### Red Tractor Standards Manual February 2025

# Fresh Produce Standards



### How to use this booklet

Our standards are organised in sections. All the words against each standard, including the column 'How you will be assessed', form part of it.

Standard coding begins with a two-letter prefix which identifies the section (e.g. EC for Environmental Protection and Contamination Control). You may notice that the codes are not always consecutive – rest assured that no information is missing from this guide.

Assessors will use this code together with one to identify the enterprise to which it relates (e.g. DR for Dairy) to record any non-conformances on the report at the end of the assessment.

Look out for the **guidance boxes** throughout this guide – these offer useful tips to help you meet the relevant standard.

- **Key** While all standards must be met, particular attention should be paid to these as they can have implications for your certification
- **Recommendation** This is not a standard and a non-conformance raised will not affect your certification. However, these are recommended actions to undertake to help demonstrate working to Red Tractor and industry core principles
- **New** A completely new standard which the member must now adhere to, or a new recommendation
- Revised A standard that has changed and requires the member to take some different or additional action to before
- **Upgraded** The standard has been upgraded to a Key standard or from a Recommendation to a full standard
- **Appendix** Indicates that additional information is provided. Appendices can be found by visiting: redtractorassurance.org.uk



Indicates that a record is required and suggests potential documentary evidence which could be used to show compliance

- Visit our website: redtractorassurance.org.uk for additional help and templates.
- Read the Red Tractor Membership Rules on the Red Tractor Assurance website: redtractorassurance.org.uk/member-rules/

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### Risk Assessment

Standard	How you will be assessed	Records
RA.1 (KEY) A documented risk assessment has been completed, covering all process steps for each relevant crop from site selection, drilling or planting through to packing, storage and transportation of product. All crop production processes are considered to identify any physical, chemical, allergenic or microbiological food safety risks and suitable preventative actions are implemented.	RA.1.a All relevant crops are considered in the Risk Assessment.  RA.1.b All relevant process stages (including transportation of products) are included within the Risk Assessment.  RA.1.c All agronomic inputs (e.g. irrigation water, PPPs, etc.) are included within the risk assessment.  RA.1.d Any physical, chemical, microbiological or allergenic risks are clearly identified.  RA.1.e Preventative actions are identified within the Risk Assessment.  RA.1.f Microbiological, chemical and physical risks are assessed for all water used in crop production processes - with reference to:  • source • distribution • application method • crop risk category  RA.1.g Risks associated with food fraud and malicious contamination are included within the risk assessment	R Risk Assessment

GUIDANCE: Further information on completing a Risk Assessment can be found in the <u>Appendix</u>. Risks associated with water used in crop production (RA.1.f) may be assessed within a separate Water Risk Assessment or members may opt instead to cover this within the body of the main Risk Assessment.

#### **RA.2**

The Risk Assessment includes a flow diagram of the production process and identifies the points in the process where specifically identified risks occur

#### RA.2.a

Risks identified in the Risk Assessment (RA.1) are highlighted appropriately on a Process Flow Diagram.

#### RA.2.b

A Process Flow Diagram has been developed for each type of production.

# R

Process Flow Diagram

#### **RA.3**

Preventative actions are defined and implemented. Where Critical Control Points (CCPs) are identified, these are managed effectively.

#### **RA.3.a**

Effective implementation of preventative actions is defined

#### RA.3.b

Responsibility for the implementation of preventative actions is allocated.

#### **RA.3.c**

Any CCPs are identified by a documented process.

#### RA.3.d

Personnel responsible for effective implementation of CCPs have specific, documented training.

#### **RA.3.e**

Monitoring records are in place to demonstrate effective implementation of CCPs.

#### **RA.3.f**

Actions to be taken in the event of a CCP failure are



- Preventative Action Plan
- CCP Decision Tree
- Training Record
- CCP Monitoring Record
- CCP Failure Record

documented and effectively implemented.

GUIDANCE: RA.c – RA.f only relevant where a HACCP based approach to Risk Assessment is used and CCPs are identified.

#### **RA.4**

The Risk Assessment and preventative actions must be reviewed regularly and whenever processes/products change.

#### RA.4.a

The Risk Assessment is reviewed at least annually.

# Category 0, 1 & 2 only RA.4.b

Risk Assessment review is documented.

# Category 0, 1 & 2 only RA.4.c

Risk Assessment review includes looking at complaints and any relevant test results, including microbiological testing data.



- Risk Assessment (review date)
- Record of Risk
   Assessment review

GUIDANCE: A record of Risk Assessment review should clearly indicate that the risk assessment, flow diagram and preventative actions have been evaluated and compared to current circumstances, practices and risks to ensure this is an effective risk management system and accurately reflects current practices.

Any relevant elements mentioned in RA.4.c should also be considered.

The record of review should confirm when the review was completed, and all persons involved. For very small businesses, it may be appropriate for the review to be completed by one person, but in most cases, it will be necessary to involve other personnel to ensure all relevant business areas are considered.

#### **RA.5**

Risk Assessment must be performed by suitably trained staff with a wide knowledge to ensure all aspects of the process have been thoroughly assessed

#### RA.5.a

Staff completing Risk
Assessment have wide
knowledge of all areas of the
business. Evidence of wide
business knowledge may be
demonstrable rather than
documented. In most cases, it
will be appropriate to involve
multiple members of staff to
ensure that all aspects of the
operation are covered.



Training Record

# Category 0, 1 & 2 only RA.5.b

The Risk Assessment lead has received risk assessment training.

GUIDANCE: To demonstrate Best Practice, a certified training course covering risk assessment and food safety (e.g. HACCP training course) will provide the best foundation for effective risk assessment.

#### RA.6 (KEY)

All production sites are risk assessed and deemed suitable for use

#### RA.6.a

The Certification Body has been informed of any new site and it has been added to your Red Tractor membership

#### RA.6.b

All production sites are risk assessed and deemed suitable for use

#### RA.6.c

Site Risk Assessments consider the prior use of land and previous management of the site with reference to physical, chemical, microbiological and allergenic risks

#### RA.6.d

Site Risk Assessments consider any relevant risks within the production environment, including any risks in close proximity to the site that may affect food safety and risks from neighbouring production sites such as spray drift

#### RA.6.e

Where risks are identified, preventative actions or mitigation steps are identified and implemented



Site Risk Assessments

#### RA.6.f

Risk assessments are reviewed whenever circumstances change and at least annually.

GUIDANCE: A production site may be defined as any primary production environment, including field, orchard and protected cropping locations. It is acceptable to group sites within one Site Risk Assessment for efficiency but only where the proximity of sites and nature of risk ensure that a consolidated approach is equally robust.

Site Risk Assessments and the depth of focus given to review shall be commensurate to risk and the potential for circumstances to change.

For farm environments sited within permanent, protected structures (e.g. glasshouse), it may be possible to consider all relevant risks within the body of the main Risk Assessment (RA.a). For largely consistent growing environments (e.g. orchard crops) it may be appropriate to just record a date of review if no details have changed. For annual crops with rotations, Site Risk Assessment will be an annual process.

#### **RA.8**

Members understand the Red Tractor standards and complete Internal Audits to verify their effective implementation. (REVISED)

#### **RA.8.a**

A minimum of one selfassessment per year is completed against the Red Tractor Fresh Produce scheme standards.

# Category 0, 1 & 2 only RA.8.b

Regular Internal Audits are completed to verify that the preventative actions identified within the Risk Assessment are operating effectively.

#### **RA.8.c**

Where non-conformances are detected, effective corrective actions are implemented



- Internal audit (against Red Tractor Fresh Produce Standards)
- Internal Audit Report

GUIDANCE: Self-assessment must include review of documentation and practical, operational activities. A suitable frequency for the completion of Internal Audits will vary based on the scale and complexity of operation and may also be influenced by seasonality. A minimum of one Internal Audit per year must be completed. In most cases, it will be appropriate to complete more.

#### **Documents and Procedures**

Standard	How you will be assessed	Records
DP.1 (KEY) The farm, as a whole, must present an acceptable and tidy appearance to the general public. The site management must not present a food safety, animal welfare or environmental risk.	DP.1.a The external areas around buildings and farm entrances are kept clear of rubbish, non-essential equipment and other debris.  DP.1.b Loose wire, scrap machinery, scrap metal, seed and fertiliser bags, PPP containers and disused tyres are managed.	
DP.1.1 A farm map must be present and areas of specific risk are identified	DP.1.1.a Areas at high risk of pollution are identified on the farm map DP.1.1.b Maps are accessible for staff and visitors to reference.	• Farm map

GUIDANCE: One or more maps may be used and this may be held as a hard copy or as an electronic document. Examples of details which may be included on farm maps: fields, orchards, watercourses (details of water sources and irrigation distribution systems), glasshouses, growing houses (including polytunnels), packhouses, staff accommodation, any rented land and storage, specific hazards (e.g. power lines), footpaths.

# DP.2 A documented plan for the effective management of serious incidents and potential emergency situations that threaten food safety, legality or the environment must be in place and known to those involved in farm tasks

#### DP.2.a

You have considered the risks to your farm and documented the actions to be taken in event of:

- fire
- power cuts
- extreme weather
- pollution incident
- incidents affecting food safety or legality (e.g. microbiological or residue issues)
- other site-specific risks



Contingency/emergency plan

#### DP.2.b

Up-to-date relevant contact details are documented and - where appropriate - displayed (including out of hours phone numbers) e.g. electricity supplier, Environment Agency hotline, supply chain contacts, laboratory, etc.

#### **DP.2.c**

Key personnel have access to plan.

GUIDANCE: For further guidance on managing incidents that threaten food safety, refer to the appendix.

#### DP.3

Systems must be in place for recording, investigating and resolution of any complaints and/or sampling results that are relevant to the requirements of the Red Tractor Standards (REVISED)

#### **DP.3.a**

System includes recording the:



- investigation result
- action taken to prevent/stop the issue happening again
- complaints trending for food safety issues



- Complaint records
- Complaints trending
- Sample Records

GUIDANCE: Includes complaints made by local authority, general public, customers or other, including but not limited to those related to food safety and environmental protection. Includes results of any relevant analyses carried out on any samples that have importance to human health, e.g. microbiological testing, residues, environmental sampling

#### **DP.4**

Where records are required by the standards, they must be retained for a minimum of two years unless otherwise specified.

**DP.5** 



A completed and signed food safety policy declaration is recorded and updated annually.	Signed food safety policy declaration
DP.6 A documented Fire Risk Assessment for the control and prevention of fires in all farm buildings must be in place and known to key personnel.	Fire Risk Assessment

### Personnel

Standard	How you will be assessed	Records
PL.1 (KEY) Systems must be in place to ensure all personnel are effectively trained and deemed competent to carry out the activities they are required to do (REVISED)	PL.1.a  No person starts work without an induction, supervision and explanation of the tasks they will carry out  PL.1.b  Induction record to include as a minimum:  Activities role will undertake Health & Safety information Reporting lines  PL.1.c  Language and learning style is given due consideration to ensure all workers understand information.	• Induction record

GUIDANCE: Records of induction and training may be recorded on either separate or consolidated records, provided that compliance with all relevant requirements can be demonstrated.

records, provided that complia	nnce with all relevant requirements can b	ne demonstrated.
PL.2 Records of training must be kept	<b>PL.2.a</b> A training record is available for all, including:	R

- Name
- Details of training/events attended
- Date of training
- Who provided the training (in-house or external provider)

#### PL.2.b

Where workers are trained to undertake specific tasks, these are listed in their record

#### PL.2.c

Records kept for 2 years after person has left the business

Training Record

#### PL.3

The performance and competence of employees must be regularly reviewed and refresher training implemented as required

#### PL.3.a

Working arrangements allows for observation of workers discharging their responsibilities. The frequency of observation is proportionate to risk



Gaps in competence are addressed by recorded refresher training, implemented immediately or within defined timeline



Training record

GUIDANCE: It is recognised that some roles may involve ongoing supervision and for other employees – particularly those with specialist skills – less supervision may be appropriate. The frequency of review shall be proportionate to the level of risk present and with reference to skills, experience and relevant external training credentials.

#### PL.3.1

Where contractors are employed to undertake work on the production of crops, a Contractor's Commitment Document is in place which confirms that the contractor will comply with the Red Tractor Fresh Produce Scheme requirements

#### PL.3.1.a

Contractor's Commitment
Document is signed by both
contractor and producer



 Contractor's Commitment Document GUIDANCE: Where a contractor completes tasks/operations directly relevant to a specific Red Tractor standard, any relevant records shall be available for inspection during assessment unless the contractor is also an assured Red Tractor Fresh Produce member.

#### PL.4

Where labour providers are used, they are licensed, and a documented agreement is in place

#### PL.4.a

All labour providers used hold a valid Gangmasters & Labour Abuse Authority (GLAA) licence

#### PL.4.b

A Service Level Agreement is in place between the business and the labour provider

#### PL.4.c

The agreement confirms that any workers provided are suitably competent

#### PL.4.d

The agreement confirms any training completed by the labour provider as an alternative to the business's own training systems

#### PL.4.e

The agreement confirms that all workers are legally permitted to work within the UK

#### PL.4.f

The agreement defines allocation of Health & Safety responsibilities between labour provider and labour user

# R

- Evidence of GLAA licence
- Service Level Agreement

#### PL.5 Written Health and Safety Policy in place

#### PL.5.b

Policy is effectively communicated to all relevant workers

#### PL.5.c

Language and learning style is given due consideration to ensure all workers understand information



Health & Safety Policy

#### **GUIDANCE:**

Definition of worker (taken from <a href="https://www.gov.uk/employment-status/worker">https://www.gov.uk/employment-status/worker</a>)

A person is generally classed as a 'worker' if:

- they have a contract or other arrangement to do work or services personally for a reward (your contract doesn't have to be written)
- their reward is for money or a benefit in kind, for example the promise of a contract or future work
- they only have a limited right to send someone else to do the work (subcontract)
- they have to turn up for work even if they don't want to
- their employer has to have work for them to do as long as the contract or arrangement lasts
- they aren't doing the work as part of their own limited company in an arrangement where the 'employer' is actually a customer or client

HSE - How to write your Health and Safety Policy (including link to example template): https://www.hse.gov.uk/simple-health-safety/policy/how-to-write-your-policy.htm

#### PL.5.1

Accident and emergency procedures are displayed and communicated (NEW)

GUIDANCE: Additional information can be found at: <a href="https://www.hse.gov.uk/workplace-health/emergency-procedures.htm">https://www.hse.gov.uk/workplace-health/emergency-procedures.htm</a>

#### PL.6

Any temporary, on-site accommodation provided must be habitable and have suitable basic services

#### PL.6.a

Accommodation, as provided is sanitary and fit for purpose (e.g. sound roof, windows and doors)

#### PL.6.b

A clean and functioning refrigerator is available for food storage

#### PL.6.c

Potable water is available for drinking and hot water for washing

#### PL.6.d

Sanitary washing and toilet facilities are available

#### PL.6.e

Heating facilities are present if accommodation is used between 1st October and 31st March



- Electrician's certificate for electrical installations
- Record of gas installation maintenance

#### PL.6.f

Fire safety precautions are in place (e.g. smoke alarm, fire extinguisher)

#### PL.6.g

Electrical installations are inspected annually (or every 3 years if underground) by a qualified electrician

#### PL.6.h

Gas installations must be maintained at least annually by a qualified gas engineer

GUIDANCE: Applies where accommodation is offered for a time limited period, typically to temporary or seasonal workers. It does not apply to accommodation provided as a primary residence – e.g. tied cottages or Assured Agricultural Occupancies.

#### PL.6.1

Workers have access to clean drinking water, food storage where appropriate, and areas to eat and rest (NEW)

#### PL.6.1.a

All workers have unrestricted access to drinking water

#### PL.6.1.b

If workers eat on the farm, they are provided with a suitable place to store food and eat

#### **PL.7**

A named person has responsibility for Health and Safety

Applies to any farm with workers

#### PL.7.a

The Health and Safety Policy identifies a director or senior manager as responsible for Health & Safety

#### PL.7.b

The person identified has sufficient visibility of business activities to fulfil this role

#### PL.7.c

Identity of the responsible person is communicated to workers

### R

 Health and Safety Policy

#### **PL.8**

Documented Health and Safety meetings take place

#### PL.8.a

Health and Safety meetings are held at least once per year

#### PL.8.b



# Applies to any farm with five or more **employees**

Employees are represented at the meetings

#### Record of Health and Safety meetings

#### **PL.8.c**

Employee representatives are able to communicate views and concerns

#### PL.8.d

Records are kept of Health and Safety meetings

## R

# PL.9 Appropriate first-a

Appropriate first-aid requirements are defined and implemented

#### PL.9.a

First-aid requirements that are 'adequate and appropriate in the circumstances' are defined and documented

- First-aid requirements
- Evidence of first-aid training

#### PL.9.b

The first-aid requirements identify persons responsible for first-aid arrangements

#### PL.9.c

Suitably stocked first-aid kits are available

#### PL.9.d

The first-aid requirements identify an appropriate number of trained first-aiders (as a minimum, one person is trained)

GUIDANCE: It is recommended that the St John Ambulance First Aid Calculator is used to assess training requirements.

#### **PL.10**

A Health and Safety risk assessment has been carried out, which includes consideration of increased risk for high-risk workers

#### PL.10.a

Any increased risk encountered by high-risk workers is considered and documented

#### PL.10.b

Specific consideration is given to reentry intervals for areas recently



 Health & Safety risk assessment

# Applies to any farm with workers

treated with PPPs - requirements follow any label instructions with specific consideration given for any high-risk workers.

 Evidence of risk consideration for high-risk workers

#### PL.10.c

A documented Health & Safety risk assessment is in place

GUIDANCE: High-risk workers include those who may be at greater risk for a time-limited or indefinite period. Examples include (but are not limited to): pregnant women, young or inexperienced workers and workers with specific medical conditions which may introduce an elevated risk – e.g. hearing loss.

More information on Health and Safety risk assessment can be found on the HSE website: https://www.hse.gov.uk/simple-health-safety/risk/risk-assessment-template-and-examples.htm

#### PL.10.1

A grievance mechanism appropriate to the scale of the farm is in place which allows workers to file complaints (NEW)

Applies to any farm with workers

#### PL.10.1.a

The mechanism is confidential with no potential for complaints to be traced to individual workers

#### PL.10.1.b

The mechanism is simple to use and is clearly described in a way which is understood by all workers

#### PL.10.1.c

Complaints are reviewed and issues are resolved where possible

#### PL.10.1.d

Records are kept of filed complaints and evidence of resolution

GUIDANCE: Additional guidance can be found on the Acas website: https://www.acas.org.uk/acas-guide-to-discipline-and-grievances-at-work

A post-box approach may be suitable for smaller farms

#### **PL.11**

Substances hazardous to health are identified by warning signs

#### PL.11.a

Warning signs in place where substances hazardous to health are stored.

#### **PL.12**

COSHH assessments are completed and associated control measures are implemented

#### PL.12.a

Relevant COSHH assessments available for inspection.

#### PL.12.b

Control measures identified in COSSH assessments are



COSHH assessment

implemented, including any specific requirements defined in safety data sheets of products used.

#### PL.12.c

Staff using or applying PPPs must be able to access facilities or contact assistance easily in the event of an accident.

GUIDANCE: Refer to Control of Substances Hazardous to Health Regulations (2002).

#### **PL.13**

Health checks are offered to workers applying PPPs when a need is identified within COSHH assessments



- COSHH assessment
- Record of health check offered to employee

#### **PL.14**

A procedure regulates reentry intervals for PPPs applied to crops

Only mandatory where PPPs with re-entry requirements are used

#### PL.14.a

A procedure regulates re-entry intervals for PPPs applied to crops

#### PL.14.b

Re-entry procedure is consistent with manufacturers' instructions where applicable

#### PL.14.c

Workers that might be affected by re-entry intervals are aware of the procedure



 Re-entry interval procedure

#### **PL.15**

Appropriate protective equipment is made available to workers using PPPs and usage is effectively controlled

#### PL.15.a

Appropriate Personal Protective Equipment (PPE) is provided, in accordance with PPP label instructions

#### PL.15.b

PPE is cleaned and maintained where required

#### PL.15.c



RPE maintenance records

PPE is disposed of according to manufacturers' instructions

#### PL.15.d

New PPE is stored securely, separate from other materials and equipment

#### PL.15.e

Reusable PPE is stored securely in a well-ventilated area separated from other clothing and materials

#### PL.15.f

PPE for workers using PPPs is not transported in sprayer cabs

#### PL.15.g

Secure, dedicated facilities are available for workers using PPPs for storage of personal clothes

#### PL.15.h

Functional Respiratory Protective Equipment (RPE) is provided where required

#### PL.15.i

Any disposable filters within RPE appear visibly operational and are within expiry date

#### PL.15.j

Steps are taken to ensure filters are replaced whenever appropriate (e.g. RPE maintenance records with recorded filter changes)

#### **PL.16**

Workers taking samples from controlled atmosphere stores are appropriately trained

#### PL.16.a

Procedure in place for taking samples from controlled atmosphere stores where a risk to worker safety is identified

#### PL.16.b

Workers are trained against procedure



- Procedure for sampling from controlled atmosphere stores
- Worker Training Record

# Traceability and Assurance

Standard	How you will be assessed	Records
TI.1 (KEY) Systems must be in place that deliver traceability of product throughout the operation	TI.1.a Product identification/coding throughout the operation  TI.1.b Identification/coding provides traceability back to growing location (e.g. glasshouse, polytunnel, etc.) and date of harvest and can be related to any other relevant process steps (e.g. long-term storage details)  TI.1.c Identification/coding allows for dispatched batches of product to be unambiguously linked to crop production records.	• Traceability records
TI.2 Records of bought-in seeds or plants must be kept (REVISED)	TI.2.a Records detail:      suppliers     variety names     purity     germination rates     batch numbers     quality control systems     agreements with seed houses (where applicable)  TI.2.b Pest and disease monitoring is recorded for seeds, nursery stock and young plants  Category 0 only TI.2.c Microbiological testing of seed is completed	<ul> <li>Seed/plant traceability records</li> <li>Quality control information</li> <li>Pest and disease monitoring records</li> <li>Microbiological testing certificates</li> </ul>

GUIDANCE: Microbiological test results may be provided by the seed supplier or the farm/business can organise its own testing through an accredited laboratory.

Agreements with seed houses may be required when growing registered varieties covered by Plant Breeders' Rights

#### **TI.3**

Systems must be tested annually to ensure the traceability system is effective

#### TI.3.a

Records of a product recall test include details of the product looked at, include all the paperwork for that production from seed to farm-gate/dispatch and demonstrate that the traceability system is effective

#### TI.3.b

Where the product recall test shows that improvements to the system are required there is evidence that the improvements have been implemented

#### TI.3.c

Quantities whether produced, stored or purchased for assured (and where applicable) non-assured products are recorded. These volumes are then balanced against out-going quantities and waste to produce a final or 'mass balance'



- Product recall test records
- Mass balance calculations

GUIDANCE: Farms shall ensure that a product recall test and mass balance calculation are completed in advance of a Red Tractor assessment. The assessment itself does not represent the annual test required by the standard.

WHERE TO FIND HELP: Red Tractor Checker service to complete assurance checks on other farms, hauliers and markets: <a href="https://checkers.redtractor.org.uk/rtassurance/services.eb">https://checkers.redtractor.org.uk/rtassurance/services.eb</a>

#### **Vermin Control**

Standard	How you will be assessed	Records
VC.1 (KEY) There must be effective control of vermin	VC.1.a  No build-up of vegetation close to farm structures that could harbour vermin	Site surveys

#### VC.1.b

A site survey is completed at least quarterly, detailing:

- date of inspection
- locations inspected
- findings
- · actions required
- date actions completed

#### **VC.1.c**

Dead/trapped vermin are searched for and disposed of when bait points are checked

GUIDANCE: Note that where an equivalent survey is completed to the required frequency by a pest contractor, the business does not need to complete an additional in-house survey

# VC.1.1 Systems are managed in-house by a competent person or by an external

contractor

#### VC.1.1.a

Where an external pest contractor is used, a documented agreement is in place



Where pest control is managed inhouse, the person with overall responsibility for this task has received some certified training in pest control/management



- External contractor agreement
- Training in pest control/management



#### VC.2.a

Prior to treatment with baits the use of non-chemical control methods is considered first followed by the least toxic alternatives (see Appendix - risk hierarchy)

#### VC.2.b

An Environmental Risk Assessment is undertaken in accordance with the Appendix before bait is laid

#### VC.2.d

Non-target animals do not have access to baits

#### VC.2.e



 Environmental Risk Assessment Baiting stations kept away from product

#### VC.2.f

Permanent baiting is not routinely undertaken and toxic bait is removed when treatment is finished

#### VC.2.g

Product label directions are followed

#### VC.2.h

Granular bait is not used in areas where product is stored or packed

GUIDANCE: Permanent baiting is the application of a rodenticide product when no active infestation is present.

Permanent baiting is strictly limited to sites with a high potential for reinvasion when other methods of control have proven insufficient and can only be carried out by professional users and only with products authorised for this use.

#### VC.2.1

All pest monitoring points are recorded on a site plan and regular checks are completed

#### VC.2.1.a

All pest monitoring points, including non-toxic monitoring points, any toxic baits and EFK (Electronic Fly Killing) units are accurately recorded on a site plan



- Plan/map of pest monitoring points
- Pest monitoring point check records

#### VC.3

Buildings used for packing and storing product must be maintained, proofed and managed in a manner that prevents the ingress of pests and vermin

#### VC.3.a

No evidence of poor proofing or damage to buildings which may permit pest/vermin access

#### **VC.3.b**

Where products are stored in a walled area, gaps are left between the product and the wall (with the exception of loose, bulk storage areas)

#### VC.4

Domestic animals must not be allowed in any operational areas,

#### VC.4.a

No evidence of domestic animals in operational areas

#### Category 1 and 0 only

VC.4.b

including packing and storage areas	Where footpaths run through, or in close proximity to production areas, warning notices are used to minimise the risk of members of the public and domestic animals entering cropped areas
VC.5 Precautionary measures are taken where appropriate to discourage pest and vermin activity in crops and cropping areas	<ul> <li>VC.5.a</li> <li>Where areas of potential wild animal activity have been identified in the Risk Assessment, appropriate mitigation strategies have been implemented. These include but are not limited to:</li> <li>bird scaring devices</li> <li>rabbit fencing</li> <li>crop covers</li> <li>physical barriers</li> <li>management of local pest and vermin populations</li> </ul>

# Soil Management

Standard	How you will be assessed	Records
SM.1 A Soil Management Plan (SMP) must be established and implemented (REVISED)	SM.1.a Production practices are adjusted to maintain soil structure and control erosion  SM.1.b The classification of soils on the farm is known	<ul><li>Soil Management Plan</li></ul>
	SM.1.c Crop rotations are employed whenever possible and details are recorded and retained for at least 3 years SM.1.d Appropriate measures are taken where possible to maintain crop cover to ensure bare soil does not remain exposed for extended periods of time	
SM.2 (Recommendation) It is recommended that the Soil Management Plan is informed by site specific data and key information is shared	SM.2.a Conservation and building of soil organic matter is considered SM.2.b	<ul><li> Test results</li><li> Farm map(s)</li></ul>

#### with relevant personnel Scientific tests are undertaken where (REVISED) available to ascertain pest and disease levels in the soil SM.2.c Soil management is discussed with advisers and relevant staff in order to ensure that cultivations are appropriate for soil type, cropping, topography, erosion risk and climate SM.2.d Classification of soil type is included on farm maps **SM.3** (Recommendation) It is recommended that the Soil Management Plan includes strategies for minimising compaction **SM.4** Substrates (including peat and peat substitutes) are traceable to source and do not originate from designated conservation areas. **SM.5 Recycling of substrates** must be undertaken Substrate recycling where feasible and records documented. GUIDANCE: Where inert substrates are not recycled, the reasons why this is currently unfeasible are documented. SM.6 SM.6.a Where crops are grown Effective traceability systems are in place in substrates other than to allow for retrospective visibility of Microbiological batches used. soil or water, test certificates traceability systems are

Category 0 & 1 only

in place and

microbiological risks are considered and managed where necessary.

#### **SM.6.b**

Microbiological risks are considered within the Risk Assessment and – if the substrate presents a potential microbiological risk – verification testing is completed against defined parameters and to a pre-determined frequency.

# Category 0 & 1 only SM.6.c

Where microbiological testing is completed, non-conforming test results lead to follow up actions to manage any risk to crop.

GUIDANCE: Where testing of substrates is completed, it is recommended that an indicator organism such as E. coli is tested for. Testing can be completed inhouse or by the substrate supplier. The frequency of testing shall be risk based – testing of each batch is recommended. Where the inherent characteristics of a substrate mean it is unable to support the survival of pathogens, no testing is required.

#### **Environment**

Standard	How you will be assessed	Records
EC.1 (KEY) Potential pollutants must be stored in a manner that minimises the risk of contamination and pollution to crops, feedstuffs, animals, soils, groundwater and watercourses	EC.1.a Fuel tanks are bunded where required by legislation  EC.1.b PPPs are kept in a locked store with access only given to trained and authorised personnel  EC.1.c Manufactured fertiliser is stored on a hard, dry surface  EC.1.d Fertilisers that pose a combustion or oxidiser hazard are stored in accordance with the Safety Data Sheet  EC.1.e Any fertiliser spillage can be contained  EC.1.f Organic manures are not stored:	Pollution     Prevention     Management Plan

- within 10m of inland freshwaters or coastal waters
- within 50m of a spring, well or borehole

#### **EC.1.g**

Liquid fertiliser is stored in suitable tanks or bowsers: liquid fertiliser tanks are either bunded or have lockable or removable tap handles

#### EC.1.h

A documented pollution prevention management plan identifies all potential pollutants within the business and measures put in place to prevent pollution of the local environment.

#### **GUIDANCE:**

Potential pollutants include PPPs\*, fertilisers – manufactured and organic, anaerobic digestate, fuel oil, empty containers, disinfectants, baits, noise, light, dark smoke\*\*.

\*PPPs are defined as any product with a MAPP number.

\*\*The darker the smoke, the more polluting it tends to be. The Ringelmann chart is used to define dark smoke. The chart has 5 shades of grey with 0 being clear and 5 being black. Smoke is considered 'dark' if it is shade 2 or darker. For further info see: <a href="https://www.gov.uk/preventing-air-pollution/dark-smoke">www.gov.uk/preventing-air-pollution/dark-smoke</a>.

Watercourse includes, water courses (ditches, streams, rivers), ponds, lakes, reservoirs, canals, estuaries, coastline. Organic manure includes livestock manures, sewage sludge/biosolids, compost, digestates, organic industrial waste.

# EC.1.1 (KEY) The PPP store must be of a suitable design, construction and layout

#### EC.1.1.a

The store has adequate ventilation

#### EC.1.1.b

The lighting within the store is sufficient to read product labels

#### EC.1.1.c

The store is frost-proof

#### EC.1.1.d

The store is away from areas presenting a risk of fire and at least 4m away from flammable materials and/or sources of ignition

#### EC.1.1.e

Warning signs on or adjacent to, the door including:

- general warning sign
- no smoking sign
- · naked flames prohibited sign

#### EC.1.1.f

Liquids cannot contaminate granules and powders

#### EC.1.1.g

Fixed shelving is strong enough to support product

#### EC.1.1.h

Emergency facilities are available to deal with spillages e.g. sand/absorbent granules/an adequate sump/ability to retain spillages (i.e. bunded)

#### EC.1.1.i

An outside cage is only used where the product is supplied in a container designed specifically for outside storage.

#### EC.1.1.i

Segregation of product and empty packaging

#### EC.1.1.k

Emergency phone numbers are displayed

#### EC.1.1.m

A first aid kit, including eye wash, is available

#### EC.1.1.n

A fire extinguisher is available

GUIDANCE: HSE guidance on storing pesticides for farmers and other professional users: www.hse.gov.uk/pubns/ais16.pdf

# EC.1.2 A list of stored PPPs must be available and updated on a

#### EC.1.2.a

A list of stored PPPs must be kept and updated on a minimum monthly basis

#### EC.1.2.b



List of stored PPPs

minimum monthly basis	The list identifies product and quantity present in the store  EC.1.2.c A copy or suitable alternative (e.g. farm software system) is available for use by the emergency services
EC.2 In the case of packaging breakages PPPs must be transferred to a suitable container	EC.2.a Container has an appropriate safe closure cap or bag tie  EC.2.b The original label information is displayed
EC.3 Nitrogen based fertilisers must be stored in a way that minimises the risk of theft	EC.3.a Stored in a secure building or compound where there is no public access  EC.3.b Product is either not stored close to, or is not visible from, a public highway (covering or sheeting is an acceptable way of ensuring the product is not visible)  EC.3.c Checks are made to ensure manufactured fertiliser has not been tampered with, moved or stolen  EC.3.d Any theft or losses are reported to the police immediately (Tel: 101)  EC.3.e Site map references for granular nitrogen fertiliser storage are recorded (what3words or six figure Easting and Northing reference, e.g. 123456/456789)
EC.3.1 A list of stored manufactured fertiliser must be kept and updated regularly	Stored     manufactured     fertiliser list
EC.3.2 (Recommendation)	EC.3.2.a

It is recommended that you notify the relevant authorities if you are storing certain amounts and/or types of fertiliser Sites storing more than 150 tonnes of fertilisers which contain Ammonium Nitrate, where the Nitrogen content is greater than 15.75%, notify the Fire and Rescue Service

#### EC.3.2.b

If storing more than 25 tonnes in total of any fertilisers or other substances with an oxidiser warning sign on the bag or container you have notified both HSE and the Fire and Rescue Service

EC.4 (KEY)
PPPs must be
approved and
appropriate for
their intended use

#### EC.4.a

Manufacturer's instructions are followed

#### EC.4.b

PPPs are approved for the intended use (including target crop where relevant) through a valid, on-label approval, Extension of Authorisation for a Minor Use (EAMU) or Emergency Approval

#### EC.4.c

Unapproved product is kept in a segregated area of the pesticide store, pending collection for disposal at the earliest opportunity; clearly marked with signs/labels stating that it must not be used

#### **EC.4.d**

The Defra Code of Practice for Using Plant Protection Products is adhered to and particular attention is given to:

- environmental impact and residue levels
- maximum permitted dose rates
- any relevant risks if reduced dose rates are used
- restrictions on repeated applications to a single crop
- rotation of modes of action (where possible)

#### EC.4.e

All deliveries of PPPs can be traced back to supplier through invoices or suitable alternative records

#### **EC.4.f**

Where applicable, farms comply with customer pesticide policies



Invoices

GUIDANCE: A PPP is defined as any product with a current MAPP number. Alternative records to connect PPP deliveries to the supplier – such as a delivery note – may be used; particularly where invoices for recent deliveries have not yet been received

# EC.4.1 PPPs are mixed/handled in a manner that minimises the risk of contamination and pollution

#### EC.4.1.a

Where used, measuring equipment is dedicated to this purpose, non-glass, clean and free of accumulated residues and numbering is sufficiently legible to enable accurate measurement

## EC.4.1.b

Where used, weighing scales are dedicated to this purpose and are calibrated at least annually

#### EC.4.1.c

Any dedicated PPP filling areas are designed to effectively contain any drips or spills generated by filling of PPP application equipment

#### EC.4.1.d

Where a dedicated filling area is not in place, a suitable alternative provision is present to control this risk (e.g. a suitably functional drip tray and selection of filling locations distanced from water courses, boreholes/springs/wells)

#### EC.4.1.e

Any alternative provisions used are managed appropriately to ensure they do not themselves present a risk of contamination to personnel or environment

# EC.5 (KEY) PPPs must be applied in a manner that minimises the risk of contamination and pollution

#### EC.5.a

PPP application does not occur in areas of high pollution risk, as identified on farm map

#### EC.5.b

PPP application does not occur in unsuitable conditions e.g. when there is a risk of drift or where soil conditions are unsuitable e.g. waterlogged, flooded or snow-covered soil or where the soil has been frozen for more than 12 hours in the previous 24 hours



 PPP store scale calibration record

#### EC.5.c

Buffer zone requirements of the PPP being applied are complied with

#### EC.5.d

Local beekeepers are given at least 48 hours' notice of the intention to apply a PPP that is hazardous to bees, via direct contact, BeeConnected or an equivalent tool

#### EC.5.e

Care is taken when applying near hedgerows, woodlands, wetlands, private homes or public places e.g. schools, parks, playgrounds

GUIDANCE: BeeConnected website: beeconnected.org.uk

EC.6 (KEY)
PPP application
must be
undertaken by
competent
operators

#### EC.6.a

NPTC Pesticide Application Certificates/Lantra Awards Level 2 Pesticides qualification are held



National Register of Sprayer Operators (NRoSO) registration is held



- NPTC/Lantra certificates
- NRoSO membership number and expiry date

GUIDANCE: PPP application operators also include those applying granular/dust PPPs, post-harvest treatment or seed treatment

# EC.7 All PPP application equipment must be maintained and tested

#### EC.7.a

Frequency of testing is carried out as follows:

Equipment	Testing frequency
Boom sprayers over 3	Annual NSTS test
metres and air blast	
sprayers	
Granular nematicide	Annual NSTS test
applicator	
Boom sprayers 3 metres	NSTS tested
and under, micro-	before the
granular and slug pellet	equipment is 5
applicators, weed	years old and
wipers, seed treatment	thereafter NSTS
and other specialist	tested once every
application equipment	6 years



- NSTS Certificates
- Calibration records

Handheld/ knapsack	No testing
sprayers	required

#### EC.7.b

Equipment calibration occurs between seasons of use, as a minimum

#### EC.7.c

Equipment used to apply granular PPPs is calibrated whenever there is a change of product

#### EC.7.d

All handheld applicators and knapsack sprayers must be checked on an annual basis and results recorded

# EC.7.1 PPPs must be transported in manner that minimises the risk of contamination and pollution

#### EC.7.1.a

Transporting product through water/crossing watercourses is avoided wherever possible

# EC.7.1.b Diluted PPPs:

- Valves which control the flow of the PPP to the spraying equipment are shut during transport unless constant agitation is specifically mentioned on the label
- Hoses, nozzles and other fittings are maintained in line with manufacturer's instructions

# EC.7.1.c Undiluted PPPs:

• transported in a secure chest/ cabinet/ container

# EC.7.3 Where granular nematicides are used, use must be in accordance with the Nematicide Stewardship Programme (NSP) Best Practice Protocol.

#### EC.7.3.a

Staff applying granular nematicides hold a PA4 or PA4G certificate

#### EC.7.3.b

Staff applying granular nematicide complete ARTIS e-learning modules

#### EC.7.3.c



- PA4 /PA4G certificate
- ARTIS e-learning certificate
- Applicator check record (pre-season

The applicator is checked prior to the start of the season and on each working day to ensure all pipework is correctly fitted, the hopper bungs are in place and the hopper lids are secure. When the applicator is in use, granules are monitored to check they are flowing correctly

### EC.7.3.d

Applicators in potatoes are fitted with a device in the cab which allows the operator to shut off nematicide granule flow at least 3 metres from the end of each row

#### EC.7.3.e

Designated areas for filling hoppers in each field are used which can easily be checked for spillages. Spillages should be dealt with according to manufacturer's recommendations and the NSP protocol to ensure no granules are left on the surface

#### EC.7.3.f

Treated fields are checked the next day (12-24 hours) after application for any adverse effects to wildlife as per the protocol outlined in the NSP Field Monitoring Guidance

- and on day of operation)
- Post-application field check record

GUIDANCE: Nematicide Stewardship Programme: http://nspstewardship.co.uk

The Nematicide Stewardship Programme (NSP) was founded in 2015 with a scope covering the use of cholinesterase inhibiting, granular nematicides – specifically Fosthiazate (e.g. Nemathorin). The NSP scope does not include liquid nematicides and non-cholinesterase inhibiting granular nematicides.

EC.7.4 Anyone making recommendations on PPP use must be on the BASIS Professional Register.		Name and BASIS professional register number
EC.7.5 Surplus spray mix must be dealt with in a manner that	EC.7.5.a Surplus spray mix is sprayed onto designated areas (e.g. crop left specifically for the purpose) and the maximum rate is not exceeded, or	<ul><li>Exemption/ permit</li></ul>

minimises the risk of contamination and pollution	securely stored pending collection by a registered waste contractor  EC.7.5.b  Tank washings and rinsates are treated in a biobed or biofilter under a registered waste exemption or disposed directly to the ground in accordance with an appropriate permit	
EC.7.7 (Recommendation) It is recommended that PPP application equipment is stored in a manner that minimises the risk of contamination or pollution	EC.7.7.a  Equipment is stored in a safe, dedicated area and - where this is within a building - the area is well-ventilated  EC.7.7.b  Application equipment is regularly cleaned down	<ul><li>Cleaning records</li></ul>
EC.7.8 (Recommendation) It is recommended that records of PPP application instructions/ agronomist recommendations are kept		<ul> <li>PPP instruction records</li> </ul>
EC.8 Records must be kept of all applications of PPPs and any other substances applied to the crop	EC.8.a  Records are kept of all PPP applications, including PPPs used to treat seed, rootstock and young plants, in-field PPPs, pre-harvest crop store PPPs and post-harvest PPPs  EC.8.b  Records include:  • field/store identifier for post-harvest treatments • crop/variety • sowing or planting date • date and time applied • justification/target for application • product name and active ingredient	<ul> <li>PPP application records</li> <li>Biological control introduction records</li> </ul>

- rate of application
- water volume
- · wind direction and speed
- harvest interval
- first permissible harvest date
- name of sprayer operator

#### EC.8.c

Records are kept for at least 3 years

#### **EC.8.d**

Records are kept of applications of biological controls, such as natural predators, and any other substances not classed as PPPs

#### **GUIDANCE:**

Records for seed treatments and treatments of rootstock and young plants concern in-house treatments, not seed, rootstock or young plants purchased with a pre-applied treatment.

Biological controls are defined as all products used for the purpose of plant protection which do not have/require a MAPP number. Examples include but are not limited to, plant extracts, pheromones and natural predators.

"Other substances" may include products not covered by pesticide legislation such as growth promoters, biostimulants, pH adjusters, etc

EC.8.1 (KEY) Systems must be in place to ensure statutory harvest intervals for PPPs are complied with		<ul><li>Harvest records</li></ul>
EC.8.2 Records must be held for any bought-in seed, rootstock or young plants that have been treated with PPPs		Treatment records or suitable alternative
GUIDANCE: Record keeping system in place to effectively identify active ingredients applied to seed, rootstock or young plants prior to purchase.		
EC.8.4 (Recommendation)		R

It is recommended that where professional guidance on the use of biological controls is provided by an agronomist or another party (e.g. supplier), this guidance is followed and documented records are retained

 Recommendations for use of biological controls

#### EC.9 (KEY)

Manufactured fertilisers, organic manures and other soil amendments must be applied in a manner that minimises the risk of contamination or pollution

#### EC.9.a

Any materials, including waste materials, that are applied to land should have agricultural benefit

#### EC.9.b

Exemptions/permits to use waste materials are held

#### EC.9.c

A Nutrient Management Plan (NMP) is established and implemented where applications are made to land.

#### EC.9.d

NMP includes the following:

- timing, frequency and quantity of applications
- identification of any areas where particular applications cannot be made
- nutrient content of organic manures and fertilisers
- plans to minimise nutrient loss

#### EC.9.e

Before application, the following factors are considered:

- NVZ restrictions
- soil type
- soil condition
- results of soil testing

## R

- Exemptions / permits
- Nutrient
   Management Plan
   (or alternative
   records detailing
   required
   information)
- Justification for applications of fertilisers and organic manures (may be covered in NMP or in other records)

- crop requirements
- slope
- weather conditions
- the location of watercourses
- water supplies and abstraction points (including on neighbouring land)
- location of field margins/hedges/other areas where applications should not be made
- application machinery travelling conditions

#### EC.9.f

Applications are not carried out during high-risk times e.g. on waterlogged, flooded or snowcovered soil or where the soil has been frozen for more than 12 hours in the previous 24 hours

#### **EC.9.g**

Biosolids are assured under the Biosolids Assurance Scheme

#### EC.9.h

Untreated sewage sludge, untreated abattoir or catering derived animal by-products are not applied

#### EC.9.i

Applications are made in accordance with Appendix

#### EC.9.j

Applications of fertilisers and organic manures are justified and planned to not exceed soil and crop nutrient needs

GUIDANCE: Possible examples of relevant inputs include but are not limited to:- Manure-Compost- Anaerobic digestate- Treated sewage sludge- Bio-stimulants- Plant strengtheners

Nutrient Management Plan requirements can also be covered under a broader, overarching plan (e.g. Soil Management Plan or Land Management Plan) or an adjacent plan that covers these topics (e.g. Manure Management Plan).

Tried & Tested Nutrient Management Plan: <a href="https://www.nutrientmanagement.org/2-nutrient-management-plan">www.nutrientmanagement.org/2-nutrient-management.org/2-nutrie

For guidance on fertiliser use, see the AHDB Fertiliser Manual RB209: <a href="https://www.ahdb.org.uk/projects/CropNutrition.aspx">www.ahdb.org.uk/projects/CropNutrition.aspx</a>

EC.9.1 Anyone making recommendations on manufactured fertiliser use must be on the FACTS Professional Register.	Name and FACTS professional register number
EC.9.2 Fertiliser rates must be based on a calculation of the nutrient requirements of the crop and on regular analysis of nutrient levels in soil, plant or nutrient solution and with consideration of nutrient content of any organic manure applications.	Analysis results or standard analysis (e.g. RB209)
EC.9.4  Documentary evidence detailing the chemical content (N, P, K) of all purchased, manufactured fertiliser must be retained	<ul> <li>Invoices/delivery records/data sheets</li> </ul>
EC.9.5 Documentary evidence must be kept which demonstrates that manufactured fertiliser is responsibly sourced and traceable, e.g. from a Fertiliser Industry Assurance Scheme	<ul> <li>Invoices/delivery records</li> </ul>

(FIAS) approved supplier		
EC.9.6 Records are kept of all recommendations for fertiliser and soil improvement products	EC.9.6.a Recommendations for fertiliser and soil improvement products are documented and retained  EC.9.6.b Recommendations are sufficiently comprehensive to support rational and responsible use. Examples of data fields that may be relevant:  • name of person making recommendation • date of recommendation • reason for recommendation • application method • crop • location/area • type of fertiliser or soil amendment • application rate • specific precautions	Fertiliser application     Instructions /professional advisor recommendations
EC.10 All manufactured fertiliser application equipment must be maintained and calibrated at least annually		<ul><li>Calibration record</li></ul>
EC.10.1 Records must be kept of all applications of manufactured fertilisers, organic manures and other soil amendments	<ul> <li>EC.10.1.a</li> <li>Records include:</li> <li>field identifier/location</li> <li>date of application</li> <li>product type</li> <li>product quantity</li> <li>method of application</li> <li>name of operator or contractor</li> </ul>	Manufactured fertiliser/ organic manure application records

EC.10.2 (KEY)
All manufactured
fertilisers, organic
manures and other
soil amendments
are safe and
suitable for use and
are carried out in
accordance with
the Safe
Applications to
Land appendix

#### EC.10.2.a

All manufactured fertilisers, organic manures and other soil amendments used (including faeces from animal grazing) are considered within the Risk Assessment and within relevant Site Risk Assessments

#### EC.10.2.b

All applications to land (including faeces from animal grazing) are in accordance with the Safe Applications to Land appendix and any relevant withholding periods have been adhered to

#### EC.10.2.c

Where crop residues are composted and used as a soil conditioner, there is no identifiable risk of disease carry-over

## Category 0 and 1 only EC.10.2.d

All staff and contractors involved in applying manure-based products understand the microbiological risk they pose.

## R

- Risk Assessment
- Site Risk Assessment

EC.11 (KEY)
All wastes which
cannot be utilised
are disposed of in a
manner that
minimises the risk
of contamination
and pollution

#### EC.11.a

Wastes are disposed of by a registered waste carrier

#### EC.11.b

Wastes are not burnt, with the exception of vegetation and untreated wood

#### EC.11.c

Empty PPP containers are:

- cleaned using an integrated pressure rinsing device, or triple rinsed appropriately and the rinsate returned to the spray tank
- stored securely
- not reused
- returned to the supplier or where nonreturnable, disposed of via a registered waste carrier

#### EC.11.d

Redundant PPPs are disposed of via the supplier or a registered waste carrier



- Waste transfer notes
- Waste carrier name and registration number

GUIDANCE: In order to transport your own waste you must be registered (free of charge) as a low tier waste carrier: https://www.gov.uk/register-renew-waste-carrier-broker-dealer-england

#### EC.12 Systems are in place to manage waste responsibly (REVISED)

#### EC.12.a

Opportunities are considered for:

- · reducing the production of waste
- re-using waste
- recycling waste, plastics in particular

#### EC.12.b

A Waste and Recycling Management Plan is documented and implemented.

#### EC.12.c

Consideration is given to the minimisation and management of food waste, where applicable



 Waste and Recycling Management Plan

## EC.13 Crop waste is managed responsibly to minimise risk to other crops

#### EC.13.a

Where disposal of crop waste presents a disease transfer risk, responsible management practices are documented and adopted

Examples of such practices include (but are not limited to) use of dedicated waste receptacles for plant and crop waste and management/removal of any haulm growth on field potato dumps.

#### EC.13.b

Where crop residue in the field presents a physical contamination risk to other crops in the rotation, mitigation steps are documented and adopted

Examples of such practices include (but are not limited to) identifying post-harvest management practices to minimise the potential for regrowth and volunteers. This may present an elevated risk in certain situations - e.g. poisonous berries from potato regrowth that cannot be easily separated from vining peas.



Crop waste management controls

## Integrated Pest Management

Standard	How you will be assessed	Records
IM.1 Integrated Pest Management (IPM) must be in place to proactively manage crop production (REVISED)	IM.1.a An IPM Plan is documented and followed  IM.1.b The IPM Plan is discussed with relevant staff, advisers and contractors  IM.1.c The IPM Plan covers all areas of good agricultural practice with an emphasis on optimising the use of PPPs and improved protection of the environment.  IM.1.d The person technically responsible for the IPM plan has received appropriate training or has sought advice from a suitably qualified person  IM.1.e Prevention measures identified in the IPM plan are implemented	• IPM Plan
GUIDANCE: For a template IPI pest-management/	M plan visit: https://voluntaryinitiative	.org.uk/schemes/integrated-
IM.2 Regular crop inspections must be undertaken and recorded	IM.2.a  Documented crop inspection records are available. These may be electronic or handwritten	<ul> <li>Crop inspection records/diary notes</li> </ul>
IM.3 Relevant pests, diseases and weeds must be monitored regularly and recorded	IM.3.a Recording is carried out directly or through participation in a relevant prediction programme IM.3.b	<ul> <li>Records of pests, diseases and weeds on- farm</li> </ul>

Documented thresholds with corresponding technical options are used where applicable, to ensure any reactive application of PPPs is evidence based.

#### **IM.4**

Plans must be in place to minimise the use of PPPs without compromising product quality.

#### IM.4.a

There is documented or demonstrable evidence that strategies are present to reduce PPP use.

#### **IM.5**

A sample of each crop must be tested for pesticide residues at least annually, unless an evidence-based justification for less frequent testing is present (REVISED)

#### IM.5.a

Testing is completed by a laboratory with accreditation for pesticide residue testing (issued either by UKAS or another ILAC signatory)

#### IM.5.b

Samples are collected in accordance with a documented sampling procedure

#### IM.5.c

Pesticide residue test results are traceable to:

- producer
- production site
- batch
- date of harvest

#### IM.5.d

A multi-residue screen is completed unless a clear justification is present for an alternative testing suite

#### IM.5.e

Investigation and appropriate follow up actions are taken in response to any MRL exceedance or detection of non-applied PPPs (including use of contingency plan where needed)



- Pesticide residue test results
- Documented follow up actions (where appropriate)
- Documented sampling procedure
- Documented justification for reduced testing frequency or testing suite (where applicable)

#### IM.5.f

A means of checking applicable MRLs for country of production and market of sale (if different) is available

#### IM.5.g

Where crops are tested less than annually, a documented, risk-based justification is present and - as a minimum - consideration is given to the following points:

- historical results are available and indicate a particularly low risk of MRL exceedance
- crop management practices and PPP use presents a particularly low risk of MRL exceedance and has not substantially changed since the last available test was completed
- consideration is given to risk of adventitious contamination routes (e.g. legacy contamination, spray drift)
- an alternative testing frequency is defined, ensuring that testing is completed at least once every three years

GUIDANCE: Testing may be completed by a customer or other supply chain stakeholder provided that the required testing frequency is met and results of testing are made available to the grower.

#### IM.6

Where maximum nitrate concentrations apply to crop commodities, the risk must be considered and appropriate testing regimes implemented.

#### IM.6.a

Nitrate concentration is considered within the Risk Assessment.

#### IM.6.b



- Risk Assessment
- Product testing for nitrates

Product testing requirements are
defined and implemented.

#### IM.6.c

Test results are compared with maximum permitted nitrate concentrations with documented evidence of follow up action if maximum concentration is exceeded.

#### **GUIDANCE**:

For background information on nitrate parameters in fresh produce, see: <a href="https://www.food.gov.uk/research/research-projects/nitrate-monitoring-in-spinach-and-lettuce-surveillance-programme">https://www.food.gov.uk/research/research-projects/nitrate-monitoring-in-spinach-and-lettuce-surveillance-programme</a>

As of 2021, nitrate legislation applies to spinach, lettuce and rocket.

### Irrigation

Standard	How you will be assessed	Records
IG.1 Water used in crop production (irrigation, mixing of fertiliser and PPPs, crop and equipment washing) must be tested at a frequency which is in response to the Risk Assessment and in line with the Water Matrix Appendix.	IG.1.a Microbiological testing frequency is dependent on crop category  IG.1.b Water is tested for E. coli  IG.1.c E. coli thresholds are dependent on crop category - further information can be found in the Water Matrix Appendix  IG.1.d Growers are aware of any critical values expected by their customers	
IG.1.1 Controls and test results must be kept, regularly reviewed and any improvement action taken must be recorded for all water used in crop production (irrigation,	IG.1.1.a Water test results are available IG.1.1.b There is evidence of corrective action being taken in response to results where required, in accordance with the Water Matrix	Water test results

mixing of fertiliser and PPPs, crop and equipment washing).		
IG.1.2 Analysis of irrigation water is completed by a UKAS accredited laboratory (or another ISO 17025 standard) with E. coli testing of water samples within the scope of accreditation.	IG.1.2.a Accreditation of the laboratory can be demonstrated through documentation or electronically (e.g. through a website)	Evidence of laboratory accreditation
IG.2 (KEY) Untreated sewage water must not be used	IG.2.a  No evidence that untreated sewage contaminated with human and/or mon crop production sites	
IG.3 A documented Water Management Plan must be produced and used to identify opportunities for water use efficiency and reducing waste	IG.3.a A Water Management Plan is in place  IG.3.b Plan identifies opportunities to optimise water efficiency - examples may include:  • computer modelling of crop's water requirements • irrigating at night • maintenance plans to reduce possibility of leakage • storage of winter storm water • collection and re-use of some water, such as from glasshouse roofs and winter rainfall • water audit	Water management plan
IG.3.1 (Recommendation) It is recommended that the Water Management Plan gives consideration		

to participation in collaborative water management activities with neighbouring stakeholders (NEW)		
IG.4 Crop irrigation must be based on an identified need	IG.4.a Irrigation need is identified by refere examples include:  • moisture measurement • scheduling (where appropriate) • physical inspection  weather station data	
IG.5 Records must be kept of irrigation water usage	IG.5.a Primary source of each application identified  IG.5.b Volume and timing recorded	<ul><li>Irrigation records</li></ul>
IG.6 Licenses are in place where required for water used on farm	IG.6.a A valid licence or permit is in place for use of any ground water or surface water used for irrigation  IG.6.b Any licensing conditions (e.g. permitted volume or timing of abstraction) are complied with	

## Storage

Standard	How you will be assessed	Records
ST.1 Storage areas must be managed and maintained in a safe hygienic condition to ensure crops stored do not become contaminated - e.g. glass, hard plastic, etc.	ST.1.a Glass and hard plastics are protected from damage ST.1.b A glass and Hard Plastic Policy/procedure is in place which:	<ul> <li>Glass and Hard Plastic Policy/procedure</li> <li>Glass and hard plastic register</li> <li>Glass and hard plastic check records</li> </ul>

- lists all glass and hard plastics in the storage area on a register
- the register is checked on a riskbased frequency for signs of breakage or damage
- where glass and hard plastics cannot be covered regular checks (based on a frequency determined by the Risk Assessment) are made to ensure there is no damage
- Sets out actions to be taken in the event of a glass breakage and who responds

#### ST.1.c

Long-term, controlled atmosphere stores are kept secure when holding crop

GUIDANCE: Monthly glass and plastic checks are suggested as a guide, but an alternative frequency may be deemed appropriate, for example, where the store is unoccupied for extended periods or for Controlled Atmosphere (CA) stores where it may not be possible to safely enter the store.

#### **ST.2**

Temperature and humidity of storage facilities used to store packed product must be monitored and documented to ensure correct storage conditions are maintained

#### ST.2.a

Optimal storage conditions and acceptable ranges are clearly defined for products being stored

#### ST.2.b

Storage conditions are routinely monitored to ensure conditions are within acceptable range

Category 0, 1 & 2 only



- Storage and product checks
- Out of temperature procedures
- Calibration records

	ST.2.c Documented procedures that set out actions to be taken where storage conditions or product temperatures are found to be outside the acceptable range  Category 0, 1 & 2 only ST.2.d All temperature monitoring equipment is routinely calibrated	
ST.3 Stored packed product must be rotated to ensure product quality and safety	ST.3.a Stock rotation system is effectively implemented	
ST.4 Product stores must be cleaned each season, inspected and maintained	ST.4.a Stores are part of annual maintenance and cleaning programme	Store maintenance records
ST.5 Where PPPs are used as store treatments, all use must be based on qualified recommendation		Name and BASIS professional register number

GUIDANCE: A PPP is defined as any product with a current MAPP number. Scope may encompass multiple applications if deemed appropriate by the qualified adviser.

## ST.6 Where PPPs are used as store treatments, operators must be able to demonstrate competence

#### ST.6.a

NPTC Pesticide Application Certificates or Lantra Awards Level 2 qualification, with modules covering relevant operational area

#### ST.6.b



- NPTC/Lantra certificates
- Product specific training from manufacturer

Specific alternative training
options

GUIDANCE: Where store treatments do not fall within the scope of NPTC and Lantra certified modules, members shall seek alternative training options where provisions exist. Examples include online training provided by product manufacturers supplying ethylene-based treatments (e.g. Restrain: <a href="https://restrain.thinkific.com">https://restrain.thinkific.com</a>).

#### **ST.7**

Systems must be in place to ensure that postharvest treatments do not contaminate other products/crops

#### ST.7.a

There is awareness of contamination risks and controls are implemented where a risk is identified

#### ST.7.b

Stores that have been treated with CIPC must be clearly labelled with a permanent notice indicating CIPC has been used

#### **ST.7.1** (Recommendation)

It is recommended that contractors used for post-harvest treatment of potatoes are certified to the National Association of Agricultural Contractor's ALBC Post-Harvest Potato Storage Treatment Standard



 ALBC Post-Harvest Potato Storage Treatment Standard certificate

#### **ST.8**

Where third party storage facilities are being used to hold harvested or packed product a contract or formal agreement must be in place defining storage requirements

#### ST.8.a

Contract/agreement, which confirms that third party storage conditions are in line with the Red Tractor
Assurance for Farms - Fresh Produce Standards for storage and relevant crop protocols which includes:

- allergen status
- temperature and storage conditions traceability



Contract/agreement

#### ST.9

Regular checks of storage providers to

#### ST.9.a

Checks are carried out to ensure that the product is



ensure they are meeting requirements (or a suitable alternative form of assurance) must be in place being stored in line with the contract/agreement held with the store owner or a valid BRCGS certificate is in place Store audits or BRCGS certificate

### **Energy Efficiency/Environmental Impact**

Standard	How you will be assessed	Records
EE.1 A written energy policy is in place detailing how energy is used and plans are in place to ensure optimal energy consumption	EE.1.a Renewable energy options are considered where viable. EE.1.b Farming equipment is selected and maintained for optimal energy consumption.	• Energy Policy
EE.1.1 (Recommendation) It is recommended that a plan is in place to reduce greenhouse gas emissions and sequester carbon where possible (NEW)	<b>EE.1.1.a</b> The farm's reduction and seques supported with metrics	tration of greenhouse gases is
EE.3 A plan for the management of wildlife and conservation of the environment for the farm must be in place and activities implemented on farm	<ul> <li>EE.3.a</li> <li>Plan includes activities that:</li> <li>minimise environmental impact</li> <li>avoid damage and deterioration to habitats</li> </ul>	Wildlife Management and Environment Conservation Plan

GUIDANCE: Requirements may be addressed through a specific Wildlife Management and Environment Conservation Plan but may also be covered in another document.

# EE.4 Producers must be aware of any practices that have an adverse environmental impact EE.4.a Important features of biodiversity and conservation value are identified on and around the farm EE.4.b

	Practices are adopted to minimise detrimental impact on such features	
	<b>EE.4.c</b> Consideration has been given to how the environment can be managed for the benefit of the local community, flora and fauna	
EE.5 (Recommendation) It is recommended that consideration is given to the conversion of unproductive sites to conservation areas for the encouragement of natural flora, fauna and increase of biodiversity	EE.5.a  Consideration has been given to low lying wet areas, woodlands, headland strip and areas of impoverished soil	
EE.6 (Recommendation) It is recommended that a baseline audit to understand existing animal and plant diversity on-farm is undertaken		<ul><li>Baseline audit</li></ul>

## Genetically Modified Organisms

Standard	How you will be assessed	Records
GM.1 (KEY) There is no production of GM crops unless a valid derogation has been agreed with Red Tractor.		

## Harvesting

Standard	How you will be assessed	Records
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# HS.1 Written staff hygiene policies and/or procedures must be in place, communicated to personnel and compliance monitored

#### HS.1.a

Hygiene policy includes:

- all harvest personnel to wash hands (with running water and non-perfumed soap) and dry hands before starting work, after breaks and after using toilets
- no jewellery except for a plain wedding band, jewellery used for health reasons or religious jewellery with no stones or jewels
- no rings or studs worn in exposed parts of the body
- no eating, spitting or chewing in cropping areas
- no smoking including ecigarettes and vaping in cropping areas
- banning personal phones and watches in the field or production areas has been considered (excludes supervisory staff and lone worker phones)
- no excessive make-up, false nails, false eyelashes or hair extensions where they present a contamination risk to the crop
- no nail varnish
- no perfume or aftershave

## Category 0, 1 and 2 only HS.1.b

Reporting of cuts and wounds and the use of blue, metal-detectable plasters, the issue of which is controlled and recorded.



- Hygiene Policy
- Personnel training records/agency labour training records
- Plaster issue record

#### HS.2 All staff handling crops are given training in the Staff Hygiene Policy as part of the staff

#### HS.2.a

Training covering all applicable requirements of the Hygiene Policy is completed as part of the induction before starting work



Training records/agency

## induction before starting work

#### HS.2.b

Training covering all applicable requirements of the Return-to-Work Policy is completed as part of the induction before starting work

labour training records

Visitor/Contractor

Hygiene Policy

#### HS.2.c

Refresher training in personal hygiene requirements is completed at least annually

## R

#### HS.3

All visitors that enter crop production areas must be made aware of any site hygiene and Health and Safety requirements.

#### HS.3.a

Hygiene Policy in place for visitors/contractors

#### HS.3.b

Systems in place to ensure all visitors/ contractors entering crop production areas have been made aware of Health and Safety requirements

## Category 0, 1 and 2 only HS.3.c

Systems in place to ensure all visitors/contractors entering crop production areas have been made aware of hygiene requirements

## Category 0, 1 and 2 only HS.3.d

Visitors/contractors declare they understand and will comply with the Hygiene Policy

#### Personal Protective Equipment (PPE) appropriate to the crop type being produced

must be provided and

maintained in good

condition. (REVISED)

HS.4

#### HS.4.a

Personal Protective Clothing (PPE) requirements are clearly defined by the business.

#### HS.4.b

All PPE used is clean and fit for purpose.

#### HS.4.c

If hair is identified as a contamination risk within the Risk Assessment, suitable head coverings are in use (and beard snoods where appropriate).

- PPE requirement policy
- Glove use procedure
- Contract laundry audit report

#### **HS.4.d**

Where PPE is required to protect the product from contamination, it is captive to the business and not taken home or to employee accommodation.

#### HS.4.e

Where PPE is required to protect the product from contamination, it is not worn in the smoking area or toilets.

## Category 0 & 1 only HS.4.f

Where gloves are used, a glove use procedure is in place which includes:

- Only intact and clean gloves are used
- Glove storage
- Staff to discard when torn or heavily soiled
- Hand washing before and after gloves are put on

## Category 0 only HS.4.g

System for managing the laundering of non-disposable overalls (where these are used to prevent product contamination and not solely for the protection of workers):

- laundered by an audited contracted facility or
- laundered in-house in a manner that minimises the risk of crosscontamination

#### HS.4.h

There is evidence that the PPE provided is being used by the workers

#### HS.4.i

Suitable changing facilities are provided where necessary. This may not be needed if PPE is worn over existing clothing

GUIDANCE: Where PPE or work wear is provided exclusively for the protection of workers and is not deemed to be a product contamination risk, it may be appropriate for this PPE to taken into and worn in non-operational areas.

**HS.5 (KEY)** 

Clean and maintained facilities that are accessible to all personnel and enable them to ensure an appropriate degree of personal hygiene must be provided

#### HS.5.a

There is one toilet available per 10-20 people working at any time

#### HS.5.b

Facilities provided:

- are supplied with nonperfumed soap, water, hand drying facilities (paper towels or equivalent) and toilet paper
- are routinely checked to ensure soap, water and paper towel supplies are maintained
- are maintained in a clean and usable condition
- are within 500m of working or within 5 minutes' walk
- have potable water for hand washing that does not pose a risk of contamination

#### HS.5.c

Portable toilets are not placed in close proximity to the crop where there could be a risk of contamination during cleaning or in case of a spill

## Category 0, 1 & 2 only HS.5.d

Where used, hand sanitisers are a complement to handwashing, not a replacement.

## R

- Hygiene policy
- Toilet cleaning records

## Written procedures for reporting any infectious diseases must be in place and communicated to personnel and visitors

HS.6

#### HS.6.a

Policy in place for all personnel returning to work after gastrointestinal (GI) illnesses

#### HS.6.b

Policy on GI illnesses and return to work is communicated to personnel (via Hygiene Policy) and



- Return to work Policy
- Hygiene policy
- Visitor/ Contractor Hygiene Policy
- Return to work questionnaire

visitors/contractors (via Visitor/Contractor Hygiene Policy)

## Category 0, 1 & 2 only HS.6.c

Formal recording of all incidences of GI illness is in place

## Category 0, 1 & 2 only HS.6.d

Supervisory/Management staff are trained in assessing risk

## Category 0, 1 & 2 only HS.6.e

Workers complete a Return-to-Work questionnaire when returning after a period of absence. A manager or supervisor reviews this questionnaire and determines whether the worker may return to work. A counter signature or equivalent record is present to verify this process has occurred.

## Category 0 only HS.6.f

At least one member of staff is formally trained in assessing personnel return to work after GI illness.

#### Training records

#### **HS.7**

All tools, equipment, crates, boxes and transportation used in harvesting must be kept clean and maintained to prevent product contamination.

#### HS.7.a

Cleaning schedules are in place that document how and when to clean

#### HS.7.b

Cleaning takes place away from the crops and irrigation water sources

#### HS.7.c

Damaged containers are repaired/replaced

#### HS.7.d

Maintenance schedules are in place for all appropriate equipment including vehicles which are under the



- Cleaning schedules
- Cleaning records
- Maintenance records

member's responsibility and are being used to load and transport produce

## Category 0, 1 & 2 only HS.7.e

When not in use, cleaned containers are stored in a manner that prevents the risk of contamination (e.g. from pests, birds, dust, water, etc.)

## Category 0, 1 & 2 only HS.7.f

Only specified food-grade cleaning chemicals and lubricants are used where relevant (e.g. food contact surfaces).

## Category 0, 1 & 2 only HS.7.g

When not in use, harvesting equipment is stored in a manner that prevents the risk of contamination.

## Category 0, 1 only HS.7.h

Where containers such as crates and bins are stored outside, systems are in place to protect them from contamination, or they are cleaned and/or disinfected prior to being used for product.

## HS.8 Containers/crates/boxes

used to store and transport product must be dedicated to that use.

#### HS.8.a

Product containers/crates/boxes are not used to store any chemicals, waste or other debris that could contaminate product. NB: waste does not include waste product

#### Category 0 & 1 only

HS.8.b

Overfilling of containers and bins is avoided to prevent transfer of contaminants onto product during stacking

#### Category 0 & 1 only

HS.8.c

Excessive dirt or mud is removed from containers during harvest

#### Category 0 & 1 only

**HS.8.d** 

Harvesting containers/crates are not placed directly on the ground (with the exception of wooden field crates)

### HS.9

Suitability of multipurpose trailers must be assessed as part of the Risk Assessment and trailers are cleaned prior to being used to transport product

#### HS.9.a

Cleaning is considered within the Risk Assessment

#### HS.9.b

Cleaning procedures are in place and cleaning records are kept



- Risk Assessment
- Cleaning Procedures
- Cleaning records

#### **HS.10**

Controls must be in place to protect product from contamination with any broken glass, hard plastic, wood or other foreign bodies

#### HS.10.a

Where glass and hard plastics cannot be covered e.g. tractors and trailers, regular checks are made to ensure there is no damage

#### HS.10.b

Containers, crates and boxes are checked prior to filling

#### HS.10.c

Damaged wooden crates, pallets or trays are repaired or disposed of

## Category 0, 1 & 2 only HS.10.d

All staff are trained in how to deal with glass/hard plastic breakages and understand the Glass and Hard Plastic Policy/Procedure

## Category 0, 1 & 2 only HS.10.e

Written procedures are in place for handling glass and hard plastic in glasshouses and regular checks are carried out to ensure there is no damage

## Category 0, 1 & 2 only HS.10.f

Written procedures for how to deal with any glass and hard plastic breakages are in place



- Glass and hard plastic checks records
- Glass breakage policy/procedure
- Training records

#### **HS.11**

Controls must be in place to prevent the risk of product contamination from knives and cutting blades, secateurs, maintenance tools, gloves and plasters.

#### HS.11.a

Equipment is managed to ensure that it does not represent and risk of contamination to product through loss or damage

#### HS.11.b

System to manage knives, blades and tools is in place which includes:

- controlled issue and collection at end of shifts
- routine inspection of blades for damage
- lost items investigated



 Knife issue record (where used)

#### **HS.12**

Daily start-up checks are completed for harvesting operations to ensure that any risks to product are identified and addressed

#### HS.12.a

Documented checks of harvesters and other relevant vehicles and harvesting equipment are completed before harvesting commences to ensure no product contamination risks are present - examples include but are not limited to:

- glass and plastic breakages
- cleanliness of food contact surfaces
- fluid leaks (e.g. oil, hydraulic fluid)

#### HS.12.b

Documented checks of harvest workers are completed to ensure they are compliant with staff hygiene policies and procedures

#### HS.12.c

Where issues are identified, documented follow up actions are taken to manage any risk to product or personnel



 Daily start-up checks

GUIDANCE: For efficiency, daily start-up checks may also encompass other requirements for documented checks within this section, including glass and plastic checks (HS.10) and knife issue (HS.11).

#### **HS.13**

A written procedure must be in place that details actions to be taken in the event of identification of contamination in a field crop

#### HS.13.a

Contamination procedure in place, including glass, foreign objects, oil, diesel, wood, metal, dead animals and bird & animal excrement and any other potential contaminants deemed to be relevant



 Contamination procedure

#### **HS.14**

Procedures must be in place to ensure packaging used is clean and free from contamination

#### HS.14.a

Documented packaging controls are defined



#### HS.14.b

Packaging is checked before use

#### HS.14.c

Packaging is stored in a clean area, free from any contamination risks and is not stored directly on the field or floor of rigs, trailers, etc.

Documented controls for packaging

#### **HS.15**

Transportation and temporary storage of harvested products must be managed to minimise contamination risks

#### HS.15.a

Harvested product is covered during transport and during any temporary, outdoor storage except where risk-based mitigations apply

#### HS.15.b

Harvested product is not left in the field overnight

#### Category 0, 1 & 2 only

#### HS.15.c

Materials used for covering, if reused, are cleaned between uses

GUIDANCE: Examples of crops which may be transported or stored without covers include root vegetables, transported in bulkers where the product will subsequently undergo a processing step to remove soil and stones.

#### **HS.16**

Where product temperature is identified as a food safety or quality control within the Risk Assessment, product is cooled as soon as possible after harvest and in

#### HS.16.a

Any relevant temperatures and cooling times are defined by the Risk Assessment



#### HS.16.b

Adequate cooling facilities are present to allow product to be cooled in

Risk Assessment

accordance with the defined cooling parameters	accordance with defined cooling parameters	
HS.17 All non-produce waste must be removed from fields and disposed of appropriately		

## **Produce Packing**

Standard	How you will be assessed	Records
PP.1 Written hygiene policies and procedures must be in place, communicated to personnel and compliance monitored.	<ul> <li>PP.1.a Hygiene policy includes: <ul> <li>personnel to wash hands (with running water and nonperfumed soap) and dry hands before starting work, after breaks and after using toilets</li> <li>no jewellery except for a plain wedding band, jewellery used for health reasons or religious jewellery with no stones or jewels</li> <li>no rings or studs worn in exposed parts of the body</li> <li>no nail varnish</li> <li>no perfume or aftershave</li> <li>no eating, spitting or chewing in production areas</li> <li>no smoking including ecigarettes and vaping in production areas</li> <li>banning personal phones and watches in production areas has been considered (excludes supervisory staff and lone worker phones)</li> <li>no excessive make-up, false nails, false eyelashes or hair</li> </ul> </li> </ul>	Hygiene Policy     Plaster issue record

	extensions where they present a contamination risk  Crop category 0, 1 and 2 only PP.1.b		
	Reporting of cuts and wounds and the use of blue, metal-detectable plasters, the issue of which is controlled and recorded		
PP.2 All personnel handling fresh produce must be trained in personal hygiene requirements	PP.2.a Training covering all applicable requirements of the Hygiene Policy is completed as part of the induction before starting work  PP.2.b Training covering all applicable requirements of the Return-to-Work Policy is completed as part of the induction before starting work  PP.2.c Refresher training in personal hygiene requirements is completed at least annually	R	Training records/agency labour training records
PP.3 All visitors entering production areas must be made aware of the hygiene and Health and Safety requirements	PP.3.a Hygiene policy in place for visitors/contractors  PP.3.b Systems in place to ensure all visitors/contractors on site have been made aware of Health and Safety requirements  Crop category 0, 1 and 2 only PP.3.c Procedure in place to ensure all visitors/contractors on site have been made aware of Hygiene Policy.  Crop category 0, 1 and 2 only PP.3.d	R	Visitor/contractor Hygiene Policy

Visitors/contractors declare that they
understand and will comply with the
Hygiene Policy

#### **PP.4**

Signs must be clearly displayed in the packing facilities which describe the main hygiene instructions for workers and visitors

#### PP.4.a

Signs are present and appropriately positioned, communicating main hygiene instructions

#### PP.4.b

Specific signs communicate the need to wash hands after using the toilet

#### **PP.5**

Personal Protective
Equipment (PPE)
appropriate to the crop
type being produced
must be provided and
maintained in good
condition

#### PP.5.a

Personal Protective Clothing (PPE) requirements are clearly defined by the business

#### PP.5.b

All PPE used is clean and fit for purpose

#### PP.5.c

If hair is identified as a contamination risk within the Risk Assessment, suitable head coverings are in use (and beard snoods where appropriate)

#### PP.5.d

Where PPE is required to protect the product from contamination, it is captive to the business and not taken home or to employee accommodation

#### PP.5.e

Where PPE is required to protect the product from contamination, it is not worn in the smoking area or toilets

#### PP.5.f

Crop category 0 and 1 only. Where gloves are used, a glove use procedure is in place which includes:

- Only intact and clean gloves are used
- Glove storage



- PPE requirement policy
- Glove use procedure
- Contract laundry audit report

- Staff to discard when torn or heavily soiled
- Hand washing before and after gloves are put on

## Crop category 0 only PP.5.g

System for managing the laundering of non-disposable overalls (where these are used to prevent product contamination and not solely for the protection of workers):

- laundered by an audited contracted facility or
- laundered in-house in a manner that minimises the risk of cross-contamination

#### PP.5.h

There is evidence that the PPE provided is being used by the workers

#### PP.5.i

Suitable changing facilities are provided where necessary. This may not be needed if PPE is worn over existing clothing

GUIDANCE: Where PPE or work wear is provided exclusively for the protection of workers and is not deemed to be a product contamination risk, it may be appropriate for this PPE to taken into and worn in non-operational areas.

#### PP.6

Clean and maintained facilities that are accessible to all personnel and enable them to ensure an appropriate degree of personal hygiene must be provided

#### PP.6.a

For every 20 workers there is a minimum of one toilet provided

#### PP.6.b

Toilets are adequately separated from the packing and storage environment

#### PP.6.c

Facilities:

 provide non-perfumed soap, water, hand drying facilities



- Hygiene Policy
- Toilet cleaning records

- (paper towels or equivalent) and toilet paper
- are routinely checked to ensure soap, water and paper towel supplies are maintained
- are maintained in a clean and usable condition and toilet cleaning records kept

#### PP.6.d

Water used in hand washing is potable and does not pose a risk of contamination

## Crop category 0, 1 and 2 only PP.6.e

Hand sanitisers do not replace handwashing and have only been used after hands are washed

# PP.7 Written procedures for reporting any infectious diseases must be in place and communicated to personnel and visitors

#### PP.7.a

Policy in place for all personnel returning to work after Gastrointestinal (GI) illnesses

#### PP.7.b

Policy on GI illnesses and return to work is communicated to personnel (via Hygiene Policy) and visitors/contractors (Visitor/Contractor Hygiene Policy)

## Crop category 0, 1 and 2 only PP.7.c

Formal recording of all incidences of GI illness is in place

## Crop category 0, 1 and 2 only PP.7.d

Supervisory/Management staff are trained in assessing risk

## Crop category 0, 1 and 2 only PP.7.e

Workers complete a Return-to-Work questionnaire when returning after a period of absence. A manager or supervisor reviews this questionnaire



- Return to work Policy
- Hygiene policy
- Visitor/Contractor Hygiene Policy
- Return to work assessments
- Training records

and determines whether the worker may return to work. A counter signature or equivalent record is present to verify this process has occurred.

## Crop category 0 only PP.7.f

At least one member of staff is formally trained in assessing personnel return to work after GI illness.

#### **PP.8**

Produce handling, loading, transporting, packing and storage facilities, including boxes, must be kept clean and routinely maintained to prevent product contamination.

#### PP.8.a

Cleaning schedules are in place that document how and when to clean all pieces of equipment

#### **PP.8.b**

Graders and washing equipment and vehicles which are under the member's responsibility and are being used for loading and transport of product are maintained and inspected daily when in use

#### **PP.8.c**

Floors are fit for purpose and gently sloped towards the drains

#### PP.8.d

Drains are cleaned periodically to prevent biofilm build-up

#### PP.8.e

Waste is disposed of at a frequency that discourages flies

## Crop category 0, 1 and 2 only PP.8.f

Staff are trained in cleaning requirements.

## Crop category 0, 1 and 2 only PP.8.g

When not in use, cleaned containers are stored in a manner that prevents



- Cleaning schedules
- Cleaning records
- Grader/washing equipment/vehicle maintenance records
- Training records

	the risk of contamination (e.g. from pests, birds, dust, water, etc.).  Crop category 0, 1 and 2 only PP.8.h Floors are kept as dry as possible to minimise Listeria risk  Crop category 0 and 1 only PP.8.i Pooling of water is avoided	
PP.9 Water used post-harvest in direct contact with the product (including ice) must be deemed acceptable by the Water Matrix and Risk Assessment and is stored in a clean container	PP.9.a Risk assessment identifies any water used in direct contact with the product PP.9.b Quality of water used meets the requirements of the Water Matrix  PP.9.c Any tanks or containers used for storing water are managed to ensure that they do not introduce a microbiological risk	• Risk Assessment
PP.10 Water analysis is completed by an ISO 17025 laboratory, test results are monitored and actions taken on poor results	PP.10.a  Evidence that laboratory is accredited to ISO 17025 for microbiological testing of water  PP.10.b  Evidence of test results and evidence of actions taken for any adverse results	<ul> <li>Laboratory         accreditation         information (paper         record or         electronic)</li> <li>Water testing         results</li> </ul>
PP.11 Chemicals and lubricants used must be authorised for food industry use and technical data sheets held and stored in a dedicated area	PP.11.a Technical data sheets confirm chemicals/lubricants are authorised for food industry use  PP.11.b Chemicals/lubricants are stored in an appropriate secure area when not in immediate use	Technical data sheets

#### **PP.12**

Controls must be in place to protect product from contamination with any broken glass, hard plastic, wood or other foreign bodies

#### PP.12.a

Glass and hard plastics are protected in areas with open product

#### PP.12.b

A Glass and Hard Plastic Policy/Procedure is in place which:

- lists all glass and hard plastics in the production area on a register
- register is checked monthly for accuracy
- where glass and hard plastics cannot be covered regular checks (based on a frequency determined by the Risk Assessment) are made when in use to ensure there is no damage
- sets out actions to be taken in the event of a glass breakage

#### PP.12.c

Pre-production check sheets ensure staff check equipment and their area at the start of shift for any damage that could introduce contamination into the product

#### **PP.12.d**

Containers, crates and boxes are checked prior to filling

#### PP.12.e

Damaged wooden crates, pallets or trays are repaired or disposed of

#### PP.12.f

All staff are trained in how to deal with glass and hard plastic breakages and understand the Glass and Hard Plastic Policy/Procedure

#### **PP.13**

Controls must be in place to prevent the risk of product

#### PP.13.a

Equipment is managed to ensure that it does not represent any risk of



- Glass and Hard Plastic Policy/Procedure
- Glass and hard plastic register
- Glass and hard plastic check records
- Pre-production check sheets
- Training records



contamination from knives, cutting blades, maintenance tools, gloves and any other relevant equipment	contamination to products through loss or damage  PP.13.b  System to manage knives, blades and tools includes:  • controlled issue and collection at end of shifts • routine inspection of blades for damage • lost items investigated	Knife issue record
PP.14 Containers/crates/boxes used to store product must be dedicated for that purpose	PP.14.a Product containers/crates/boxes are no chemicals, waste or other debris that co	ould contaminate product.
PP.15 Controls must be in place to ensure packaging is suitable for product, clean and free from contamination	PP.15.a Packaging stored in a clean area, free fro PP.15.b Packaging checked before use	om any contamination risks
PP.16 Controls must be in place to ensure that the correct packaging and coding is applied to all packed product	PP.16.a When final packing takes place, product labelling is done in accordance to applicable food regulations in the country of intended sale and according to customer specifications  PP.16.b Products originating from certified operations are not labelled, marked or described in a manner which implies they meet specific food criteria	Documented controls for packaging
PP.17 Equipment used for weighing or temperature control of product must be calibrated in line with equipment suppliers'	PP.17.a Equipment is:  uniquely identified routinely calibrated, in line with supplier's instructions	<ul><li>Calibration records</li></ul>

recommendations and verified where deemed necessary by risk assessment	<ul> <li>routinely verified internally, in line with risk assessment</li> </ul>	Verification records
PP.18 Controls must be in place to ensure that products are not contaminated with allergens	PP.18.a Allergens on site have been identified as part of the Risk Assessment (including lubricants)  PP.18.b Preventative actions are in place which prevent products being contaminated with allergens  PP.18.c Staff are trained in the importance of the preventative actions and actions to be taken in the event of a failure	<ul> <li>Allergen risk assessment</li> <li>Training records</li> </ul>
GUIDANCE: An up-to-date list of allergens can be found on the FSA website:www.food.gov.uk/sites/default/files/top-allergy-types.pdf		
PP.19 Where preventative actions cannot guarantee a product is not contaminated with a known allergen on site, the product is labelled	PP.19.a Identification of such products and effective labelling in place	<ul><li>Product labels</li></ul>
PP.20 (Recommendation) It is recommended that forklifts and other driven equipment used within the packhouse are maintained to avoid product contamination, with special attention given to emissions		

## **Produce Washing**

Standard	How you will be assessed	Records

# **PW.1** Water used post-harvest for product washing or other process where it is in direct contact with the product (including ice) must be deemed as acceptable by the Water **Matrix and Risk** Assessment

# PW.1.a Risk Assessment identifies any water used in direct contact with the product PW.1.b

### Quality of water used meets the requirements of the Water Matrix

#### PW.1.c Any tanks or containers used for storing water are managed to ensure that they do not introduce a microbiological risk



Risk Assessment

#### PW.2

Water analysis is completed by an accredited laboratory, test results are monitored and actions taken on poor results

#### PW.2.a

Evidence that laboratory is accredited to ISO 17025 for microbiological testing of water

#### PW.2.b

Water test results are available

#### PW.2.c

Results are compared to the **Red Tractor Water Matrix** with documented evidence of follow up action if results do not meet parameters



- Laboratory accreditation information (paper record or electronic)
- Water testing results

#### **PW.3**

Where water is recirculated, a documented water treatment process must be in place to ensure the water remains suitable for product contact

#### PW.3.a

Water treatment process defined

#### PW.3.b

Documented records demonstrate the effective implementation of a water treatment process



Water treatment records

GUIDANCE: Standard not relevant where recirculated water is used purely for desoiling and stone separation

#### **PW.4** Category 0, 1 & 2 only. Wash processes are designed and managed to ensure product may not be cross contaminated by soiled product from an earlier stage in the process **PW.5** PW.5.a Members hold a valid A valid Environmental **Environmental Permit** Permit is in place for **Environmental Permit** where required for discharge of waste water discharge of water from from post-harvest post-harvest processes processes PW.5.b The business is compliant

GUIDANCE: For further information, see: <a href="https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit">www.gov.uk/guidance/risk-assessments-for-your-environmental-permit</a>.

with any conditions of the Environmental Permit

## **Protected Cropping**

Standard	How you will be assessed	Records
PC.1 Appropriate entrance controls for workers and visitors entering protected crop production areas are defined and implemented	PC.1.a  A documented entrance procedure is in place for admitting workers and visitors to crop production areas  PC.1.b  Consideration is given within the entrance procedure to plant health and bio-security risks and additional controls are implemented where appropriate	<ul> <li>Entrance procedure for protected crop production areas</li> <li>Staff training records</li> </ul>

# Category 0 & 1 only PC.1.c

All workers entering crop production areas – including administrative and maintenance staff – have been trained against the Staff Hygiene Policy.

GUIDANCE: Risks may include potential to introduce disease risks from other farms or from other areas of the same farm. Controls should be based upon individual circumstances – possible examples include exclusion periods, sanitising of boots, hand washing, use of PPE, maintaining distance from crops, sequentially managed access to cropping areas (relevant to mushroom farms), etc.

#### PC.2

Risk based cleaning programmes are in place for permanent and reusable surfaces and structures which are in direct contact with fresh produce or in indirect contact with the potential to pose a risk to food safety

#### PC.2.a

A documented cleaning programme, including method and frequency of cleaning is in place

# Category 0 & 1 only PC.2.b

Cleaning records are in place, demonstrating that cleaning activities have been completed



- Documented cleaning programme
- Cleaning records

#### PC.3

E. coli testing must be used to monitor and verify the safety of end products for category 0 crops.

Testing must be performed by a UKAS accredited laboratory (or another ISO 17025 standard) with E. coli testing of food samples within the scope of accreditation.

#### Category 0 only

#### PC.3.a

Samples of end products are tested for presence of E. coli to a defined frequency.

#### Category 0 only

#### PC.3.b

Non-conforming test results lead to follow up actions to manage any risk to crop.

#### PC.4

Members hold a valid Environmental Permit where required for

#### PC.4.a

A valid Environmental Permit is in place for



• Environmental Permit

discharge of water from irrigation systems	discharge of waste water from irrigation systems	
	PC.4.b The business is compliant with any conditions of the Environmental Permit	

GUIDANCE: For further information, see: <a href="https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit">www.gov.uk/guidance/risk-assessments-for-your-environmental-permit</a>

# Hops

Standard	How you will be assessed	Records
HO.1 Each pocket or bale must be correctly labelled or marked	HO.1.a It is possible to trace the following for each bale or pocket of hops:  • variety & field name (permitting reference to the record of pesticide applications) • harvest date • kiln or oast number (if appropriate) time & date of drying • weight of pocket or bale (and from which core samples were taken) • date put into storage or dispatched	Hop pocket/bale traceability records
HO.2 Hop picking and cleaning machines, and conveyors of both green and dried hops, are cleaned before harvest each season and that this is recorded.		Cleaning records for picking/cleaning/conveying machines

HO.3 Analysis of water (for irrigation or other processes where there is direct product contact) must be in accordance with the Water Matrix and the analysis completed must be within the Detail of Accreditation of an ISO 17025 accredited laboratory.		Water testing results	
HO.4 Kiln burners must be checked annually and serviced to ensure efficient operation and to prevent fuel aerosols from fouling the crop.	HO.4.a Air heating system for kiln dryers and temperature controls are maintained and calibrated annually to ensure proper drying and efficient energy use.  HO.4.b Where diesel is used as a fuel source, documented servicing occurs to ensure clean exhaust, and minimal soot and odour.	• Kiln burner service red	cords
HO.5 The choice of variety is based upon acceptable agronomic performance appropriate to the local conditions - based upon information from official trials, rootstock supplier or customer requirement.		Varietal information, I on official trials or reconstruction supplier or custom supplier.	eived
HO.6 Traceability records must be available for all purchased rootstock, including supplier, origin, variety name,		<ul> <li>Rootstock traceability records</li> </ul>	/

and virus-free/quality statement (if applicable).			
HO.7 Traceability records must be available for on-farm sourced rootstock, including variety name, and traceability back to mother yards.			Rootstock traceability records
HO.8 Practices and procedures are in place to prevent co-mingling of varieties during propagation.		R .	Procedures to maintain varietal purity
HO.9 (Recommendation) It is recommended that lockers are provided for employees to store personal belongings while working and that lockers are stored away from harvesting, handling and storage areas			
HO.10 Worker toilets are inspected on a daily basis and cleaned as required to ensure all consumables (e.g. soap, toilet paper, hand towels) are present and toilets are in a suitably hygienic condition.		R	Daily toilet inspection
HO.11 Fire safety precautions are implemented within harvesting facilities.	HO.11.a  Fire extinguishers are present within harvesting facilities and are freely accessible.	R	Training record

	HO.11.b Employees are trained at least annually on emergency action plans.  HO.11.c At least one person present during harvesting operations has received fire extinguisher training.	
HO.12 When harvesting at night, additional steps are taken to protect safety of workers, including lighting of harvesting equipment and reflective PPE or personal lighting to maintain visibility. Not relevant where no night-time harvesting occurs.		
HO.13 Where workers handling hops are issued with disposable shoe covers or gloves, clean PPE is issued at the start of the day and is replaced when torn or contaminated. Not relevant where such PPE is not in use.		
HO.14 Where risk assessment identifies a need for workers in hop harvesting and handling facilities to wear specific PPE, including: - head protection - leg protection (e.g. chainsaw chaps) -		

hearing protection - respiratory equipment this is inspected prior to use and damaged or compromised PPE is discarded and replaced. Not relevant where such PPE is not in use.	
HO.15 All PPE is stored in a clean and designated area away from potential sources of contamination when not in use.	
HO.16 Where natural air or sun is used for the drying of harvested hops in the field, the producer has implemented adequate measures to prevent physical contamination, prevent pest ingress and maintain product integrity.	
HO.17 Temperature probes and moisture monitoring equipment are inspected prior to use and calibrated to a defined frequency.	<ul><li>Calibration records</li></ul>
HO.18 Optimum drying parameters (e.g. drying temperatures, kiln bed depths, and drying duration) are identified, implemented and recorded to ensure	<ul><li>Drying records</li></ul>

good final product quality, and efficient energy.		
HO.19 Kiln drying facilities are managed to protect the welfare of workers.	HO.19.a Kiln drying facilities are ventilated moisture build-up.  HO.19.b Workers in kiln facilities are given from extreme temperature environments.	n an adequate number of breaks
HO.20 Where vehicles and transportation equipment (e.g. forklifts, telehandlers, etc.) are stored in hop harvesting or handling facilities during the offseason, precautions are taken to protect areas and surfaces which may come into contact with the product.		
HO.21 Packaging materials protect food safety (polycloth, food grade burlap, Mylar aluminum foil, etc.) and are stored in a clean and hygienic area.		
HO.22 Methods are in place for detecting and removing metals prior to product being packaged.	HO.22.a In-line magnets are installed based on risk assessment to control metal from making its way into finished product.  HO.22.b Magnets are inspected routinely, and findings are documented.	In-line magnet inspection records

HO.23 Refrigerated containers used to store or transport hop bales are inspected and verified as clean and in good working condition before use. Not relevant where refrigerated containers are not used.		Refrigerated container inspection record
HO.24 Pest monitoring/vermin control continues out of season.		Checks of pest monitoring points
HO.25 Finished bale weights must be effectively checked.	HO.25.a Finished bale weights are checked and documented by batch.  HO.25.b Weighing scales are calibrated to a defined frequency and records are available.	<ul> <li>Bale weight check records</li> <li>Scale calibration</li> </ul>
HO.26 Where product quality parameters are analysed by a third-party laboratory against industry standards or customer specifications (e.g. alpha acids, H.S.I, moisture, seed, leaf, and stem), analysis records are kept and can be linked to batch. Not relevant where such analysis is not completed.		Product analysis records

HO.27
Documented
procedures are in place
to identify, segregate
and - where appropriate
- rework any non-
conforming product.



 Procedures for nonconforming product

# Watercress

Standard	How you will be assessed	Records
WC.1 Site Risk Assessments (RA.6) for watercress producers must consider additional, crop specific risks. Preventive actions or mitigation steps are documented where relevant.	<ul> <li>WC.1.a The following risks are considered within Site Risk Assessments (where relevant): <ul> <li>the possibility of runoff of contaminated water from nearby land, roads and onsite tracks</li> <li>access by animals (domestic or wild) to the production site, including with humans on rights of way</li> <li>access of animals (domestic or wild) to water sources used in watercress production and associated operations</li> <li>the possibility of manure storage, spreading and composting operations close to production sites</li> <li>the possibility of airborne microbial contamination e.g. in aerosols from slurry spreading and dust from intensive livestock units, both of which may contain pathogens harmful to human health</li> <li>the possibility of microbial contamination from organic wastes applied to nearby</li> </ul> </li></ul>	• Site Risk Assessment(s)

- land e.g. waste/digestate from anaerobic digesters and sewage sludge/biosolids
- the possibility of the production site being flooded with water that may be contaminated, for example where rivers and streams contain upstream discharges from sewage works, septic tanks etc or where there are livestock in the catchment
- human habitation close to production sites e.g. discharges from drains or access by domestic animals
- public sewers and foul drains, both on-site and offsite nearby
- sewage treatment facilities, both public and private, close to or on production sites (both currently and in the past) e.g. STWs, septic tanks, package treatment plants and cess pits
- hazardous waste sites close to watercress production sites (both currently and in the past)
- industrial and mining sites close to watercress production sites (both currently and in the past)

#### WC.1.b

Personnel completing Site Risk Assessment are demonstrably competent and have adequate knowledge of the business.

GUIDANCE: Since watercress is very often eaten raw, identifying risks to food safety from pathogen contamination is particularly important. When carrying out a risk assessment it is important that growers identify all the potential sources of human pathogens that may affect that site and all of the pathways by which such pathogens could enter each production site.

WC.2 WC.2.a

#### Measures are in place to manage risks to crop from livestock and wildlife

Effective physical barriers (e.g. suitable fencing, gates, cattle grids) at all access points adjacent to livestock areas

#### WC.2.b

Measures to control contamination from wildlife are present that are commensurate to risk

GUIDANCE: Contamination poses a particular challenge in that the flowing water may spread any contamination which occurs through the growing crop. Contamination can occur from trafficking both onto the site and within the site, and from livestock and wildlife entering the site.

The Food Standards Agency and Public Health England have encouraged the watercress industry to give particular consideration to the risks from livestock, domestic animals and wildlife (including waterfowl, amphibians, mud snails and vermin), run-off of surface water from surrounding land, and to floodwater.

There are examples of measures to control contamination from wildlife in the Industry Guide to Good Hygiene Practice for Watercress (recognised by the FSA).

#### **WC.3**

Measures must be in place to reduce the risk of liver fluke entering the crop.

#### WC.3.a

There is demonstrable evidence of strategies to manage the risk of liver fluke, including:

- control risk from ingress of surface water
- preventative action to exclude mud snails from production heds
- effective physical barriers are in place to prevent all livestock gaining access to production sites

#### WC.4

WC.5

Where there is

flooding from

watercourses) or

evidence that surface

water (run-off from

surrounding land or

Where there is a risk of leakage from foul drains contaminating the crop, drains under the grower's control must be tested annually for leaks, and immediately if a leak is suspected.

#### WC.5.a

Record and do not harvest where there is evidence that surface water (run-off from surrounding land or flooding from watercourses) has entered the crop.



- Incident records and remedial actions
- Training programme

livestock / wildlife have entered the crop and pose a risk to food safety, follow up actions are implemented and recorded.

#### WC.5.b

Staff involved in production are trained to report significant incursions into the crop by livestock and wildlife.

#### WC.5.c

Incursion into the crop by livestock or wildlife that requires remedial action including non-harvesting of crop must be recorded.

# WC.6 Additional, watercress specific controls are in place to manage water quality in production beds.

#### WC.6.a

All water used in crop production and associated activities (including inhouse propagation and washing of substrate) must be sourced from boreholes, artesian wells or springs, or be potable.

#### WC.6.b

Water sources are protected from contamination.

#### WC.6.c

Water sources and distribution systems are mapped.

#### **WC.6.d**

All water entering production beds must be tested a minimum of four times a year (tests distributed across the production season) or in the case of sources which run intermittently, across the period when they are flowing.

#### WC.6.e

The following water testing criteria is applied: Generic E. coli:

Target: <10 cfu/100ml</li>

Investigate: 10-100 cfu/100ml

• Unacceptable: >100

cfu/100ml

#### **WC.6.f**



- Maps of water source/distribution system
- Water test results
- Trending of test results
- Records of investigations

Test results must be trended and kept for a minimum of 5 years.

GUIDANCE: Context: since watercress is very often eaten raw, the microbial quality of the water in which it is grown is particularly important. If the water is contaminated with microbial pathogens, it can pose a direct risk to human health. Sources of water must therefore be of high microbial quality e.g. boreholes, artesian wells and springs.

Open water sources which are vulnerable to microbial contamination e.g. rivers, ponds and reservoirs pose an unacceptable risk.

Watercress differs from land crops in that the crop is grown in water from planting to harvest (as distinct from intermittent application of water as in irrigation). Watercress therefore has its own standards for the quality of water as contained in the Industry Guide for Hygienic Crop Production which is recognised by the FSA. Where there is overlap between the generic standards and the crop's own standards, the strictest will apply.

# WC.7 The water in production beds must be flowing.

#### **WC.8**

Members hold a valid Environmental Permit where required for discharge of water from watercress beds.

#### WC.8.a

A valid Environmental Permit is in place for discharge of waste water from watercress beds.

#### WC.8.b

The business is compliant with any conditions of the Environmental Permit.



• Environmental Permit

GUIDANCE: Context: watercress farms discharge water from the beds to rivers and streams which in some cases are of high conservation status. The discharges can have serious effects on aquatic habitats and are regulated by the Environment Agency by means of environmental permitting.

For further information, see: <a href="https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit">www.gov.uk/guidance/risk-assessments-for-your-environmental-permit</a>

#### WC.9

Bought-in propagation material is produced in accordance with the principles of Good Agricultural Practice.

#### WC.9.a

Batches of bought-in propagation material are produced in accordance with 'The Industry Guide to Good Hygiene Practice for Watercress' and this is verified through a certificate or declaration from supplier.



 Certificate/declaration for bought-in propagation material GUIDANCE: Context: propagation material (seeds, seedlings and cuttings) is a potential source of human pathogens and hence a potential route for contamination of the crop to occur. Isolating bacteria from contaminated seeds has proved extremely challenging with available technologies and microbial testing of seeds cannot be relied on to ensure seeds are free of contamination.

#### WC.10 Seed must be stored in such a way as to prevent contamination by insects and other animals. Seed must be inspected before use and any damaged seed must not be used.

# WC.10.a

Storage facilities must be kept in good repair and be checked regularly for infestation.



Records of seed inspection

#### WC.11 **Traceability systems** allow for retrospective traceability of all seeds, seedlings and cuttings.

#### WC.11.a

Documented traceability records effectively identify all seed, seedling and cutting by batch.



Traceability records

#### WC.11.b

Batch information recorded effectively links all seed, seedling and cutting back to source.

GUIDANCE: Context: propagation material (seeds, seedlings and cuttings) is a potential source of human pathogens and hence a potential route for contamination of the crop to occur. Isolating bacteria from contaminated seeds has proved extremely challenging with available technologies and microbial testing of seeds cannot be relied on to ensure seeds are free of contamination. Batch identification and record of original source of each batch of propagation material is required, whether bought in or produced within the business.

WC.12 The source of each batch of substrate material must be known and recorded. Any treatments must be recorded.		<ul> <li>Substrate traceability records</li> <li>Records of substrate treatment</li> </ul>
WC.13 Each batch of substrate material	WC.13.a	R

used for propagation must be verified as free from pathogens. Each batch of substrate is tested against the following parameters (either inhouse or by supplier):

• Generic E. coli: <100 cfu/g

• Salmonella: absence

 Substrate test results of certificate of conformity

#### **GUIDANCE:**

Context: the substrate used for propagation or for production beds can be a potential pathway for human pathogens to enter and contaminate the crop.

Peat, for example, can have variable levels of E. coli present. Substrate for production beds (gravel) may contain soil and plant debris, particularly where recycled material from within the business is used.

WC.14
Bed substrate must
be stored in a manner
that prevents
contamination.

#### **GUIDANCE:**

Refer to Industry Guide to Good Hygiene Practice: Watercress for further information.

#### **WC.15**

Fertilisers containing organic materials must have undergone suitable treatment and meet required criteria.

#### WC.15.a

Fertiliser is tested against the following parameters (either inhouse or by supplier):

- Target <100 cfu/g generic E.</li>
   coli
- Absence of E. coli O157, Salmonella and Listeria monocytogenes



- Method of treatment
- Test result or certificate of compliance from producer

#### **GUIDANCE:**

Context: natural fertilisers derived from animal products used in some growing systems are a potential source of contamination of the growing crop. Such fertilisers must have undergone treatment to achieve a high level of potential pathogen reduction.

# Urea

Standard	How you will be assessed	Records
UR. 1 Fertiliser containing urea must only be applied where the following requirements are met (NEW)	UR.1.a Protected/inhibited fertilisers containing solid urea can be applied within any product use by/best before dates  UR.1.b Protected/inhibited fertilisers containing liquid urea can be applied with the prescribed rate of protector/inhibitor for the application, and within any product use by/best before date	<ul> <li>Application records</li> <li>Name and FACTS         professional register         number</li> <li>Recommendation sheet for         applications</li> </ul>
	UR.1.c In England, unprotected/uninhibited solid fertiliser containing urea can only be applied between 15th January and 31st March UR.1.d	
	In England, unprotected/uninhibited liquid fertiliser containing urea can be applied between 15th January and 31st March	
	UR.1.e In England, unprotected/uninhibited liquid fertiliser containing urea can be applied between 1st April and last application in autumn* only if agronomic justification is provided by FACTS-qualified farm personnel** or advice specific for the crop has been provided by a FACTS-Qualified Adviser and been followed (see EC 9.1)	
	UR.1.f In Northern Ireland, Scotland and Wales fertiliser containing urea	

(solid and liquid) can be applied as per relevant legislation

<sup>\*</sup> All applications should be made before the end of October in accordance with RB209.\*\* A member of the FACTS Professional RegisterProtected/inhibited means urease inhibitors or treatments to mitigate ammonia emissions. This standard includes: All mineral fertilisers for agricultural use, containing 1% ureic nitrogen or more, except urea solution for late foliar application for protein