INFORMATION NOTE

BIOSUISSE

Checklist - Compliance with due diligence obligations to avoid pest control residues where Bud products are stored

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This is a checklist of precautions that Bio Suisse requires or recommends to avoid contamination with residues, particularly phosphine (PH3). It supplements the Bio Suisse Standards, part V, 3.2, which provides the list of substances permitted by Bio Suisse for pest control purposes. This checklist sets forth the precautions that should or must be followed by storers in order to avoid residue contamination and meet their due diligence obligations, and it stipulates the self-regulatory manner in which these precautions should be documented. The checklist focusses on precautions to prevent residue contamination where organic products are stored; other precautions required by law, by the Bio Suisse standards or by the Generalized System of Preferences (GSP) are not included in this checklist.

Mandatory precautions: if a precaution is mandatory, the regulatory document under which it is required is indicated.
The object of the recommended precautions is to avoid contamination of grain with PH3 and other pest control residues and to keep the residue level below the 3 g PH3/kg threshold, as generally targeted by the organic sector.

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Checklist

	Precautions	Requirement / recommendation (The sources named refer to the Bio Suisse Standards unless otherwise indicated.)	Documentation required from the storage operation concerned
1. Direct control of pests in Bud products or treatment of rooms and equipment when Bud products are present			
1.1	**Permitted direct pest control substances and measures**		
1.1.1	Bud products may only be treated directly with the pest control substances and measures given in the Bio Suisse Standards. Those substances and measures may also be used in rooms which contain Bud products.	Requirement (part III, 1.12.3.2 and 1.12.4.1; part V, 3.2.3)	Record of the substances and measures used
2. Localized pest control treatments of rooms and equipment where Bud products are processed and/or stored			
2.1	**Permitted localized pest control substances and measures**		
2.1.1	Traps and stationary bait with rodenticides may be used to control rodents. Localized control of insects by means of insect traps and stationary bait is permitted. Pheromones may be used in traps and as mating disruptors to control moths as long as this does not interfere with infestation monitoring or the use of beneficial organisms.	Requirement (part III, 1.12.4.2, a; part III, appendix 3; part V, 3.2.3)	Record of the pest control substances and measures used as well as the date and time of usage
2.1.2	Only substances given in the Bio Suisse Standards are permitted in spray products used for localized treatments or to treat nooks. Bud products may be stored / processed in the same room when such products are used for localized treatments.	Requirement (part III, 1.12.4.2, b; part III, appendix 3; part V, 3.2.3)	Record of the pest control products and substances used as well as the site of application, date and time of usage

2.2	**Precautions to prevent contamination with residues from localized pest control substances**		
2.2.1	Under no circumstances may Bud products come in direct contact with pest control substances during localized pest control treatments.	Requirement (part III, 1.12.4.2; part V, 3.2.3)	Record of precautions taken to avoid contact
3. Large-scale pest control treatments (fumigation or fogging) of rooms and equipment where Bud products are processed and/or stored, or which are near rooms where Bud products are processed or stored			
3.1	**General requirements**		
3.1.1	High-risk operations (i.e., operations with an increased risk of pest infestation) must develop an integrated pest management system. This must be installed and monitored by a Bio-Suisse-approved pest control company (exemptions may be granted).	Requirement (part III, 1.12.2.3; part III, 1.12, appendix 1; part V, 3.2.2)	Contract with a Bio-Suisse-approved pest control company or exemption by Bio Suisse
3.1.2	Large-scale pest control treatments must be carried out by a Bio-Suisse-approved pest control company or by an appropriately trained employee of the licensee.	Requirement (part III, 1.12.4.3a)	Name of the company / employee that carries out pest control treatments
3.1.3	Employees who carry out large-scale pest control treatments must hold a general certificate in pest control, a fumigation certificate or a Bio Suisse operator's certificate.	Requirement (part III, 1.12.4.3a; 1.12.4.4)	Proof of certification
3.1.4	All large-scale pest control treatments carried out on the premises of the operation must be recorded in an annual report.	Requirement (part III, 1.12.4.3a; 1.12.5)	The annual report must contain the following pest control information: Status of infestation: type of pests, equipment and/or room concerned Treatment: date, substance used, amount Precautions: precautions taken to avoid contamination of Bud products (in detail) Person in charge: Name of the person in charge of the pest control treatment

3.2	**Permitted large-scale pest control substances and measures**		
3.2.1	Only permitted substances may be used to fumigate or fog empty rooms.	Requirement (part III, 1.12, appendix 3; part V, 3.2.3)	Record of the substances used as well as the date and time of treatment and dates when products were stored
3.2.2	If it becomes necessary to carry out pest control treatments of non-organic products or empty chambers on the premises of the same operation, the use of PH_3 fumigant pellets should be avoided if possible. As an alternative, pure PH_3 gas may be used. Warning: In order to prevent residue contamination, only substances permitted by Bio Suisse may be used to control pests in operations that also store non-organic food products.	Recommendation	Record of the measures and substances used on non-organic food products on the premises of the same operation
3.3	**Precautions to prevent contamination through fumigation and fogging of rooms and equipment at operations that store Bud products**		
3.3.1	**Storage of Bud products**		
3.3.1.1	Chambers used to store organic products must be sufficiently protected from residues of pest control substances and dust.	Recommendation	Record of the precautions taken to protect chambers used to store organic products
3.3.1.2	All raw, semi-processed and final Bud products must be removed from the rooms and equipment prior to fogging and fumigation. If fumigation is carried out, even gas-tight packaged products must be removed.	Requirement (part III, 1.12.4.3 b, c; part V, 3.2.3)	Procedural instructions, storage records for Bud products
3.3.1.3	Where fumigation is carried out, Bud products may only be stored in nearby chambers if the chamber and pipes involved in the fumigation treatment or the chambers where Bud products are stored are gas-tight. Where fogging is carried out, Bud products may only be stored in nearby chambers if the chamber to be fogged is sufficiently sealed.	Requirement (part III, chapter 1.12.4.3 b, c; part V, 3.2.3)	Storage management records, record of sealing, procedural instructions
3.3.1.4	Bud products may only be stored in chambers where PH_3 fumigant pellets	Recommendation	Storage management records, including records of pest

	have never been used and where fumigated conventional products have never been stored. If this is not possible, then Bud products should only be stored in chambers where unfumigated products were previously stored.		control treatments of chambers
3.3.2	**Cleaning and refilling chambers after pest control treatments**		
3.3.2.1	Prior to fumigation, equipment parts where dust from pellets or from the fumigated products could settle should be identified. Cleaning measures must be drawn up for such parts to ensure that Bud products do not come in contact with the dust. During the cleaning process attention must be paid to hygiene so that dust contamination is kept to an absolute minimum on all parts of the equipment and on all means of conveyance. Depending on the respective operation's level of hygiene risk and risk of contamination with residues, the proprietor should determine how and how often to clean all means of conveyance (lorries, containers, etc.), drains, conveyors, floors, bins, chambers, filters, sampling tables, sampling equipment, and any other relevant equipment parts. As a rule, the entire operation should be thoroughly cleaned of dust four times a year. The level of the risk of contamination with residues depends not only on the specific circumstances of the operation concerned, but also on whether non-organic products are also stored / processed on site and whether fumigation is carried out.	Recommendation	List of the equipment concerned, the cleaning schedule and cleaning protocols
3.3.2.2	Residue analyses (of grain or dust) should be furnished as evidence for the efficacy of the cleaning schedule (particularly with regard to PH_3). Each cleaning concept and every change to a cleaning concept should be reviewed. Once this has taken place, a control analysis once every three years should suffice. Samples taken for other purposes may be used to this end. Target thresholds for PH_3 in dust (based on empirical values from various storage sites in Switzerland): • Elevator pit: < 10 g/kg • Conveyer: < 100 g/kg • Aspirated dust: < 1000 g/kg • Storage chambers for organic products: < 100 g/kg	Recommendation	Record of residue analyses and changes to the cleaning schedule

	Target threshold for PH_3 in final products: < 3 g/kg		
3.3.2.3	Rooms and equipment must be thoroughly ventilated after fumigation and fogging treatments. A 24-hour waiting period must be observed before Bud products may be processed or stored in an area that has been fumigated. Employees may not enter the treated area until the concentration of the substance used has fallen below the MAC (Maximum Allowable Concentration) value.	Requirement (part III, 1.12.4.3 b, c; part V, 3.2.3)	Record of waiting periods and residue values
3.3.2.4	After rooms and equipment have been fumigated or fogged, the next batch of products that are stored or processed there may not be sold under the Bud label.	Requirement (part III, 1.12.4.3 b, c; part V, 3.2.3)	Record of the next use after treatment
3.3.2.5	After treatments, storage chambers must be thoroughly cleaned of dust before being filled with Bud products.	Recommendation	Record of cleaning
3.3.2.6	The upper level of a storage bin should only be cleaned after the lower chambers have been closed.	Recommendation	Record of chamber closure
3.3.2.7	Aspirated dust must be disposed of separately and may not be returned to the product.	Requirement (Swiss Federal Act on Foodstuffs and Utility Articles (FSA) Art. 4[3]; Swiss Animal Feed Book Ordinance, Appendix 11)	Record of disposal, procedural instructions
4. Guarantee of traceability			
4.1	**Inspection of products / risk-based inspection schedule**		
4.1.1	An inspection schedule that is adapted to the specific circumstances of the operation concerned and its level of risk should be in place. In keeping with this schedule, spot checks of incoming and outgoing products should be regularly performed to test for pest control substances (particularly PH_3). How often samples are taken and which	Recommendation	Inspection schedule, results of analyses

	parameters should be measured must be determined on an individual basis depending on the operation's products and level of risk. Samples should be tested for storage pesticides such as phosphine[1], dichlorvos, pirimiphos-methyl and pyrethroids.		
4.1.2	All pesticide residues, including values < 0.01 mg/kg, must be reported to Bio Suisse and will be assessed by Bio Suisse on a case-by-case basis.	Bio Suisse licensing terms	Bio Suisse assessment
4.2	**Samples**		
4.2.1	Representative samples should be taken from every incoming and outgoing batch. Samples of incoming batches should be taken directly from the rail or lorry container. When samples are taken from bins, there is a risk of spreading contamination via the conveyor equipment. Amount: 1 kg or 1 L (at least 0.5 kg or 0.5 L) is recommended. Retention period: Dependent on the product and its intended further processing (2 years or 3 months longer than the shelf life expiration date is recommended). Labelling: The samples must be legibly and clearly labeled (with at least the batch number, date and signature). Storage: The samples should be stored in appropriate containers (e.g., in safety packs, sealed tins, etc.) that protect them from infestation or contamination with pest control substances. The shelf life of the samples must be ensured.	Recommendation	Record of incoming and outgoing batches, storage site and storage period, samples
4.3	**Traceability**		
4.3.1	The origin of the products must be completely traceable.	Requirement (part I, 2.1.3.1; FSA Art. 23a; Swiss Ordinance on Organic Farming SR 910.18, Art. 4[2], Art. 7.4)	Certificates, receipts, transport records

1 Phosphine concentration must be measured by a laboratory that can meet a detection limit of 0.001mg or 1 µg/kg.