OFFICIAL

Temporary Operational Instruction

Action Note: 2024-08-22: Chapter 3, Section 3 of the MOC

Title: **N60 sampling verification and guidance of beef for export to Canada**

Purpose:

This document details the Official Veterinarians (OVs)/Meat Inspection Team (MIT) verification process of Canada export N60 testing requirements in co-located and stand-alone cutting premises, together with the communication of N60 test results to a certifying vet in a cold store.

Background:

This guidance has been created by FSA, FSS and DAERA to provide instructions to OVs/MHIs on the testing requirement for E. coli O157:H7/NM and the verification of N60 sampling as required by the Canadian authorities for beef precursor material (e.g. trim) intended for finished raw ground beef production (FRGBP) in Canada or precursor material used to produce FRGBP, which is intended for export to Canada.

Procedure:

OVs/MHIs working in beef plants exporting to Canada should be familiar with this guidance, in particular, if precursor material (PM) is intended for export to Canada. OVs/MHIs must also be familiar with the FBO's Canada export RMOP and any associated SOPs, such as the N60 sampling SOP.

Front line staff are required to note the following action:

Please ensure this guidance is read by all front-line staff in establishments exporting to Canada and actioned if applicable. Where necessary, print a copy for the plant file.

Please see the Annex for details.

This action note will be:

- uploaded to the Temporary Operational Instruction Folder held in the MOC area of SharePoint: Manual for Official Controls annexes - Home (sharepoint.com)
- logged on the Temporary Operational Instruction tracker: TOI Action and Information Note Tracker.xlsx
- published alongside the MOC pages on food.gov.uk: Manual for official controls | Food Standards Agency.

The action note will remain live until either incorporated into the MOC or revoked.

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Annex

1 Background

Export health certificate 7833EHC is used to export the following to Canada:

- intact bovine meat (e.g. carcase and primal/sub-primal cuts)
- bovine meat intended for intact use (i.e. not for grinding)
- AND/OR precursor material (e.g. trim) intended for finished raw ground beef production (FRGBP) in Canada
- precursor material (PM) used to produce FRGBP, which is intended for export.

All beef cuts intended for further processing/grinding, for export to Canada must be sampled by the FBO using the N60 method and tested for the presence of E coli O157:H7/NM (non-motile).

And/or, where minced meat is produced for export to Canada the precursor material (PM) lot from which the mince was produced must be N60 sampled and tested for E. coli O157.

Precursor materials (PM) include:

- beef trim (beef manufacturing trims produced in slaughter facilities),
- bench trim (beef trimmings produced in facilities that do not have on-site slaughter but perform further beef processing activities),
- head meat,
- cheek meat,
- tongue roots,
- weasand meat,
- hearts,
- coarse ground beef,
- finely textured beef,
- other raw beef components such as primal or sub-primal cuts (e.g., chucks, top round, sirloin cuts, etc.)

There is no requirement to carry out N60 testing on intact carcase meat or bovine meat intended for intact use.

However, if the OV has any concern that the material produced for export to Canada is PM and not a primal cut, therefore not N60 sampled and tested for E. coli O157, the OV can request a letter of guarantee (LOG – Precursor Material/Intact Beef) from the FBO to confirm the nature of the material.

- In NI, CM link: Letter of guarantee - Precursor Material/Intact Beef
- In England and Wales: FSA MOC Chapter 3, Section 4 - Annexes (Annex 12)
- In Scotland link here.

A Required Method of Operation Procedure (RMOP) must be drawn up and agreed by the FBO and premises OV where N60 testing is carried out.

- England and Wales, the RMOP can be found on the FSA MOC: Chapter 3 Annex 10.dotx (sharepoint.com)
- Northern Ireland, CM link to Canada RMOP: Canada RMOP
- In Scotland link here

When exporting to Canada intact bovine meat or bovine meat intended for intact, i.e. no N60 testing for E.coli 0157 testing, **a SOP must be drawn up by the FBO** and assessed as satisfactory by the site OV.

- In England and Wales, FSA MOC Chapter 3, Section 3.2
- In NI, see chapter 3.1 Manual for Official Controls, section 3. Standard Operating Procedures

Examples of beef cuts intended for further processing / grinding, for export to Canada, include carcase trim, trim derived from primal and sub-primal cuts, hearts etc. If FRGBP itself, is intended for export, then the precursor material from which FRGBP is made should also be tested.

N60 samples must be taken from each lot of precursor material and the samples sent to a UKAS accredited laboratory where it must be tested for E. Coli O157:H7/NM using a method acceptable to Canadian Food Inspection Agency (CFIA). This method is ISO 17025 accredited by UKAS. The samples must return a negative ('not detected') result. Only lots with a negative ('not detected') are eligible for export to Canada. Further information on what is expected in the case of positive and presumptive positive results must be included in the RMOP for those premises. Any positive lots must be actioned as per FSA E.coli 0157 guidance: https://www.food.gov.uk/business-guidance/protecting-consumers-from-infection-with-shiga-toxin-producing-ecoli-stec (In Scotland: FSS Testing for pathogens | Food Standards Scotland).

CFIA defines a lot to mean, in respect of beef or veal products, all product that is manufactured, treated, processed, or packaged under the same conditions and using the same equipment over a maximum of 5 consecutive calendar days and does not exceed 4,500 kg. Currently, Campden BRI in Gloucestershire and AFBI in Belfast are the only laboratories in UK which have UKAS accreditation for N60 testing. ALS in the Republic of Ireland is also ISO 17025 accredited to test N60 samples for export to Canada.

It is important that OVs and MIs familiarise themselves with the N60 method for sampling the precursor material and ensure the correct procedure is followed as stated in the RMOP or in an associated document such as a N60 sampling SOP.

CFIA provides more information on this requirement. See following links:
https://www.inspection.gc.ca/about-the-cfia/acts-and-regulations/list-of-acts-andregulations/documents-incorporated-by-reference/biological-hazards-in-meatproducts/eng/1519737053960/1519737054373

Preventive controls for E. coli O157/NM in raw beef products - Canadian Food Inspection Agency

A USDA FSIS video on N60 sampling can be found at:
https://www.youtube.com/watch?v=wlXizKqv70E

NB: This FSIS video is referred to in the Canada export cert 7833 NFG and for interest only as it is not fully in agreement with Canadian guidance outlined in the links above.

2 N60 Sampling Technique

Sample Collection:

i. Samples collected from the containers must be clearly and uniquely identifiable and traceable to the sampled lots to allow for traceability, retention and a potential recall. The sample must be labelled with the following as a minimum:

- Establishment number
- Date and time of sampling
- Identification of the lot (lot #)
- Person who took the samples

ii. All precursor material produced for export to Canada must have an equal opportunity to be sampled within the lot. A random number generator can be used to select the times samples can be taken during boning or the finished product box numbers for sampling.

iii. All combos/units must be equally represented in the sample. For example, 12 individual pieces would be taken from each combo of a five combo lot. For alternate units, a minimum of 60 equally distributed pieces must be collected across the lot (e.g., a 10 vat lot of trim could be sampled by collecting six pieces per vat, a five pallet lot could be sampled by collecting 12 pieces per pallet, etc.).

N60 Method Canadian requirements:

i. A sample consists of 60 small surfaces slices 5-6g in weight. The total sample weight must be 325g ± 32.5g

ii. For precursor material not amenable to excision sampling, e.g., finely textured beef, select a minimum of 5 sub-samples of 65 g each for a total sample of at least 325 g.

iii. The sample must be collected using sterile instruments and aseptic practices.

iv. The material collected for testing should represent the outside surface of the product (e.g., carcass surface for sampled trim, exposed surfaces of the heart muscle, external aspect of the diaphragm muscle, etc.). In other words, it must not be taken from inner meat tissue unless the normal production process has left only inner tissue to sample. Try to avoid fatty tissue.

v. All 60 pieces can be placed in the one bag. Samples are to be transferred to the FBO's refrigerator where they are stored securely at 1°C to 7°C or frozen, depending on when they will be dispatched, to ensure product quality and integrity.

vi. Samples must be collected and transported to the approved laboratory using refrigerated transportation that day or the following day in the case of fresh, not frozen samples. Samples must be tested within 24hrs of collection if they are fresh samples.

3 OV/MIT N60 verification

1. OV or MIT carrying out N60 verification must be familiar with the FBO's Canada export RMOP (and any associated SOPs, such as an N60 sampling SOP).

2. OV or MIT carrying out N60 verification must be familiar with N60 sampling technique as required by **Canadian authorities** for precursor material.

3. Every lot of product for FRGBP intended for export to Canada must be sampled by the FBO using the N60 technique and tested E. Coli O157:H7/NM. Including PM lots that are minced in UK before they are exported to Canada.

4. To facilitate OV/MIT verification at the frequency required to provide certification OV/MIT must have an agreed method of timely notification with the FBO for when precursor material is being produced and N60 sampling is taking place. The FBO must give the OV/MIT details of all batches produced including lot numbers and date of production.

5. Only lots with '**not detected**' results are eligible for export to Canada. If the lot produced is **positive for E. Coli O157:H7/NM**, this product **will not be eligible for export to Canada**. Details of how any lots where E. Coli 0157:H7NM has been detected are to be actioned by the FBO must be included in their RMOP.

6. OV/MIT verifies, as per 7833NFG, N60 sampling in the form of spot checks.

7. Spot checks on FBO N60 sampling ensure the definition of a lot is implemented properly, FBO samples are taken, and correct procedure for N60 sampling is carried out as indicated in the RMOP.

8. Spot checks are carried out at a rate of 1 in 10 lots (10%) reducing to 1 in 20 lots (5%) if the first 10 verification checks are satisfactory. It is not the case that every 10th lot is to be verified but that it can be shown that 10% of all lots produced are checked, reducing to, and continuing at, 5% of all lots providing the first 10 checks are found to have been satisfactory.

9. If a spot check reveals unsatisfactory sampling is being carried out verification must revert to 1 in 10 lots and not reduce to 1 in 20 until there have been 10 satisfactory checks.

10. In carrying out spot checks on FBO N60 sampling the OV/MIT must observe the sampling procedure for as long as needed to satisfy themselves that sampling is being carried out satisfactorily as per N60 method for sampling precursor material and ensure the correct procedure is followed as stated in the RMOP.

11. Verification that N60 samples are being taken satisfactorily includes, as necessary, checks that the FBO operative has been properly trained in N60 sampling. Verification of the operative's N60 training will be by direct observation of their technique and, to the extent deemed necessary by the observing OV/MIT, checking the training records of the FBO personnel.

12. If samples are not submitted for testing straightaway, a procedure for storing them must be agreed between the FBO and the OV to ensure storage conditions and means of identification are appropriate. This must be detailed in the RMOP.
13. OV/MIT must get sight of all E. Coli 0157:H7 testing results for lots that are intended for export to Canada. How the OV/MIT are to receive N60 results must be agreed with the FBO and included in the RMOP.

14. OV/MIT must verify that the laboratory used is UKAS /INAB approved and uses an ISO 17025 method which is acceptable to CFIA and accredited by UKAS/INAB.
15. N60 sampling verification must take place and a record kept.

    - England and Wales: Form 6 B (Table A2: Record of spot check verification of FBO's Canada N60 sampling) can be found in the MOC. See the link: Chapter 3 Annex 4h2.dotx (sharepoint.com)
    - Link for FSS here
    - Northern Ireland CM link: Form 6B In Northern Ireland Form 6B is saved to HPRM container: **Third Country Trade: Verification and Assessment of FBO Export SOPs**.

16. **Form 6B** records lot identification and date(s) of production of all lots verified, total of all N60 tested lots for that month, and confirmation by OV that all N60 testing results for that month have been satisfactory ('not detected') unless otherwise stated.

4 Certification of product for export to Canada

Internal movements of product within GB / within NI before certification to Canada:

1. In GB: Product Intended for Grinding /Ground meat where N60 sampling has been carried out on PM material: **IMC is required**.

   As per 7833 NFG:
   "A bespoke Internal Movement Certificate (7833 IMC) is available to cover movement downstream of the precursor material or FRGBP from where it was produced/sampled and ultimately to a cold store pending final certification for export to Canada. This also allows the results of the N60 samples to be entered retrospectively if the submission/testing of the samples is postponed/delayed and the precursor material has moved into cold storage."

   In NI: 7833 IMC is available, but use of the IMC is not insisted upon. OVs routinely use DAERA Export Certification online (DECOL), and not an IMC, for results of N60 samples to be relayed to the certifying OV by the FBO.

2. Product Not Intended for grinding and so **no N60 sampling/E.Coli 0157 testing** has been carried out: **No IMC required for any movement within UK, GB or NI**.

Product for Movement from NI to GB with the intention of onward Certification to Canada

1. Product Intended for Grinding where N60 sampling has been carried out/Ground meat where N60 sampling has been carried out on PM material: IMC may be required as per final Certifying Officer request, specifically 7833 IMC. Found here: Export fresh beef to Canada: certificate 7833 - GOV.UK

   N60 results corresponding to the consignment to be uploaded to DECOL by the FBO. FBO to apply on DECOL for 7833 IMC.

2. Product Not Intended for grinding where no sampling has been carried out: IMC may be required as per final Certifying Officer request, specifically 7833 IMC. FBO to apply on DECOL for IMC.

Product for Movement from NI to ROI with the intention of onward Certification to Canada

1. Product Intended for Grinding where N60 sampling has been carried out: IMC may be required as per final Certifying Officer request. 7833 IMC is for UK internal use only so a **1304a IMC** will be used here. N60 results corresponding to the consignment to be uploaded to DECOL by the FBO. FBO to apply on DECOL for **1304a IMC**.

2. Product Not Intended for grinding where no sampling has been carried out: IMC may be required as per final Certifying Officer request. 7833 IMC is for UK internal use only so a **1304a IMC** will be used in this case. FBO to apply on DECOL for IMC.

5.I N60 verification summary for communications between FBO, premises of N60 sampling OV, and certifying OV at a cold store within NI:

1. N60 sampling verification checks, and record of satisfactory results are recorded on Form 6B and saved to CM container: Third Country Trade: Verification and Assessment of FBO Export SOPs for each premises where N60 sampling takes place.

2. Form 6Bs are available for all DAERA OVs including Certifying OVs to review.

3. FBO uploads all relevant information when making the DECOL application for the load to be certified. This includes the N60 testing results for the precursor material lots that make up the load and IMCs for any lots of PM that were sampled in premises in GB.

5.II N60 verification summary for communications between FBO, premises of production (where N60 samples are taken) OV, and certifying OV at a cold store in GB:

1. IMC 7833 must be completed by the premises (where N60 samples are taken) OV and all the required information forwarded to the certifying OV.

2. Where a load of PM is moved from NI to GB, it must move on 7833 IMC and, when it reaches NI, a copy of the IMC and supporting information stored in the NI premises' CM container: Third Country Trade: Verification and Assessment of FBO Export SOPs

6. Actions to be taken by the OV /MIT:

- If the FBO does not carry out N60 testing in accordance with the points above or does not make available the N60 test results to the OV/MIT in the agreed manner, verification will be suspended. The lot/s affected are ineligible for export to Canada.

- If N60 testing does not meet requirements (positive or presumptive positive results returned) the lot/s affected is/ are ineligible for export to Canada.

- Presumptive positive lots are ineligible for export unless the result is brought to the confirmatory stage and a 'not detected' result for E. Coli O157:H7/NM returned.
- A root cause analysis must be performed and all necessary actions as a result of the analysis performed to the satisfaction of the resident OV.
- Further information on what is expected in the case of positive or presumptive positive results is detailed in the RMOP.
- Any positive lots must be actioned as per FSA E.coli 0157 guidance. https://www.food.gov.uk/business-guidance/protecting-consumers-frominfection-with-shiga-toxin-producing-ecoli-stec (In Scotland: FSS Testing for pathogens | Food Standards Scotland)
- OV/MIT verifies FBO compliance with their own procedures as outlined in RMOP in case of positive or presumptive positive results.
- Enforcement actions as outlined in MOC are to be followed. See Chapter 3.1, Section 6 Enforcement for NI, and see Chapter 7 – Enforcement for Scotland, England and Wales.

Actions on confirmed positive result in relation to product no longer destined for export but intended to be placed on the domestic market:

- **Profile 1 - Ready-to-eat (RTE)** - considered a serious risk to public health, enforcing authority to be consulted on appropriate risk management action. If the food is still within the control of the FBO (and has not reached retail level), food may be re-directed for further processing if it is rendered safe for its intended use. Where this approach is used it must be included in the business's food safety management system and approved by the enforcement authority as providing a sufficient level of public health protection.

- **Profile 2 - Foods intended to be consumed following further processing** - risk assessment shows it can be reasonably assumed that the risk presented by STEC-contaminated Profile 2 food products will be controlled by normal hygienic practices and conditions of use of the food by the food handler or consumer. There is therefore generally no need to take action to remove product from the market. Food Businesses should consider the appropriate response, document this in their Food Safety Management Response and discuss with enforcement authorities during routine official checks. Information must be passed to other businesses along the supply chain, or to the final consumer to ensure the food is handled, stored, cooked and consumed safely. In situations where this information is not provided, there may be a risk that contaminated food is consumed without cooking or other treatment that would remove the STEC risk. Therefore, the affected product must be treated according to food Profile 1