.1 LOCAL TRANSPORTATION (FROM THE FIELD TO STORAGE PLACE)

Once the harvested organic crops have been collected and have to be transported to the storage, the company needs to find suitable logistic solutions to be able to transport the products from point A to point B. According to Organic Standards, logistic companies are not subject to obligatory inspections within the certification process. Nevertheless, it is of utmost importance that the transport facilities used by even external logistic companies are thoroughly cleaned in advance and meet all the requirements for the transport of organic products. This thorough cleaning is definitely a “must have”, particularly when the transport facility is also used to transport goods other than organic commodities. Practical experience shows, that transport from the field to the intermediate or main storage facility is usually carried out using leased transport facilities or vehicles. Hence, products are transported in bulk. Such conditions may pose a high risk of cross-contamination of organic products due to the improper conditions resulting from insufficient cleaning of the transport facility. There is no single established procedure for “proper cleaning”. It is up to each organic company to develop its own cleaning procedure based on an evaluation of the conditions they usually encounter. Each cleaning procedure must also be accompanied with respective monitoring and control procedures.

According to the Organic Standards, logistic companies are not subject to obligatory certification.

WHAT ARE THE MAIN RISKS FOR CONTAMINATION OF ORGANIC PRODUCTS DURING TRANSPORT?



When a company's own transport vehicles and infrastructure used for organic products are also involved in non-organic activities;



When a subcontracted logistic company as well as its history of previous deliveries and product movement are unknown;



When products are transported in bulk;



When, during the loading process, the equipment used was previously involved in non-organic activities;










When re-usable packaging materials are used;



When packaging is damaged during transportation.

HOW CAN I MINIMIZE THE RISKS DURING PRODUCT TRANSPORT?

In order to minimize the risks during transport of organic commodities, the following processes must be included and described in the Organic Risk Management System:

-  Planning the availability of the company's own transport facilities to be used for the transportation of organic products only;
-  A plan to source additional safe transport options in case of emergencies when the main transport options cannot be used;
-  A clear criteria for preparing and authorizing the transport option (truck, rail car, etc.) to be used for the transport of organic food. This must be done for company own transport as well as rented/leased vehicles;
-  A procedure for monitoring and controlling the conditions and travel route of organic products transportation (for example, by using GPS trackers);
-  Training for all personell involved in transport operations and close control over the activities of these persons;
-  An internal notification and registration procedure to document all situations in which problems in the compliance with the company-established policies occur;
-  A procedure for analyzing these problems and implementing measures to try to avoid them in the future.

CRITERIA TO EVALUATE THE RISKS ARISING DURING TRANSPORT OF ORGANIC PRODUCTS:

- Whether transport vehicle and facilities are used for organic products only;
- Whether three last deliveries carried out by this transport option are known;
- Whether transport vehicle and facilities have been properly cleaned according to set procedure;
- Whether the cleaning has been done under close supervision and properly;
- Whether the cleaning procedure has been done under control;
- Whether organic products are packed in secured packages;
- Whether the personnel involved in the transportation and loading processes have been trained according to the organic requirements.






III.2 INTERMEDIATE WAREHOUSING OF ORGANIC COMMODITIES

Intermediate warehousing of organic commodities is one of the most common but least controlled places in Ukrainian organic supply chains. The fact that the products are stored in the facilities of a subcontracted company increases the risk of cross-contamination because conditions there are mostly not under control of the farmer.

WHAT ARE SOME EXAMPLES OF INTERMEDIATE WAREHOUSING?






- the open grain elevator owned by the company itself
- the temporarily leased storage facility belonging to another company
- any other location where organic crops could be stored for short periods

IN WHAT SITUATIONS CAN CONTAMINATION OF ORGANIC PRODUCTS OCCUR DURING INTERMEDIATE WAREHOUSING?

-  When non-organic products from other owners are located nearby;
-  When the same storage is used for organic and non-organic crops, often belonging to different operators;
-  When the history of storage place is unknown;
-  When the equipment is used for non-organic products as well;
-  When personnel of the subcontracted company are not or insufficiently trained in terms of organic requirements or motivated to follow the processes strictly.

HOW CAN I MINIMIZE RISKS IF I AM PLANNING TO USE AN INTERMEDIATE WAREHOUSE?

In order to minimize the risks during intermediate warehousing of organic commodities the following processes need to be described in the Organic Risk Management System:

-  Planning appropriate places for storage ahead of time, taking into account the amount of products to be stored;
-  Establishing the criteria for selecting subcontracted warehouse solutions and defining the requirements that these warehouses must meet;
-  Keeping careful records of all product movements;
-  Implementing the procedures for controlling storage conditions as well as ways for assessing the risk posed by these conditions with respect to possible contamination from the outside;
-  Providing training for the personnel involved in all processes of intermediate storage and monitoring their level of understanding and application of this knowledge.

CRITERIA TO EVALUATE THE RISKS ARISING DURING INTERMEDIATE STORAGE OF ORGANIC PRODUCTS:

- Whether the storage location is certified according to organic requirements;
- Whether the storage location was used for storing non-organic products in the past;
- Whether this storage location was fumigated shortly before organic crops entered it;
- Whether it was cleaned according to the procedure set by company;
- Whether the cleaning procedure was controlled;
- Whether non-organic products are stored nearby;
- Whether staff who handle organic products are trained in organic requirements;
- Whether storage/place where organic products are stored are clearly identified as «ORGANIC».

III.3 MAIN WAREHOUSING OF PRODUCTS

The quality of storage conditions at the warehouses used by the organic operator for the main storage of products are of utmost importance with regards to preserving the quality and integrity of organic commodities. The question of whether the quality of organic products can be maintained during storage depends on several factors.

IN WHAT SITUATIONS CAN CONTAMINATION OF ORGANIC PRODUCTS OCCUR DURING MAIN WAREHOUSING?



When the warehouse used is old and/or has an unknown history



When some space inside a group warehouse is used for storing of organic crops



If any space within the warehouse was recently fumigated

WHAT ARE THE RISKS ASSOCIATED WITH USING OLD LOCATIONS FOR STORING ORGANIC PRODUCTS?







- the residues of non-organic products stored in those locations earlier;
- the dust that has absorbed various hazardous substances, sometimes over the course of many years;
- possible contact with any packaging materials or equipment that have been previously used for non-organic products;
- the environment (buildings, streets, etc.) surrounding the storage location;
- the fumigation procedures carried out (or not) in the warehouse;
- insufficient physical separation of organic and non-organic products.

WHAT ARE THE GREATEST RISKS ASSOCIATED WITH FUMIGATION PROCEDURES?

According to the warehousing rules for organic products, fumigation may be carried out only (!) if there is no product present in the entire facility. The required resting time before product may be put back in must be two or three times more than normally required. However, even if the fumigation procedures are carried out correctly, a high risk remains that inside surfaces of storage facilities have absorbed some of the fumigation substances and can give these off again to the products stored inside afterwards, thus contaminating it.

HOW CAN I MINIMIZE THE RISKS DURING STORING ORGANIC COMMODITIES?

In order to minimize the risks during main storing of organic commodities, the following processes need to be described in the Organic Risk Management System:

-  Establishing requirements that must be met for the main storage facility used;
-  Carrying out laboratory tests of dust samples collected at the storage location;
-  Developing policies and procedures for carrying out fumigation according to organic rules;
-  Keeping exact records of the products stored;
-  Complying with the internal requirements for the storage conditions such as the physical separation of the organic products from the non-organic products;
-  Establishing criteria for the evaluation of external risks arising from nearby storage facilities whenever products are stored in group warehouses.

CRITERIA TO EVALUATE THE RISKS DURING MAIN STORAGING OF ORGANIC PRODUCTS:

- Whether storage place certified according to organic requirements;
- Whether this storage was used for storing non-organic commodities;
- Whether this storage was not fumigated before;
- Whether dust sampling has ever been conducted;
- Whether it was cleaned according to the procedure set by a company;
- Whether the cleaning procedure has been done under control;
- Whether there is NO nearby storage place for non organic products;
- Whether personnel who handle organic products are trained for organic requirements;
- Whether storage place where organic products stored identified as «ORGANIC».

III.4 EQUIPMENT





During handling, storing and transporting organic products, different types of equipment are used for drying, cleaning and loading organic commodities.

Organic Standards do not require that equipment needs to be specifically certified.

However, every contact of the organic commodity with equipment is an additional risk factor.




IN WHAT SITUATIONS CAN CONTAMINATION OF ORGANIC PRODUCTS OCCUR THROUGH CONTACT WITH THE EQUIPMENT?

In order to minimize the risks related to equipment during main storing of organic commodities the following processes need to be described in the Organic Risk Management System:







-  Whenever the same equipment is used for both organic and non-organic products;
-  When the equipment was improperly cleaned or negligently prepared for further operations and when it contains the residues of non-organic products or dust;
-  When parts of the equipment used (for example, "the sleeves" at the packing line) cannot be properly cleaned;
-  When the equipment is in improper technical condition particularly relevant for drying equipment.

HOW CAN I MINIMIZE THE RISKS RELATED TO CONTAMINATION THROUGH CONTACT WITH EQUIPMENT?

In order to minimize the risk of contamination from the equipment, the following processes need to be described in the Organic Risk Management System:

-  Using the equipment involved in the operations with the organic commodities only;
-  Introducing the procedure for selecting and preparing the equipment for organic processing;
-  Providing training for the personnel involved in all processes of using the equipment and monitoring their level of understanding and application of this knowledge.

CRITERIA TO EVALUATE THE RISKS FROM THE CONTACT WITH EQUIPMENT

-  Whether the equipment is used for storing non-organic products;
-  Whether it was cleaned according the procedure set by company;
-  Whether the cleaning procedure was controlled;
-  Whether there are NO places in the equipment which are difficult/impossible to clean;
-  Whether the staff who handle organic products are trained for organic requirements;
-  Whether the equipment was technically checked before the harvesting season starts.

III. 5 TERMINALS AND WATER SHIPMENT

The supply chains in which water shipment is involved pose unique risks. Water logistics is used for transporting large amounts of organic products. These products are mainly transshipped and stored in bulk.

The terminals used for the transshipment of organic products must be certified according to the organic standards. However, in practice, large volumes of products pass through these terminals and their activities are not connected with the organic products only. The intensity of the processes carried out at the terminals together with the fact that organic as well as non-organic activities take place mean that the risk of contamination is very high.

IN WHAT SITUATIONS CAN CONTAMINATION OF ORGANIC PRODUCTS OCCUR THROUGH TERMINALS?



When products are mainly transshipped and stored in bulk;



When the terminal is used for both organic and non-organic activities;



When the history of the used storage at the terminal is unknown;



When the operator has only limited influence on the processes carried out at the terminal for products transshipment;









When loading or unloading of organic and non-organic products occur simultaneously at the terminal;



When the staff involved is not properly trained in the handling the products in the terminal.

HOW CAN I MINIMIZE THE RISKS WITH REGARD TO TRANSHIPMENT THROUGH TERMINALS?

In order to minimize the risks of contaminations occurring during transshipment through terminals, the following processes need to be described in the Organic Risk Management System:

-  Giving preference to storage at terminals with a known history;
-  Controlling if storage facility has been cleaned before loading organic products preferably through conducting laboratory analyses of dust collected at the facility before depositing the organic commodities there;
-  Introducing a product accounting system (for instance CCTV);
-  Providing training for personnel involved in all processes of the intermediate storage and monitoring their level of understanding and application of this knowledge;
-  Sealing the warehouses and vehicles/ships after loading under the supervision of an expert from the survey company;
-  Minimizing the use of intermediate equipment.

CRITERIA TO EVALUATE THE RISKS DURING STORING PRODUCTS AT THE TERMINALS:

- Whether the terminal is certified according to organic requirements;
- Whether this storage which organic products placed was used for storing non-organic products;
- Whether this storage was not fumigated before;
- Whether dust sampling in this storage has ever has been conducted;
- Whether it was cleaned before placing organic products;
- Whether the staff at the terminal are trained for organic requirements;
- Whether the storage/place where organic products are stored is identified as «ORGANIC»;
- Whether the equipment used for organic products was cleaned before.



**PART IV.
STAFF – TRAINING ABOUT
RISK MITIGATION**

An important element in the Organic Risk Management is the personnel management and the introduction of an efficient Organic Training System. According to the Organic Standards, all the personnel involved in organic activity need to be trained in the theory and practical implementation of the organic requirements. A result of such training needs to be verified and recorded within the system. The employee training does not only provide benefits for individual, but also for the organic business because it helps ensure that the company continues running effectively and avoids unpredictable losses.

WHY IS IT IMPORTANT TO PROVIDE ORGANIC EDUCATION TO THE STAFF?

Organic knowledge and skills of the staff are audited by organic certifiers. Untrained employees can make many mistakes and cause inefficiencies that can result in damage to your company's reputation and loss of customers. Any mistake done by an untrained worker results in unnecessary loss of time and material, often making it necessary for the work to be done again. The worst case scenario is that contaminated organic commodities are delivered to the client.

HOW DOES THE STAFF TRAINING INFLUENCE THE COMPANY PERFORMANCE?

Although it is sometimes difficult, to calculate direct costs resulting from the mistakes made by untrained personnel, these costs are incurred and they are certainly an issue to address. In order to fix mistakes, often much time and material are invested. Had the work been done correctly the first time around, all these additional costs would not have been incurred.

**Specific organic training for the staff -
the key for moving forward organic business**

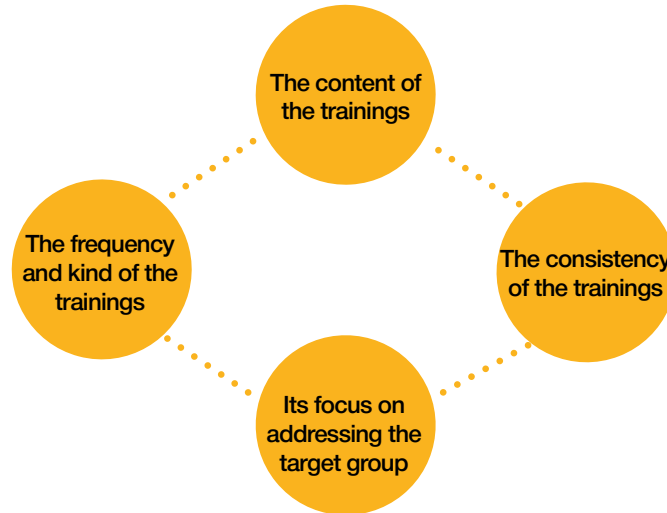
WHY SHOULD AN ORGANIC TRAINING SYSTEM BE ORGANIZED IN THE COMPANY?

An organic training system increases the awareness of all employees with respect to the handling organic products and why it is important to follow all the rules. An employee who has received the necessary training is better able to understand the significance of the organic rules. Training also builds the employee's confidence because the staff get better understanding of the responsibilities related to the job.

DO THE ESTABLISHED GUIDELINES FOR ORGANIC TRAINING PROGRAMS EXIST?

No, there is no guideline structure for an Organic Education Program. However, this publication provides recommendations, which could be used by companies as practical tool.

THE ESSENTIAL ELEMENTS OF AN ORGANIC EDUCATION PROGRAM ARE:



■ 1. CONTENT OF THE TRAINING:

The content of the organic training program needs to include:

- ✓ Principles of organic agriculture;
- ✓ Description of the Organic Standards implemented in the company and their basic requirements;
- ✓ Rules on separation of organic and non-organic products;
- ✓ Procedure on cleaning transport and storage facilities as well as equipment;
- ✓ Pest control and fumigation procedures;
- ✓ Record-keeping;
- ✓ Organic Risk Assessment at the work place;
- ✓ Identification of organic products;
- ✓ Traceability procedure.

■ 2. CONSISTENCY

The consistency is particularly relevant for the company's basic organic policies and procedures. All employees need to be aware of the organic policies and procedures implemented in the company. Further, they need to know what is expected in terms of task to be performed, lists to be followed and documentation to be done. Regular trainings of all employees ensure that all staff members are exposed to the information regarding organic procedures and have a minimum level of knowledge about it.

■ 3. TARGET GROUP

Organic training needs to target employees all levels within a company, from top managers to department heads and workers.

IMPORTANT: The role of workers who load, clean and handle organic crops on their way into or out of storage is critical concerning managing the risk of contamination.

¹ The content of training is only recommended and could be adopted for company needs

■ 4. FREQUENCY AND KIND OF TRAINING

Organic training needs to be performed regularly depending on the company needs and in accordance with the education program implemented in the company. Organic training needs to be mandatory for all new staff. Additionally, the company should take staff fluctuation rates and the frequency of new organic procedures being implemented into consideration to ensure that the maximum amount of employees is trained at any given time. The timing and frequency of training sessions should be carefully selected in order to find the optimal balance of offering enough training but not too much because of the risk of staff losing interest.

The company should also explore many different types of training available. One-to-one training, group tuition sessions can be done as well. E-learning is also becoming a popular way of training staff and requires less time away from the business.

**Staff of subcontracted company also need to be trained
in the handling of organic products.**

A large cargo ship is the central focus, moving across a body of water. A tugboat is positioned in front of it, likely assisting with its movement. In the background, another large ship is visible. The sky is a clear, deep blue. A prominent yellow diagonal stripe runs from the top right corner towards the bottom right, separating the blue-tinted image from a white background.

**PART V.
THE ROLE OF THE
IMPORTER**

Last but not least, this section describes the role of the importer in securing the integrity of organic commodities traded within supply chains. The importer can also contribute to doing this by checking the supply chain for any risks that may cause or may have caused contamination before engaging with organic suppliers.

The experience shows that importers carry much responsibility when it comes to developing secure organic supply chains from such countries such as Ukraine, where national infrastructure and governmental control systems are not sufficient. If each importer verified their supply chain beyond the certification body they work with and made an effort to go further than just looking at the validity of organic certificates, this would contribute greatly to making supply chains safer and more trustworthy.




ORGANIC SUPPLY CHAIN VERIFICATION RULE - 10 QUESTIONS THAT THE IMPORTER SHOULD ASK:

1. Do I have enough information about my supplier beyond the organic certificate?
2. Have I implemented a method for verifying my organic supply chain?
3. Do I know from which farms I am buying organic products?
4. Do I know how the local transport and logistics are organized?
5. Am I aware of all the actors and elements (e.g. facilities, logistic conditions) that are part of my supply chain?
6. Has my exporter implemented an organic quality management or risk management system?
7. What risks have been identified by the operator during risk assessment procedure?
8. How did the exporter manage the scored risks?
9. If necessary, which corrective measures were implemented by the exporter?
10. Am I aware of all risk and control them?




ANNEX 1 DESCRIPTIONS OF THE STANDARDS

The tables below contain extracts from the requirements of the three standards: EU Organic Regulations (European Union), NOP USDA Organic (USA), Bio Suisse Private Standards (Switzerland) for storing, transportation, handling and risk assessment for organic products.


RISK MANAGEMENT REQUIREMENTS



LOGO	STANDART	PARAGRAPH	CONTENT
	Commission Regulation (EC) No 889/2008	Article 63 Control arrangements and undertaking by the operator	(c) the precautionary measures to be taken in order to reduce the risk of contamination by unauthorised products or substances and the cleaning measures to be taken in storage places and throughout the operator's production chain.
	NOP Standard, USA	§ 205 272 Commingling and contact with prohibited substance prevention practice standard.	(a) The handler of an organic handling operation must implement measures necessary to prevent the commingling of organic and nonorganic products and protect organic products from contact with prohibited substances.
	Bio Suisse Standard, Switzerland	No requirements	-----

REQUIREMENTS FOR THE TRANSPORTATION OF ORGANIC PRODUCTS

LOGO	STANDART	PARAGRAPH	CONTENT
	Commission Regulation (EC) No 889/2008	Article 31 Packaging and transport of products to other operators or units	<p>(b) the vehicles and/or containers which have transported nonorganic products are used to transport organic products provided that:</p> <p>(i) suitable cleaning measures, the effectiveness of which has been checked, have been carried out before commencing the transport of organic products; operators shall record these operations</p>
	NOP Standard, USA	§ 205 272 Coningling and contact with prohibited substance prevention practice standard	<p>(b) The following are prohibited for use in the handling of any organically produced agricultural product or ingredient labeled in accordance with subpart D of this part:</p> <p>(2) The use or reuse of anym bag or container that has been in contact with any substance in such a manner as to compromise the organic integrity of any organically produced product or ingredient placed in those containers, unless such reusable bag or container has been thoroughly cleaned and poses no risk of contact of the organically produced product or ingredient with the substance used.</p>
	Bio Suisse Standard, Switzerland	5.8.4 Transport	<p>(4) Organically and non-organically grown products may only be transported together if they are packaged appropriately and labelled individually. The packaging during transport must conform with the packaging rules set out in these Standards.</p>

REQUIREMENTS FOR THE ORGANIC PRODUCT STORAGE CONDITIONS

LOGO	STANDART	PARAGRAPH	CONTENT
	<p>Commission Regulation (EC) No 889/2008</p>	<p>Article 35 Storage of products</p> <p>Article 63 Control arrangements and undertaking by the operator</p>	<p>For the storage of products, areas shall be managed in such a way as to ensure identification of lots and to avoid any mixing with or contamination by products and/or substances not in compliance with the organic production rules. Organic products shall be clearly identifiable at all times.</p> <p>4. In case where operators handle both non-organic products and organic products and the latter are stored in storage facilities in which also other agricultural products or foodstuffs are stored:</p> <p>(a) the organic products shall be kept separate from the other agricultural products and/or foodstuffs;</p> <p>(b) every measure shall be taken to ensure identification of consignments and to avoid mixtures or exchanges with non-organic products;</p> <p>(c) suitable cleaning measures, the effectiveness of which has been checked, have been carried out before the storage of organic products; operators shall record these operations.</p> <p>(c) the precautionary measures to be taken in order to reduce the risk of contamination by unauthorised products or substances and the cleaning measures to be taken in storage places and throughout the operator's production chain.</p>

LOGO	STANDART	PARAGRAPH	CONTENT
	NOP Standard, USA	§ 205.272 Commingling and contact with prohibited substance prevention practice standard.	(b) The following are prohibited for use in the handling of any organically produced agricultural product or ingredient labeled in accordance with subpart D of this part: (1) Packaging materials, and storage containers, or bins that contain a synthetic fungicide, preservative, or fumigant
	Bio Suisse Standard, Switzerland	Storage 5.8.2	Produce from organic farming must be stored so as to preclude comingling or inadvertent mixing with non-organic products. Non-organically and organically grown products may only be stored together if they are packaged and labelled ready for sale. Storage facilities and containers for unpackaged produce must be kept separate and be specially labelled. Impacts arising from any possible treatments with pesticides prior to the use of these facilities and containers must be ruled out. Lifts, pipes, etc. must be free from the remains of any non-organic produce.



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