Final Report

AMPC
AUSTRALIAN MEAT PROCESSOR CORPORATION

Barcode as Shipping Marks

Use of Meat Messaging and Bar Codes as Shipping marks to US

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1.0 Abstract

The problem to be solved, as outlined by FSIS regulations, is the ability to instantly and reliably provide supply chain provenance on a carton by carton basis to a level that is acceptable to Government.

The current use of regulatory shipping marks as the method for providing the supply chain provenance is an inaccurate, often manually applied and error prone process. These shipping mark related errors can be referred to as preventable refused entry causes.

The causes of refused entry occurrences fall into two (2) distinct categories of Export Establishment preventable and non-preventable causes.

Export Establishment preventable examples include; invalid shipping mark, invalid inspection certificate, failed type of inspection and other (typically Misc. labelling issue). These are refused entry causes where the export establishment should have had suitable systems and processes in place through their Approved Arrangements (AA) to prevent the occurrence.

Non-Preventable causes are typically related to shipping damage which is often outside of the control of the Export Establishment.

The U.S. is Australia's largest export market for Beef (412 million kgs for 2024), 2nd largest for Sheepmeat, and largest for Goatmeat.

The U.S. has specific import requirements that must be satisfied to allow Australian red meat clearance into U.S. commerce.

Over the last five years the volume of exports and the number of exporters to the U.S. have grown significantly. An analysis of USDA FSIS published "Import and Export Data", "Import Presented Refused & Import Refusal Reason Data" for the last 5 years has shown the number of refused entry notices for the exported volume has greatly increased disproportionally to the export volume.

An increase in presented volume from 253 million kgs to 538 million kgs (a 212% increase) resulted in an increase from 380,000 kgs to 1.58 million kgs (a 438% increase) of product refused entry. In simple terms, by doubling the volume there was a 4 times increase in refused entry volume. The calendar year 2024 saw a total of 11,863 refused entry notices issues for a total of 1.576 million kgs refused entry of Australian red meat.

The dispositional increase for bovine is more significant compared to the combined species analysis. An increase in volume presented of 273% resulted in an increase of refused entry volume of 618%.

The bovine non-preventive causes for 2024 are now greater than preventable causes as the rate of shipping damage continue to rapidly increase. For ovine, preventable causes is the major cause of refused entry.

An analysis of the top 10 foreign countries importing red meat into the U.S. has revealed that Australia has consistently ranked as the worst or second worst exporter per 1,000 metric tonnes imported since mid-2022.

At a commercial level U.S. buyers have raised concerns at the increasing rate of refused entry and are moving toward financial penalties for repeat offenders. Individual Import Inspection facilities are increasing the charges related to activities to attempt to resolve the increase rate of preventable refused entry causes.

At an industry level in the U.S. the Meat Import Council of America (MICA) Food Safety Committee has raised the inability of Australin Export Establishments to get the issue of preventable refused entry causes under control.

Industry recognition of the growing issue of preventable refused entry causes is essential, with the implementation of appropriate corrective action programs. As these preventable causes are linked to Export Establishments having inadequate systems and process in place through their AA, much of the responsibility for ensuring compliance rests on The Department of Agriculture Fisheries and Forestry (DAFF). Providing an industry solution that provides an alternative to the current shipping mark process is critical in reducing this unacceptable high level of refused entry occurrence.

(DAFF), Meat and Livestock Australia (MLA) and AUSTRADE ceased providing remarking services to assist with correcting shipping mark errors in the US from December 2021. The Australian meat industry Meat Messaging portal has been in operation for more than eight (8) years and has been demonstrated to be an effective method to resolve shipping mark issues that are identified at time of import inspection in the US.

This project was undertaken to develop and trial protocols based on the use of barcodes as a verification tool to replace current shipping marks with an expanded Meat Messaging system to link Government Health Certificates for cartons. Thereby removing the need for a separate manually applied shipping mark to cartons in a consignment applied at the time of staging or loadout.

2.0 Executive summary

Shipping marks as a means of compliance to FSIS regulations for identification of consignment lots has been in place for more than nearly 100 years. The history of shipping marks as a method of ownership identification for a lot of physical goods goes back hundreds of years to the early days of commercial shipping. When sending a consignment on a sailing ship, a Bill of Laden (being a legal document issued by the carrier) was used by the owner of the goods to identify those goods using a shipping mark. When the ship docked and the goods were then offloaded, you as the holder of the Bill of Lading would present the Bill of Lading that listed the shipping mark and a count of goods against the shipping mark. The longshoremen would then stage all of the goods with that shipping mark ready for collection and when they saw the Bill of Lading with the corresponding shipping mark, the count of goods would then be handed over. Moving forward a few hundred years and the same process is being followed but today it is USDA FSIS that is using the shipping mark at the Import Inspection Establishment to verify that the goods match the foreign country's issued health certificate. All other industries have moved forward over the last few hundred years and now use barcodes and electronic messaging (such as Advanced Shipping Notice electronic messages) to show ownership and providence of goods.

The idea of applying a shipping mark on each carton as the time of stagging or loadout through some manual process is very unreliable. The label that was applied to the carton at the time of manufacture has a unique barcode and other production data that uniquely identifies the carton.

There are 6 common methods for applying shipping marks and issues associated with each method. These are outlined as follows:

1. **Changeable ink stamps** – This is what was traditionally used for shipping marks. Over the last 10 years the changeable ink stamps usage has drop dramatically. This method was reliable but suffered from smudging creating illegible marks and the application of the shipping mark to the wrong cartons.

2. **Print on demand paper labels** - This has become the dominate method for shipping marks. However, if applied to iced or moist carton surfaces the labels will peel off during the transport and at import inspection. There is also the high possibility of the labels being applied to the wrong cartons. For some companies, the failure rate using this method is very high.

3. **Print on demand paper labels with auto application** - This is the same as above but uses scanning of the barcode while the carton is on a conveyor near loadout to check order details to determine the shipping mark. The shipping mark label is printed with the correct information and automatically applies the label to the applicable carton. But if applied to iced surface, moist surfaces, over strapping or the edge of lids, the label will likely peel off through the transport and at import inspection. There needs to be systems in place to ensure that the shipping mark label has been successful applied.

4. **Inkjet printing directly onto cartons** – This works in environments where the carton moves along a conveyor and the barcode is scanned to check order details to determine the shipping mark. If set up and maintained correctly this process is very reliable. One type of error occurs where the strapping position and carton shape are not consistent resulting in poor inkjet application and high levels of refused entry for illegible marks. The other problem that has occurred with some plants is incorrect queuing of the scans to the inkjet shipping mark application. When this happens, whole shipments may have the wrong mark applied. Another problem that has occurred is where the inkjet has failed and there were no systems in place for checking and recording that the inkjet mark was applied, therefore whole shipments were then sent with no shipping marks.

5. **Print the shipping mark on the carton label at time of carton label production** – This has been done by a few companies and there have been zero shipping mark errors. This is the lowest cost and most reliable solution but only works where the inventory can be fully controlled to fulfill orders. This is one of the proposed protocols included in the project. The USDA FSIS allow for use of this process within the labelling regulations and is acceptable to the US customers. However, DAFF would be required to make changes to the current EXDOC system to fully support printing of the shipping mark of the carton label at time of carton label application.

6. **Laser over marking** – This was a project that commenced 10 years ago to use a laser to heat the carton label surface to create a shipping mark. This operates like the inkjet printer whereby scanning the carton barcode is needed to determine what mark to apply. The laser also needs to determine where the label was positioned to ensure correct positioning of the shipping mark. The reason the lasers were considered was due to the lower operating costs than an inkjet printer.

1.1 Project Objective

The objective of this project was to gain Food Safety Inspection Service (FSIS) approval to conduct pilot trials for the use of barcodes or batch codes on the case/carton label as shipping marks. The

outcome of this trial would then form the basis of a submission to support the Commonwealth Department of Agriculture, Fisheries and Forestry (DAFF), in discussions with the FSIS to accept barcodes or batch codes as shipping marks. The trials utilised Meat Messaging to link the barcodes or batch codes to the associated Government Health Certificates.

This project was not permitted to impact commercial lot or batch control marks (current shipping marks commercial usage) that might be applied for commercial lot control. This concept of commercial lot or batch control mark is an important operational requirement for many sectors of the meat supply chain within the U.S..

The overall objective of this project was to investigate the possibility of conducting pilots utilising Meat Messaging for sending products to the US using the carton barcode, placard or batch code as the regulatory shipping mark.

This project focused on researching and implementing pilot programs to remove the requirement for applying regulatory shipping marks during product selection or loadout by utilising Meat Messaging and case/carton barcodes.

There are several key requirements that had to be achieved within this project for any proposed protocols:

1. Must be based on FSIS Directives and satisfy FSIS requirements,
2. Deliver commercial value to every segment of the entire meat supply chain (Exporters, Import Inspection Establishments, U.S. Buyer, and End Users),
3. Reduce the incidences of refused entry due to shipping mark failures,
4. Provide a clear visual identification system for managing commercial lots,
5. Reduce the time taken for export load and import clearance activities,
6. For certain supply chains and products, the existing shipping mark procedures **MUST** remain in place.

The project developed three (3) proposed protocols that were defined for different types of products, supply chains and load requirements:

1. Airfreight consignments of less than 10,000lbs using the Placard protocol based on FSIS Directive 9910.1 BARCODES IN LIEU OF SHIPPING MARKS FOR FRESH MEAT PRODUCTS FROM AUSTRALIA.
2. Whole container load consignments of a single product code to a single US further processing using the Placard protocol based on FSIS Directive 9910.1 BARCODES IN LIEU OF SHIPPING MARKS FOR FRESH MEAT PRODUCTS FROM AUSTRALIA.
3. Case/ Carton Label Unique Batch Codes (Shipping Marks) applied at time of case/carton production.

Each of the proposed protocols ensures that a commercial visual lot mark is on each case/carton to manage commercial lotting along the meat supply chain. This commercial lot mark MUST NOT be used for regulatory purposes.

3.0 Introduction

The project involved working with all sectors of the meat export and US important industry to ensure detailed understanding of the current issues, commercial requirements and volume of refused entries associated with shipping marks.

The project included detailed analysis of FSIS refused entry data to clearly identify the magnitude and characterises of the shipping mark issues.

From the detailed analysis and the supply chain participant requirements, the project involved the development of a number of proposed protocols that will support not needing to apply a shipping mark at the time of loadout to individual cartons, by using the carton barcode and Meat Messaging.

To date the project developed three (3) proposed protocols that were defined for different types of products, supply chains and load requirements:

1. Airfreight consignments of less than 10,000lbs using the Placard protocol based on FSIS Directive 9910.1 BARCODES IN LIEU OF SHIPPING MARKS FOR FRESH MEAT PRODUCTS FROM AUSTRALIA.

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Each of the proposed protocols ensures that a commercial visual lot mark is on each case/carton to manage commercial lotting along the meat supply chain. This commercial lot mark MUST NOT be used for regulatory purposes.

The proposed protocols were developed in conjunction with:

- Australian export establishments,
- Australian non-packer exporters,
- Australian 3rd party cold stores,
- Industry bodies and government representatives through a project committee under the RMSCC,
- U.S. importers/buyers,
- U.S. import inspection establishments,
- U.S. Value adders/ end users,
- Meat Importer Council of America (MICA) food safety committee,
- USDA FSIS representative provided guidance.

The project intended to test each proposed protocol through a number of Australian export/U.S. import supply chains.

There were six export companies that signed up to participate in the project:

- Australian Country Choice Production Pty Ltd (Est 1620)
- Australian Lamb (Colac) Pty Ltd (Est 282)
- Fletcher International Export Pty Ltd (Est 2309)
- JBS Australia Pty Ltd (Dinmore Est 235 and Hemmant Est 1804)
- Teys Australia Distribution Pty Ltd (Est 1533)
- Wodonga Rendering Pty Ltd (Est 612)

The use of Meat Messaging was a prerequisite requirement for participants in trial and pilots. Each participant had implemented Meat Messaging and was successfully utilising Meat Messaging for U.S. shipments.

Each participant was to trial the most suitable protocols to match their respective products and supply arrangements.

The trials where to have a number of stages:

1. Initial trails where the protocol was applied in conjunction to normal operational activities. Est 282 was successful in the trial for the air freight protocols with no issues or complications.

2. Once the initial trials showed that the protocols were working along the supply chain and that the operational requirements of each section of the supply chain were compatible with the protocol, application to FSIS to formally conduct a set of pilots would be submitted. No export establishments managed to implement the protocols to this level.

3. Upon the successful operational and sufficient collection of evidence of the formal pilot success, a formal approach to FSIS would be made to enable the use of the commercial protocols under suitable supervision and monitoring.

There were a range of stated reasons for the export establishments not implementing the proposed protocols even though they had signed up to participate in the project:

1. Australian Country Choice Production Pty Ltd (Est 1620) has changed the operational processes for loadout and increased the service processing. This has resulted in the products that would be part of the trials being owned by operators and not ACC. This makes controlling the supply chain impractical for the purpose of the trials. ACC management have changed and the focus on participation in the pilot has stopped. Certain company team members have pushed for the pilots to be conducted while other team members have resisted wanting to conduct the trials.

2. Australian Lamb (Colac) Pty Ltd (Est 282) was purchased by Minerva Foods and their processing and production systems are being replaced with a custom built by Minerva Foods. These changes would delay any protocol trial by at least 2 years.

3. Fletcher International Export Pty Ltd (Est 2309) while initially actively involved with the project, staff changes, and operational focus changes have resulted in a lack of interest in participating in the trials.

4. JBS Australia Pty Ltd (Dinmore Est 235 and Hemmant Est 1804) have greatly increased their export volume, resulting in an increase in operational issues which need to be managed.. JBS have requested to delay any trial work while they are focussed on addressing the operational issues.

5. Teys Australia Distribution Pty Ltd (Est 1533) have internal operational issues with the central distribution centre, and this has changed the focus of the organisation away from trying to implement the trial protocols. Certain company team members have pushed for the pilots to be conducted while other team members have resisted wanting to conduct the trials.
6. Wodonga Rendering Pty Ltd (Est 612) has had staff changes that have impacted the project, and the operational processes have changed in terms of the loadout facilities. They have indicated that it would be at least 18 months before they could participate in the pilots.

There are large, direct, cost savings available as the industry value proposition through the utilisation of the proposed protocols across the whole of the export supply chains.

The calendar year 2024 saw a total of 11,863 refused entry notices issued for a total of 1.576 million kgs final refused entry of Australian red meat. More than half of this volume was directly or indirectly related to preventable causes that would be addressed through the proposed protocols.

The costs associated with product loss and costs for attempting to correct the shipping mark related errors is in excess of $20,000,000.

In terms of industry cost saving for the calendar year 2024 that was more than 68,000 consignments of red meat to the U.S. made up of more than 30,000,000 cartons.

The direct cost of application of shipping marks and associated administration is estimated at $30,000,000.

Utilisation of the proposed protocols would provide direct annual industry saving of $50,000,000 for the U.S. market with an indirect saving of even more through removing delays due to products being held at import inspection.

There are few operational barriers to the adoption of the proposed protocols, however there can also be large management and sales related barriers. The idea of a change to the status quo within sales teams and management is seen as too risky under that current increasing volume of exports to the U.S.

4.0 Project objectives

The objective of this project is to gain Food Safety Inspection Service (FSIS) approval to conduct a trial for the use of barcodes on cartons as shipping marks. The outcome of this trial would then form the basis of a submission to support the Department in discussions with the FSIS to accept barcodes as shipping marks. The trial will utilise Meat Messaging to link the barcodes to the associated Government Health Certificates.

This project does not impact commercial lot or batch control mark (current shipping marks commercial usage) that might be applied for commercial batch control. This concept of commercial lot or batch control mark is an important operational requirement for many sectors of the meat supply chain within the U.S.

The objective of this project is to investigate the possibility of conducting pilots utilising Meat Messaging for sending products to the U.S. using the carton barcode, placard or batch code as the regulatory shipping mark. The problem to be solved, as outlined by FSIS regulations, is the ability to instantly and reliably provide supply chain provenance on a case/carton by case/carton basis to a level that is acceptable to Government.

The current use of post-production manual or inkjet applied regulatory shipping marks as the method for providing the supply chain provenance is an inaccurate and error prone process. Commonwealth Department of Agriculture, Fisheries and Forestry (DAFF), Meat and Livestock Australia (MLA) and AUSTRADE ceased providing remarking services to assist with correcting shipping mark errors in the US from December 2021.

The Australian meat industry Meat Messaging portal has been in operation for more than ten (10) years and has been demonstrated to be an effective method to resolve shipping mark issues that are identified at time of import inspection in the U.S. This project proposes to trial the use of barcodes or unique batch codes on the case/carton label as shipping marks using the Meat Messaging system to link Government Health Certificates with cartons. Thereby removing the need for a separate shipping mark to be applied to cases/cartons in a consignment. This expanded use of Meat Messaging may also prove useful in supporting provenance and other label claims.

The analysis of U.S. refused entry records was conducted to determine the current industry impact of the preventable refused entry. This analysis was conducted on the FSIS publicly available datasets for the 10 years up until the end of 2024.

The project developed three (3) proposed protocols that were defined for different types of products, supply chains and load requirements:

1. Airfreight consignments of less than 10,000lbs using the Placard protocol based on FSIS Directive 9910.1 BARCODES IN LIEU OF SHIPPING MARKS FOR FRESH MEAT PRODUCTS FROM AUSTRALIA.

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3. Case/ Carton Label Unique Batch Codes (Shipping Marks) applied at time of case/ carton production.

Each of the proposed protocols ensures that a commercial visual lot mark is on each case/carton to manage commercial lotting along the meat supply chain. This commercial lot mark MUST NOT be used for regulatory purposes.

3.1 Analysis of FSIS Publicly Available U.S. Refused Entry Data

This review uses publicly available data from USDA FSIS including “Import and Export Data”, and “Import Presented Refused & Import Refusal Reason Data” available at:

https://www.fsis.usda.gov/inspection/import-export/international-reports/import-and-export-data.

The analysis of the data covers from the 31st of January 2015 through to the 31st of January 2025. The date of the 31st of January was chosen as a simple method to adjust for an average transport offset from the date the product was exported from Australian. The analysis is therefore presented as 10 calendar years from 2015 through to 2024 inclusive.

The FSIS dataset details each consignment presented for inspection including the exporter, import inspection establishment, product classification, weights, and any refusal reasons.

The data is future broken down in to the species groups of Bovine, Ovine and Caprine.

The analysis examined data relationships to identify possible cause and effect related to refused entry occurrence.

The U.S. is Australia’s largest export market for Beef (412 million kgs for 2024), 2nd largest for Sheepmeat and largest for Goatmeat.

The U.S. has specific import requirements that must be satisfied to allow Australian red meat clearance into U.S. commerce.

Over the last 5 years the volume of exports and the number of exporters to the U.S. have grown significantly. An analysis of USDA FSIS “Import and Export Data”, “Import Presented Refused & Import Refusal Reason Data” for the last 5 years has shown the number of refused entry notices for the exported volume has greatly increased disproportionally to the export volume.

An increase in volume from 253 million kgs to 538 million kgs (a 212% increase) resulted in an increase from 380,000 kgs to 1.58 million kgs (a 438% increase) of product refused entry. In simple terms by doubling the volume there was a fourfold increase in refused entry volume. The calendar year 2024 saw a total of 11,863 refused entry notices issues for a total of 1.576 million kgs refused entry.

The dispositional increase of bovine is more significant compared to the combined species analysis. An increase in volume presented of 273% resulted in an increase of refused entry volume of 618%.

The causes of refused entry occurrences fall into two (2) distinct categories of Export Establishment preventable and non-preventable causes.

Export Establishment preventable examples include; invalid shipping mark, invalid inspection certificate, failed type of inspection and other (typically Misc. labelling issue). These are refused entry causes where the export establishment should have had suitable systems and processes in place through their Approved Arrangements (AA) to prevent the occurrence.

Non-Preventable causes are typically related to shipping damage which is often outside of the control of the Export Establishment.

The bovine non-preventive causes for 2024 are now greater than preventable causes as the rate of shipping damage continues to rapidly increase. For ovine, preventable causes is the major cause of refused entry.

An analysis of the top 10 foreign countries importing red meat into the U.S. has revealed that Australia has consistently ranked as the worst or second worst exporter per 1,000 metric tonnes imported since mid-2022.

At a commercial level U.S. buyers have raised concerns at the increasing rate of refused entry and are moving toward financial penalties for repeat offenders. Individual Import Inspection facilities are increasing the charges related to activities to attempt to resolve the increase rate of preventable refused entry causes.

At an industry level in the U.S. the Meat Import Council of America (MICA) Food Safety Committee has raised the inability of Australin Export Establishments to get the issue of preventable refused entry causes under control.

Industry recognition of the growing issue of preventable refused entry causes is essential, with the implementation of appropriate corrective action programs. As these preventable, uses are linked to Export Establishments having adequate systems and process in place through their AA, much of the responsibility for ensuring compliance rests of The Department of Agriculture Fisheries and Forestry (DAFF).

Export Establishments that have robust systems and processes, and few or no refused entry occurrences, are being disadvantaged by those failing to adhere to regulatory compliance requirements.

3.1.1 Export Establishments Analysis

The analysis of export establishment looked at relationships between exporters and refused entry occurrence.

3.1.1.1 Key Export Establishments Insights

Key insights from the analysis of the 10 years of FSIS “Import Presented Refused & Import Refusal Reason Data” include:

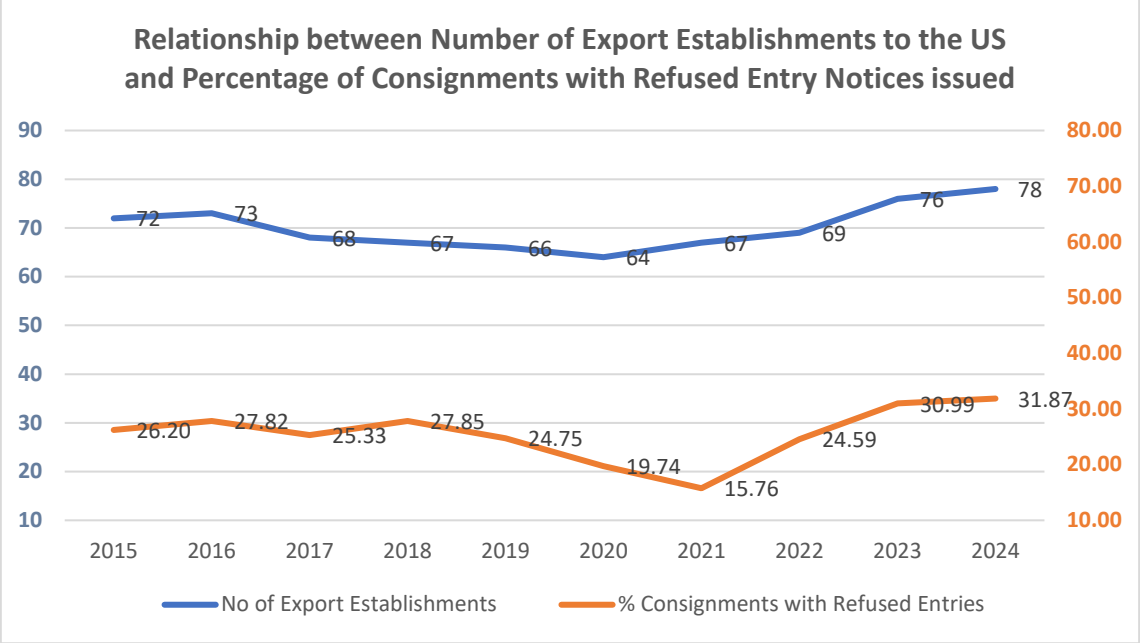
1. An increase in the number of export establishments has led to a disproportionate rise in the number of refused entry notices issues. This suggests that newer export establishments lack the necessary systems and controls to maintain compliance with US import inspection requirements.
2. The bottom 20% of export establishments represents between 60% and 76% of refused entry notices. This indicates that this group consistently represents the majority of refused entry notices.
3. The top performing export establishments (those with <0.1% refused entry by volume) account for between 15% and 60% of the presented volume, with higher percentages corresponding to lower export volumes.

In summary, as the number of export establishments shipping products to the U.S. increases, so does the occurrence of refused entries. Notably, 20% of export establishments are responsible for 60% to 76% of refused entry notices issued.

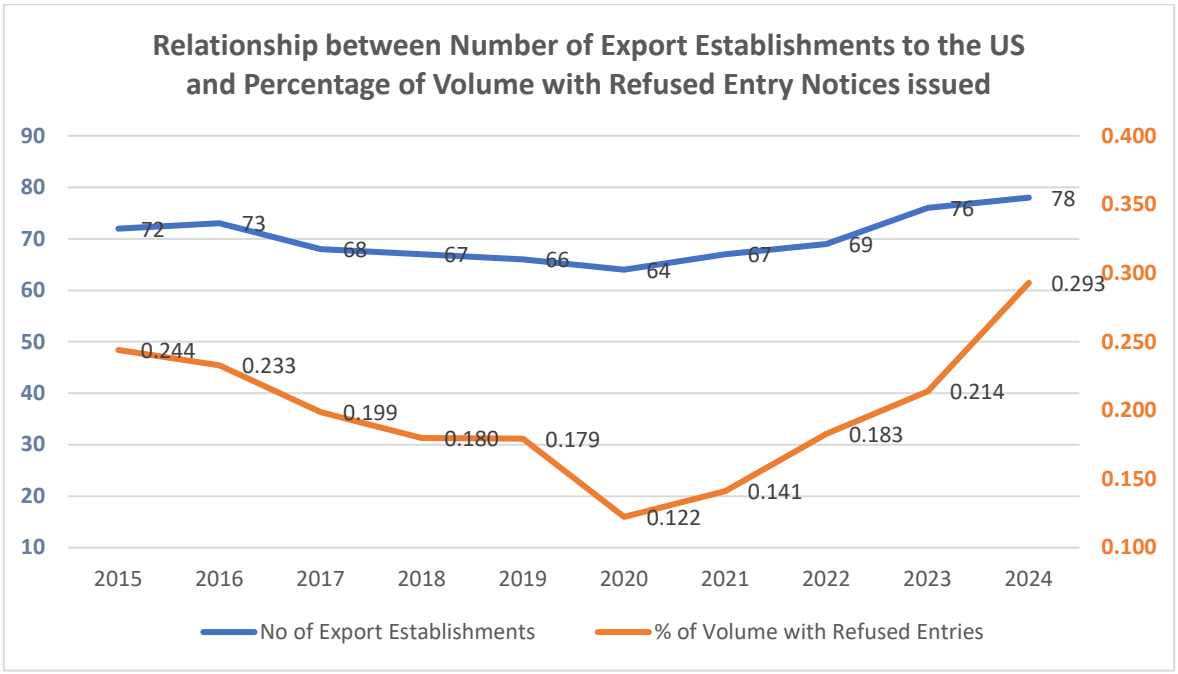
3.1.1.2 Export Establishment Analysis Charts

A number of charts are shown below that relate to an analysis of the export establishment characteristics.

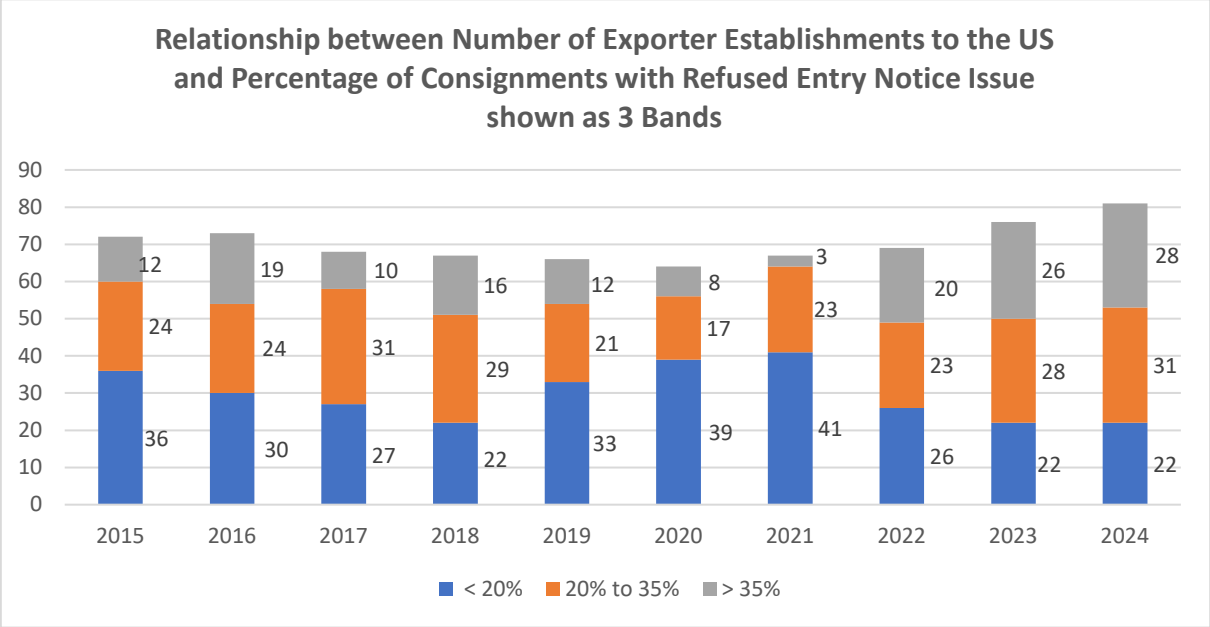
The chart below shows the relationship between the number of exporter establishments and the percentage of consignments with refused entry notices issued. This shows that when the number of exporter establishments increase the percentage of consignments with refused entry notices issued increase at a greater percentage.



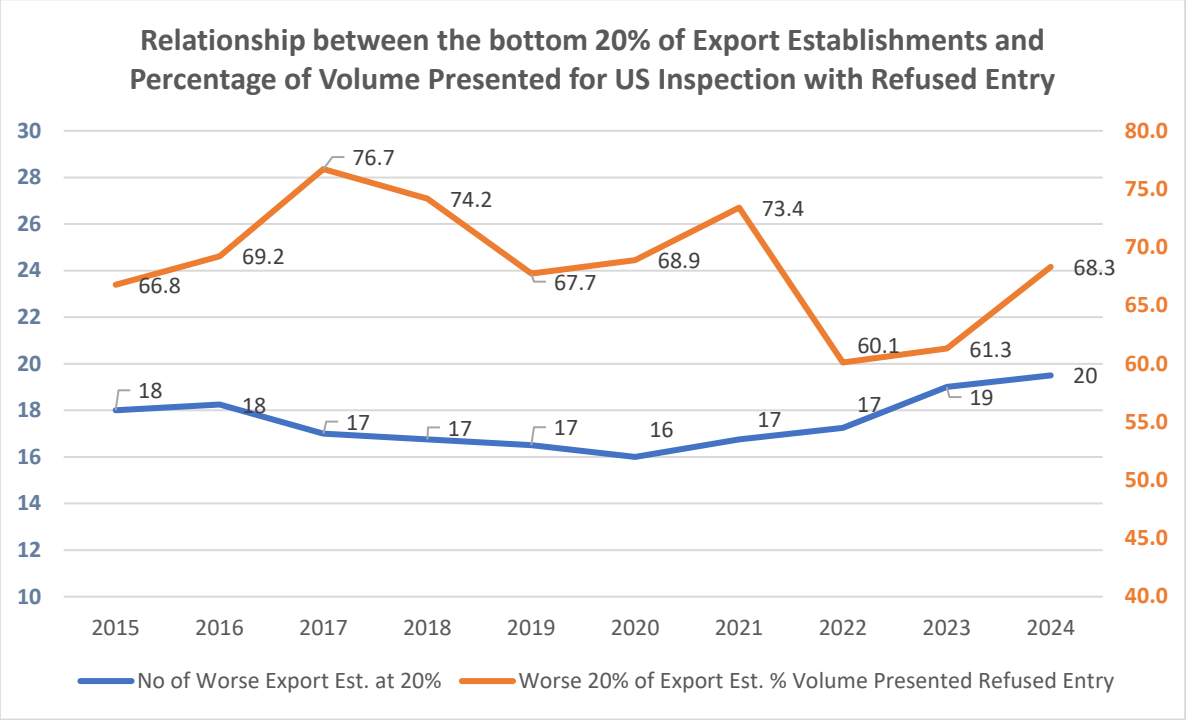
The chart below shows the relationship between the number of exporters and the percentage of volume with refused entry notices issued. This demonstrates that as the number of exporter establishments increase, the percentage of volume with refused entry notices rises at a proportionally higher rate. This likely indicates that newer establishments may lack the necessary systems and controls to ensure compliance to US import inspection requirements.



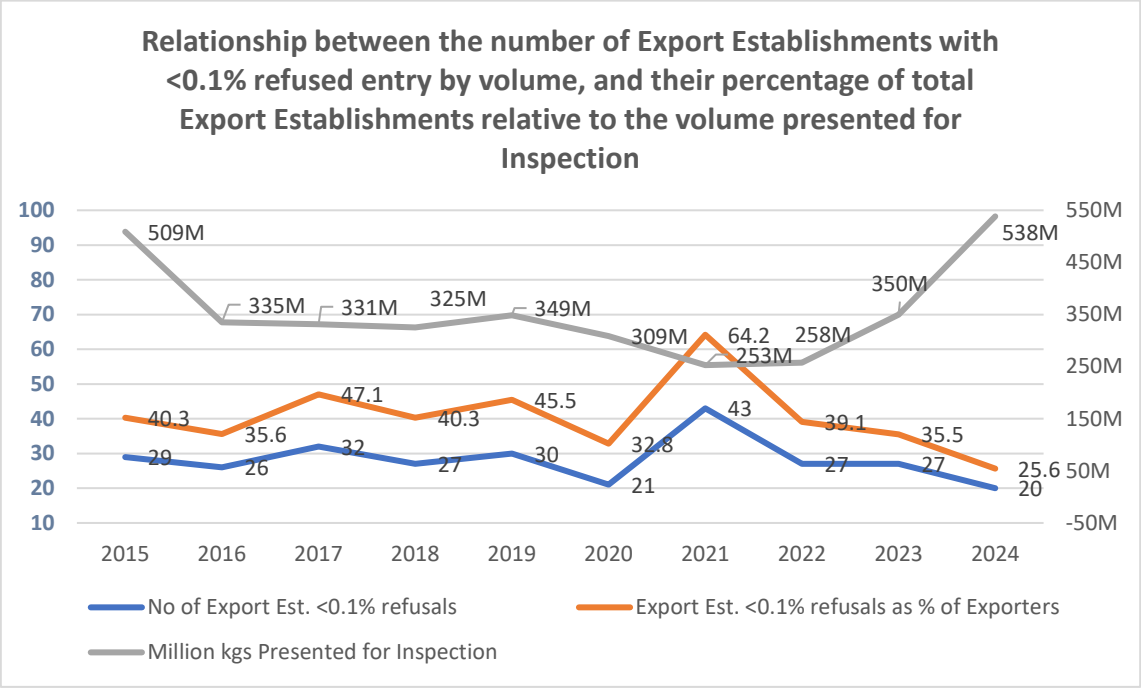
The chart below shows the export establishments counts broken into three (3) bands based on the percentage of consignments with refused entry notices issued. The bands represent Establishments with less than 20%, between 20% and 35% and more than 35% of consignments having refused entry notices issued. The overall trend shows that as the number of exporting establishments increases, the proportion of Establishments with more than 35% of consignments receiving refused entry rises significantly.



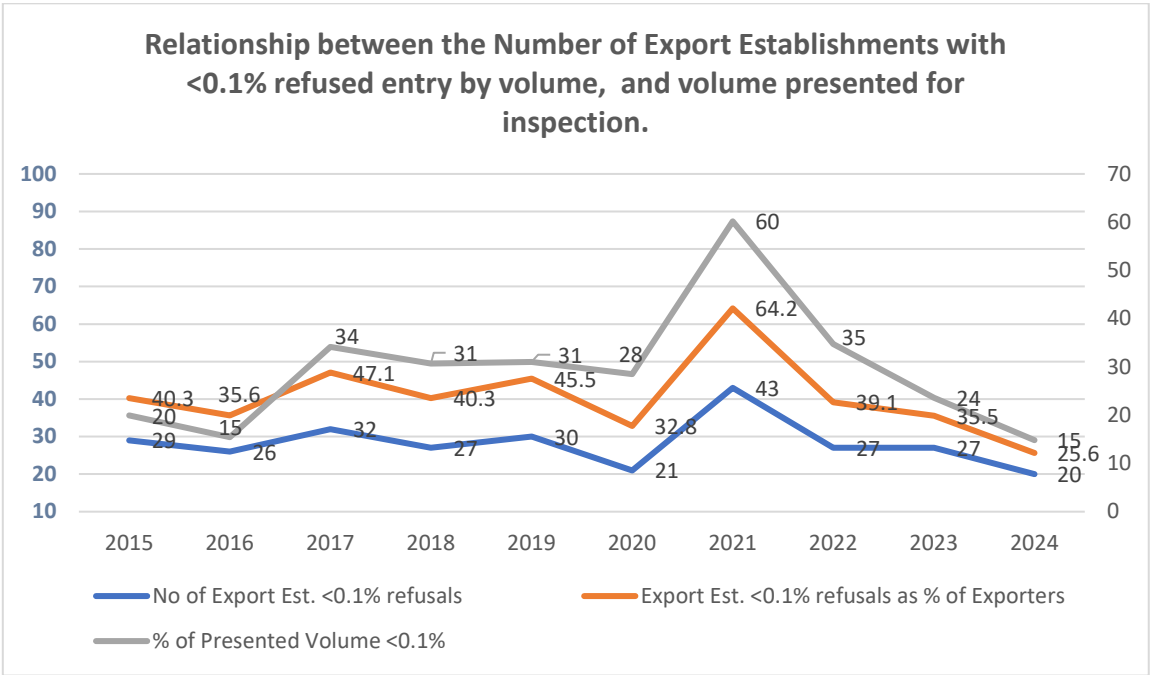
The chart below illustrates the relationship between the bottom 20% of export establishments and percentage of volume presented for US Inspection with refused entry notices issued. The data indicates the bottom 20% of export establishments are responsible for between 60% and 76% of refused entry notices issued.



The chart below shows the relationship between the number of export establishments with <0.1% refused entry by volume, and their percentage of total export establishments relative to the volume presented for inspection. The data shows that as export volume increases and the number of export establishments rises, the percentage of establishments with <0.1% refused entry by volume decreases.



The below chart illustrates the relationship between the number of export establishments with <0.1% refused entry by volume, and the percentage of such establishments relative to the total number of export establishments, in relation to the volume presented for inspection by these establishments.



3.1.2 Volume Analysis

The volume of product presented in the U.S. for inspections has more than doubled in the past three (3) years. During that period, the percentage of refused entry notices issued has increased threefold.

3.1.2.1 Key Volume Analysis Insights

A key insight from the analysis of the volume presented for inspection over the last 10 years of the FSIS "Import Presented Refused & Import Refusal Reason Data" include:

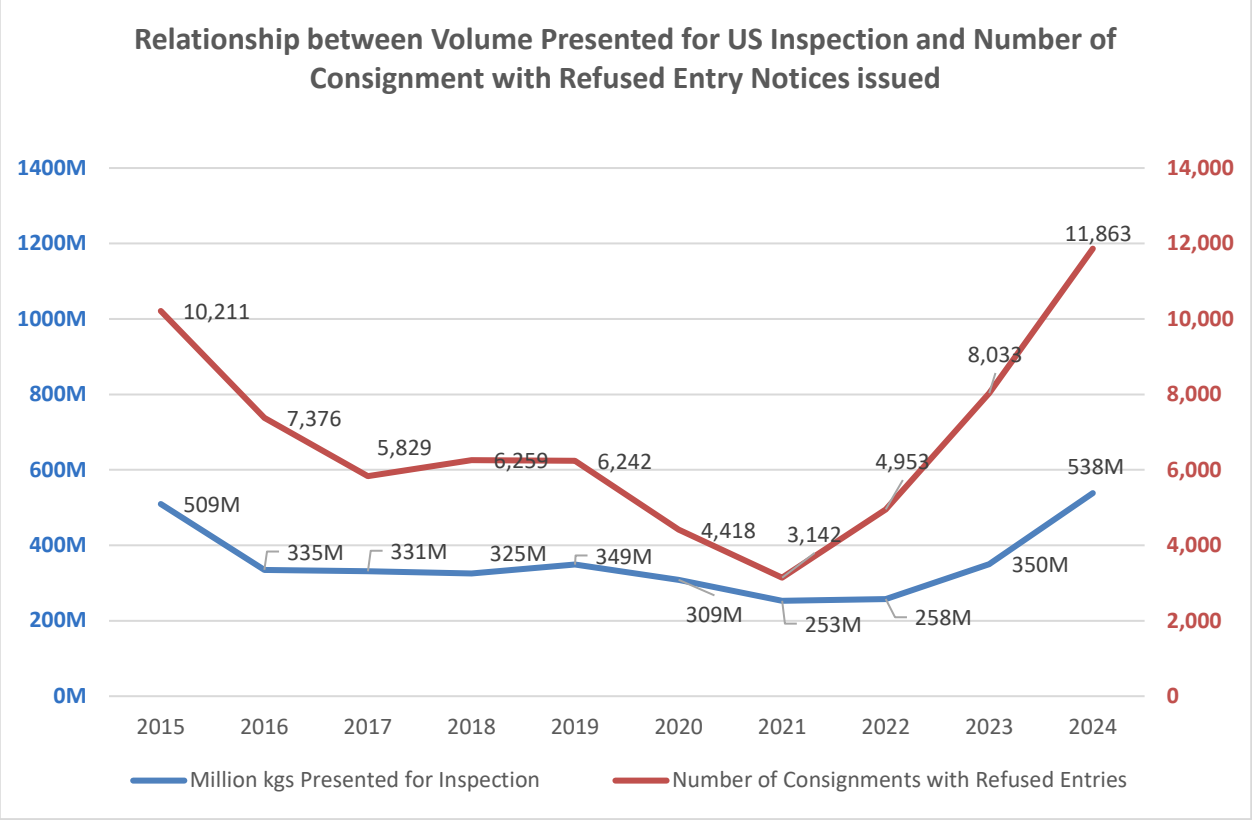
1. An increase in the volume presented for inspection has led to a disproportionate increase in the volume of product refused entry and number of refused entry notices. Specifically, an increase in volume from 253 million kgs to 538 million kgs (a 212% increase) resulted in a rise from 380,000 kgs to 1.58 million kgs (a 438% increase) of product refused entry. In simple terms, doubling the volume resulted in a fourfold increase in refused entry volume.

In summary, as more product is presented for inspection in the U.S., the occurrence of refused entry rises disproportionately.

3.1.2.2 Volume Analysis Charts

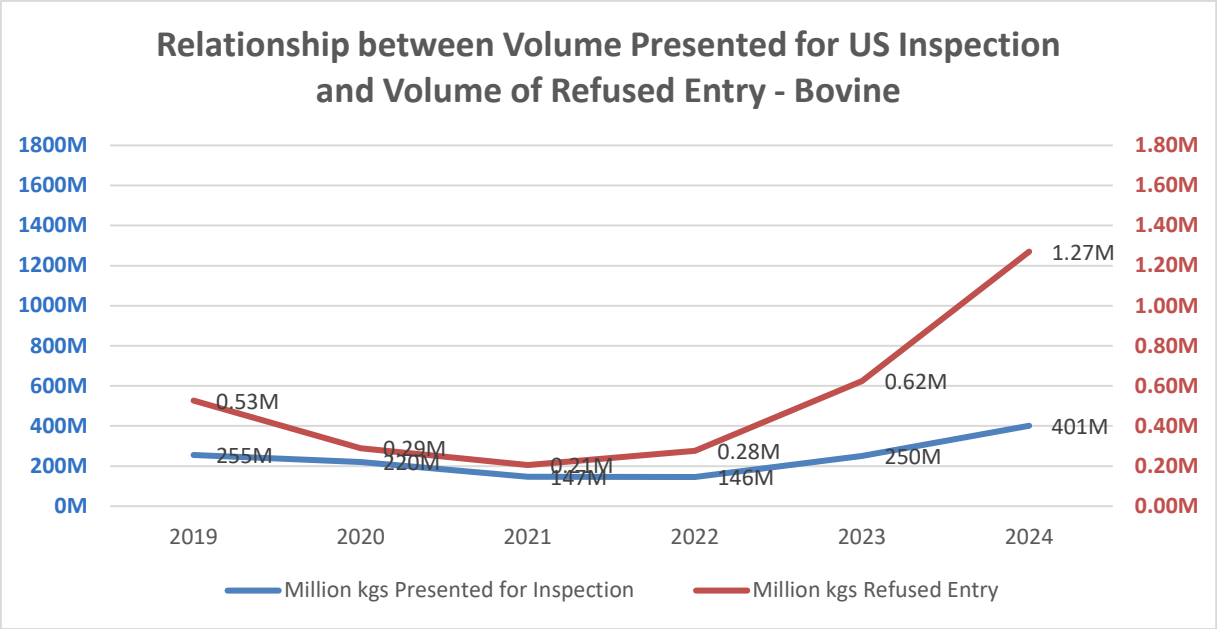
Several charts are presented below that relate to the analysis of the characteristics of the volume presented for inspection.

The chart below illustrates the relationship between the volume presented and the number of consignments with refused entry notices issued for combined species. It demonstrates that as the volume increases, the number of consignments with refused entry notices rises at a disproportionate rate.

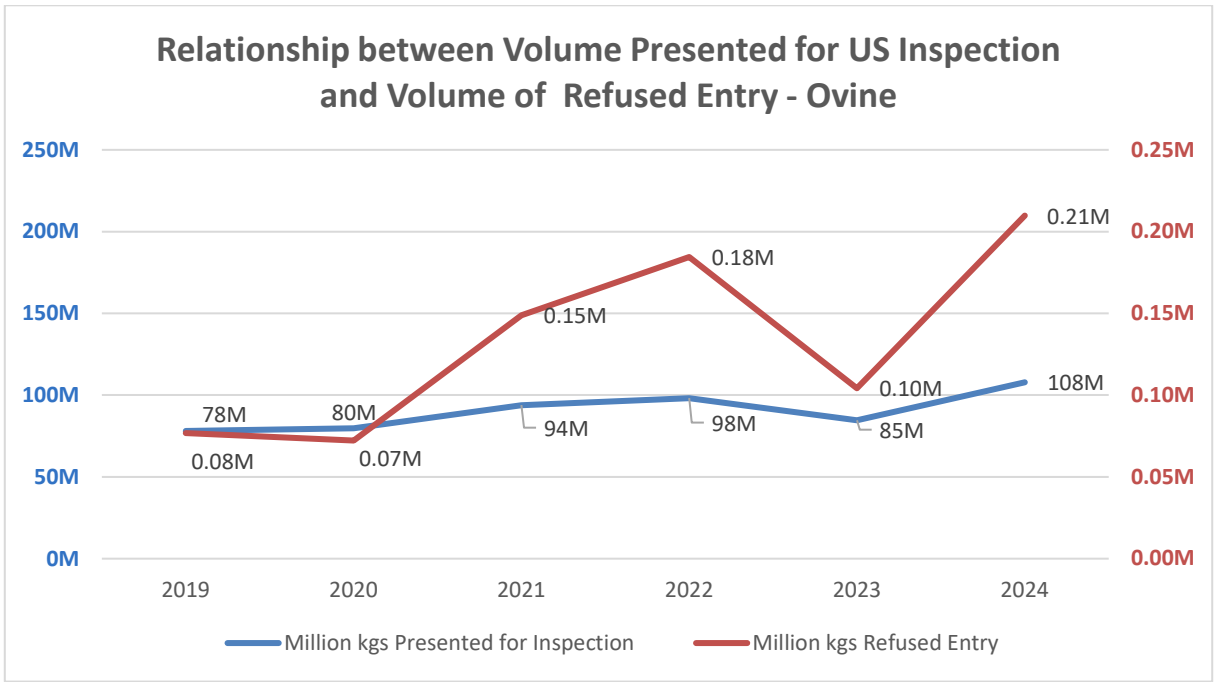


The chart below shows the relationship between the volume presented and the number of consignments with refused entry notices issued for Bovine. Similar to the combined species chart, it shows that as the

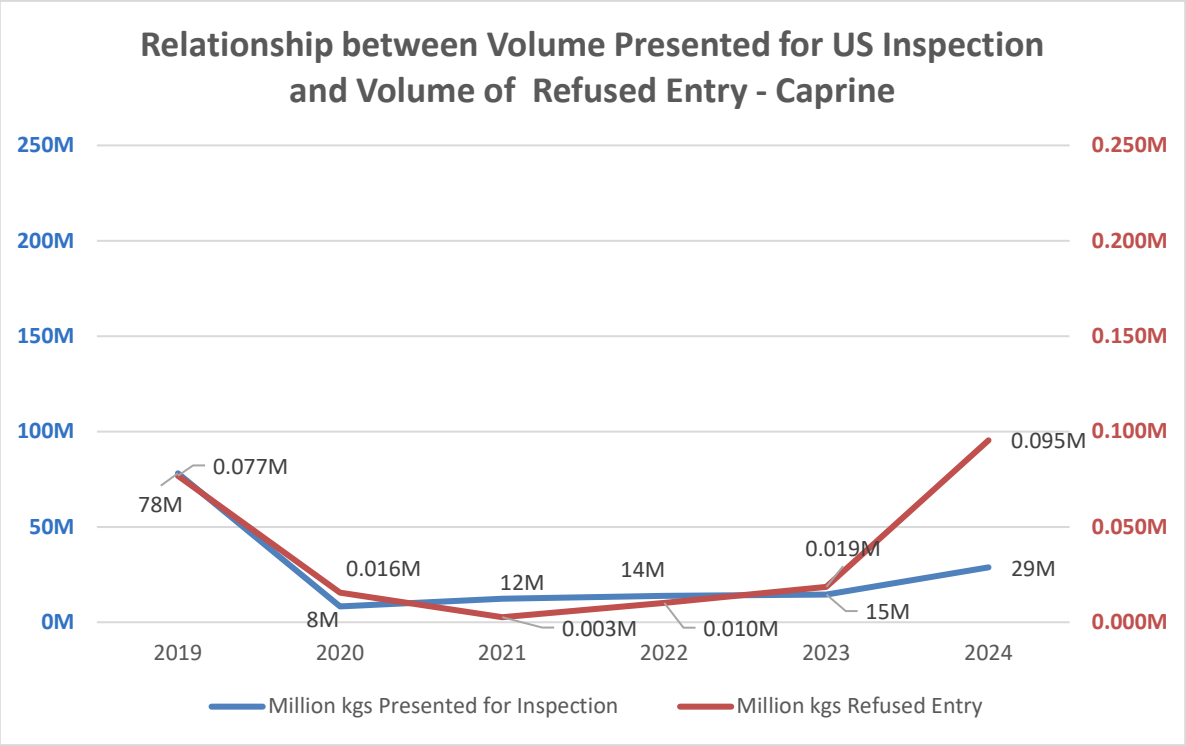
volume increases, the number of consignments with refused entry notices increases at a disproportionate rate. However, the dispositional increase is more significant for Bovine compared to the combined species chart. Specifically, a 273% increase in volume resulted in an increase of refused entry volume of 618%.



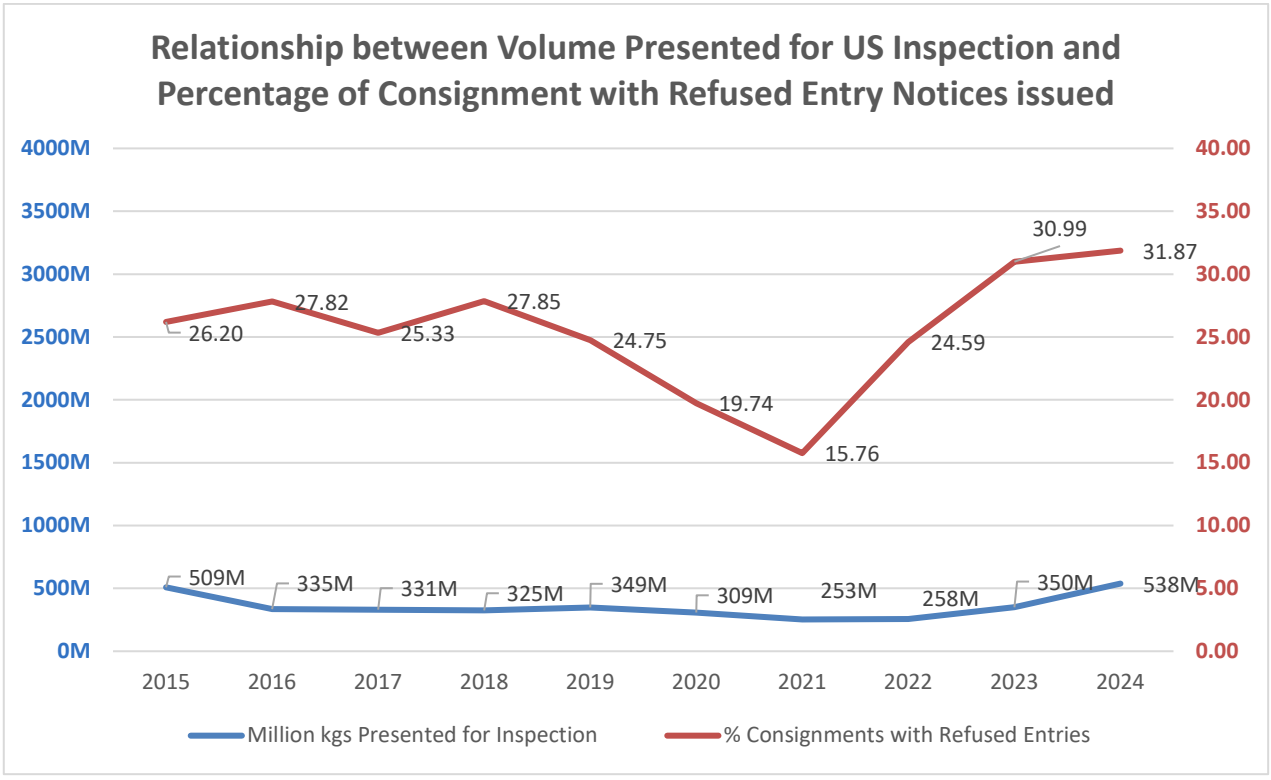
The chart below illustrates the relationship between the volume presented and the number of consignments with refused entry notices issued for Ovine. Similar to the combined species chart, it shows that as the volume increases, the number of consignments with refused entry notices rises at a disproportionate rate.



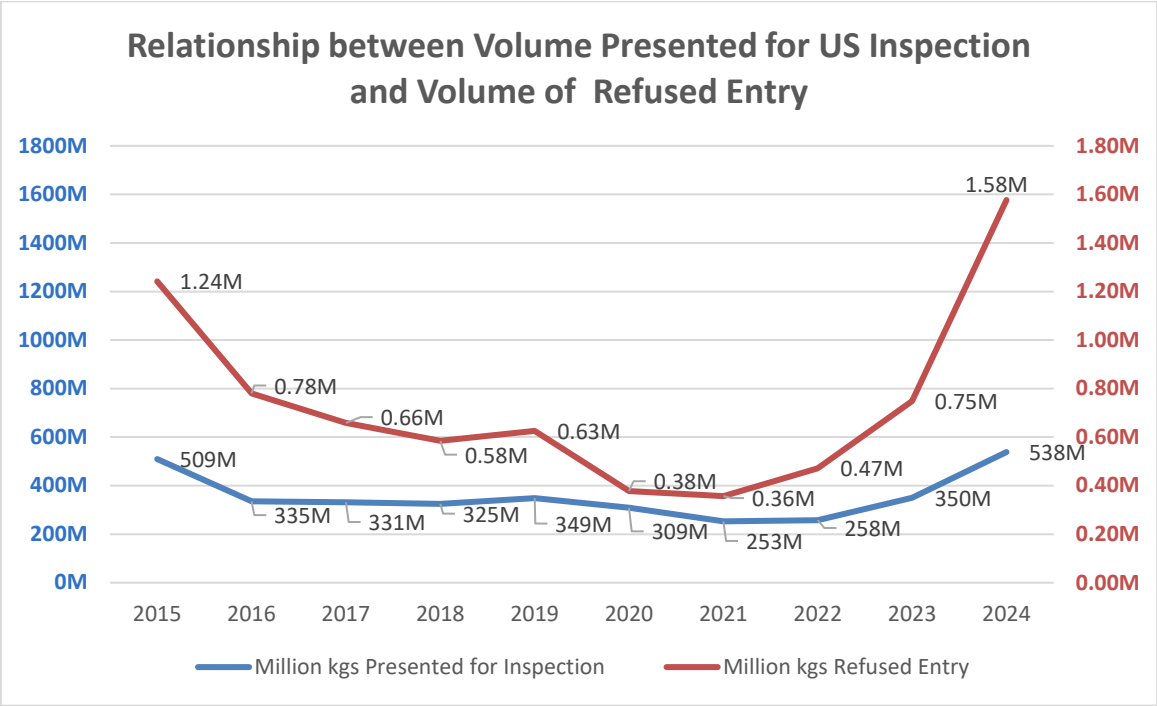
The chart below illustrates the relationship between the volume presented and the number of consignments with refused entry notices issued for Caprine. The rate of change between the increase in volume presented and the increase in refused entries is the lowest for Caprine.



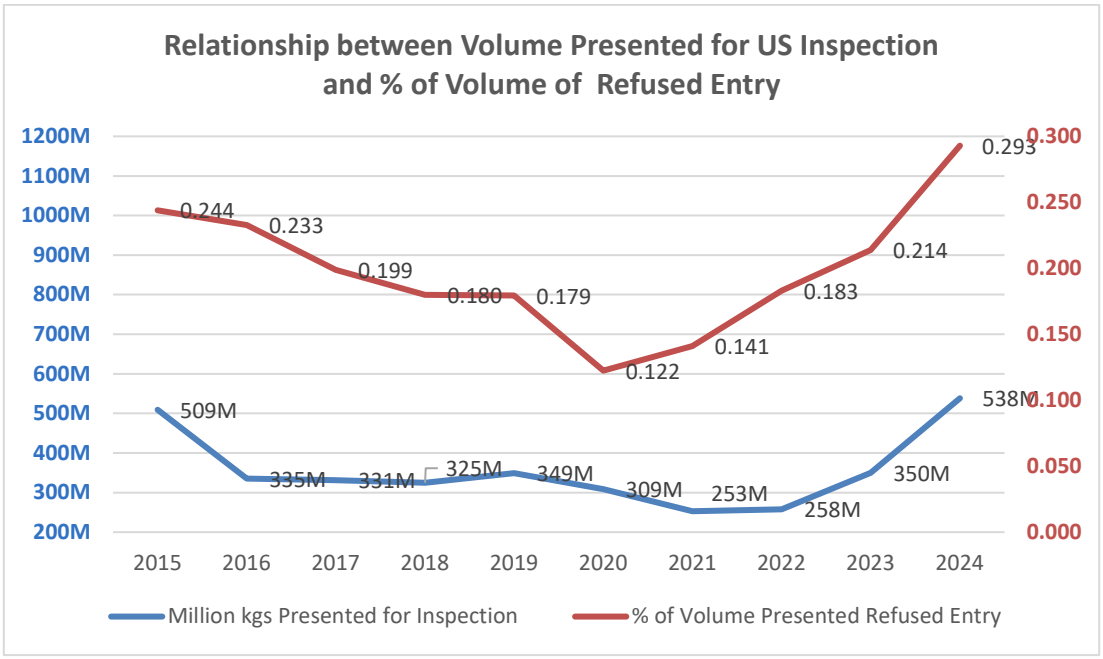
The chart below illustrates the relationship between the volume presented and the percentage of consignments with refused entry notices issued. It shows that as the volume increases, the percentage of consignments with refused entry notices increased at an accelerated rate.



The chart below shows the relationship between the volume presented and the volume of refused entry notices issued. It demonstrates that as the volume increases, the volume with refused entries increases at a greater rate. When the volume presented is less than 310 million kgs per year, the refused entry volume remains under 500,000 kgs annually. However, when the volume exceeds 500 million kgs per year, the refused entry volume increases to over 1.20 million kgs.



The chart below illustrates the relationship between the volume presented and the percentage of volume with refused entry notices issued. This shows that as the volume increases, the percentage of volume with refused entry notices issued increases at a disproportionate rate. Specifically, an increase in volume from 253 million kgs to 538 million kgs (a 212% increase) resulted in a rise from 380,000 kgs to 1.58 million kgs (a 438% increase). In simple terms, doubling the volume led to a fourfold increase in the volume of refused entries.



3.1.3 Refused Entry Reasons Analysis

The analysis of refused entry reasons looks at relationships between these reasons, exports, and species over the period from January 31st 2020, to January 31st 2025 (5 years).

The refused entry reasons data is broken down by species and reported as a refused entry occurrence per 1,000 metric tonnes presented for inspection.

3.1.3.1 Key Refused Entry Reasons Analysis Insights

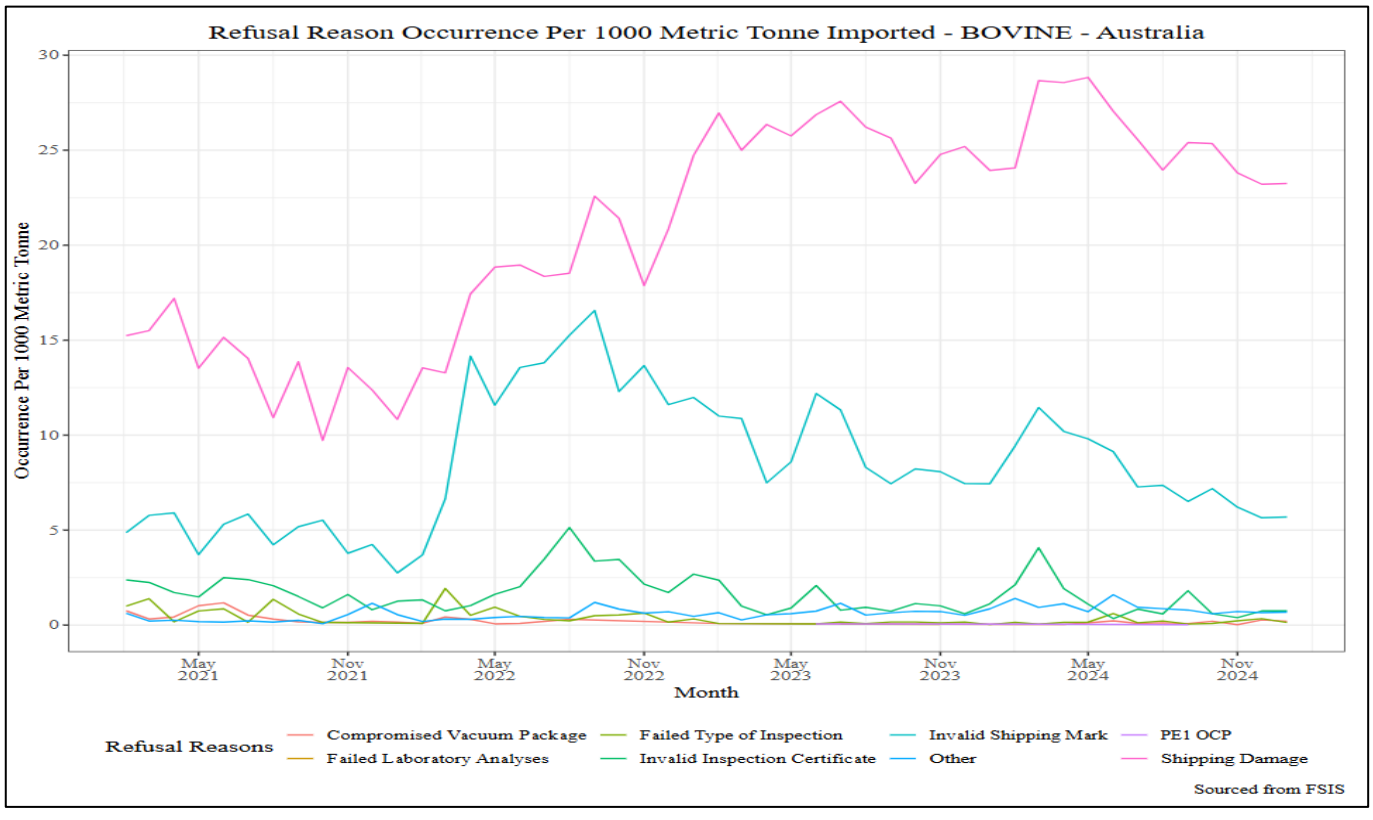
Key insights from the analysis of refused entry reasons over the last five (5) years of the FSIS "Import Presented Refused & Import Refusal Reason Data" include:

In summary, invalid shipping marks and invalid inspection certificates are a major source of refused entries that are entirely preventable. While issues related to shipping are to some extent outside the control of the export establishment, these two (2) reasons are significant areas of concern.

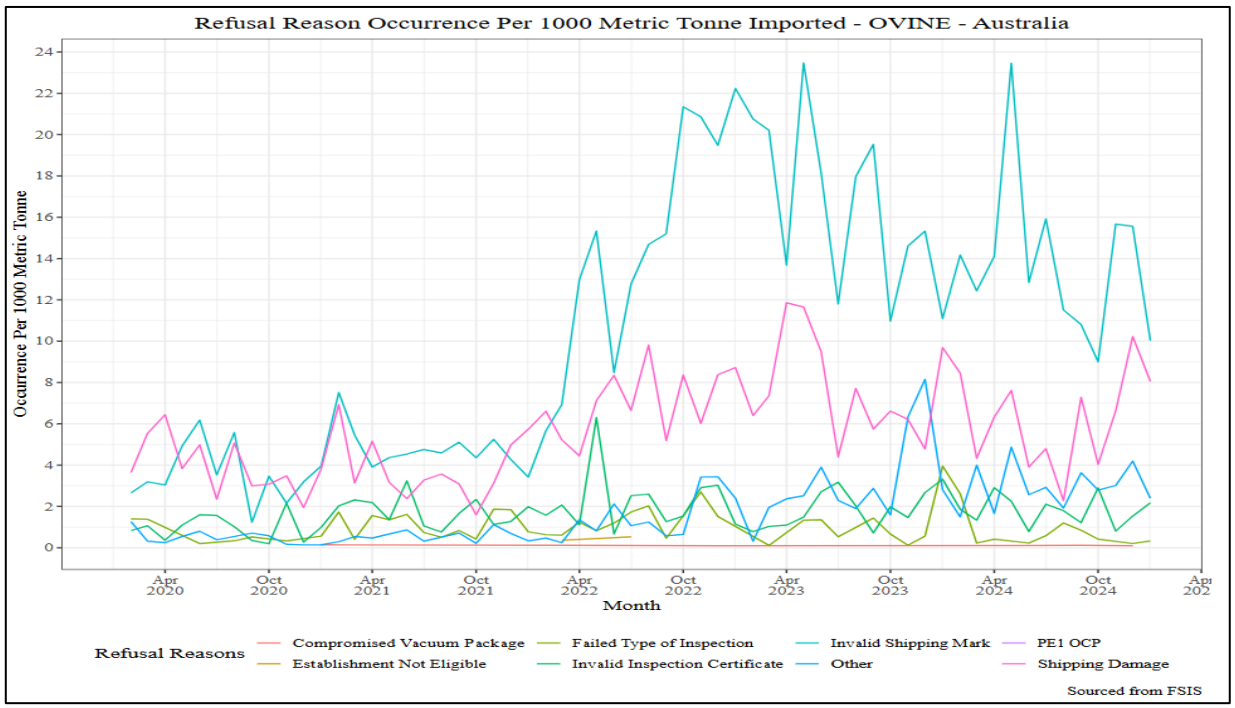
It is important to note that an invalid inspection certificate is cited as a refused entry reason when a consignment presented for inspection matches the certificate in terms of carton count but shows discrepancies in the count of marks, an over count of one mark and a under count of another. Operationally, this indicates that the export establishment applied insufficient quantities of one mark and too many of the second mark. Technically, this is not a certificate violation, but rather an issue of incorrect marks.

3.1.3.2 Refused Entry Reason Analysis Charts

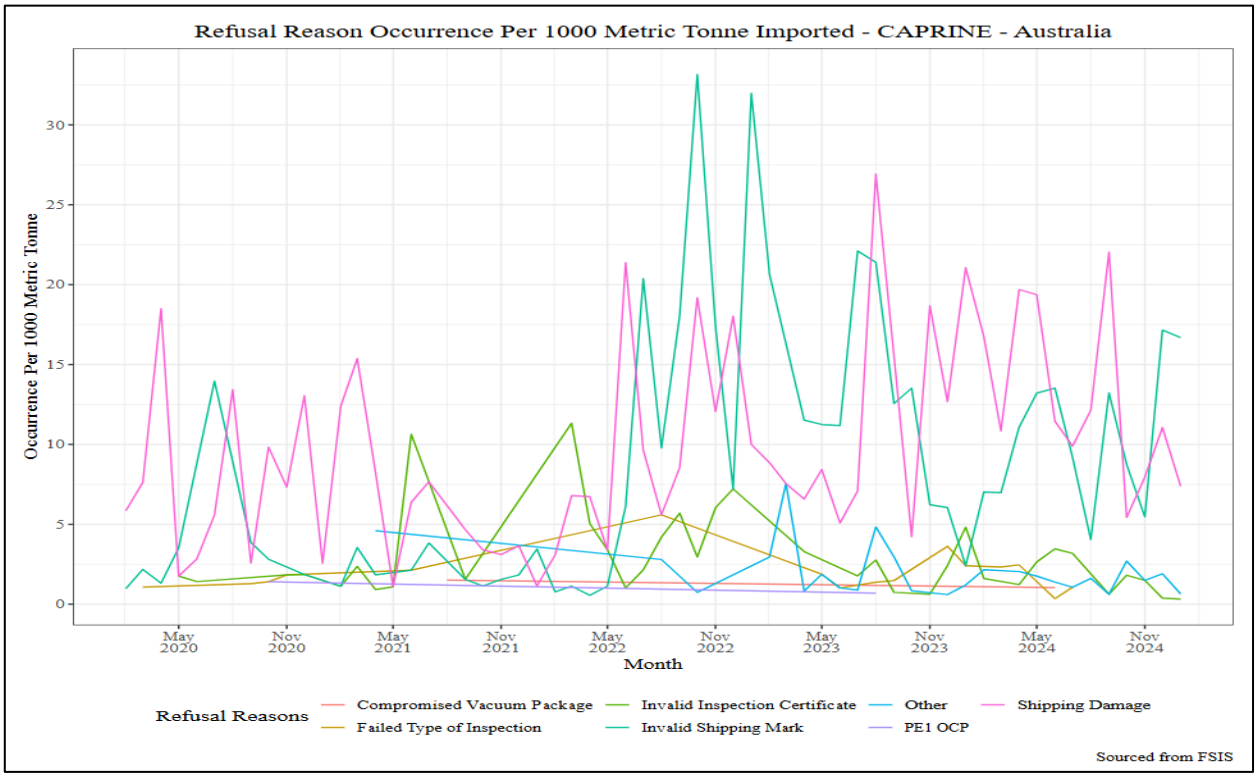
The chart below shows the refused entry reasons for Bovine for the years 2021, 2022, 2023 and 2024. The chart shows the significant increase in refused entry occurrences that began in 2022. Shipping damage is identified as the primary cause of refused entry during this period, followed by invalid shipping marks and invalid inspection certificates.



The chart below indicates the refused entry reasons for Ovine for the years 2021, 2022, 2023 and 2024. The chart shows the significant increase in refused entry occurrences that began in 2022. Shipping marks is identified as the primary cause of refused entry for the period followed by shipping damage and invalid inspection certificates.



The chart below shows the refused entry reasons for Caprine for the years 2021, 2022, 2023 and 2024. It shows the increase in refused entry occurrences that began in 2022. Over the five (5) year period, invalid shipping marks and shipping damage alternate as the primary causes of refused entry.



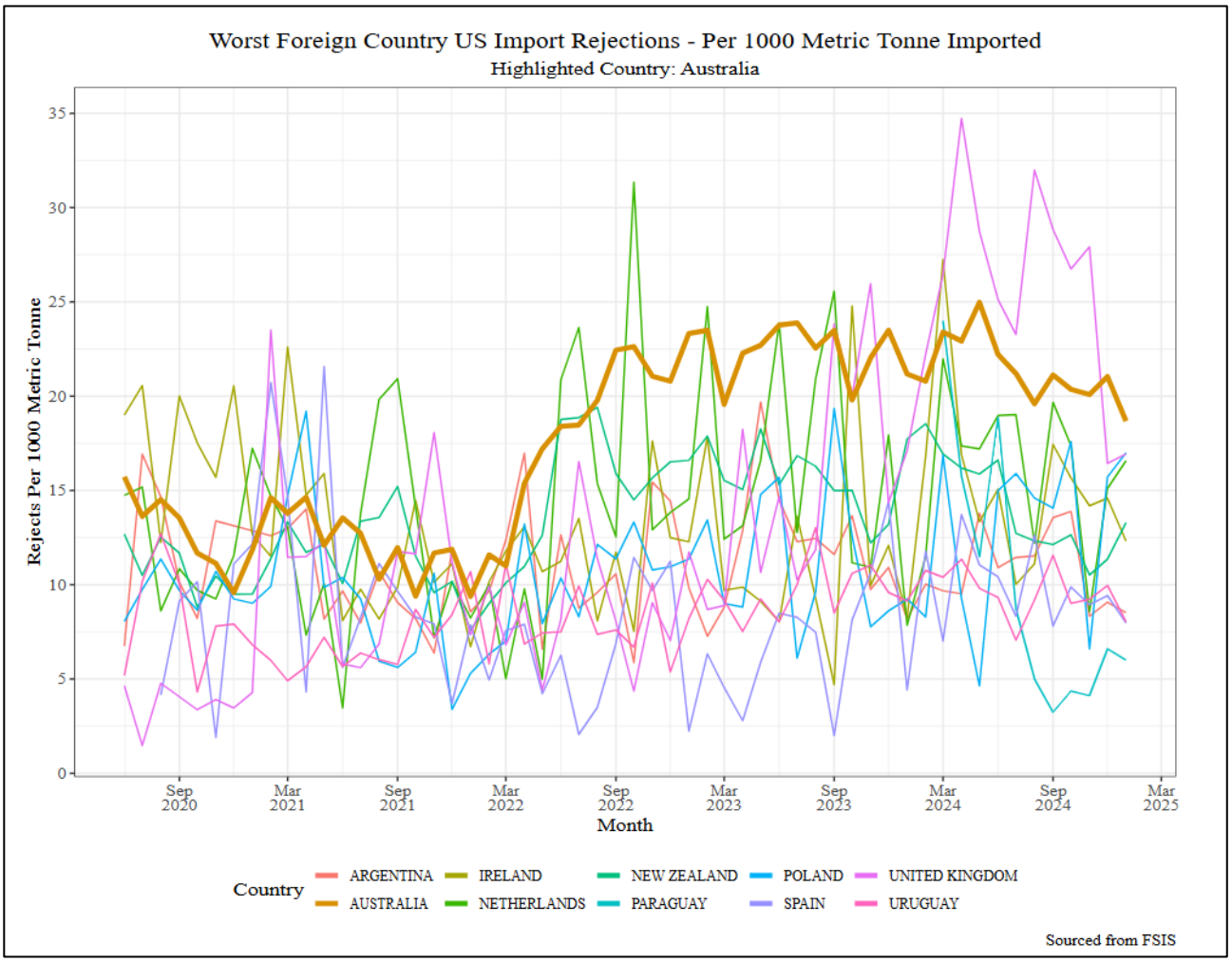
3.1.4 Australian Refused Entry Occurrence Compared to Other Countries

An analysis comparing Australia's performance to the 10 countries with the highest U.S. import rejections was undertaken for the five (5) year period ending January 31st 2025.

The findings indicate that Australia has consistently ranked either the worst or second worst exporter to the U.S. since March 2022.

The analysis also reveals that Australia's rejection rate has remained near 20 rejections per 1000 metric tonnes imported since June 2022.

The chart below illustrates Australia's position among the 10 countries with the highest export rejection rates to the U.S.



3.1.5 Examples of Preventable Refused Entry Causes

Several examples of preventable causes of refused entry have been provided to offer context on the actions that should have been taken by Export Establishments to prevent such occurrence.

3.1.5.1 Shipping Mark Label Failures

Shipping mark label failures are a significant cause of refused entry. When shipping mark labels are used, they are most often applied during carton staging before being loaded into shipping containers. This applies to third party cold stores and processing export establishments.

Currently, there are no published industry standards regarding the quality or suitability requirements of label stock used across different export establishments.

When the shipping mark labels are applied on ice or moist carton surfaces the likelihood of a suitable surface bond is greatly diminished.

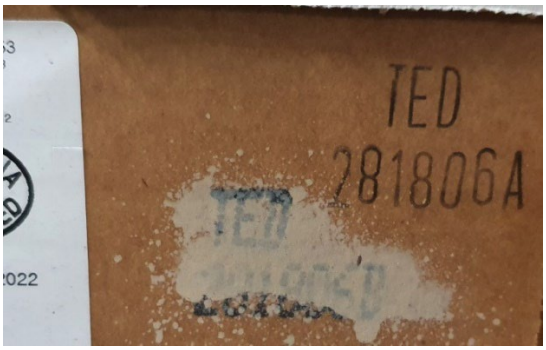
The images below were captured in U.S. import inspection establishments and show peeling labels on Australian exported cartons.

It is common to observe numerous shipping mark labels on the floor of staging areas at U.S. import inspection establishments. This is indicative of either the shipping mark label material being unsuitable for the environment or the improper application of the shipping mark labels.

3.1.5.2 Incorrect Application of Shipping Marks

Several Export Establishments have transitioned to using inkjet printing of shipping marks. However, when the inkjet mark is applied over carton strapping, it becomes illegible, leading to refused entry notices being issued.

The images below were recorded in a U.S. import inspection facility.



When paint or other methods are used to cover an existing shipping mark (image above), and the original mark is not fully hidden, it will result in a refused entry due to illegible or incorrect shipping mark.

3.1.5.3 Certificate Violations

There are numerous instances where errors occur during the staging process, particularly with the incorrect application of shipping marks to cartons.

A typical issue arises when a Health Certificate specifies a total of 700 cartons, with 350 identified with one shipping mark (e.g. Mark A) and 350 of another shipping mark (e.g. Mark B). During the application process, loadout staff incorrectly applied 330 of mark A and 370 of mark B. The container is loaded and sealed without the error being detected.

The Health Certificate by its function certifies the product as described, including the count on the certificate.

At the time of U.S. import inspection, there is a mismatch between what is stated on the Health Certificate and what is marked on the cartons. The result is a refused entry notice often with the reason of “Invalid Inspection Certificate.” This is an incorrect reason as the Health Certificate was correct in relation to the certified product. The cartons where incorrectly marked and therefore the refused entry reason should have been “Invalid Shipping marks.”

A specific example of this type of error can be seen with Health Certificate number 11305345 and Refused Entry Application Lot Identification Number 6660212-2. In this case, the Health Certificate indicated Mark A = 525 cartons and Mark B = 631 cartons. Upon physical inspection the cartons had Mark A = 631 cartons and Mark B = 525 Cartons.

The response to this error was to request a replacement Health Certificate. This was an incorrect approach, as the Health Certificate was valid. The cartons’ product codes, serial numbers, production dates and product data all matched the certificate. The issue was the incorrect application of shipping marks to a number of cartons. The correct course of action in this case would have been to use Meat Messaging to correct the applied marks.

Another example is Health Certificates 11344665 and 11344667. In this situation two containers where being loaded simultaneously, and product from one container TBS23463 was loaded into the incorrect container.

On U.S. import inspection the refused entry notice was cited “Invalid Inspection Certificate” as the cause, prompting the request for a replacement certificate. The export establishment, through email, requested the replacement certificate. However, since the product in question is *A-TRMG* 80CL BP FRZN and is subject to STEC testing protocols, issuing a replacement Health Certificate would have violated the protocol, as the Certificate of Analysis would not cover the product in question.

The incorrect product was identified through the carton label serial numbers and the Meat Messaging system. The appropriate response would have been for the product to be refused entry and destroyed.

5.0 Methodology

The project methodology employs the following steps:

- Industry engagement - Meetings with DAFF, the Australian Embassy, MLA North America, Australian industry representatives to formalise a strategy and action plan that has industry and government agreement.
- Obtain industry and government endorsement for trial pilot protocols for Australian meat to use barcodes and Meat Messaging as replacements of traditional shipping marks with the barcodes as unique identifier marks.
- Working with DAFF and industry to define a proposal for the FSIS to conduct a demonstration pilot utilising Meat Messaging and carton barcodes as the method of shipping mark compliances for specification supply chain protocols.
- Obtain agreement from FSIS to participate in a demonstration pilot and determine the timeframe for the trial.
- Conduct the demonstration pilots with 10 export Establishments with supervision of Australian representatives and FSIS representatives.
- Document the demonstration pilot results in a manner suitable for use as a set of protocols for adoption by FSIS to use carton barcodes as shipping marks.
- Work with Australian exporters, U.S. importers, Australian Embassy, MLA North America and industry representatives for adoption of the proposed alternative protocols for use of carton barcodes as shipping marks.

To successfully conduct the pilots, following the pilot protocols agreement, work activities were undertaken with the following organisations to ensure the supply chain participant acceptance:

1. Export Processing Establishments,
2. Non-Packer Exporters,
3. 3rd Party Cold Storage Export Establishments,
4. Freight Forwarders,
5. MLA North America,
6. RMSCC Meat Messaging steering committee (representing DAFF, MLA, ISC, AMPC, MICA, GS1 and industry),
7. U.S. import Inspection Establishments,
8. U.S. Buyers/ Importer of Record,
9. U.S. End Users,
10. DAFF,
11. Australian Embassy (through DAFF), and

12. FSIS.

The process included initial communication with all the parties above through informal discussions with drafts of proposed pilots for comment and feedback. This feedback highlights operational and regulatory issues that need to be addressed in the protocol long before any pilot is proposed. If any of the parties above said “no” the cause of the no was reviewed to be understood the reason and a solution included to address the concerns.

Before the pilot protocol was submitted to the relevant parties for the request to conduct the pilots a number of tests (or pre-pilot shipments) were planned to be conducted covering the operational parts of the proposed pilot protocol using the current systems within the current regulations. Any testing must operate within the current regulations.

4.0 Results

The project was conducted through a subcommittee of the Red Meat Supply Chain Committee (RMSCC) to ensure suitable engagement with industry and government representation. The project participates where included in the RMSCC subcommittee.

The project developed three (3) proposed protocols that were defined for different types of products, supply chains and load requirements:

1. Airfreight consignments of less than 10,000lbs using the Placard protocol based on FSIS Directive 9910.1 BARCODES IN LIEU OF SHIPPING MARKS FOR FRESH MEAT PRODUCTS FROM AUSTRALIA.

2. Whole container load consignments of a single product code to a single US further processing using the Placard protocol based on FSIS Directive 9910.1 BARCODES IN LIEU OF SHIPPING MARKS FOR FRESH MEAT PRODUCTS FROM AUSTRALIA.

3. Case/Carton Label Unique Batch Codes (Shipping Marks) applied at time of case/carton production.

Each of the proposed protocols ensures that a commercial visual lot mark is on each case/carton to manage commercial lotting along the meat supply chain. This commercial lot mark MUST NOT be used for regulatory purposes.

The details on the three (3) proposed protocols can be found under the “Pilots/ Projects” section of the Meat Messaging website: https://meatmessaging.org/shipping_marks

This includes a details video/ power point of the Case/Carton Label Unique Batch Codes as Shipping Marks protocol as this protocol is permitted under current FSIS regulations: https://meatmessaging.org/docs/MM_Carton_label_shipping_mark_20250212_A.mp4

4.1 RMSCC Meeting Minutes Extracts

The administration of the project was conducted through the RMSCC structure and committee members. The project participates where also included on the committee.

The sections below are the extracts of the relevant projects section for the meeting minutes.

4.1.1 Meeting held on the 18th of January 2024:

Agenda Item 5 : Project Update – Meat Messaging Barcodes as Shipping Marks

Ann McDonald provided an overview the of the AMPC project looking at Barcodes as shipping marks for exports to the US. The project is now up and running and includes seven (7) processors – small, medium and large. AMPC are looking to set up a steering committee within the RMSCC to oversee and report back to the Committee.

Des Bowler then went on to provide further detail in relation to the project. Key discussions around this topic included

(i) FSIS has already accepted barcodes to validate products

(ii) Placards on pallets are acceptable when matching to barcodes. FSIS inspector will stamp placards not cartons

(iii) The initial pilots will focus on two (2) test cases: Air Freight Consignments less than 10,000lbs and Whole loads of a single product to a single end user (typically grinding products) and mixed loads for general distribution.

(iv) Subsequent pilots' protocols will likely include mixed products to both single end users and for general distribution.

(v) The importance of including the relevant supply chain stakeholders ensuring that both regulatory and operational requirements are going to need to be met.

(vi) The need to formally apply and establish a good working relationship with FSIS to conduct pilot programs.

(vii) The Heath Certificate will contain the Meat Messaging SSCC number and link to the message. John Langbridge commented on the need to ensure that the Department had approved the use of the message SSCC on the Health Certificate.

(viii) Glenn Edmunds commented on the need to engage with FSIS to help facilitate the pre-pilot programs and the Meat Messaging SSCC on the Health Certificates, this may include a formal letter outlining Australia's commitment to continue to meet the minimum shipping requirements. The general consensus of the Committee was that we won't be compromising at any stage and that product must continue through commerce.

(ix) Sam Munsie enquired as to where the Canadian project is currently sitting. Des highlighted the current challenges facing products entering Canada. The Department are currently implementing a new reporting system early next year that will assist with Canadian reporting. AMPC are currently aware of the issues being faced for products entering Canada, a project exploring this will likely commence at the completion of the US project.

(x) A subcommittee of the RMSCC will need to be formed for oversight of the project. The subcommittee will include in the first instance the seven (7) contributing processors, members from AUS-MEAT, Department, Meat Messaging, AMPC, MLA and MICA. There will also be the need to include outside contributors such as Cold Stores and NPE's from time to time.

4.1.2 Meeting held on the 18th of January 2024:

Agenda Item 2: Overview of Project

The project plan was introduced, and an overview of the project details and the protocols provided. It was noted that this is an AMPC funded project. As part of this project, there are multiple protocols that will cover different sets of shipments. Currently the project plan outlines the protocols for:

- *Airfreight (less than 10,000 lbs)*
- *Whole shipping container*

It was highlighted that the removal of shipping marks will not remove the need for a commercial mark or lot mark. These marks are to satisfy importers and buyers records. The use of barcodes as a shipping mark removes the issues of shipments being held up due to an illegible or incorrect mark. From an FSIS perspective, this is to minimise risk as the commercial marks are to be maintained through to end users.

Discussion around how the project should proceed during what is called the pre-pilot phase. The pre-pilot phase is to ensure that the protocols work as expected, but don't break any existing processes. To do this, the manifest is to be included with the loads as an addition to all existing documents and processes. This will keep everything compliant and to regulation while the pre-pilot is in effect.

These projects will run over the next 6 to 8 months. Information will be collected during this time to create a report to request FSIS approval for the pilot phase of the project.

Discussion around the purpose and structure of the working group. The group is set up through, and partially funded by, AMPC. AUS-MEAT are the administrators of the Meat Messaging program, they will be involved in chairing groups and facilitating the process. This working group sits under the Red Meat Supply Chain Committee, the outcomes of this project will be reported back to the committee. The responsibility of the working group is to see the project is seen through and successful.

Pre-pilot:

- *To run over next 6-8 months*
- *Everything as normal PLUS barcodes – verifying protocols work*
- *Work with MICA on implementation on US end*

Agenda Item 3: Project Steering Committee (Introductions)

Through introductions all attendees indicated participation based on desire to get rid of shipping marks and move to a digital solution.

Agenda Item 4: Current Work Plan

The current work plan was spoken to. One of the core elements of the protocols is to get the Meat Messaging message SSCC number on the health certificate. The first item highlighted was to let FSIS or USDA know that we are "playing" so they are aware of the SSCC number and its purpose on the health certificates during the pre-pilot.

Jeremy Moody reported that DAFF has sent the letter off to the FSIS notifying them of the pre-pilot, but they are yet to have receive a response. Approval to add the SSCC number by FSIS is required before the pre-pilot can begin.

A broad range of topics were covered, including:

(i) *Identifying participants who are already using Meat Messaging and meet the protocol requirements (i.e., air freight and/or whole container loads). Establishments will be contacted individually to verify their suitability in participating. Once participants are identified, shipments will be monitored over the next few months to identify which loads can be used as part of pre-pilot testing.*
(ii) *US importers and buyers will need to be notified of the pilot – need to ensure that no one has an issue with the use of the SSCC number being on the health certificate. Feedback will need to be collected from importers and buyers to ensure the protocols work for them and their processes.*
(iii) *Formal pilot with FSIS will require a "no surprise" element. Everything will be documented, every single shipment in the pilot with be recorded (when it leaves, when it arrives, etc.)*
(iv) *Current model supports unique ID to identify shipments; There is no requirement for the FSIS to identify the shipments through a shipping mark. Currently, they use a shipping mark, but the aim of the project is to move to a barcode.*

It was mentioned that US import inspection establishments in the US are looking at using barcodes/barcode scanners. This may lead to the end of shipping marks entirely in the future but is out of scope of this project and a decision to be made by the consumers themselves.

Agenda Item 5: Draft Pilot Protocols

Further discussion to the protocols mentioned earlier. It was reiterated that the manifest report (includes SSCC number, barcodes, description, etc.) is like existing process – it just comes pre-health certificate so the health certificate number will not be on the manifest. The health certificate also contains SSCC number details which will link the manifest report and health certificate.

Discussion around the use and accessing of the manifest report. It will be printed and placed physically with the load but will also be available in Meat Messaging as a PDF and as part of the advance shipping notice (ASN). Therefore, even if the physical copy of the manifest is destroyed during transport the importer can still access the manifest through the ASN.

A range of technical challenges were covered, including:

(i) *Some plants don't have SSCC numbers before shipment is finalised – they do not have the SSCC number until the message is uploaded. This number is needed in advance to be uploaded to the health certificate. Therefore, a shipments SSCC number must be allocated and managed prior to the shipment being finalised. This will need to be addressed as part of the pre-pilot to ensure that no one is generating the SSCC number after they upload their message. This will be a requirement of the participants to ensure their SSCC number is generated at the before message upload.*

    Discussion on whether there is the opportunity to allocate SSCC number in advance as the manifest report contains all the numbers, but not the health certificate. Will need to allocate a SSCC number early as the manifest report is required:
    a. *Physically with the load*
    b. *In the advance shipment notification (ASN)*
    c. *In collection of documents.*

(ii) *Air forwarders will require the ability to generate SSCC numbers. Establishments to identify airfreight forwarders so they can be contacted regarding their role in the pilot.*
(iii) *Participants raised concern that US import inspection establishments may potentially cause issues. Currently, they are charging for the remarking of cartons if shipping marks are illegible. They may try to identify more places to charge though this pilot (i.e., charging to scan).*

(iv) As part of the pilot, once FSIS approval is received, someone will check on the other end (scan) as part of trial to confirm the barcodes are functioning as expected. This will be part of the evidence collection to prove the outcomes of the project.

It was reiterated that this project's outcome will be labour reducing, not increasing.

Agenda Item 6: Project Participation

Discussion around the participation requirements for the project. A document/form will be sent to the potential participants asking for responses to gather their eligibility to participate in the project. Some of the questions will include:

- *Do you use air freight or container?*
- *How often do you send exports?*
- *Size of exports (lbs)?*
- *Where do you export to (within the US)?*
- *Which airfreight forwarder/s do you use? Etc.*

Participants are to nominate a primary contact who will be responsible for regularly touching base and attending project meetings. This primary contact will also be the touch point when the pilot is underway - all questions will be funnelled through the primary contact.

Commitment is required from participants to identify shipments, implement the protocols, and verify the shipments are flowing through to the end points as expected under the protocols. It is important to ensure that internal processes will not be interrupted by the project – we need to ensure that operationally this will work onsite. Additionally, employees are required to be aware of the project, so they don't accidentally interfere with the pilot.

A document with requirements for participation will be produced for each participant. Des indicated that this document will be created uniquely for each participant, based on their own circumstances.

Tom Foster flags obsolete codes on certificates and whether this may be brought up during/hinder the process of the project. There was discussion around whether this project may be the trigger to transition away from using obsolete codes. Tom also highlights that FSIS says that we "should" be using their new codes – not currently mandatory.

Agenda Item 7: Project Communication

It was reiterated need to provide a primary contact for each participating processor.

Suggested that next meeting should take place within the next 3-4 months (end of this quarter). Timeline for future meetings to be discussed in the next meeting after gathering how the project is tracking.

It was highlighted that photos inside processing facilities will be required as part of the documentation process. Processors can vet which photos are to be used, but the photos are important in part of getting FSIS approval.

4.1.3 Meeting held on the 13th of August 2024:

Agenda Item 2: Overview of Project

Des Bowler provided an update of the project to date including participation and air freight pre-pilot shipments over the course of the past few months.

Des acknowledged there has been minimal movement to date from project participants with the only pre-pilots having been conducted by Minerva Foods with three (3) Air freight shipments completed to date. The consignments include products with multiple shipping marks, with a group level SSCC per mark. Des advised that the shipments have been successful with no issues relating both the sending and receiving of products in the US. Sufficient evidence has been provided back supporting the successful validation of the products in the US.

Des provided further updates regarding pre-pilot consignments with multiple groups and in turn multiple marks, and that we should consider using a new group level segment called a Global Shipment Identification Number (GSIN). Similar to an SSCC and can be referred to as the SSCC Shipping Mark). The GSIN is fully compatible with ISO/IEC standard 15459 – Part 8: Grouping of Transport Units. A GSIN starts with 402 and is 20 digits long (Standard) Unique Consignment Reference (UCR) – e.g. Shipping Mark.

A discussion ensued regarding the basic principle of using a GSIN as an alternate to a Shipping Mark. Des committed to providing further information to the group regarding the GSIN number and the underpinning ISO/IEC Standard for the groups reference.

Stewart Lowden will consult the EXDOC team at the Department to look at the possibility of using the GSIN number as the Shipping Mark.

Agenda Item 4: Current Project Status

The following updates were provided by the attending project participants.

John Langbridge highlighted that Teys Australia will concentrate on sea freight consignments given that air freight consignments are "out of season" for the company. Teys will commence with single commodity lines ensuring they are comfortable before progressing to more complex consignments.

Michael Johnston from JBS Australia confirmed that JBS have yet to consign any products to the US under the pre-pilot shipment protocol. Michael committed to working with the team over the coming month to identify consignments that are eligible for the pre-pilot program.

Des reiterated at this point in time the pre-pilot shipments only need to include the SSCC on the product description line of the Health Certificate. This should not upset the process and should lead to the supply chain being comfortable prior to progressing to the next stage of the project.

Kylie Garbutt reiterated that Minerva Food group are committed to continuing to support the project over the coming months.

The Chairman acknowledged the success of the three (3) consignments to date and reiterated the need to get more companies involved with the pre pilot work over the coming months.

4.1.4 Meeting held on the 18th of December 2024:

Agenda Item 4 : Meat Messaging Project update

The Chairman invited Des Bowler to provide an update regarding the Shipping Mark projects.

Des Provided an update regarding the current status of the Shipping Mark project. Des outlined the three (3) protocols within the project

1. *Airfreight consignments of less than 10,000lbs using the placard protocol*

2. *Whole container loads consignments of a single product to a single US further processor using the placard protocol.*

3. *Application of unique Batch Codes (Shipping Marks) applied at the time of case/carton production.*

Des discussed the benefits and challenges of each of the protocol and their alignment with USDA traceability requirements.

The following are key points discussed:

(i) The project looking at Airfreight consignments of less than 10,000lbs has been successful to date. We now need to look at how we commercially implement this on a large scale.
(ii) Whole container loads have been worked on with Teys Australia on single products (manufacturing at this point) with Placards. This is the same as the Canadian model.
(iii) Des highlighted the Canadian inspection model.
(iv) The unique batch codes model aligns with the USDA traceability lot code protocol.
(v) The above protocols being tested do not include the current shipping mark model, however, provide options that can be fully integrated along the supply chain, that provide value through not applying manual shipping marks at time of loadout.
(vi) Member queried the Canadian protocol with Des outlining the 50 mile rule and the implications it has for the Australian industry. FSIS will no longer enforce this and this will have implication due to the case by case nature of the approvals. Problems in the supply chain will increase.
(vii) Len Lang provided an update regarding the impact in the US.

A further discussion led by Len Lang regarding the current Canadian protocol and changes was discussed by the group.

Des provided a further update on the with regard to Shipment SSCC's and how these are integrated with Health Certificates. John Langbridge outlined how products are described on Health Certificates in a simplified system by using the high level WCO codes.

4.2 Presentations to U.S. Supply Chain Participants

The project included involvement of U.S. meat supply chain participants. Preparations and meetings were conducted at the Meat Importer Council of America MICA conferences held during the week commencing 6th November 2023 and 11th of November 2024.

The MICA food safety committee is involved with the consideration of the proposed protocols. Each of the three proposed protocols were presented and discussed by MICA representatives.

MICA through their relationship with FSIS put forward submissions to FSIS for interpretation and changes to FSIS directives.

MICA are awaiting additional test shipments of the proposed protocols and the results of such shipments before providing comment on the protocols.

5.0 Discussion

The proposed protocols have been circulated and reviewed by various supply chain participants. The proposed protocols as they are presented within this report include the feedback received to data from the supply chain participants.

The analysis of the U.S. reported refused entries for exporter preventable causes shows that the adoption of the prosed protocols can readily provide in excess of $50 million direct annual saving to the Australian red meat industry.

U.S. importers and import inspection establishments are willing to participate in the trials of the proposed protocols when the Australian exporters are ready to conduct the trials.

The change is U.S. Government direction for imports that has occur during the beginning of 2025 and the continued increase volume exports of Australian red meat to the U.S., has exporters focused on current range of operational prioritised issues. The exporters are not focused on changing current shipping mark protocols at the risk of future disturbance in the current market turbulence.

6.0 Conclusions

The project did achieve the project objective of:

"Investigate the possibility of conducting pilots utilising Meat Messaging for sending products to the U.S. using the carton barcode as the regulatory shipping mark."

This is evidenced through the 3 proposed protocols for removing the application of shipping marks at the time of staging or loadout and using the carton label/barcode as the primary identifier in conjunction with Meat Messaging.

The project did not succeed in conducting sufficient trials and pilots to obtain acceptance from FSIS for use of alternative protocols. ;

7.0 Recommendations

There is a recommendation to conduct a future project to support adoption of the proposed protocols on a case by case basis with export establishments that are willing to utilise the proposed protocols.

8.0 Project outputs

The project developed three (3) proposed protocols that were defined for different types of products, supply chains and load requirements:

1. Airfreight consignments of less than 10,000lbs using the Placard protocol based on FSIS Directive 9910.1 BARCODES IN LIEU OF SHIPPING MARKS FOR FRESH MEAT PRODUCTS FROM AUSTRALIA.

2. Whole container load consignments of a single product code to a single US further processing using the Placard protocol based on FSIS Directive 9910.1 BARCODES IN LIEU OF SHIPPING MARKS FOR FRESH MEAT PRODUCTS FROM AUSTRALIA.

3. Case/Carton Label Unique Batch Codes (Shipping Marks) applied at time of case/carton production.

Each of the proposed protocols ensures that a commercial visual lot mark is on each case/carton to manage commercial lotting along the meat supply chain. This commercial lot mark MUST NOT be used for regulatory purposes. Each of the protocols address specific operational activities with the objective of minimising operational and regulatory risk while maximising operational benefit and cost reduction.

Each pilot protocol will follow the sequence outlined below:

1. Draft the protocol and circulate to the various parties for comment and feedback.
2. Work with the exporters, importers, MICA, MLA North America, DAFF and FSIS for endorsement to participate with the pilot protocol.
3. Operate the pilot protocol under controlled conditions and record through photos, videos and documentation.
4. Collect and collate sufficient evidence through the pilots to demonstrate compliance to FSIS regulations.
5. Work with MICA, DAFF and FSIS to facilitate acceptance of the protocol.

8.1 Air Freight shipment of under 10,000 lbs Protocol

The protocol is intended for air freight shipments of under 10,000 lbs. The 10,000 lbs value is used as it provides a minimum risk for loss of identification through the commercial supply channels.

The pilot utilises:

1. The globally unique GS1 barcodes (unique identification marks) that are applied to each case at time of production,
2. The Australian Meat Messaging meat industry traceability portal that holds all the case unique GS1 barcodes (unique identification marks) linked to each case certified on the foreign certification documents,
3. The Australian Health Certificate (eCert) and Meat Messaging All Carton Serial Number Report linked to the GS1 barcodes (unique identification marks) through line level unique Shipping Mark.
4. The requirements as outlined in US Regulation 9 CFR 327.4 (see attachment 5).

When a consignment is prepared for export each case GS1 barcode is scanned and recorded/certified against the consignment and uploaded to the Meat Messaging web portal. Each product line (same product description) on Australian Health Certificate (eCert) is issued a shipping mark (GSIN) that links to the individual case GS1 barcodes. The ***Meat Messaging All Carton Serial Number Report*** which identifies certified products, that is linked to the Health Certificate (eCert) number and lists the individual GS1 barcodes (unique identification mark) per line shipping mark.
The proposed pilot for airfreight consignment of less than 10,000 lbs would apply under the following conditions:

- The product is going as an unbroken load to an end user for further processing/packaging and or Hotel Restaurant and Institution (HRI).
- Product details including all the case GS1 barcodes must be uploaded to Meat Messaging prior to arrival in the US.
- Product must be from an export processing establishment that is listed with FSIS as “US Bar Code Admin”.

- The receiving end (import establishment or alternate approved site) user must be registered to use meat messaging.
- The receiving import establishment must use the Advance shipping notice in Meat Messaging to inspect shipment.
- The receiving import establishment must be able to demonstrate that all cases, by use of the barcodes, Meat Messaging and Health Certificate (eCert), have been received and destined for use in further processing/packaging or HRI (accomplished by labelling For Further Processing, For HRI Use Only).
- No product in the original case/carton packaging is to enter into general U.S. commerce until reinspection verification activities are complete.

Validation of the case GS1 barcodes (unique identification mark) against the Meat Messaging All Carton Serial Number Report can be through GS1 barcode scanning or manually verification processes. The Meat Messaging All Carton Serial Number Report links to the Health Certificate (eCert) number and other information used to verify shipments. This verification is confirmation that the boxes are certified as a part of the certificate.

NOTE: The cases may have a commercial lot code used by the trading partners for commercial lot management. This commercial lot code is **NOT** to be considered the regulatory mark. The barcode is the regulatory mark.

The proposed pilot is to be conducted over an adequate period of time to create sufficient records to demonstrate to the FSIS the robustness of the protocols in meeting the Regulations and Directives using barcodes as shipping marks.

8.1.1 Use of Placard Protocol Based on FSIS Directive 9910.1

This pilot is based on an Air Freight shipment of under 10,000 lbs consignment of a single or mixed product codes going to a single US further processor using the “Placard protocol”. The placard protocol uses the Global Shipment Identification Number (GSIN) and is based on the FSIS Directive 9910.1 BARCODES IN LIEU OF SHIPPING MARKS FOR FRESH MEAT PRODUCTS FROM AUSTRALIA.

The FSIS Directive 9910.1 outlines the process for pallet groups of cases/cartons that are identified with a placard that shows the shipping mark.

This proposed Air Freight shipment of under 10,000 lbs consignment of a single or mixed product codes to a single U.S. further processor builds on the pallet group concept from FSIS Directive 9910.1. This is achieved by treating the load as a single “large pallet” group.

The placard has the complete list of case/carton barcodes and must accompany the cases/cartons throughout the supply chain. The placard includes a “shipping mark” in the form of a 20 digit globally unique GSIN.

8.1.2 GSIN

The GSIN provides the equivalent to a pallet Serial Shipping Container Code (SSCC) that is outlined in FSIS Directive 9910.1. The GSIN is fully compatible with ISO/IEC 15459 – PART 8: GROUPING OF TRANSPORT UNITS. The GSIN meets the requirements for a Unique Consignment Reference (UCR) according to the World Customs Organization. The GSIN appears on the Health Certificate as the shipping mark. More information on the GSIN can be found here.

The GSIN and SSCC are both 20 digits and have similar properties; They are both globally unique and directly traceable to the company that issued the number. The GSIN can be encoded by the shipper in a barcode or as text on a Bill of Lading, in addition to the message SSCC, and on shipment/pallet placards.

The GSIN comprises the following elements:

1. GS1 Application Identifier (402)
2. Company Prefix as 7-digits (e.g. 9312345)
3. Company allocated unique number as 9-digits (e.g. 123456789)
4. Check digit based on the 16-digit combination of elements 2 and 3 (e.g. 9312345123456789 has check digit 1)

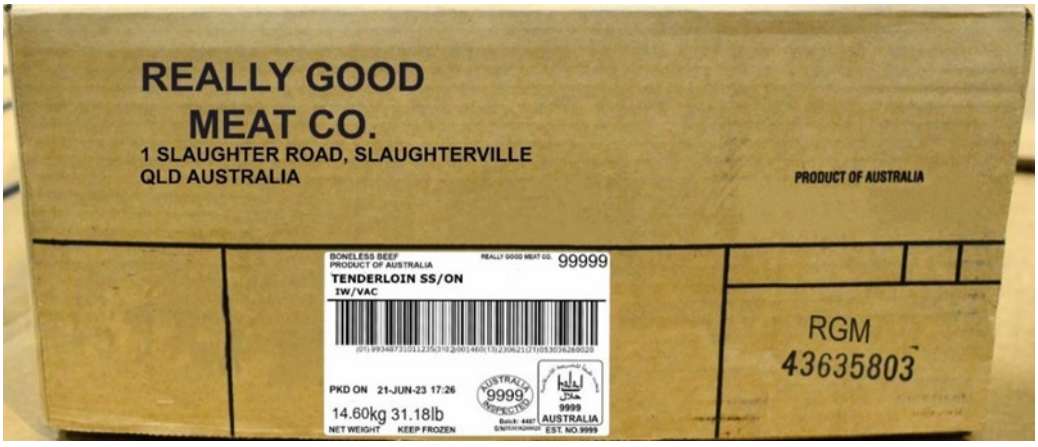
When shown the GSIN would be presented as (402) 9312345 123456789 1

As data the GSIN would be 402931234512345678 91.

The GSIN as a barcode would be displayed as:

8.1.3 Case/Carton End Panel Example

The case/carton end panel shows the globally unique GS1 meat industry barcode. This barcode provides the bases of true case/carton identification which can be directly linked to a certified load through Meat Messaging and the group placard as outlined in FSIS Directive 9910.1.



Example case/carton end panel showing:

1. Export Production Establishment details.
2. Case/Carton label with GS1 barcode (globally unique identification). (**01993487310112353102001460132306212105303626002 0**)

3. Commercial lot code (RGM 43635803) – This is NOT the shipping mark. The commercial lot code is used by trading partners for inventory lot control.

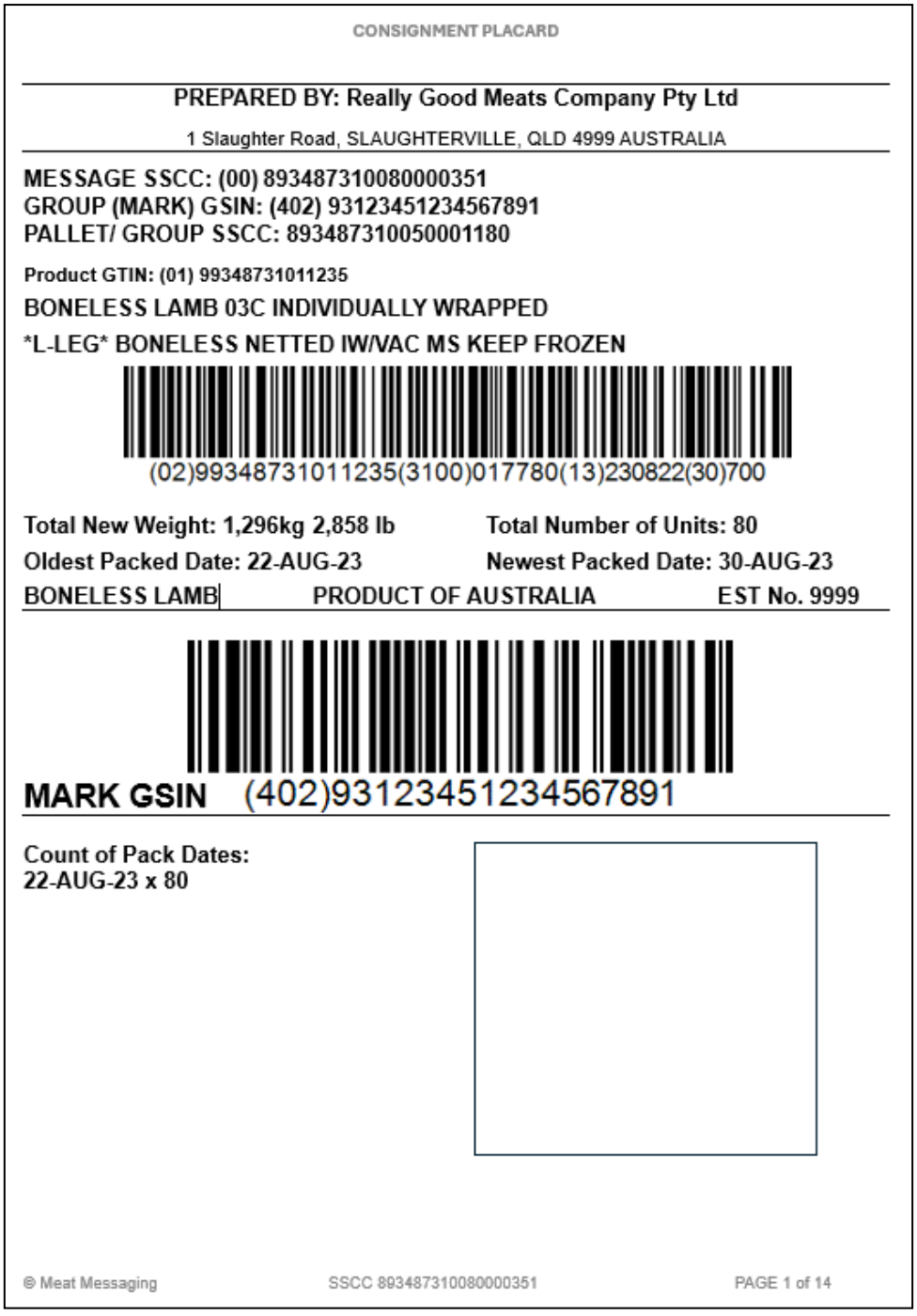
Example case/carton label showing:

1. Commercial product description (BONELESS BEEF, TENDERLOIN SS/ON, IW/VAC)
2. Case/Carton label with GS1 barcode (globally unique identification) (**01993487310112353102001460132306212105303626002O**)

8.1.4 Consignment Placard

The consignment Placard contains the consignment details including the following:

1. Group (Mark) GSIN (acting as the shipping mark on the placard),
2. Message SSCC – this is used to link to the health certificate,
3. Producing foreign establishment number,
4. Place for the U.S. import mark of inspection,
5. Production dates,
6. Net weight,
7. Number of units for the Placard,
8. Handling instructions and
9. Exporters name and address.


CONSIGNMENT PLACARD

PREPARED BY: Really Good Meats Company Pty Ltd

1 Slaughter Road, SLAUGHTERVILLE, QLD 4999 AUSTRALIA

MESSAGE SSCC: (00) 893487310080000351
GROUP (MARK) GSIN: (402) 93123451234567891
PALLET/ GROUP SSCC: 893487310050001180

Product GTIN: (01) 99348731011235

BONELESS LAMB 03C INDIVIDUALLY WRAPPED

L-LEG BONELESS NETTED IW/VAC MS KEEP FROZEN

(02)99348731011235(3100)017780(13)230822(30)700

Total New Weight: 1,296kg 2,858 lb | Total Number of Units: 80

Oldest Packed Date: 22-AUG-23 | Newest Packed Date: 30-AUG-23

BONELESS LAMB | PRODUCT OF AUSTRALIA | EST No. 9999

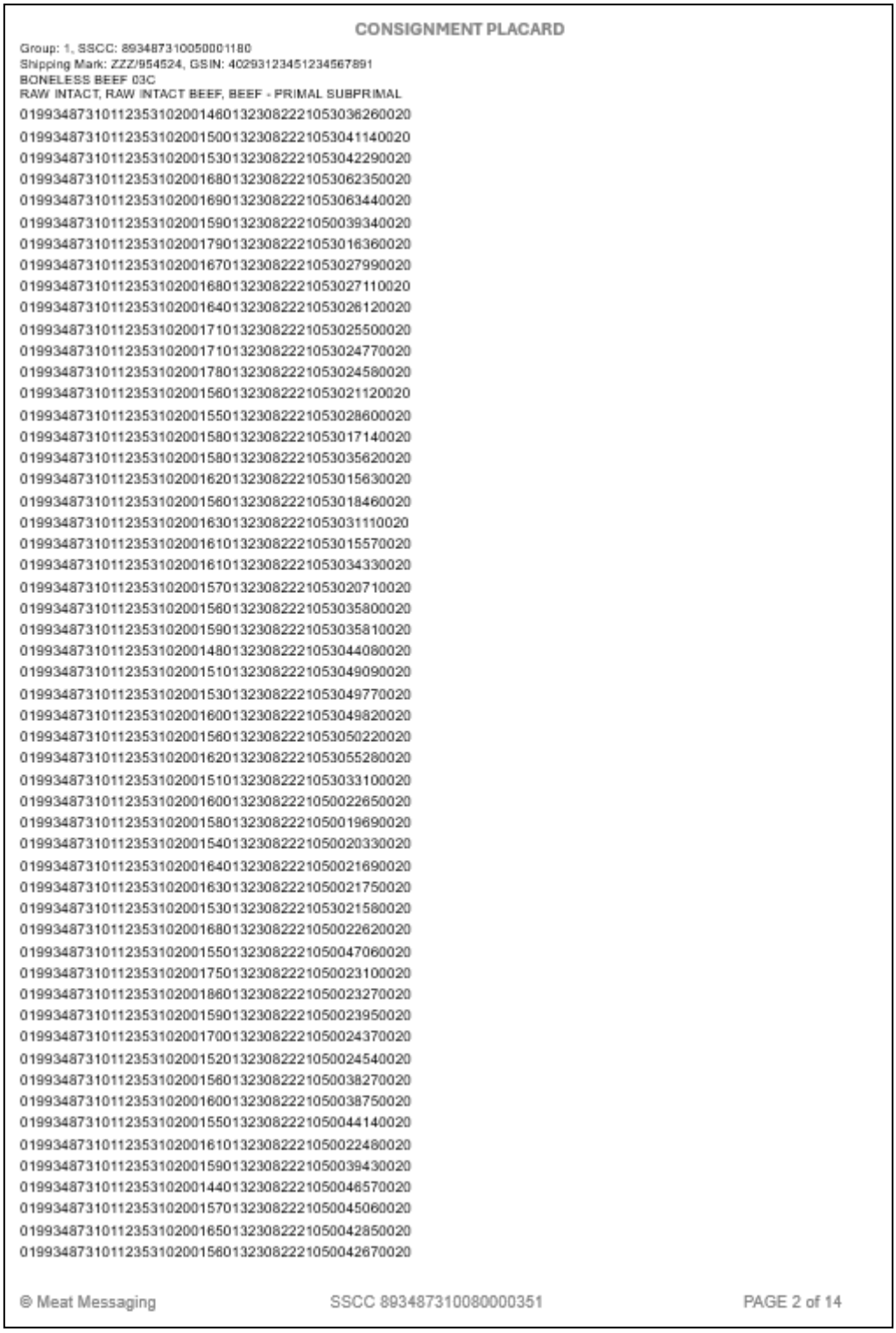
MARK GSIN (402)93123451234567891

Count of Pack Dates:
22-AUG-23 x 80

© Meat Messaging | SSCC 893487310080000351 | PAGE 1 of 14

8.1.5 Consignment Placard Case/Carton Listing

The Placard includes the list of every case/carton barcode applicable for the Placard GSIN as shown below (page 2 of 14):



CONSIGNMENT PLACARD

Group: 1, SSCC: 893487310050001180
Shipping Mark: ZZZ/954524, GSIN: 40293123451234567891
BONELESS BEEF 03C
RAW INTACT, RAW INTACT BEEF, BEEF - PRIMAL SUBPRIMAL

0199348731011235310200146013230822210530362600201993487310112353102001500132308222105304114002019934873101123531020015301323082221053042290020
0199348731011235310200168013230822210530623500201993487310112353102001690132308222105306344002019934873101123531020015901323082221050039340020
0199348731011235310200179013230822210530163600201993487310112353102001670132308222105302799002019934873101123531020016801323082221053027110020
0199348731011235310200164013230822210530261200201993487310112353102001710132308222105302550002019934873101123531020017101323082221053024770020
0199348731011235310200178013230822210530245800201993487310112353102001560132308222105302112002019934873101123531020015501323082221053028600020
0199348731011235310200158013230822210530171400201993487310112353102001580132308222105303562002019934873101123531020016201323082221053015630020
0199348731011235310200156013230822210530184600201993487310112353102001630132308222105303111002019934873101123531020016101323082221053015570020
0199348731011235310200161013230822210530343300201993487310112353102001570132308222105302071002019934873101123531020015601323082221053035800020
0199348731011235310200159013230822210530358100201993487310112353102001480132308222105304408002019934873101123531020015101323082221053049090020
0199348731011235310200153013230822210530497700201993487310112353102001600132308222105304982002019934873101123531020015601323082221053050220020
0199348731011235310200162013230822210530552800201993487310112353102001510132308222105303310002019934873101123531020016001323082221050022650020
0199348731011235310200158013230822210500196900201993487310112353102001540132308222105002033002019934873101123531020016401323082221050021690020
0199348731011235310200163013230822210500217500201993487310112353102001530132308222105302158002019934873101123531020016801323082221050022620020
0199348731011235310200155013230822210500470600201993487310112353102001750132308222105002310002019934873101123531020018601323082221050023270020
0199348731011235310200159013230822210500239500201993487310112353102001700132308222105002437002019934873101123531020015201323082221050024540020
0199348731011235310200156013230822210500382700201993487310112353102001600132308222105003875002019934873101123531020015501323082221050044140020
0199348731011235310200161013230822210500224800201993487310112353102001590132308222105003943002019934873101123531020001440132308222105004657002019934873101123531020015701323082221050045060020
0199348731011235310200165013230822210500428500201993487310112353102001560132308222105004267002

8.1.6 Example Health Certificate - Air Freight shipment of under 10,000 lbs

The example Health Certificate shows the GSIN, which is linked to the Shipping Mark and the Placard, in the product description field. There are no other changes or alterations to the Health Certificate.

ORIGINAL

Exporter / Consignor
REALLY GOOD MEATS COMPANY PTY LTD
1 SLAUGHTER ROAD
SLAUGHTERVILLE QLD 4999
AUSTRALIA

No. **99999999**

Department of Agriculture and Water Resources
Extract from data held in respect to electronic certificate issued for export of meat, meat products

Consignee
REALLY GOOD IMPORT COMPANY
99 Frig Way
COLDSVILLE PA 19059
UNITED STATES

Packing Establishment No.	Sea/air port of loading
9999	SLAUGHTERVILLE
Vessel/Aircraft	**Date of departure**
RGA99/99999	01-AUG-2023
Sea/air port of discharge	**Final destination**
SHORTVILLE	COLDVILLE

Shipping marks and container no.	No. of pieces or containers	Description of goods	Net Weight LB
ZZZ/999997	80 CARTONS	RAW INTACT, RAW INTACT BEEF, BEEF - PRIMAL SUBPRIMAL - BONELESS PRIMAL SUBPRIMAL CUTS GSIN 40293123451234567891	2858.73
ZZZ/999957	80 CARTONS	RAW INTACT, RAW INTACT BEEF, BEEF - PRIMAL SUBPRIMAL - BONELESS PRIMAL SUBPRIMAL CUTS GSIN 40293123451234567908	3232.85
ZZZ/999447	80 CARTONS	RAW INTACT, RAW INTACT BEEF, BEEF - PRIMAL SUBPRIMAL - BONELESS PRIMAL SUBPRIMAL CUTS GSIN 40293123451234567916	3220.51
TOTALS	240 CARTONS		9312.10

An electronic certificate 99999999 has been issued and the Australian Government attests that the meat and meat byproducts described in the electronic certificate were derived from livestock which received ante-mortem and post mortem veterinary inspections at the time of slaughter in plats certified for importation of their products into the United States and are not adulterated or misbranded as defined by the regulations governing meat inspection of the U.S. Department of Agriculture; and that said products have been handled in a sanitary manner in this country and are otherwise in compliance with the requirements equivalent to those in the Federal Meat Inspection Act and said regulations.

1. The commodities were exported from a region of negligible risk of BSE
2. IF BSE has been diagnosed in one or more indigenous bovines in the region of negligible risk, the commodities were derived from bovines subject to a ban on the feeding of ruminants of meat-bone-meal and greaves derived from ruminates.
3. The commodities were derived from bovines that passed ante-mortem and post-mortem inspections.

Dated at NOWHERE
this 99TH DAY OF JAN 2099

Signature of veterinary office of the Department of Agriculture and Water Resources

Printed name and official title

eCert issued on 99TH DAY OF JAN 2099

8.1.7 Example Air Freight shipment of under 10,000 lbs Meat Messaging All Carton Report

The *All Carton Serial Number Report* includes shipment details along with a list of case/carton barcodes associated with the Health Certificate and the shipping mark displayed on the Health Certificate.

All Carton Serial Number Report

SSCC 893487310080000156

Exporter / Consignor

REALLY GOOD MEATS COMPANY PTY LTD
1 SLAUGHTER ROAD
SLAUGHTERVILLE QLD 4999
AUSTRALIA

Consignee

REALLY GOOD IMPORT COMPANY
99 Frig Way
COLDSVILLE PA 19059
UNITED STATES

Buyer

Third Party/ Loading Establishment

Est:

Shipping Line	REALLY GOOD AIRLINE
Vessel/Aircraft	RGA
Voyage	999999
Date of Departure	202308010000
Port of Loading	Melbourne AU
Port of Discharge	Los Angeles US
Final Destination	Los Angeles United States

Carton Count	200
Message File Name	893487310080000156A
Message Date	202310111902
Message Status	OPEN
Container Number	
Gov. Seal No.	No Seal
Carrier Seal No.	
Consignor Seal No.	
Health Certificate	99999998
EXDOC No.	9999995
Goods Decl. (ECN)	ABDBDBDI
Bill of Lading	
Invoice No.	
Order No. (purchase)	4514920111
Species	OVINE
Country of Origin	Australia
Slaughter Est. No.	9999
Packing Est. No.	9999
Net Weight Total	9456.453 LB
Shipping Marks	ZZZ/999996

Shipment Reference

Description

BONELESS LAMB 03C INDIVIDUALLY WRAPPED

17-Oct-23 12:33:07 GMT+10:00 © Meat Messaging SSCC 893487310080000156 Page 1

8.1.8 Example Meat Messaging All Carton Report barcode details

The barcode details below show the first page of the list of all case/carton barcodes for the consignment:

All Carton Serial Number Report

Group: 1, SSCC: 893487793105166974
Shipping Mark: ZZZ/999996 GSIN: 40293123451234567891
BONELESS LAMB 03C INDIVIDUALLY WRAPPED
L-LEG BONELESS NETTED IW/VAC MS
01993310790559173102002002132310032131276431313801993310790559173102002026132310032131276431307301993310790559173102002062132310032131276170544001993310790559173102002074132310032131276170543801993310790559173102002074132310032131276431306601993310790559173102001992132310032131276170543201993310790559173102002088132310032131276170543001993310790559173102002094132310032131276170544601993310790559173102002104132310032131276170610001993310790559173102001894132310032131276170585001993310790559173102002160132310032131276170542201993310790559173102002172132310032131276170542001993310790559173102002184132310032131276170536401993310790559173102002186132310032131276431301601993310790559173102002196132310032131276170542901993310790559173102002196132310032131276170543901993310790559173102002200132310032131276170542101993310790559173102002202132310032131276170542401993310790559173102002234132310022131275431274801993310790559173102002248132310032131276170548701993310790559173102002252132310032131276170533501993310790559173102002276132310032131276170538301993310790559173102002286132310032131276431301501993310790559173102002294132310032131276170540101993310790559173102002300132310032131276431302001993310790559173102002302132310022131275170493701993310790559173102002304132310032131276170532601993310790559173102002316132310032131276170542501993310790559173102002336132310032131276170540501993310790559173102002354132310032131276170537301993310790559173102002014132309192131262178907701993310790559173102002036132309192131262178908501993310790559173102001994132309192131262178908201993310790559173102002048132309192131262178906901993310790559173102002062132309192131262439852301993310790559173102002064132309192131262178908001993310790559173102002068132309192131262439852701993310790559173102002072132309192131262178907501993310790559173102002076132309192131262439851701993310790559173102002080132309192131262178908301993310790559173102002082132309192131262439854501993310790559173102002086132309192131262439847101993310790559173102002088132309192131262439851901993310790559173102002118132309192131262178908101993310790559173102002120132309192131262178907301993310790559173102002150132309192131262178907401993310790559173102002150132309192131262178908801993310790559173102002152132309192131262439859801993310790559173102002154132309192131262439847601993310790559173102002194132309192131262178907017-Oct-23 12:33:07 GMT+10:00 © Meat Messaging SSCC 093310793105166967 Page 2

8.1.9 Air Freight shipment of under 10,000 lbs Consignment Proposed Protocol

This proposed pilot for Air Freight shipment of under 10,000 lbs consignments to a single U.S. facility is intended to demonstrate compliance to FSIS requirements through the use of the Placard protocol outlined in the FSIS Directive 9910.1. The pilot is achieved through the use of the consignment Placard that carries:

1. A globally unique GSIN as the “Shipping Mark”, linked to the
2. Foreign certification document (Health Certificate [eCert]), and
3. A complete list of the consignment case/carton barcodes that are verifiable through,
4. The Meat Messaging *All Carton Serial Number Report*.

The pilot utilises:

1. Placard protocol based on FSIS Directive 9910.1.
2. The globally unique GS1 barcodes that are applied to each case/carton at the time of production.
3. The Meat Messaging portal to hold all the case/carton unique GS1 barcodes linked to each case certified on the foreign certification documents.
4. The Australian Health Certificate showing the Placard GSIN (shipping mark).

When a consignment is prepared for export, each barcode is scanned, recorded, certified against the consignment and uploaded to the Meat Messaging portal. A Placard is created and printed, to accompany the load, that shows the GSIN (Shipping Mark).

The Australian Health Certificate is issued showing the GSIN (shipping mark) that links to the Placard. The Placard lists all the individual case/carton barcodes. The *Meat Messaging All Carton Serial Number Report* can be used to verify all cases/cartons in the load are linked to the Health Certificate.

The proposed pilot for whole container load consignments to a single U.S. further processing facility would apply under the following conditions:

- The product is going as an unbroken load to an end user for further processing.
- Product details including all the case/carton GS1 barcodes must be uploaded to Meat Messaging prior to arrival in the U.S.
- Product must be from an export processing establishment that is listed with FSIS as “U.S. Bar Code Admin”.
- The receiving end (import establishment or alternate approved site) user must be registered to use Meat Messaging.
- The receiving import establishment must use the Advance Shipping Notice in Meat Messaging.
- The receiving import establishment must be able to verify, if required, through barcode sampling that the cases/cartons match the Placard.

NOTE: The cases/cartons may have a commercial lot code used by the trading partners for commercial lot management. This commercial lot code is **NOT** considered the regulatory mark. The GSIN on the Placard is the regulatory ‘Shipping Mark’.

The proposed pilot is to be conducted over a period of time to create sufficient records to demonstrate to FSIS the robustness of the protocol in meeting the Regulations and Directives related to using barcodes as shipping marks based on FSIS Directive 9910.1.

8.2 Whole Container Load Single Mark Pre-Pilot Protocol

This pilot is based on a whole container load consignment of a single product code going to a single US further processor using the “Placard protocol”. The placard protocol uses the Global Shipment Identification Number (GSIN) and is based on the FSIS Directive 9910.1 BARCODES IN LIEU OF SHIPPING MARKS FOR FRESH MEAT PRODUCTS FROM AUSTRALIA.

The FSIS Directive 9910.1 outlines the process for pallet groups of cases/cartons that are identified with a placard that shows the shipping mark.

This proposed whole container load consignment of a single product code to a single U.S. further processor builds on the pallet group concept from FSIS Directive 9910.1. This is achieved by treating a whole container load as a single “large pallet” group.

The placard has the complete list of case/carton barcodes and must accompany the cases/cartons throughout the supply chain. The placard includes a “shipping mark” in the form of a 20 digit globally unique GSIN.

8.2.1 GSIN

The GSIN provides the equivalent to a pallet Serial Shipping Container Code (SSCC) that is outlined in FSIS Directive 9910.1. The GSIN is fully compatible with ISO/IEC 15459 – PART 8: GROUPING OF TRANSPORT UNITS. The GSIN meets the requirements for a Unique Consignment Reference (UCR) according to the World Customs Organization. The GSIN appears on the Health Certificate as the shipping mark. More information on the GSIN can be found here.

The GSIN and SSCC are both 20 digits and have similar properties; They are both globally unique and directly traceable to the company that issued the number. The GSIN can be encoded by the shipper in a barcode or as text on a bill of lading, in addition to the message SSCC, and on shipment / pallet placards.

The GSIN comprises the following elements:

1. GS1 Application Identifier (402),
2. Company Prefix as 7-digits (e.g. 9312345),
3. Company allocated unique number as 9-digits (e.g. 123456789) and
4. Check digit based on the 16-digit combination of elements 2 and 3 (e.g. 9312345123456789 has check digit 1)

When shown the GSIN would be presented as (402) 9312345 123456789 1

As data the GSIN would be 40293123451234567891.

The GSIN as a barcode would be displayed as:

(402) 9312345 123456789 1

8.2.2 Case/Carton End Panel Example

The case/carton end panel shows the globally unique GS1 meat industry barcode. This barcode provides the bases of true case/carton identification which can be directly linked to a certified load through Meat Messaging and the group placard as outlined in FSIS Directive 9910.1.

Example case/carton end panel showing:

1. Export Production Establishment details.
2. Case/Carton label with GS1 barcode (globally unique identification). (**01993487310112353102001460132306212105303626002O**)
3. Commercial lot code (RGM 43635803) – This is NOT the shipping mark. The commercial lot code is used by trading partners for inventory lot control.

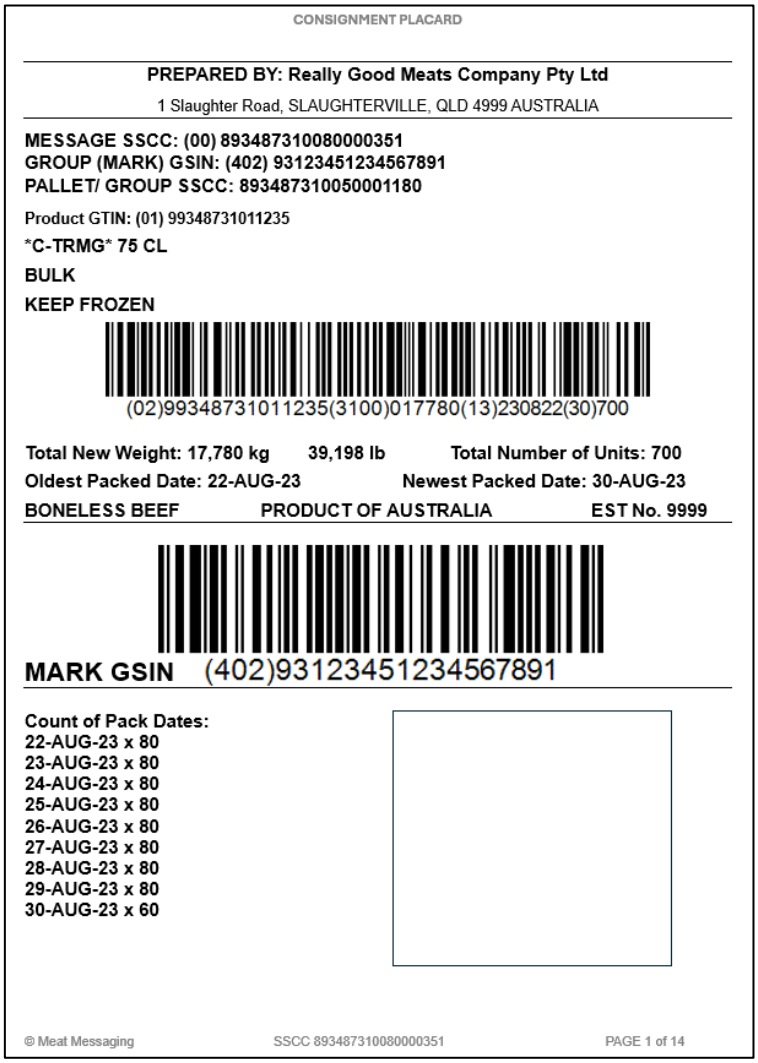
Example case/carton label showing:

1. Commercial product description (BONELESS BEEF, TENDERLOIN SS/ON, IW/VAC)
2. Case/Carton label with GS1 barcode (globally unique identification) (**01993487310112353102001460132306212105303626002O**)

8.2.3 Consignment Placard

The consignment Placard contains the consignment details including the following:

1. Group (Mark) GSIN (acting as the shipping mark on the placard);
2. Message SSCC – this is used to link to the health certificate;
3. Producing foreign establishment number;
4. Place for the U.S. import mark of inspection;
5. Production dates;
6. Net weight;
7. Number of units for the Placard;
8. Handling instructions; and
9. Exporters name and address.


CONSIGNMENT PLACARD

PREPARED BY: Really Good Meats Company Pty Ltd

1 Slaughter Road, SLAUGHTERVILLE, QLD 4999 AUSTRALIA

MESSAGE SSCC: (00) 893487310080000351
GROUP (MARK) GSIN: (402) 93123451234567891
PALLET/ GROUP SSCC: 893487310050001180

Product GTIN: (01) 99348731011235

C-TRMG 75 CL

BULK

KEEP FROZEN

(02)99348731011235(3100)017780(13)230822(30)700

Total New Weight: 17,780 kg 39,198 lb Total Number of Units: 700

Oldest Packed Date: 22-AUG-23 Newest Packed Date: 30-AUG-23

BONELESS BEEF PRODUCT OF AUSTRALIA EST No. 9999

MARK GSIN (402)93123451234567891

Count of Pack Dates:
22-AUG-23 x 80
23-AUG-23 x 80
24-AUG-23 x 80
25-AUG-23 x 80
26-AUG-23 x 80
27-AUG-23 x 80
28-AUG-23 x 80
29-AUG-23 x 80
30-AUG-23 x 60

© Meat Messaging SSCC 893487310080000351 PAGE 1 of 14

8.2.4 Consignment Placard Case/Carton Listing

The Placard includes the list of every case/carton barcode applicable for the Placard GSIN as shown below (page 2 of 11):

CONSIGNMENT PLACARD

Group: 1, SSCC: 893487310050001180
Shipping Mark: ZZZ/954524, GSIN: 40293123451234567891
BONELESS BEEF 03C
C-TRMG 75 CL

01993487310112353102001460132308222105303626002001993487310112353102001500132308222105304114002001993487310112353102001530132308222105304229002001993487310112353102001680132308222105306235002001993487310112353102001690132308222105306344002001993487310112353102001590132308222105003934002001993487310112353102001790132308222105301636002001993487310112353102001670132308222105302799002001993487310112353102001680132308222105302711002001993487310112353102001640132308222105302612002001993487310112353102001710132308222105302550002001993487310112353102001710132308222105302477002001993487310112353102001780132308222105302458002001993487310112353102001560132308222105302112002001993487310112353102001550132308222105302860002001993487310112353102001580132308222105301714002001993487310112353102001580132308222105303562002001993487310112353102001620132308222105301563002001993487310112353102001560132308222105301846002001993487310112353102001630132308222105303111002001993487310112353102001610132308222105301557002001993487310112353102001610132308222105303433002001993487310112353102001570132308222105302071002001993487310112353102001560132308222105303580002001993487310112353102001590132308222105303581002001993487310112353102001480132308222105304408002001993487310112353102001510132308222105304909002001993487310112353102001530132308222105304977002001993487310112353102001600132308222105304982002001993487310112353102001560132308222105305022002001993487310112353102001620132308222105305528002001993487310112353102001510132308222105303310002001993487310112353102001600132308222105002265002001993487310112353102001580132308222105001969002001993487310112353102001540132308222105002033002001993487310112353102001640132308222105002169002001993487310112353102001630132308222105002175002001993487310112353102001530132308222105302158002001993487310112353102001680132308222105002262002001993487310112353102001550132308222105004706002001993487310112353102001750132308222105002310002001993487310112353102001860132308222105002327002001993487310112353102001590132308222105002395002001993487310112353102001700132308222105002437002001993487310112353102001520132308222105002454002001993487310112353102001560132308222105003827002001993487310112353102001600132308222105003875002001993487310112353102001550132308222105004414002001993487310112353102001610132308222105002248002001993487310112353102001590132308222105003943002001993487310112353102001440132308222105004657002001993487310112353102001570132308222105004506002001993487310112353102001650132308222105004285002001993487310112353102001560132308222105004267002001

8.2.5 Example Health Certificate - Container Whole Load

The example Health Certificate shows the GSIN, which is linked to the Shipping Mark and the Placard, in the product description field. There are no other changes or alterations to the Health Certificate.

ORIGINAL

Exporter / Consignor
REALLY GOOD MEATS COMPANY PTY LTD
1 SLAUGHTER ROAD
SLAUGHTERVILLE QLD 4999
AUSTRALIA

No. **999999990**

Department of Agriculture and Water Resources
Extract from data held in respect to electronic certificate issued for export of meat, meat products

Consignee
REALLY GOOD IMPORT COMPANY
99 Frig Way
COLDSVILLE PA 19059
UNITED STATES

Packing Establishment No.	Sea/air port of loading
9999	BRISBANE
Vessel/Aircraft	**Date of departure**
GOOD SHIP/345R	01-OCT-2023
Sea/air port of discharge	**Final destination**
PHILADELPHIA	PHILADELPHIA

Shipping marks and container no.	No. of pieces or containers	Description of goods	Net Weight LB
SUDU9999999		DAFF SEAL NO. 999999	
ZZZ/954563	700 CARTONS	BONELESS BEEF 03C GSIN 40293123451234567891	41975.980

An electronic certificate 99999999 has been issued and the Australian Government attests that the meat and meat byproducts described in the electronic certificate were derived from livestock which received ante-mortem and post mortem veterinary inspections at the time of slaughter in plats certified for importation of their products into the United States and are not adulterated or misbranded as defined by the regulations governing meat inspection of the U.S. Department of Agriculture; and that said products have been handled in a sanitary manner in this country and are otherwise in compliance with the requirements equivalent to those in the Federal Meat Inspection Act and said regulations.
1. The commodities were exported from a region of negligible risk of BSE
2. IF BSE has been diagnosed in one or more indigenous bovines in the region of negligible risk, the commodities were derived from bovines subject to a ban on the feeding of ruminants of meat-bone-meal and greaves derived from ruminates.
3. The commodities were derived from bovines that passed ante-mortem and post-mortem inspections.

Dated at NOWHERE
this 99th DAY OF JAN 2099

Signature of veterinary office of the Department of Agriculture and Water Resources

Printed name and official title

eCert issued on 99th DAY OF JAN 2099

8.2.6 Example Whole Container Load Meat Messaging All Carton Report

The *All Carton Serial Number Report* includes shipment details along with a list of case/carton barcodes associated with the Health Certificate and the shipping mark displayed on the Health Certificate.

All Carton Serial Number Report

SSCC 893487310080000832

Exporter / Consignor

Really Good Meats Company Pty Ltd
1 Slaughter Road
Slaughterville
QLD 4999 AU

Consignee

Really Good Import Company
Big Cold store
99 Frig Way Coldsville
PA 19059 US

Buyer

Really Good US Meat Buyer
1 Short Road
Shortville
PA 99999

Third Party/ Loading Establishment

Really Good Meats Company Pty Ltd
1 Slaughter Road
Slaughterville
QLD 4999 AU
Est: 9999

Carton Count	700
Message File Name	893487310080000832A
Message Date	202410281639
Message Status	OPEN
Container Number	SUDU9998899
Gov. Seal No.	999999
Carrier Seal No.	
Consignor Seal No.	
Health Certificate	999999994
EXDOC No.	88888888
Goods Decl. (ECN)	
Bill of Lading	90099009
Invoice No.	6543
Order No. (purchase)	AD3312
Species	BOVINE
Country of Origin	AUSTRALIA
Slaughter Est. No.	9999
Packing Est. No.	9999
Net Weight Total	27778.2
Shipping Marks	ZZZ/954524

Shipping Line	REALLY GOOD SHIPPING LINE
Vessel/Aircraft	GOOD SHIP
Voyage	380R
Date of Departure	202310010101
Port of Loading	BRISBANE AU
Port of Discharge	Philadelphia US
Final Destination	Philadelphia United States of America

Shipment Reference

Description

BONELESS BEEF 03C

29-Oct-24 07:53:28 GMT+10:00 © Meat Messaging SSCC 893487310080000832 Page 1

8.2.7 Example Whole Container Loads Meat Messaging All Carton Report barcode details

The barcode details below show the first page of the list of all case/carton barcodes for the consignment:

All Carton Serial Number Report

Group: 1, SSCC: 893487310050002682
Shipping Mark: ZZZ/954524, Certificate of Analysis: LAB995867
BONELESS BEEF 03C
C-TRMG 75 CL
01993487310112353102001590132308222105303581002001993487310112353102001480132308222105304408002001993487310112353102001510132308222105304909002001993487310112353102001530132308222105304977002001993487310112353102001600132308222105304982002001993487310112353102001560132308222105305022002001993487310112353102001620132308222105305528002001993487310112353102001510132308222105303310002001993487310112353102001600132308222105002265002001993487310112353102001580132308222105001969002001993487310112353102001540132308222105002033002001993487310112353102001640132308222105002169002001993487310112353102001630132308222105002175002001993487310112353102001530132308222105302158002001993487310112353102001680132308222105002262002001993487310112353102001550132308222105004706002001993487310112353102001750132308222105002310002001993487310112353102001860132308222105002327002001993487310112353102001590132308222105002395002001993487310112353102001700132308222105002437002001993487310112353102001520132308222105002454002001993487310112353102001560132308222105003827002001993487310112353102001600132308222105003875002001993487310112353102001550132308222105004414002001993487310112353102001610132308222105002248002001993487310112353102001590132308222105003943002001993487310112353102001440132308222105004657002001993487310112353102001570132308222105004506002001993487310112353102001650132308222105004285002001993487310112353102001560132308222105004267002001993487310112353102001630132308222105004187002001993487310112353102001600132308222105004172002001993487310112353102001580132308222105004145002001993487310112353102001560132308222105303580002001993487310112353102001570132308222105302071002001993487310112353102001610132308222105303433002001993487310112353102001610132308222105301557002001993487310112353102001630132308222105303111002001993487310112353102001560132308222105301846002001993487310112353102001620132308222105301563002001993487310112353102001580132308222105303562002001993487310112353102001580132308222105301714002001993487310112353102001550132308222105302860002001993487310112353102001560132308222105302112002001993487310112353102001780132308222105302458002001993487310112353102001710132308222105302477002001993487310112353102001710132308222105302550002001993487310112353102001640132308222105302612002001993487310112353102001680132308222105302711002001993487310112353102001670132308222105302799002001993487310112353102001790132308222105301636002001993487310112353102001590132308222105003934002001993487310112353102001690132308222105306344002001993487310112353102001680132308222105306235002001

8.2.8 Whole Container Load Consignment Proposed Protocol

This proposed pilot for whole container load consignments to a single U.S. further processing facility is intended to demonstrate compliance to FSIS requirements through the use of the Placard protocol outlined in the FSIS Directive 9910.1. The pilot is achieved through the use of the consignment Placard that carries:

1. A globally unique GSIN as the “Shipping Mark” linked to the,
2. Foreign certification document (Health Certificate [eCert]), and
3. A complete list of the consignment case/carton barcodes that are verifiable through,
4. The Meat Messaging *All Carton Serial Number Report*.

The pilot utilises:

1. Placard protocol based on FSIS Directive 9910.1,
2. The globally unique GS1 barcodes that are applied to each case/carton at the time of production,
3. The Meat Messaging portal to hold all the case/carton unique GS1 barcodes linked to each case certified on the foreign certification documents,
4. The Australian Health Certificate showing the Placard GSIN (shipping mark).

When a consignment is prepared for export, each barcode is scanned, recorded, certified against the consignment and uploaded to the Meat Messaging portal. A Placard is created and printed, to accompany the load, that shows the GSIN (Shipping Mark).

The Australian Health Certificate is issued showing the GSIN (shipping mark) that links to the Placard. The Placard lists all the individual case/carton barcodes. The *Meat Messaging All Carton Serial Number Report* can be used to verify that all cases/cartons in the load are linked to the Health Certificate.

The proposed pilot for whole container load consignments to a single US further processing facility would apply under the following conditions:

- The product is going as an unbroken load to an end user for further processing.
- Product details including all the case/carton GS1 barcodes must be uploaded to Meat Messaging prior to arrival in the US.
- Product must be from an export processing establishment that is listed with FSIS as “US Bar Code Admin”.
- The receiving end (import establishment or alternate approved site) user must be registered to use Meat Messaging.
- The receiving import establishment must use the Advance Shipping Notice in Meat Messaging.
- The receiving import establishment must be able to verify, if required, through barcode sampling that the cases/cartons match the Placard.

NOTE: The cases/cartons may have a commercial lot code used by the trading partners for commercial lot management. This commercial lot code is NOT considered the regulatory mark. The GSIN on the Placard is the regulatory ‘Shipping Mark’.

The proposed pilot is to be conducted over a period of time to create sufficient records to demonstrate to FSIS the robustness of the protocol in meeting the Regulations and Directives related to using barcodes as shipping marks based on FSIS Directive 9910.1.

8.3 Case/Carton Label based Shipping Mark Protocol

The protocol outlines the process for implementation of the Case/Carton Label Unique Batch Codes as a Shipping Mark protocol. This approach is the lowest cost solution to removing the need for application of shipping marks as the time of loadout. This approach also ensures zero error rate when cartons are scanned to load. The Case/Carton Label Unique Batch Codes as a Shipping Mark protocol currently complies with US importing requirements for shipping mark as defined by FSIS regulations.

The down side to this approach is the need to manage sales order and production in a more planned and organised process than is currently utilised in most export establishments.

8.3.1 Current Case/ Carton End Panel Examples

The case/carton end panels below show the typical shipping mark and case/carton label. The shipping mark is a label, a stamp or ink jet applied shipping mark.

The fact that the shipping mark is applied after the case/carton label is applied can result in shipping mark failures through:

1. The loss of the applied shipping mark label during transport. One of the reasons this may occur is that the label is applied to a frozen or chilled carton that may have ice or condensation on the surface at time of application.
2. Incorrect label being applied. Often the label is manually applied and human error can result in the wrong label being applied.
3. Incorrect stamp being applied. Often the stamp is manually applied and human error can result in the wrong stamp being applied.
4. Incorrect, missing or illegible inkjet applied shipping mark. When an inkjet shipping mark is applied the process for application can result in incorrect, missing or illegible shipping marks due to technical issues or print head maintenance issues.

The case/carton label which includes the globally unique GS1 meat industry barcode is the true primary identification of the product. The globally unique GS1 meat industry barcode is used for product selection to fulfil the shipment through barcode scanning. The scanning function verifies each

carton/case through checking the inventory records as correct for the specific shipment. By having an easily human readable unique batch code (that can be used as a shipping mark) included at time of case/carton creation on the case/carton label removes many of the reasons for shipping mark failures.

The approach of using a case/carton label as the carrier of the shipping mark is currently used by a small number of export establishments where this workflow suits the business processes.

The current DAFF shipping mark requirements of the three (3) letter exporter prefix with a unique up to nine (9) character alpha numeric code currently limits the use of the case/carton label as a shipping mark carrier. This three (3) letter exporter prefix with the unique up to nine (9) character alpha numeric code does not align with current FSIS shipping mark requirements. The FSIS regulations and policies requires the identification of the containers (e.g. case/carton or pallets) linked to the Health Certificate as long as the method of identification can distinguish different product groups and lots. The FSIS regulations and policies do not require an exporter prefix and also allow the shipping mark to duplicate across shipments.

The primary objective of the FSIS requirement is to link a group or lots of containers (case/carton or pallets) in a physical shipment to the line details identified with the same shipping mark on a Health Certificate. The use of the globally unique GS1 meat industry barcode uploaded to the industry Meat Messaging system provides carton/case level traceability and product verification along the whole meat case/carton supply chain.

8.3.2 Use of a Case/Carton Batch Code as a Shipping Mark

The case/carton label can easily have a human readable batch code included at the time of case/carton label creation. The image below shows an example case/carton label with a Batch Code, with the prefix ‘BC’ for batch code.

The globally unique GS1 meat industry barcode provides the carton/ case verification to the Health Certificate and any certificate of analysis (COA). The label based Batch Code (shown below) provides the human readable identification linkage to the Health Certificate therefore fulling the shipping mark requirement.

The case/carton label shows the unique Batch Code, prefixed with BC as a ten (10) digit number. This number is assigned by the Export Establishment at time of carton/case production. The number as is assigned to a specific product run of “Like” product as defined by the FSIS Product Categorization under the nine (9) process categories identified in 9CFR 417.2(b).

For an export shipment to the US the information would be uploaded to the Meat Messaging portal including the group level unique batch code (shipping mark) and each individual globally unique GS1 meat industry barcode.

At time of import inspection, the cases/cartons are group by the unique Batch Code (shipping mark) and the count recorded. This is checked against the shipping mark details and count on the Health Certificate. Once requirements are met, the product is stamped “U.S. inspected” and released into U.S. commerce.

Should any discrepancies be identified by Meat Messaging, the all-carton barcode report for the shipment is used to resolve the discrepancies as per FSIS Directive 9900.5, Section VII, E. Procedures for Correcting Shipping Marks when Using Barcodes.

8.3.3 Supply chain value proposition

Applying unique batch codes as shipping marks on case/carton labels at the time of production offers a variety of benefits throughout the entire meat supply chain.

1. Export Processing Establishments benefits include:
    a. No labour for printing and attaching shipping marks.
    b. No human error in attaching shipping marks as they are part of the product.

c. Reduced costs as there is no additional cost for including the Batch Code as a shipping mark compared to the applied separate shipping mark label.

d. Reduced error when preparing Health Certificates as shipping marks are part of the inventory records and presented when scanning cases/cartons for loads.

e. Reduced error when packing container/air freight shipments as orders are packed through scanning barcodes.

f. Reduced errors related to customer documentation as the documentation is created through barcode scans and shipping marks are part of the inventory records.

2. Non-Packer Exporter benefits include:

a. No requirement to organise shipping marks to be applied to cases/cartons as they are part of the case/carton label.

b. No errors created by loading establishment due to human error applying manual shipping marks.

c. Reduced error when preparing Health Certificates, as shipping marks are part of the inventory records and presented when scanning cases/cartons for loads.

d. Reduced errors related to customer documentation as the documentation is created through barcodes scans and shipping marks are part of the inventory records.

3. Export Cold Store Establishments benefits include:

a. No requirement to organise shipping marks to be applied to cases/cartons as they are part of the case/carton label.

b. Fewer errors occur in matching specific product cases/cartons to their respective shipments since the shipping marks are included on the case/carton labels to facilitate sortation.

c. No errors created by loading due to human error applying manual shipping marks.

d. Reduced errors when preparing Health Certificates, as shipping marks are part of the inventory records and presented when scanning cases/cartons for loads.

4. Import Inspection Establishment benefits include:

a. No loss of shipping marks and no damaged shipping marks. The mark is part of the case/carton label which is more reliable than current shipping mark labels or stamps.

b. No incorrect shipping marks due to human error at time of loadout.

c. Easy sortation of received loads into shipping mark groups as the shipping mark is clearly visible as part of the case/carton label.

d. No delays in clearance as no time will be required to resolve missing, damage or incorrect shipping marks.

5. U.S. buyer benefits include:

a. No delays in clearance as no time will be required to resolve missing, damaged or incorrect shipping marks.

b. No loss of product due to human errors related to manual shipping mark application.

c. Batch management through use of shipping marks on the case/carton label.

d. Certainty of the COA relationship to the product as the COA relates to the scanned case/carton labels which also include the shipping mark.

6. End User benefits include:

a. No delays in clearance as no time will be required to resolve missing, damage or incorrect shipping marks.

b. No loss of product due to human errors related to manual shipping mark application.

c. Batch management through use of shipping marks on the case/carton labels.

d. Certainty of the COA relationship to the product as the COA relates to the scanned case/carton labels which also include the shipping mark.

7. Whole supply chain benefits include:

a. Huge reduction in costs associated with shipping mark application and management.

b. Huge reduction in refused entry losses due to shipping mark application errors.

c. Improved reputation of Australia as a reliable exporter to the U.S.

8.3.4 Steps for implementation of the Case/Carton Unique Batch Code as a Shipping Mark Protocol

The process for implementation of the case/carton unique Batch Code as a Shipping Mark requires a number of steps:

1. Changes to DAFF/ EXDOC operational restrictions for removing the need for the three (3) digit alpha exporter prefix and only ensuring uniqueness of the batch code based on the establishment of production.

2. Adding the unique Batch Code (Shipping Mark) with the necessary production run controls for “Like” product as defined by the FSIS Product Categorization under the nine (9) process categories identified in 9CFR 417.2(b).

3. Ensuring the Export Establishment is listed to use Meat Messaging with FSIS and is using Meat Messaging for all U.S. shipments.

4. Piloting and education of import inspection establishments for the use of the Case/Carton unique Batch Code as a Shipping Mark protocol.

There would be no implications related to FSIS as the use of a case/carton unique Batch Code as a Shipping Mark is already used by a number of countries exporting meat products to the US.

8.3.5 Example Batch Code Schemas

The unique Batch Codes that the export processing establishments would need to apply to the case/carton label at time of case/carton production should follow known and agreed schemas to ensure an acceptable level of uniqueness.

As a general rule the batch code uniqueness is defined as not repeating for at least 10 years and needs to be read in conjunction with the export processing establishment identification number as included on the case/carton label.

The export processing establishments applying the case/carton label at time of case/carton production is responsible for ensuring the uniqueness requirements.

There are commercial and operational considerations when selecting the batch code schema to apply. The export processing establishments applying the case/ carton labels at time of case/ carton production may use a number of different batch code schemas within a single production run to meet commercial and operational requirements. An example of different batch code schemas being applied in a single production run may relate to the batch code schema used for high volume Boneless Beef Manufacturing Bulk Packs being different than the low volume high value specialised cuts prepared for a single export order.

Two (2) example unique batch code schemas are shown below:

1. Non-Significant sequential coding – 10 digit number e.g. 4284102344 comprising the segments:
    a. Production date code (example 4284 which is made up the last digit of the year e.g. 4 for 2024 and the day of the year e.g. 284. The 4 digit production date code is a common manufacturing date code used by many industries with a 10 year uniqueness.)
    b. Batch group sequential number identifier (example 10234 which is a sequential number starting at 00001 for the day and incrementing for each allocated group. The group size may be as small as a single case/carton where the case/carton is a unique product for a specific export order. The group size may be as large as a whole export shipment such as a whole container of a specific product classification of product codes e.g. 10 different product codes of boneless beef. A five (5) digit batch group identifier would provide for up to 99999 unique batch codes for the day.)
    c. Check digit (example 4 – modulus 10 check digit.)
2. Significant coding – 10 digit number e.g. 4284102344 comprising the segments:
    a. Production date code (example 4284 which is made up of the last digit of the year e.g. 4 for 2024 and the day of the year e.g. 284. The four (4) digit production date code is a common manufacturing date code used by many industries with a 10 year uniqueness.)
    b. Batch group significant number identifier (example 10234 which is a significant number such as the export processing establishment's internal order number allocated to the batch group. The group size may be as small as a single case/ carton where the case/carton is a unique product for a specific export order. The group size may be as large as whole export shipment such as a whole container of a specific product classification of product codes e.g. 10 different product codes of boneless beef. A five (5) digit batch group significant number identifier would provide for up to 99999 unique codes for the day.)

c. Check digit (example 4 – modulus 10 check digit.)

8.3.6 Compatibility with Existing Industry Work Practice

There are a number of existing work practices related to shipping marks used through the industry.

The work practices at an export processing establishment that handles high volume beef products sold and exported in their own name differ significantly from those of a non-packer exporter dealing in the export of low volume, high value products.

There is no one solution that works across the whole industry.

Understanding which work practices are applicable in what circumstances is very important in determining if a particular proposed shipping mark protocol is suitable for that circumstance.

In a number of supply arrangements, the current process of manually applying shipping marks at time of loadout would still need to apply. A typical example is where products are pulled from existing inventory and include different production dates and runs. In this circumstance there is no commonality across the cases/cartons and the traditional manual applying of shipping marks would need to occur.

The implementation of Meat Messaging remains an essential requirement for all proposed pilot protocols to ensure verification can be applied on a case/carton level by use of the unique barcode to verify the case/carton is part of the designated shipping mark group.

8.3.7 Export Processing Establishments that export products, processes products for customer orders or produce products in set run quantities.

For an export processing establishment, exporting high volume beef products subject to STEC testing controls, the proposed batch code based shipping mark protocol could easily be implemented. The establishment would create lots of 175 cases/cartons with a unique batch code, allowing for STEC samples to be collected during carton manufacturing and labelling. These products would be held as a unit in inventory and selected as a lot to fulfil export orders. The selection of four (4) lots of 175 cases/cartons per lot would total 700 cases/cartons for a shipment. The Health Certificate would show each of the four (4) unique batch codes with 175 cases/ cartons per line. This process closely resembles current practices, where the Health Certificate showing four (4) lines, each featuring a unique shipping mark (unique batch code) per line. The only operational difference is that the batch code (shipping mark) is applied during case/carton creation and not at time of loadout. Suitable controls would ensure all cases/cartons are scanned during staging for loadout shipments, confirming that all selected cases/cartons bear the correct applicable batch codes.

For an export processing establishment that is producing beef products to customer orders, the proposed unique batch code based shipping mark protocol could be easily implemented. The facility may use a single unique batch code across various product codes for “Like” products, as defined by the FSIS Product Categorization under the nine (9) process categories identified in 9CFR 417.2(b). This would allow for a single shipping mark (unique batch code) to be shown on the Health Certificate for a number of different product codes. This matches existing work practice for these types of products.

For an export processing establishment that is producing multiple products to customer orders, the proposed unique batch code based shipping mark protocol can also be readily applied. If specific products or customer require a unique shipping mark for product code, the export processing establishment would apply one unique batch code per production code for that customer order. This

would show as one shipping mark (unique batch code) per product code on the Health Certificate, consistent with existing work practices for these types of products and customer requirements.

In cases where an export processing establishment is producing products for inventory, it could, under certain circumstances use the proposed unique batch code based shipping mark protocol. If the export processing establishment is selling products based on set quantities, the unique batch code can be applied as the shipping mark. The export processing establishment would apply the unique batch code for each set quantity per product code. When products are sold, they are sold per the set quantity. This would be represented as one shipping mark (unique batch code) for each set volume quantity product code group on the Health Certificate, reflecting current work practices where multiple shipping marks for the same product code are included on a Health Certificate.