附件15



# Trading in a Digital Evolution







Matt Moore Director | eCert & Micor

# **Discussion today**

### Part 1 -

*High level overview of what's in part 1 presentation* 

### Part 2 – Q & A

High level overview of what's in Part 2 for the Q & A.

Also can be a space for any other questions or discussions other participants may like to raise or discuss on the topic of "Trading in a digital evolution

# **Trade has changed**

- The growth of technology solutions and the impact of the COVID-19 pandemic, has caused a rethink in how we share information.
- How can we be more efficient and get the same outcomes if not better results?
- What options are available to us?
  - Who has done this before?
  - Are there any agreed standards?
  - What is the end goal?



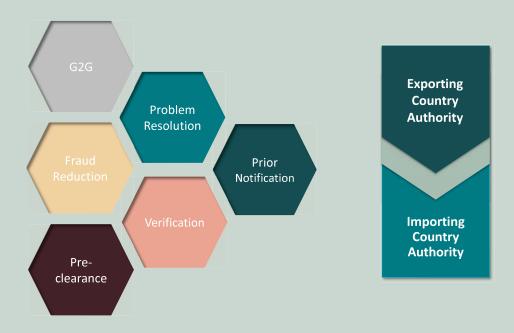
### **Guidance and Standards** World Organisation The Codex Alimentarius International Plant for Animal Health Commission (Codex) Protection Convention (IPPC) Founded as OIE Food and Agriculture International World Organisation for Animal Plant Protection Organization of the Health (WOAH) Convention United Nations World Trade Organization (WTO) The United Nations Centre for **Trade Facilitation and Electronic** Business (UN/CEFACT) The Organisation for Economic Standards and Trade **Co-operation and** UNECE **Development Facility (STDF)** Development (OECD) JN/CEFACT

# **Electronic Certification (eCert)**

- eCert is the secure electronic data transmission of SPS certificates
- eCert expansion is ongoing in both bilateral and multilateral forums
  - Objective is paperless certification
- Streamline the certification process for the Government and Business
- Supports the use of technology in other areas of border clearance



# **Benefits of eCert**



# Government to Government (G2G) and Fraud Reduction

The G2G nature of eCert means it can provide the assurance that:

- The certificate came from the listed Competent Authority
- It is a genuine certificate

Going paperless reduces the opportunity for fraudulent activity.

- Paper certificates can be replicated and presented as genuine certificates
- This provides an opportunity for unapproved goods to enter a country
- Being paperless removes the risk of goods entering a country on the presentation of fraudulent paper documents.

# **Prior Notification and Pre-Clearance**

- eCert provides importing authorities knowledge of what will be arriving, potentially within minutes of a Competent Authority issuing the certificate.
- This prior notification provides the opportunity for the pre-clearance of goods.

Where goods may not require an inspection or only in certain circumstance, once receiving the eCert the importing authority/system may be able to grant pre-clearance before the goods arrive.

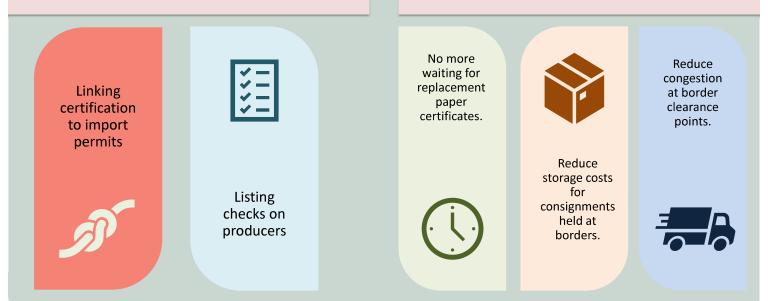
• Prior notification allows Competent Authorities the opportunity to use their work force in a more target way.



# **Verification and Problem Resolution**

Different elements of certificate verification can be used such as:

eCert can assist to resolve common paper certification problems. For example:



# Considerations for any move to digital



# Learnings

- The first steps are the hardest, but you can get momentum quickly with proper planning.
- Don't over complicate it. More is not always better.
- Be aware that Legislation, rules, policy and business process may need to change.
  - Identify these early as part of the planning.
- Important to understand who you are working with, and whether there are multiple stakeholders.
  - Some countries have split their biosecurity and export functions across multiple agencies.
  - There may be multiple stakeholders in the one country who are involved in the import and clearance of a single consignment.

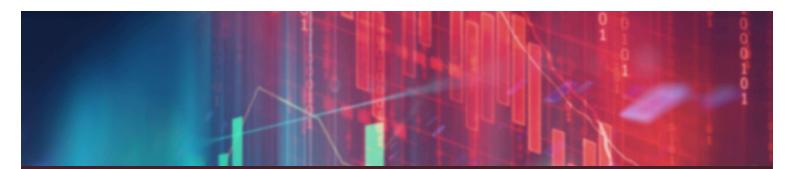
# **Always Evolving**

- eCert is a great example of digital possibilities
- Digital growth changes our conversations
- Moving to digital doesn't mean changing requirements
- IT will always move at a fast rate and that's ok.
  - Technology is always developing and evolving at a fast pace.
  - This means we need to consider when it is good to use and when is it overcomplicating?
- Linkages to other systems
  - Single trade windows
  - Domestic systems





- What do you see is a crucial factor for a successful digital future?
- How do you see the work currently ongoing within the standard setting space, impacting the work which countries have already done in the digital space/currently building?



# Thank You



附件16



### Treatment Certificate Portal and Risk Profiling

2024 QRM



Sam Griffiths Australian Department of Agriculture, Fisheries and Forestry

# Context

- International trade is underpinned by effective biosecurity treatments
- Particularly for fumigation, the biggest risks for an ineffective treatments:
  - Incorrect treatment schedule (rate, temperature, time) applied
  - Consignment not suitable for treatment
  - Inaccurate, incomplete or false concentration monitoring readings
- Largely this is driven by:
  - Lack of capacity or capability to comply with requirements (inadvertent)
  - Commercial disincentives to comply (deliberate and fraudulent)

# **Treatment documentation**

|  |                           | IENT DETAILS          |                                   |
|--|---------------------------|-----------------------|-----------------------------------|
| Goods description:                               | 15                        |                       | Quantity: 49                      |
| Consignment link                                 |                           |                       |                                   |
| Country of origin:                               | Port of loadin            |                       | Country of destination:           |
| Name and address of exporter:                    |                           | Name and address      | Australia                         |
| vanie and address of exponen.                    |                           | Name and address      | or importer.                      |
| -  |                           |                       |                                   |
| <del>,</del>                                     |                           |                       |                                   |
|  |                           |                       |                                   |
|  | TREATME                   | NT DETAILS            |                                   |
| Date fumigation completed: 2024 / 04             | 4 / 23                    | Time fumigati         | ion completed: 07:00              |
| Date ventilation commenced: 2024 /               | 04/23                     | Time ventilati        | on commenced: 07:05               |
| Town/city fumigation                             |                           | Exposure per          | iod (hours): 14                   |
| Dose rate applied ( 🗐 g/m³ or 🗍 oz/1             | 1000ft <sup>3</sup> ): 24 | Minimum tem           | perature ( X C or C *F): +10      |
| Lowest end-point reading (X g/m <sup>3</sup> or  |                           |                       | ding (ppm): 1,0 (TGRS 512)        |
| 0 20/ <del>110</del> /1                          |                           |                       |                                   |
| How was the fumigation conducted?                | _                         | eted container        | Sheeted container/s               |
|  | Chamb                     | er                    | Sheeted stack                     |
| Were the goods treated in the contai             | ner they will be shi      | pped in X             | Yes or                            |
|  |                           |                       | No (No, includes break-bulk goods |
| Container number:                                |                           |                       | or not applicabl                  |
| Was a container seal applied by the              | treatment provider        | within 120 hours of   | the treatment                     |
| completion? If yes - Seal number:                |                           |                       | X Yes or N                        |
| as all shipping packaging/wrapping               | removed or configu        | ured in a way that al | lowed                             |
| e fumigant to access all surfaces of t           |                           |                       | Yes or No or X N                  |
| elect NA if shipping packaging was r             | tot present at the t      | me or treatment)      |                                   |
| as all commercial packaging applied              |                           |                       |                                   |
| elect NA if commercial packaging wa              | as not present at th      | e time of treatment)  | X Yes or No or N                  |
|  | DECLA                     | RATION                |                                   |
| declare that all information on this ce          |                           |                       |                                   |
| eatment has been conducted in acco<br>ethodology | irdance with the Su       | Ifuryl Fluoride Fumi  | gation X Yes                      |
| ethodology                                       |                           |                       |                                   |
|  | ADDITIONAL D              | ECLARATIONS           |                                   |
|  |                           |                       |                                   |
|  |                           |                       |                                   |

|                                  | 112221-   | _                            |                                  |                                    | 20031000                  |                                |         | 100 - 10 - 10 - 10 - 10 - 10 - 10 - 10 |                           | -       |                   |
|----------------------------------|---|------------------------------|----------------------------------|------------------------------------|---------------------------|--------------------------------|---------|--|---------------------------|---------|-------------------|
| Job D                            | 5336 Same   |                              | -                                |                                    |                           |                                |         |  |                           |         |                   |
| Job Identification Customer Name |   |                              |                                  |                                    |                           | Start Dat<br>2024-04-2         |         | migation                               | Location                  |         |                   |
| 227.2                            |   |                              |                                  |                                    | 2024-04-2                 | a                              |         | -                                      |                           |         |                   |
|                                  | tion of Con   |                              |                                  |                                    |                           |                                |         |  | -                         |         |                   |
|                                  | ervice parts -  | 49 pcs                       |                                  |                                    |                           |                                |         |  |                           |         |                   |
|                                  | of Fumigati   | on                           | _                                | -                                  | _                         | Containe                       | r Numt  | iers / Consig                          | nment Identi              | licatio | m                 |
| -                                | ervice parts  |                              |                                  |                                    |                           | -                              |         |  |                           |         |                   |
| Fumin                            | ation Det   | ails                         |                                  | -                                  | -                         | -                              | _       |  |                           | _       |                   |
| 1000                             | Contraction of the second s | Seller                       | nina remaver                     | or configured                      | in a way                  | that allowed t                 | the     |  |                           |         |                   |
| furrigant                        | to access all   | surfaces of                  | the goods?                       | nt at the time o                   |                           |                                | nice.   |  | ☐ Yes                     |         | IO NA             |
| Was all o<br>(seinct h           | ommercial pr<br>14 if commerce  | ackaging app<br>ial packagin | blied as part o<br>g was not pre | f the goods ma<br>sent at the time | inufacturi<br>e of trisab | ng process?<br>nent)           |         |  | [AYes                     |         | o NA              |
| Shee                             | eted Stack  |                              | Ler                              | igth =                             |                           |                                |         | -sheeted                               | Vo                        | lume    | (m <sup>2</sup> ) |
| FISher                           | ted Contai  | anala                        | in.                              | sth =                              |                           |                                |         |  | 711                       |         |                   |
| - Current                        |   |                              |                                  | 20 2                               |                           |                                | Ch      | amber                                  | 7674                      |         |                   |
| Size: _                          | 40  | any: 6/                      | C Hei                            | ght =                              | _                         |                                |         |  |                           |         |                   |
| Specifie                         | d Dose Ra   | ite                          | Exposure                         | Period                             |                           | Forecast                       | Minimu  | im Temp                                | Fumigation<br>(if heated) | n Mini  | imum Temp         |
|                                  | )   | g/m²                         |                                  | 11                                 |                           |                                | 0       | °C                                     | (                         |         |                   |
| Calcula                          | ted Dose  | e Burg.                      | Actual Dose Applied              |                                    |                           | 1 O °C<br>Time Dosing Finished |         |  |                           |         |                   |
|                                  |   |                              | (calculated do                   | (qui bolinuon sa                   |                           |                                |         |  |                           |         |                   |
|                                  | 18.33   |                              |                                  | 000.                               |                           | 16                             | :51     | (                                      |                           |         |                   |
| Conce                            | ntration F  | Readings                     |                                  |                                    |                           |                                |         |  |                           |         |                   |
| Phase                            | Time of   | Dose                         |                                  | Monitor Li                         | ne Rei                    | adings by Location             |         |  | Equilibrium               |         | Top-up            |
| Thuse                            | Reading   | rate g/m²                    |                                  | 2:                                 | 3:                        | 4:                             | 5:      |  | Calculat                  | on      | Dose              |
| Start                            | 1710  | 24                           | 25                               | 29                                 | 5                         | 9                              | _       |  | 42                        | %       | NA                |
| Call                             |   |                              |                                  |                                    |                           |                                |         |  | 40,                       | %       | NA                |
| During                           |   | NA                           | -                                |                                    |                           |                                |         |  | NA                        |         |                   |
|                                  |   | NA                           |                                  | -                                  | -                         | -                              |         |  | NA                        |         | _                 |
| End                              | 07100   | 12                           | 13                               | 14                                 | 1                         | 2                              | _       |  | NA                        |         | NA                |
| Comme                            | ents  |                              |                                  |                                    | -                         |                                | _       |  | NA                        |         | NA                |
| Ventila                          | ation   |                              | -                                | -                                  | -                         |                                | _       | 1000                                   | -                         | _       | -                 |
| - Case (122)                     | mmenced   |                              | Date com                         | menced                             |                           | Final TLV                      | Ineadin | 0                                      | Date & time               | a rear  | ting taken        |
|                                  | 10.5  |                              |                                  |                                    | 3                         |                                |         | g ppm                                  | 20200                     | 67      | s of              |
| _                                | ator in Ch  |                              |                                  | ALC: NO                            | Paris C                   |                                |         | Officer (if su                         |                           | 10 10   |                   |
|                                  | and all of  | 11.90                        | Signature                        |                                    |                           | 10000                          | mente c | vincor (il st                          |                           |         |                   |
| Name                             |   |                              |                                  |                                    |                           | Name                           |         |  | Signature                 |         |                   |

**Certificate Portal** 

| Australias Government<br>Department of Agriculture,<br>Photoca and Facility | rms Portal                 |                |
|---|----------------------------|----------------|
| tome   Submit Treatment Details   Summary of Treatments                     | Summary of Submissions     | Ketey Coller - |
| ture > Bineculty > Trainents > 002 forms > Bineculty Tw                     | etment Lodgement           |                |
| Biosecurity Treatment Lodgement   |                            |                |
| ADI: 0900015  |                            |                |
| Treatment Certificate Humber 10   | Treatment Let Identifier O |                |
| Consignment Link Type "   | Diher 1                    |                |
| Country of Treatment *  |                            |                |
|   | ~                          |                |
| Easiers for Traditional *   |                            | *              |
|   |                            |                |
| Select or search options  |                            |                |

External facing

Departm

- Multi Factor Authentication
- Secure comms channel with TPs



- Level 1
- Data validation
- Data only from
- trusted/approved sourcesNo invalid data

SeaPest

| -484-  | Flags        | Treatment Completed | AEI ID   | Certificate No | Consignment Li       | Consignment No     |
|--|--------------|---------------------|----------|----------------|----------------------|--------------------|
| Australian Geverament<br>Department of Agriculture,<br>Flaheries and Farrowy | 1 <b>W</b> ( | 01/09/2019, 12:55   | AE40015B | SAMPCS/HTC/    | Container Number     | MRSU3725208        |
| Seasonal Pest  | w            | 07/09/2019, 12:50   | AE400158 | SAMPCS//HTC    | Container Number     | TCKU6937057        |
| (Relate 447)   |              | 14/09/2019, 12:50   | AE400158 | SAMPCS/HTC/    | Container Number     | MRKU4866384        |
| Home   |              | 25/09/2019, 13:00   | AE4001SB | SAMPCS/HTC/    | Container Number     | MRKU4836590        |
| Treatment Certificates   |              | 02/10/2019, 14:10   | AE400158 | SAMPCS/HTC/    | Container Number     | TGHU8374961        |
| Container Assessment   |              | 16/11/2019 13:15    | AF4001SR | SAMPCS/HTC/    | Container Number     | SUDU8550466        |
| Container Status   |              | 10/09/2020, 12:56   | AE4001SB | SAMPCS/HTC/    | Ocean Bill of Lading | B/L NO # DKJ2008.  |
| ■ Reporting  |              | 27/10/2020, 12:16   | AE4001SB | SAMPCS/HTC/    | Ocean Bill of Lading | 11110008540        |
| CS Update  |              | 05/12/2020, 12:12   | AE4001SB | SAMPCS/HTC/    | Other                | INVOICE NO.: IE-E. |
| Configurations   |              | 05/12/2020, 12:11   | AE400158 | SAMPCS/HTC/    | Container Number     | OOLU1030563        |

Internal facing

Level 2

Transaction automated

compliance assessment

to manage at border

promote voluntary

compliance

Identify risk consignments

Provide feedback to TPs to

Business rules to assess transactional compliance

### **Power BI T3 Model**

3



• Data analytics

- Systemic non-compliance detection
- + 2 C
  - Systemic analysis of TPs Identify deliberate noncompliance and fraudulent behaviour



Level 4

- Look at the whole system, take information from Level 1-3 and rank the Treatment Provider by **risk rating**
- Helps work out where we need to direct resources







# Offshore BMSB Treatment Providers Scheme

- Established in 2018 with NZ MPI
- Government-to-industry
- 220+ registered treatment providers
- Mandatory use of the treatment certificate portal



5

Department of Agriculture, Fisheries and Forestry

## **Treatment Certificate Portal**

Consignment information

| Australian Government<br>Department of Agriculture,<br>Fisheries and Forestry |                            |               |
|---|----------------------------|---------------|
| Home Submit Treatment Details Summary of Treatments Summary of Su             | ubmissions Sam (           | m Griffiths 🗸 |
| Home > Biosecurity > Treatments > OTP Forms > Biosecurity Treatment Lodgement |                            |               |
| Biosecurity Treatment Lodgement   |                            |               |
| AEI: CP0000TS   |                            |               |
| Treatment Certificate Number *🚯   | Treatment Lot Identifier 🚯 |               |
| QRM2024   | 1                          |               |
| Consignment Link Type *   | Container Number *         |               |
| Container Number 🗸  | Demo1234567                |               |
| Country of Treatment *  | Goods Description *        |               |
| Andorra 🗸   | Engine and machinery parts |               |
|   |                            | 7             |

## **Treatment Certificate Portal**

Target and shipping information

| Reason for Treatment * BMSB × |            |             |  |
|-------------------------------|------------|-------------|--|
| Target of Treatment *         |            |             |  |
| Goods ×                       |            |             |  |
| Enclosure Type *              |            |             |  |
| Sheeted Container             | ~          |             |  |
| Shipment Method *             |            | Seal Number |  |
| Containerised                 | ~          | 123456      |  |
| Treatment Type *              |            |             |  |
| Methyl Bromide                | <b>x</b> Q |             |  |
|                               |            |             |  |
|                               |            |             |  |

# Treatment Certificate Portal

| umigation Treatment Details        |                           |
|------------------------------------|---------------------------|
| Temperature Unit *🚯                |                           |
| Celsius                            | ~                         |
| Minimum Temp Achieved *🚯           |                           |
| 17                                 |                           |
| Treatment Duration Unit *          | Treatment Duration *🚯     |
| Hours                              | ▶ 12                      |
| Dose Rate Specified *8             | Dose Rate Applied * 🚯     |
| 24                                 | 24                        |
| Initial Concentration Timestamp *🚯 |                           |
| 31/03/2024 7:03 AM                 | î                         |
| Initial Concentration 1 * 🚯        | Initial Concentration 2 🚯 |
| 32                                 | 32                        |
| Initial Concentration 3 🚯          | Initial Concentration 4 0 |
| 31                                 |                           |
| Initial Concentration 5 🚯          | Initial Concentration 6 🚯 |
|                                    |                           |

## **Treatment Certificate Portal**

### Treatment details

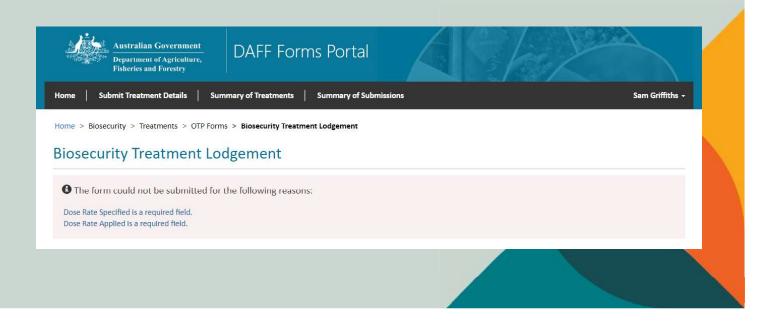
| Fumigation Treatment Details       |                           |     |
|------------------------------------|---------------------------|-----|
| Temperature Unit *3                |                           |     |
| Celsius 🗸                          |                           |     |
| Minimum Temp Achieved *🚯           |                           |     |
| 17                                 |                           |     |
| Treatment Duration Unit *          | Treatment Duration *🕄     |     |
| Hours                              | 12                        |     |
| Dose Rate Specified *              | Dose Rate Applied *🕄      |     |
| 24                                 | 24                        |     |
| Initial Concentration Timestamp *🕄 |                           |     |
| 31/03/2024 7:03 AM                 |                           |     |
| Initial Concentration 1 *🚯         | Initial Concentration 2 🚯 |     |
| 32                                 | 32                        |     |
| Initial Concentration 3 🚯          | Initial Concentration 4 🚯 |     |
| 31                                 |                           |     |
| Initial Concentration 5 🚯          | Initial Concentration 6 🚯 | No. |
|                                    |                           |     |

# **Treatment Certificate Portal**

| inal Concentration Timestamp *🚯        |   |                         |  |
|--|---|-------------------------|--|
| 31/03/2024 7:34 PM                     | Ĩ |                         |  |
| inal Concentration 1 *                 |   | Final Concentration 2 🚯 |  |
| 15                                     |   | 16                      |  |
| inal Concentration 3 🚯                 |   | Final Concentration 4 🚯 |  |
| 14                                     |   |                         |  |
| inal Concentration 5 🚯                 |   | Final Concentration 6 🚯 |  |
|  |   |                         |  |
| inal TLV-TWA *(3)                      |   |                         |  |
| 3                                      |   |                         |  |
| Date and Time Ventilation Completed *🚯 |   |                         |  |
| 01/04/2024 11:22 AM                    | Ĩ |                         |  |
|  |   |                         |  |
| Next                                   |   |                         |  |
|  |   |                         |  |

# **Treatment Certificate Portal**

Error



# **Treatment Certificate Portal**

Attach documents

| Australian Govern<br>Department of Agric<br>Fisheries and Forest |   | Portal               | 1 here             |                  |
|--|---|----------------------|--------------------|------------------|
| Home Submit Treatment Deta                                       | ils   Summary of Treatments   Sun       | nmary of Submissions |                    | Sam Griffiths +  |
| Home > Biosecurity > Treatments                                  | > OTP Forms > Biosecurity Treatment Loc | gement               |                    |                  |
| <b>Biosecurity Treatm</b>  | ent Lodgement                           |                      |                    |                  |
| Attach Documer   | Document Count                          | Created By           | Last Modified On   |                  |
| Treatment Certificate  | 0                                       | Sam Griffiths        | 08/05/2024 9:48 PM | Attach Documents |
| Record of Treatment  | 0                                       | Sam Griffiths        | 08/05/2024 9:48 PM | Attach Documents |
| Previous Next  |   |                      |                    |                  |

### **Certificate Portal SeaPest** Certificate No Consign Treatment Con AEI ID Consi Flag 53,555 195 10.029 18,319 2,724 01/09/2019. 12:55 6.989 19.30% 1.671 629 12.84 07/09/2019, 12:50 TCKU6937057 14/09/2019. 12:50 25/09/2019. 13:00 02/10/2019, 14:10 TGHU8374961 16/11/2019, 13:19 SUDURSSMAR 10/09/2020, 12:56 B/L NO # DKJ 27/10/2020, 12:1 11110008540 05/12/2020, 12:12 INVOICE NO .: IE-E Configura 05/12/2020. 12:11 00011 Internal facing •

- External facing
- Multi Factor Authentication .
- Secure comms channel with TPs

Data validation .

Level 1

- . Data only from
- trusted/approved sources No invalid data



Level 2

- Transaction automated . compliance assessment
- to manage at border
- promote voluntary compliance

- Data analytics
- Systemic non-compliance detection



compliance

- Identify risk consignments
- Provide feedback to TPs to



Business rules to assess transactional

Systemic analysis of TPs Identify deliberate noncompliance and fraudulent behaviour

Look at the whole system, take information from Level 1-3 and rank the Treatment Provider by risk rating

Level 4

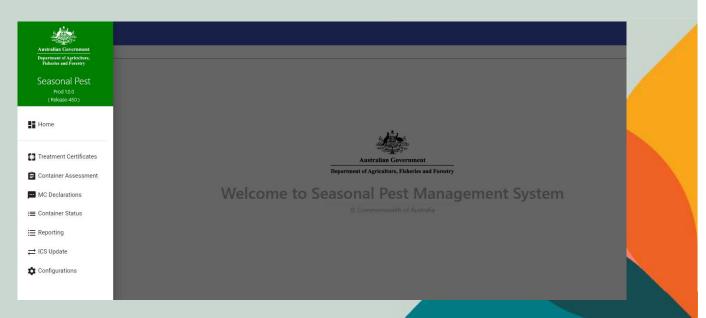
Helps work out where we need to direct resources



7,000 noncompliance

# **Seasonal Pest**

Entries



### **Power BI T3 Model**

42.499

8.692

....littitilitte

# Seasonal Pest

Entries

| Ξ | Submission ID  | Flags | Treatment Completed | AEI ID   | Certificate No | Consignment Link Type          | Consignment No | Reason For Treat | Treatment Type                       | MC Declaration ID |
|---|----------------|-------|---------------------|----------|----------------|--------------------------------|----------------|------------------|--------------------------------------|-------------------|
|   | TP2024-0044424 |       | 21/04/2024, 21:00   | DE4003SB | 2023-24-2724   | Container Number               | CAIU6978611    | BMSB             | Sulfuryl Fluoride                    |                   |
|   | TP2024-0044426 |       | 24/04/2024, 18:48   | BE4006SB | FUM049109      | Container Number               | TRLU8952381    | BMSB             | Sulfuryl Fluoride - Th               |                   |
|   | TP2024-0044427 |       | 25/04/2024, 18:56   | BE4006SB | FUM049148      | Container <mark>Numb</mark> er | CMAU7013914    | BMSB             | Sulfuryl <mark>Flu</mark> oride - Th |                   |
|   | TP2024-0044428 |       | 24/04/2024, 18:49   | BE4006SB | FUM049093      | Container Number               | FANU3676269    | BMSB             | Sulfuryl Fluoride - Th               |                   |
|   | TP2024-0044429 |       | 02/04/2024, 13:45   | MY0071MB | SFA92031       | Other                          | 28751685       | BMSB             | Methyl Bromide                       |                   |
|   | TP2024-0044431 |       | 25/04/2024, 18:57   | BE4006SB | FUM049054      | Container Number               | FCIU4463343    | BMSB             | Sulfuryl Fluoride - Th               |                   |
|   | TP2024-0044430 |       | 23/04/2024, 22:30   | DE4003SB | 2023-24-2736   | Container Number               | FANU3585359    | BMSB             | Sulfuryl Fluoride                    |                   |
|   | TP2024-0044433 |       | 25/04/2024, 18:32   | BE4006SB | FUM049047      | Container Number               | MEDU2027580    | BMSB             | Sulfuryl Fluoride - Th               |                   |
|   | TP2024-0044434 | wi    | 01/03/2024, 20:00   | FR4004SB | EWS-040493/001 | Container Number               | MEDU3989906    | BMSB             | Sulfuryl Fluoride                    |                   |
| 1 | TP2024-0044435 |       | 25/04/2024, 18:47   | BE4006SB | FUM049056-01   | Container Number               | TGBU9618757    | BMSB             | Sulfuryl Fluoride - Th               |                   |

Seasonal Pest

Non-compliant treatments

|                  | AEI Number                  |                             |   | Submission ID                | TP2024-0041890  |      |  |  |
|------------------|-----------------------------|-----------------------------|---|------------------------------|---|------|--|--|
|                  | Submission Email            | and your plant to gmail.com |   | Submitted On                 | 16/04/2024, 16:39   |      |  |  |
|                  | Certificate Number          |                             |   | Seal Number                  |   |      |  |  |
|                  | Treatment Lot Identifier    |                             |   | Record Of Treatment Document | DOC114580327  |      |  |  |
|                  | Withdrawn?                  | Yes                         |   |                              | enclosure volume > 30 m³ does not have required amount of<br>monitoring tubes         |      |  |  |
|                  | Suspended?                  |                             |   | Suspension Reason            |   |      |  |  |
|                  | Consignment Type            | OBOL                        |   | Consignment Number           | <del></del>   |      |  |  |
| Good Description |                             | AUTO SPARE PARTS NEW PARTS  |   | t 🛥                          |   |      |  |  |
|                  | Target Of Treatment         | Goods<br>Packaging          |   | Treatment Type               | Methyl Bromide 🚦 Details  |      |  |  |
|                  | Shipment Method             | Break Bulk                  |   | Treatment Method             | Sheeted stack   |      |  |  |
|                  | Reason For Treatment        | BMSB                        |   | Ventilation Completed        | 07/04/2024, 17:08 (local time of OTP)   |      |  |  |
|                  | Treatment Validation Errors |                             | 'FinalConcentrationTimestamp' value is 7/04/2024 5.08.00 PM +10:00. 'TreatmentCompletedTimestamp' value is 7/04/2024 5.08.00 PM +10:00. Must be greater than 0.0000 hours after final reading |                              |   |      |  |  |
|                  | Modified By                 | Jazmine Zabel               |   | Modified On                  | 23/04/2024, 15:12   |      |  |  |
| date History     |                             |                             |   |                              |   | ^    |  |  |
| odified On       | Modifie                     | 1233.•.                     | Field   | Previous Value               | New Value   |      |  |  |
| 8/04/2024, 15:12 | Jazmine                     |                             | Is Withdrawn  | False                        | True  |      |  |  |
| 3/04/2024, 15:12 | Jazmine                     |                             | Withdrawn Reason  |                              | enclosure volume > 30 m <sup>3</sup> does not have requ<br>amount of monitoring tubes | ired |  |  |
| 6/04/2024, 16:41 | AGDAF                       | F\svc_AIMSCC_P              | New Record Created  | -                            |   |      |  |  |

### **Certificate Portal SeaPest** Certificate No Consign Treatment Con AEI ID Consig Flag 53,555 195 10.029 18,319 01/09/2019.12:53 6.989 19.30% 1.671 12.84 07/09/2019, 12:50 TCKU6937057 14/09/2019. 12:50 AF4001SE SAMO 25/09/2019. 13:00 MPP1 MP2650 02/10/2019, 14:10 TGHU8374961 SAMPCSAHIC 16/11/2019, 13:15 SUDURSSMAR 10/09/2020, 12:56 B/L NO # DKJ I Container Stat 27/10/2020, 12:1 11110008540 05/12/2020, 12:12 INVOICE NO .: IE-E Othe 05/12/2020. 12:11 000010 Internal facing • Data analytics

compliance

- External facing
- Multi Factor Authentication .
- Secure comms channel with TPs

. Data validation

Level 1

- . Data only from
- trusted/approved sources No invalid data

Level 2

- Transaction automated . compliance assessment .
- Identify risk consignments to manage at border Provide feedback to TPs to
- promote voluntary compliance



Business rules to assess transactional

Level 3

- Systemic analysis of TPs Identify deliberate noncompliance and fraudulent behaviour
- Level 1-3 and rank the Treatment Provider by risk rating Helps work out where we
- need to direct resources

Level 4

Look at the whole system,

take information from



non-

compliance

## **PowerBI Treatment Providers**

Patterns and indicators - odds and evens

|                |              | Readings & F                                   | Patt | erns                 |        |                  | Va        | alidation |              |            |          |              | Od      | ds & evens       |              |        |                  |
|----------------|--------------|--|------|----------------------|--------|------------------|-----------|-----------|--------------|------------|----------|--------------|---------|------------------|--------------|--------|------------------|
| Submission     | date         |  |      | AEI                  |        | Certificat       | te number |           | Odds & e     | evens      |          | Occurr       | ence (s | start)           | Occurr       | ence ( | end)             |
| 01/09/20       | 3 🗉          | 08/04/2024 🖾                                   |      | Treatment provider 1 | $\sim$ | All              |           | $\sim$    | Readings     | Occurrence | %        | Reading      | Count   | %                | Reading      | Count  | %                |
|                |              |  |      | ⊘.0.₹.83             |        |                  |           |           | Even         | 3,560      | 59.49%   | 54.0         |         | 15.01%           | 28.0         | 707    |                  |
|                |              |  |      | 10101                | End    | ries by mor      | a t la    |           | Odd          | 2.424      | 40.51%   | 58.0         |         | 13.64%           | 27.0         | 652    |                  |
| Treatment II   | 0 11         | 12 13 F1 F2 F                                  | 3    |                      | Em     | Thes by mor      | iun       |           | Total        |            | 100.00%  | 56.0         |         | 12.97%           | 29.0         |        | 20.9256          |
| 34462          | 58.0         | 29.0   |      |                      | • Er   | tries 🔵 Treatmen | its       |           |              |            |          | 52.0<br>60.0 |         | 12.43%<br>11.06% | 30.0<br>31.0 |        | 19.02%<br>11.03% |
| 34432          |              | 55.0 58.0 31.0 28.0 2                          |      |                      |        |                  |           |           | Odds & e     | evens (sta | art)     | 55.0         |         | 7.49%            | 26.0         |        | 2.67%            |
| 34431          |              | 53.0 56.0 30.0 27.0 2                          |      |                      | 100    |                  |           |           | Decalization | Occurance  | ~        | 62.0         |         | 7.32%            | 32.0         |        | 0.87%            |
| 34427          |              | 55.0 58.0 31.0 28.0 2                          |      |                      |        | 1                |           |           | Readings     | Occurance  | 70       | 57.0         |         | 5.95%            | 292.0        |        | 0.03%            |
| 34426          | 62.0<br>54.0 | 55.0 58.0 31.0 28.0 2<br>27.0                  | 9.0  |                      |        | 1                |           |           | Even         | 2.176      | 72.73%   | 59.0         | 161     | 5.38%            | 38.0         | 1      | 0.03%            |
| 34421          | 54.0         | 27.0   |      |                      |        | . 0              |           | A .       | Odd          |            | 27.27%   | 53.0         | 143     | 4.78%            |              |        |                  |
| 34420<br>34419 |              | 56.0 59.0 32.0 29.0 3                          | 0.0  |                      | 50     |                  |           |           |              |            |          | 61.0         |         | 2.87%            |              |        |                  |
| 34418          | 52.0         | 26.0   | 0.0  |                      | 50     |                  | MIL       | 1LA       | Total        | 2,992      | 100.00%  | 63.0         |         | 0.67%            |              |        |                  |
| 34417          | 52.0         | 28.0   |      |                      |        |                  | IW        | JVI       | A shh        | evens (er  | d)       | 64.0         |         | 0.20%            |              |        |                  |
| 34416          |              | 55.0 59.0 31.0 28.0 3                          | 0.0  |                      |        | AL MI            |           |           |              |            | 1        | 51.0         |         | 0.13%            |              |        |                  |
| 34411          | 59.0         | 52.0 55.0 30.0 27.0 2                          | 8.0  |                      |        | 1 11             |           | 1         | Readings     | Occurance  | %        | 50.0<br>68.0 |         | 0.07%            |              |        |                  |
| 34409          | 58.0         | 29.0   |      |                      | 0      | 1 1              |           |           | Odd          | 1.000      | 53.74%   | 68.0         | 1       | 0.03%            |              |        |                  |
| 34407          |              | 52.0 56.0 29.0 27.0 2                          |      |                      |        | Oct 2023         | Jan 2024  | Apr 2024  |              |            |          |              |         |                  |              |        |                  |
| 34406          |              | 58.0 55.0 27.0 29.0 2                          |      |                      |        |                  |           |           | Even         |            | 46.26%   |              |         |                  |              |        |                  |
| 34405          |              | 56.0 59.0 31.0 29.0 3                          | 0.0  |                      | Cer    | tificate deta    | ails      |           | Total        | 2,992      | 100.00%  |              |         |                  |              |        |                  |
| 34404          | 56.0         | 28.0   |      |                      | Con    | t. number        | Cort LIPI | ROF URL   |              |            |          |              |         |                  |              |        |                  |
| 34345<br>34344 |              | 61.0 58.0 28.0 31.0 2                          |      |                      | Cer    | t. number        | Cert. UKL | KOF UKL   | Odds & e     | evens - (  | lecimal) |              |         |                  |              |        |                  |
| 34343          |              | 60.0 57.0 28.0 30.0 2<br>54.0 59.0 31.0 29.0 3 |      |                      | -      |                  | S         | Ø         | Readings     | Occurrence | %        |              |         |                  |              |        |                  |
| 34343          |              | 55.0 58.0 31.0 28.0 3                          |      |                      | -      |                  | Ø         | Ø         | -            |            | 190      |              |         |                  |              |        |                  |
| 34341          | 54.0         | 28.0   | 0.0  |                      |        |                  | P         | P         | Even         | 5,984      | 100.00%  |              |         |                  |              |        |                  |
| 34340          |              | 60.0 58.0 27.0 30.0 2                          | 9.0  |                      | _      |                  |           |           | Odd          | C          | 0.00%    |              |         |                  |              |        |                  |
| 34339          | 54.0         | 28.0   |      |                      | 100    | 40000704         | B         | B         | Total        | 5.984      | 100.00%  |              |         |                  |              |        |                  |
| 34338          | 57.0         | 29.0   |      |                      |        |                  | S         | 6         |              | -)         |          |              |         |                  |              |        |                  |
| 34337          | 52.0         | 27.0   |      |                      | -      |                  | B         | B         | Decimal      | distribut  | on       |              |         |                  |              |        |                  |
| 34336          |              | 55.0 58.0 31.0 28.0 2                          |      |                      | E.4.   | (DI-400368/000   | 0         | P         |              | Occurance  |          |              |         |                  |              |        |                  |
| 34335          |              | 58.0 54.0 27.0 29.0 2                          |      |                      |        |                  | -0        | 0         | Decimal      | uccurance  | %h       |              |         |                  |              |        |                  |
| 34334          |              | 53.0 56.0 30.0 27.0 2                          |      |                      |        |                  | 0         | 0         | 0            | 5,984      | 100.00%  |              |         |                  |              |        |                  |
| 34333          |              | 63.0 58.0 28.0 32.0 3                          |      |                      |        |                  | 0         | Q         | Total        |            | 100.00%  |              |         |                  |              |        |                  |
| 34332<br>34331 |              | 53.0 57.0 30.0 28.0 2<br>55.0 58.0 31.0 28.0 2 |      |                      | -      |                  |           |           | local        | 3,564      | 100.00%  |              |         |                  |              |        |                  |
| 34330<br>34330 |              | 56.0 58.0 31.0 29.0 3                          |      |                      |        | 1 - 100200/2020  | P         | e         |              |            |          |              |         |                  |              |        |                  |
| 34329          |              | 61.0 57.0 28.0 31.0 2                          |      |                      |        |                  |           |           |              |            |          |              |         |                  |              |        |                  |
| 34328          |              | 60.0 58.0 28.0 30.0 2                          |      |                      | -      | 11000.05         | Q         | Q         |              |            |          |              |         |                  |              |        |                  |
| 34327          |              | 52.0 55.0 30.0 27.0 2                          |      |                      | 50     | 4.4670-005       | 0         | Q         |              |            |          |              |         |                  |              |        |                  |
| 34326          |              | 56.0 58.0 81.0 29.0 8                          |      |                      |        |                  |           |           |              |            |          |              |         |                  |              |        |                  |
| 34325          | 61.0         | 55.0 59.0 31.0 28.0 3                          | 0.0  |                      |        |                  | e<br>c    | ø         |              |            |          |              |         |                  |              |        |                  |

### **Power BI T3 Model**



Systemic non-compliance detection

# **PowerBI Treatment Providers**

Patterns and indicators – decimal distribution

|                | Readings &   | Patterns             |                                | V           | alidation |          |                |        |              | Odds & evens         |              | Sector 2             |         |                |                                |         |
|----------------|--|----------------------|--------------------------------|-------------|-----------|----------|----------------|--------|--------------|----------------------|--------------|----------------------|---------|----------------|--------------------------------|---------|
| Submission     | date   | AEI                  | Certific                       | ate number  |           | Odds & e | evens          |        | Occurre      | nce (start)          | Occurre      | ence (end)           |         |                |                                |         |
| 01/09/203      | 23 🗉 08/04/2024 💷                                    | Treatment provider 2 |                                |             | $\sim$    | Readings | Occurrence %   |        | Reading      | Count %              | Reading      | Count %              |         |                |                                |         |
|                |  | Ø.0.7.80."           |                                |             | ×         | Odd      | 1,310 5        | 51.62% | 36.1         | 29 2.29%             | 22.7         | 30 2.36%             |         |                |                                |         |
|                |  |                      |                                |             |           | Even     | 1,228          |        | 36.9         | 26 2.05%             | 21.9         | 29 2.29%             |         |                | 12                             |         |
| Treatment II   | D I1 I2 I3 F1 F2                                     | F3                   | Entries by m                   | onth        |           |          |                |        | 35.9         | 21 1.65%             | 22.9         | 26 2.05%             | < Back  | to report      | DECIMAL DI                     | STRIBUT |
| 15359          | 39.8 38.5 37.2 20.2 21.6                             | 22.9                 | Entries Treatment              | ontr        |           | Total    | 2,538 10       | 00.00% | 38.1         | 20 1.58%             | 24.1         | 26 2.05%             |         | A START BOLDER | 2000 The Contract of Contracts |         |
| 15358          | 39.6 38.3 36.7 20.6 21.9                             |                      | Citules Wireau                 | ents        |           | Odde &   | evens (start)  |        | 37.1         | 18 1.42%             | 20.1         | 25 1.97%             | Decimal | Occurance      | %                              |         |
| 15357          | 43.6 42.4 41.3 23.1 22.6                             |                      |                                |             |           |          |                |        | 39.5         | 18 1.42%<br>17 1.34% | 25.9         | 24 1.89%             |         |                | *                              |         |
| 15356          | 44.2 42.9 41.6 22.9 21.3                             | 20.7                 | 100                            |             |           | Readings | Occurance %    |        | 37.9<br>35.1 | 16 1.26%             | 21.6         | 23 1.81%<br>20 1.58% | 1       | 460            | 18.12%                         |         |
| 15355          | 36.6 35.2 34.3 20.2 19.4                             |                      | 100                            |             |           | Even     | 597 4          | 7.049/ | 49.1         | 16 1.26%             | 25.7         | 20 1.58%             |         |                |                                |         |
| 15354          | 46.9 45.7 44.3 24.5 23.1                             |                      |                                | IN          |           |          |                |        | 37.8         | 15 1.18%             | 23.1         | 19 1.50%             | 9       | 414            | 16.31%                         |         |
| 15319          | 40.5 39.1 37.8 21.3 20.4                             |                      |                                | ALL A       |           | Odd      | 672 5          |        | 39.1         | 15 1.18%             | 26.1         | 19 1.50%             | 6       | 317            | 12.49%                         |         |
| 15318          | 36.7 35.3 34.1 19.6 18.2                             |                      |                                | MIL A       |           | Total    | 1,269 10       | 0.00%  | 39.6         | 14 1.10%             | 19.9         | 18 1.42%             |         |                |                                |         |
| 15317          | 92.1 90.7 89.5 69.9 71.5                             |                      | 50                             | IN V A      |           |          |                |        | 46.2         | 14 1.10%             | 27.1         | 18 1.42%             | 7       | 281            | 11.07%                         |         |
| 15316          | 38.1 36.8 35.6 20.6 19.4                             |                      |                                | 14 1 /1     |           | Odds & i | evens (end)    |        | 34.1         | 13 1.02%             | 18.5         | 17 1.34%             | 2       | 227            | 8.94%                          |         |
| 15315          | 50.1 48.9 47.4 26.3 25.5<br>36.7 35.5 34.2 20.2 21.5 |                      |                                |             |           | Readings | Occurance %    |        | 35.4         | 13 1.02%             | 20.6         | 17 1.34%             |         |                |                                |         |
| 15314<br>15313 | 40.6 39.3 37.8 19.9 21.1                             |                      |                                |             |           |          | •              | _      | 37.2         | 13 1.02%             | 26.9         | 17 1.34%             | 5       | 225            | 8.87%                          |         |
| 15312          | 42.5 41.1 39.5 23.5 24.7                             |                      | 0<br>Oct 2023                  | Jan 2024    | Apr 2024  | Odd      | 638 5          | 0.28%  | 37.5         | 13 1.02%             | 22.6         | 16 1.26%             | 4       | 211            | 8.31%                          |         |
| 15512          | 39.9 38.6 37.3 20.7 21.9                             |                      | Oct 2023                       | Jan 2024    | Apr 2024  | Even     | 631 4          | 9 72%  | 37.6         | 13 1.02%             | 25.1         | 16 1.26%             |         |                |                                |         |
| 15310          | 37.8 36.6 35.4 22.9 24.1                             |                      | Certificate de                 | A           |           | Total    | 1000 A.C. 10   |        | 38.5         | 13 1.02%             | 28.6         | 16 1.26%             | 3       | 200            | 7.88%                          |         |
| 15309          | 41.2 40.1 38.9 18.6 19.9                             |                      | Certificate de                 | taits       |           | Iotal    | 1,269 10       | 0.00%  | 34.9         | 12 0.95%             | 18.6         | 15 1.18%             | 8       | 199            | 7.84%                          |         |
| 15308          | 36.5 35.1 33.9 21.6 22.9                             |                      | Cert. number                   | Cert. URL   | ROF URL   | Odds &   | evens - (dec   | (Icmi  | 39.3         | 12 0.95%             | 19.1         | 15 1.18%             |         |                |                                |         |
| 15307          | 40.4 39.5 38.3 22.5 23.7                             |                      |                                | <u>ر</u> ها | - w       |          |                |        | 40.1         | 12 0.95%             | 20.9         | 15 1.18%             | 0       | 4              | 0.16%                          |         |
| 15306          | 34.6 33.4 32.1 24.9 26.2                             | 27.6                 |                                | Q           | Q         | Readings | Occurrence %   |        | 44.9<br>46.1 | 12 0.95%<br>12 0.95% | 20.2<br>21.4 | 14 1.10%<br>14 1.10% | Total   | 2.538          | 100.00%                        |         |
| 15305          | 35.7 34.4 33.2 26.4 27.6                             | 28.9                 |                                |             |           | -        | 958 3          |        | 45.1         | 12 0.95%             | 21.4         | 14 1.10%             | Total   | 21000          | 10010070                       |         |
| 15304          | 36.9 35.7 34.4 25.1 26.4                             | 27.8                 | COLLEGOCITOOT                  | P           | P         | Even     |                |        | 35.6         | 11 0.87%             | 23.6         | 14 1.10%             |         |                | 2 C                            |         |
| 15303          | 39.8 38.5 37.3 23.6 24.8                             | 25.9                 |                                | 9           | P         | Odd      | 1,580 6        | 62.25% | 36.5         | 11 0.87%             | 23.0         | 14 1.10%             |         |                |                                |         |
| 15302          | 40.1 38.9 37.5 21.0 22.2                             |                      |                                | . 0         | P         | Total    | 2,538 10       | 00.00% | 37.7         | 11 0.87%             | 23.9         | 14 1.10%             |         |                |                                |         |
| 15301          | 36.7 35.4 34.2 22.7 23.9                             |                      |                                |             | -0        |          |                |        | 38.4         | 11 0.87%             | 28.1         | 14 1.10%             |         |                |                                |         |
| 15300          | 37.9 36.6 35.4 21.9 23.2                             |                      |                                |             |           | Decimal  | dist ⊘ ເ 🛛 ) 🤅 | E 62 - | 38.9         | 11 0.87%             | 18.7         | 13 1.02%             |         |                |                                |         |
| 15299          | 38.4 37.2 36.1 24.2 25.6                             |                      | ( <del>100/1 - 100200/20</del> | <b>.</b> ©  | B         | Desimal  | Occurance %    |        | 40.5         | 11 0.87%             | 19.5         | 13 1.02%             |         |                |                                |         |
| 15298<br>15297 | 09.5 08.2 06.9 25.2 26.5                             |                      |                                |             |           | Decimal  |                |        | 45.1         | 11 0.87%             | 20.7         | 13 1.02%             |         |                |                                |         |
|                | 37.8 36.6 35.4 27.1 28.4                             |                      |                                | <b>0</b>    | P         | 1        | 460 18         | .12%   | 45.9         | 11 0.87%             | 21.2         | 13 1.02%             |         |                |                                |         |
| 15296<br>15295 | 46.7 45.4 44.2 23.7 24.6<br>40.5 39.3 38.1 21.7 22.9 |                      |                                |             |           | 9        | 414 16         | 3196   | 47.2         | 11 0.87%             | 22.1         | 13 1.02%             |         |                |                                |         |
| 15295          | 40.5 39.3 38.1 21.7 22.9<br>39.6 38.4 37.2 22.9 24.2 |                      |                                | 0           | B         |          |                |        | 47.3         | 11 0.87%             | 24.3         | 13 1.02%             |         |                |                                |         |
| 15294          | 47.3 46.2 44.8 25.7 26.9                             |                      |                                |             |           | 6        | 317 12         |        | 47.8         | 11 0.87%             | 24,8         | 13 1.02%             |         |                |                                |         |
| 15293          | 46.4 45.1 43.9 21.9 23.1                             |                      |                                | 9           | P         | 7        | 281 11         | .07%   | 50.1         | 11 0.87%             | 19.7         | 12 0.95%             |         |                |                                |         |
| 15292          | 44.8 43.6 42.3 22.2 23.4                             |                      | ECH ALECO DE                   | 2           | Q         | 2        | 227 8          | .94%   | 35.7         | 10 0.79%             | 22.8         | 12 0.95%             |         |                |                                |         |
| 15256          | 47.6 46.5 45.4 23.5 24.8                             |                      | Advantation of the             | 9           | Q         | 5        |                | .87%   | 36.6         | 10 0.79%             | 23.8         | 12 0.95%             |         |                |                                |         |
| 15255          | 46.9 45.5 44.3 26.1 27.4                             |                      | Deventer                       | 0           | 3         | -        |                | .8/%   | 36.7         | 10 0.79%             | 24.2         | 12 0.95%             |         |                |                                |         |
| 15254          | 45.6 44.1 42.7 22.5 23.4                             |                      | LIGHT DL                       |             |           | Total    | 2,538 100      |        | 37.3         | 10 0.79%             | 24.6         | 12 0.95%             |         |                |                                |         |
|                |  |                      | <u></u>                        | @3          | (P)       |          | 1,000 100      |        | 38.2         | 10 0.79%             | 17.9         | 11 0.87%             |         |                |                                |         |

# **PowerBI Treatment Providers**

Patterns and indicators – repeating numbers

|               |      | Readings &       | Pat  | tterns    |                |             |               | Va         | lidation |          |                   |        | Odd       | ls & even | 5  |         |       |        |
|---------------|------|------------------|------|-----------|----------------|-------------|---------------|------------|----------|----------|-------------------|--------|-----------|-----------|----|---------|-------|--------|
| Submission da | ate  |                  |      | AEI       |                |             | Certifica     | ate number |          | Odds &   | evens             | Occur  | rrence (s | tart)     |    | Occurre | \$:0: | ≂)ß ·  |
| 01/09/2023    | 团    | 08/04/2024 🖾     |      | Treatm    | ent provider 3 | $\sim$      | All           |            | $\sim$   | Readings | Occurrence %      | Readir | ng Count  | %         |    | Reading | Count | %      |
|               |      |                  |      |           | Ø.0.₹.80.•     |             |               |            |          | Even     | 10,752 50.01%     | 25.0   | 3,351     | 81:17%    |    | 13.0    | 3,894 | 38.22% |
|               |      |                  |      |           |                |             |               |            |          | Odd      | 10,747 49.99%     | 26.0   | 2,245     | 20.89%    |    | 14.0    | 2,908 | 27 05% |
| Treatment ID  | 11   | 12 13 14 15 16 1 | F1   | F2 F3     | 3 F4 F5 F6     | Entr        | ies by mo     | onth       |          |          |                   | 24.0   | 2,068     | 19.24%    |    | 12.0    | 2,156 |        |
| 3138          | 27.0 | 28.0 28.0        | 13 ( | 13.0 15   | 5.0            | - Cat       | ies 🐵 Treatme |            |          | Total    | 21,499 100.00%    | 27.0   | 971       | 9.03%     |    | 15.0    | 1,235 |        |
| 3137          |      |                  |      | 14.0 13   |                | Enu         | ies 🖝 ireatme | ints       |          | Odda 8   | evens (start)     | 23.0   | 762       | 7.09%     |    | 16.0    |       | 2.03%  |
| 3136          |      |                  |      | 14.0 16   |                | 300         |               |            |          |          |                   | 22.0   | 716       | 6.66%     |    | 17.0    |       | 1.34%  |
| 3135          |      |                  |      | 0 13.0 14 |                |             |               | A          | 1.1      | Readings | Occurance %       | 28.0   | 260       | 2.42%     | 11 | 18.0    |       | 0.66%  |
| 3134          |      |                  |      | 13.0 12   |                |             |               | A          |          |          |                   | 21.0   | 212       | 1.97%     | ы. | 19.0    |       | 0.21%  |
| 3133          |      |                  |      | 15.0 14   |                | 200         |               |            | A        | Even     | 5,343 49.71%      | 29.0   | 47        | 0.44%     | 11 | 32.0    |       | 0.10%  |
| 3132          |      |                  |      | 14.0 14   |                | 200         |               |            | A        | Odd      | 5,406 50.29%      | 13.0   | 10        | 0.09%     | 11 | 48.0    | 9     | 0.08%  |
| 3131          |      |                  |      | 15.0 15   |                |             | A             |            | 1        | Total    | 10,749 100.00%    | 15.0   | 7         | 0.07%     | 11 | 33.0    |       | 0.07%  |
| 3130          |      |                  |      | ) 13.0 13 |                |             |               | WU L.      | 11       | Iotal    | 10,745 100.00%    | 14.0   | 5         | 0.05%     | 11 | 50.0    |       | 0.07%  |
| 3129          |      |                  |      | 15.0 14   |                | 100         | INMI          | N VII      |          | & shb0   | evens (end)       | 75.0   | 5         | 0.05%     | 11 | 51.0    |       | 0.05%  |
| 3128          |      |                  | 14.0 |           |                |             |               |            |          |          |                   | 77.0   | 5         | 0.05%     | 11 | 20.0    |       | 0.05%  |
| 3127          |      |                  |      | 13.0 12   |                |             | AL V          |            |          | Readings | Occurance %       | 79.0   | 5         | 0.05%     | ы. | 47.0    |       | 0.05%  |
| 3126          |      |                  |      | 14.0 13   |                | 0 -         |               | 1 1        | N N      |          | -                 | 104.0  | 4         | 0.04%     |    | 52.0    |       | 0.05%  |
| 3125          |      |                  |      | 13.0 13   |                | 0           | Oct 2023      | Jan 2024   | Apr 2024 | Even     | 5,409 50.32%      | 105.0  | 4         | 0.04%     | ы. | 1.0     |       | 0.04%  |
| 3124          |      |                  |      | 13.0 12   |                |             | 0002020       | 2011 2024  | HPI EVEN | Odd      | 5,341 49.68%      | 76.0   | 4         | 0.04%     |    | 30.0    |       | 0.04%  |
| 3123          |      |                  |      | 14.0 14   |                | Cont        | ificate de    | taile      |          | Total    | 10,750 100.00%    | 96.0   | 4         | 0.04%     |    | 53.0    |       | 0.04%  |
| 3122          |      |                  |      | 16.0 15   |                | Cert        | incate de     | laits      |          | Iotal    | 10,750 100.00%    | 102.0  | 3         | 0.03%     | 11 | 24.0    |       | 0.03%  |
| 3121          |      |                  |      | 15.0 15   |                | Cert.       | number        | Cert. URL  | ROF URL  | Odde 8   | evens - (decimal) | 103.0  | 3         | 0.03%     |    | 25.0    |       | 0.03%  |
| 3120          |      |                  |      | 15.0 15   |                | - 1011      | 000070/0      | 10         | •<br>10  |          |                   | 106.0  | 3         | 0.03%     |    | 31.0    |       | 0.03%  |
| 3119          |      |                  |      | 18.0 17   |                |             |               |            |          | Readings | Occurrence %      | 12.0   | 3         | 0.03%     | ы. | 34.0    |       | 0.03%  |
| 3118          |      |                  |      | 12.0 12   |                | -           | 00007016      | 0          | Q        | 1000     |                   | 65.0   | 3         | 0.03%     |    | 45.0    |       | 0.03%  |
| 3117          |      |                  |      | 13.0 12   |                | -           |               | 9          | P        | Even     | 21,499 100.00%    | 67.0   | 3         | 0.03%     |    | 49.0    |       | 0.03%  |
| 3116          |      |                  |      | 13.0 12   |                | 2022        |               | ୍ଦ         | 9        | Odd      | 0 0.00%           | 74.0   | 3         | 0.03%     |    | 46.0    |       | 0.02%  |
| 3115          |      |                  |      | 14.0 13   |                |             |               |            | 1.11     | Total    | 21,499 100.00%    | 78.0   | 3         | 0.03%     | 11 | 54.0    |       | 0.02%  |
| 3114          |      |                  |      | 13.0 13   |                |             |               | 9          | P        | Total    | LA,-55 100.0070   | 80.0   | 3         | 0.03%     | 11 | 112.0   |       | 0.01%  |
| 3113          |      |                  |      | 12.0 12   |                | -           |               |            |          | Decimal  | distribution      | 100.0  | 2         | 0.02%     | 11 | 120.0   |       | 0.01%  |
| 3112          |      |                  | 13.0 |           |                | and a       |               | 0 e        | P        | 1000000  |                   | 120.0  | 2         | 0.02%     | 11 | 140.0   |       | 0.01%  |
| 3111          |      |                  | 14.0 | 14.0 13   |                |             |               |            |          | Decimal  | Occurance %       | 225.0  | 2         | 0.02%     |    | 141.0   |       | 0.01%  |
| 3110          |      |                  |      | 13.0 12   |                | _           |               |            |          |          | -                 | 5.0    | 2         | 0.02%     |    | 143.0   |       | 0.01%  |
| 3109          |      |                  |      | 13.0 12   |                | -           |               | <u>م</u>   | B        | 0        | 21,498 100.00%    | 68.0   | 2         | 0.02%     |    | 3.0     |       | 0.01%  |
| 3108          |      |                  |      | 13.0 13   |                | a state     |               |            |          | 26       | 1 0.00%           | 69.0   | 2         | 0.02%     |    | 313.0   |       | 0.01%  |
| 3107          |      |                  |      | 15.0 14   |                | -           | 1.000.000     | ୍ଷ         | B        | Total    | 21,499 100.00%    | 72.0   | 2         | 0.02%     |    | 35.0    |       | 0.01%  |
| 3106          |      |                  |      | 12.0 12   |                |             |               | ®          | P        | Iotal    | 21,495 100.00%    | 73.0   | 2         | 0.02%     |    | 4.0     |       | 0.01%  |
| 3105          |      |                  |      | 14.0 14   |                |             |               |            |          |          |                   | 97.0   | 2         | 0.02%     |    | 44.0    |       | 0.01%  |
| 3104          |      |                  |      | 14.0 15   |                | i i i i i i |               | B          | C        |          |                   | 0.26   | 1         | 0.01%     |    | 55.0    | 1     | 0.01%  |
| 3103          |      |                  |      | 13.0 13   |                | -           |               | e          | S        |          |                   | 101.0  | 1         | 0.01%     |    |         |       |        |
| 3102          |      |                  |      | 13.0 14   |                |             |               | Ø          | B        |          |                   | 107.0  | 1         | 0.01%     |    |         |       |        |
| 3101          |      |                  |      | 13.0 12   |                |             | _             | 0          | 0        |          |                   | 121.0  | 1         | 0.01%     |    |         |       |        |

| BROWN MARMORA<br>SULFURYL FLOURIDE FUN<br>Certificate number:  | IGATION CERTIFICATE   |   | *                         | Assirtation Governmoon<br>Department of Agricultus<br>and Water Resources | :                         | BMSB           | Sulfuryl                        | Fluoride         | - Record                | of Fur    | igation - N      | <u>letric</u> |
|--|---|---|---------------------------|---|---------------------------|----------------|---------------------------------|------------------|-------------------------|-----------|------------------|---------------|
| CONSIGNMENT  | DETAILS   |   | Job Det                   | tails   |                           |                |                                 |                  |                         |           |                  |               |
| Goods description:   | Quantity: 49  |   | Job Ident<br>227.         |   | -                         | Customer N     | lame                            | Start 2024-      | Date of Fumiga<br>04-22 | ation     | Location         | 2             |
| ne and address of exporter: Na   | Country of destination:<br>Australia<br>me and address of importer:   |   |                           | on of Consignr<br>vice parts - 49 pc                                      |                           |                | -                               |                  |                         |           | (a)              |               |
|  |   |   | Target of                 | Fumigation<br>vice parts  |                           |                |                                 | Conte            | ainer Numbers           | / Consign | ment Identificat | on            |
|  |   |   | Fumiga                    | tion Details  |                           |                |                                 | -                |                         |           | Contract of      | 1000          |
| TREATMENT  | Time fumigation completed: 07:00  |   | furrigant to              | ipping packaging<br>access all surfact<br>if shipping packa               | ces of the p              | poods?         |                                 |                  | ved the                 |           | □Yes □I          | NO NA         |
| Date ventilation commenced: 2024 / 04 / 23   | Time ventilation commenced: 07:05   |   | Was all con<br>/select MA | nmercial packagi<br>if commercial pai                                     | ing applied<br>okaoing wa | as part of the | e goods manu<br>t at the time o | facturing proces | 557                     |           | AYes DI          | No NA         |
| Town/city fumigation   | Exposure period (hours): 14   |   | Sheete                    |   |                           | Lengt          |                                 |                  | _ Un-she                | ieted     | Volume           | : (m²)        |
| Dose rate applied ( Xg/m <sup>3</sup> or Oz/1000ft <sup>3</sup> ): 24  | Minimum temperature ( X C or C *F): +10   |   | -                         |   |                           |                |                                 |                  | Contair                 | ner       | 400              |               |
| Lowest end-point reading (X g/m3 or Oz/1000ts): 12   | Final TLV reading (ppm): 1,0 (TGRS 512)   |   | Sheete                    | ed Container/s  | 10                        | Width          |                                 |                  | - Chamb                 | er        | 76,4             |               |
| low was the fumigation conducted? X Un-sheeted   | with more at an   |   | Size:                     | 40 any:_  | FIC                       | Height         | =                               |                  | -                       |           |                  |               |
| Chamber  | Sheeted stack   |   | Specified                 | Dose Rate   | E                         | xposure Pe     | ariod                           | Forec            | ast Minimum T           |           | Fumigation Mil   | iimum Temp    |
| re the goods treated in the container they will be shipped   | in X Yes or No (No, includes break-bulk goods)  |   |                           | 24 .  | 10.0                      | 1              |                                 |                  | 10                      | °C        | (11 melateru)    |               |
| ontainer number:   | or not applicable   |   | Calculate                 | d Dose  |                           | ctual Dose     |                                 |                  | Dosing Finishe          | ed        |                  |               |
| /as a container seal applied by the treatment provider with<br>ompletion? If yes - Seal number:                      | n 120 hours of the treatment X Yes or No  |   | 1                         | 8.33  | - 0                       | 2.0            | 00.                             | 0 1              | 6:51                    |           |                  |               |
| Vas all shipping packaging/wrapping removed or configured  |   |   | Concen                    | tration Read  | lings                     |                |                                 |                  |                         |           | E STA            |               |
| fumigant to access all surfaces of the goods?<br>ect NA if shipping packaging was not present at the time of         | Yes or No or X NA   |   | T                         | Time of Do  | ose                       | М              | onitor Line                     | Readings         | by Location             |           | Equilibrium      | Top-up        |
|  | A second s |   | Phase F                   | Reading rate  | g/m² 1:                   | 1              |                                 | 3:               | 4: 5:                   |           | Calculation      | Dose          |
| all commercial packaging applied as part of the good's r<br>ct NA if commercial packaging was not present at the tin |   |   | Start                     | 17100 0   | 24                        | 25             | 24                              | 29               |                         |           | 6,2 %            | NA            |
| DECLARAT   |   |   | Gan                       |   |                           |                |                                 |                  |                         |           | %                | NA            |
| are that all information on this certificate is true, complete   | e and accurate, and that the  |   | During                    | 1.22  | IA                        | -              |                                 |                  |                         |           | NA               |               |
| nent has been conducted in accordance with the Sulfury<br>odology  | I Fluoride Fumigation X Yes   |   |                           | N   | A.C.S.                    |                |                                 |                  |                         |           | NA               |               |
| ADDITIONAL DECL  | 1017/01/0   |   | End                       | 07100 1   | 2 .                       | 13             | 14                              | 19               |                         | _         | NA               | 22.58         |
| ADDITIONAL DECL  |   |   | Commen                    | its   |                           |                |                                 | -                |                         |           | NA               | NA            |
|  |   |   | Ventilati                 | ion   |                           |                |                                 | -                |                         |           | -                |               |
|  |   |   | Time com                  | 10000   | De                        | ate comme      | inced                           | Final            | TLV reading             | -         | Date & time rea  | ding taken    |
| 00   |   | 2 | . 0.7.1.                  | 0.5   |                           |                | 04.23                           |                  |                         | ppm       | 2024-044         | S OPE         |
|  |   |   | Fumigat                   | tor in Charge   | 3                         |                |                                 |                  | emment Offic            |           |                  |               |
|  |   |   | Name                      |   | Si                        | gnature        | 100                             | Name             | 1                       | 1         | Signature        |               |

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## **PowerBI Treatment Providers**

Patterns and indicators - repeating numbers

|                |      |          | Readi  | ngs & I | Patterns             |                  | V          | alidation |          |                    |             | Odd      | ls & evens |              |         | $\Diamond$     |         |
|----------------|------|----------|--------|---------|----------------------|------------------|------------|-----------|----------|--------------------|-------------|----------|------------|--------------|---------|----------------|---------|
| Submission d   | ate  |          |        |         | AEI                  | Certific         | ate number |           | Odds & e |                    | Occurr      | rence (s | tart)      | Occurr       | ence (e | end)           |         |
| 01/09/2023     | 8    | 08/04/2  | 2024 🖾 |         | Treatment provider 4 | V All            |            | $\sim$    | Readings | Occurrence %       | Reading     | g Count  | %          | Reading      | Count   | %              |         |
|                |      |          |        |         | \$ 0 ₹ 8             |                  |            |           | Even     | 2,801 52.67%       | 25.0        | 1,223    | 45.985+    | 13.0         | 927     | 34.88%         |         |
|                |      |          |        |         |                      |                  |            |           | Odd      | 2,517 47.33%       | 24.0        | 781      | 29.38%     | 12.0         | 711     | .25.75%        |         |
| Freatment ID   | 11   | 12 13    | 14 15  | F1      | F2 F3                | Entries by m     | onth       |           |          |                    | 26.0        |          | 19.40%     | 14.0         | 645     | 24.27%         |         |
| 1757           | 24.0 | 24.0 25. | 0      | 13.0    | 12.0 12.0            | Entries  Treatm  | ontr       |           | Total    | 5,318 100.00%      | 27.0        |          | 4.85%      | 9.0          |         | 4.70%          |         |
| 1756           |      | 26.0 27. |        |         | 12.0 12.0            | Citules @ ireaui | ients      |           | Odde &   | evens (start)      | 28.0        |          | 0.19%      | 15.0         |         | 3.50%          |         |
| L1755          |      | 25.0 26. |        |         | 13.0 12.0            |                  |            |           |          |                    | 13.0        |          | 0.08%      | 10.0         |         | 2.71%          |         |
| 11696          | 25.0 | 25.0 26. | 0      | 14.0    | 14.0 15.0            | 60               |            |           | Readings | Occurance %        | 9.0<br>14.0 |          | 0.08%      | 8.0<br>11.0  |         | 2.14%<br>0.45% |         |
| 1695           | 25.0 | 25.0 25. | 0      | 13.0    | 12.0 12.0            |                  |            |           | -        |                    |             |          |            |              |         | 0.30%          |         |
| 11694          | 24.0 | 24.0 26. | 0      | 13.0    | 13.0 14.0            | 1.1              | A M AA     |           | Even     | 1,304 49.02%       | 8.0         | 1        | 0.04%      | 16.0<br>25.0 |         | 0.30%          |         |
| 11693          | 24.0 | 24.0 25. | 0      | 13.0    | 14.0 15.0            | 40               | 11111      |           | Odd      | 1,356 50.98%       |             |          |            | 25.0         |         | 0.11%          |         |
| 1692           | 25.0 | 25.0 27. | 0      |         | 12.0 12.0            | 40               |            | A         | Total    | 2,660 100.00%      |             |          |            | 17.0         |         | 0.08%          |         |
| 11691          | 25.0 | 25.0 27. | 0      | 14.0    | 14.0 15.0            | 111              |            | 1 01      |          |                    |             |          |            | 17.0         |         | 0.04%          |         |
| 1690           | 25.0 | 25.0 25. | 0      | 13.0    | 14.0 14.0            | 20               | 1 1 1      | 1 114     | Odds &   | evens (end)        |             |          |            | 26.0         |         | 0.04%          |         |
| 11689          | 25.0 | 24.0 26. | 0      | 13.0    | 13.0 13.0            |                  |            | MA        |          |                    |             |          |            | 20.0         | 1       | 0.0476         |         |
| 1688           | 25.0 | 24.0 24. | 0      | 13.0    | 12.0 14.0            | / V              |            | VII       | Readings | Occurance %        |             |          |            |              |         |                |         |
| 11687          | 25.0 | 25.0 25. | 0      | 14.0    | 14.0 12.0            | 0                |            |           | Trees    | 1,497 56.32%       |             |          |            |              |         |                |         |
| L1686          | 24.0 | 24.0 25. | .0     | 12.0    | 12.0 14.0            | Oct 2023         | Jan 2024   | Apr 2024  | Even     |                    |             |          |            |              |         |                |         |
| 1685           | 26.0 | 26.0 24. | 0      | 13.0    | 13.0 12.0            |                  |            |           | Odd      | 1,161 43.68%       |             |          |            |              |         |                |         |
| 11684          | 25.0 | 25.0 26. | 0      |         | 14.0 14.0            | Certificate de   | tails      |           | Total    | 2.658 100.00%      |             |          |            |              |         |                |         |
| 11683          | 26.0 | 24.0 26. | 0      | 13.0    | 13.0 14.0            |                  |            |           |          | The second second  |             |          |            |              |         |                |         |
| 11682          |      | 24.0 24. |        |         | 13.0 12.0            | Cert. number     | Cert. URL  | ROF URL   | Odds & e | evens - (decimal)  |             |          |            |              |         |                |         |
| 11681          | 24.0 | 24.0 26. | .0     | 12.0    | 13.0 12.0            |                  | S          | 0         |          |                    |             |          |            |              |         |                |         |
| 11680          |      | 25.0 25. |        |         | 12.0 15.0            |                  | P          | P         | Readings | Occurrence %       |             |          |            |              |         |                |         |
| 1679           |      | 24.0 24. |        |         | 14.0 12.0            | IUIILULUMI       |            |           | Even     | 5,318 100.00%      |             |          |            |              |         |                |         |
| 11678          | 25.0 | 25.0 27. | 0      | 12.0    | 14.0 14.0            |                  | P          | B         |          |                    |             |          |            |              |         |                |         |
| 11677          |      | 25.0 26. |        |         | 13.0 14.0            | 0000000000000    | B          | B         | Odd      | 0 0.00%            |             |          |            |              |         |                |         |
| 11676          |      | 26.0 25. |        |         | 14.0 13.0            |                  | 6          | Ø         | Total    | 5,318 100.00%      |             |          |            |              |         |                |         |
| 11675          |      | 25.0 25. |        |         | 12.0 12.0            |                  |            |           |          |                    |             |          |            |              |         |                |         |
| 11674          |      | 25.0 25. |        |         | 13.0 12.0            |                  |            |           | Decimal  | dist ⊘ ( @ ) ₹ @ ~ |             |          |            |              |         |                |         |
| 11673          |      | 25.0 24. |        |         | 13.0 12.0            |                  | <b>e</b>   | P         |          |                    |             |          |            |              |         |                |         |
| 11672          |      | 26.0 27. |        |         | 13.0 13.0            |                  |            |           | Decimal  | Occurance %        |             |          |            |              |         |                | And And |
| 11671          |      | 25.0 26. |        |         | 13.0 14.0            |                  | •          | B         | 0        | 5,318 100.00%      |             |          |            |              |         |                |         |
| 11670          |      | 27.0 25. |        |         | 13.0 14.0            |                  |            |           |          |                    |             |          |            |              |         |                |         |
| 11669          |      | 26.0 26. |        |         | 12.0 12.0            |                  | _          | -         | Total    | 5,318 100.00%      |             |          |            |              |         |                |         |
| 11668          |      | 26.0 27. |        |         | 14.0 14.0            |                  | 6          | Q         |          |                    |             |          |            |              |         |                |         |
| 11551          |      | 25.0 26. |        |         | 14.0 14.0            |                  | ®          | P         |          |                    |             |          |            |              |         |                |         |
| 11550          |      | 26.0 25. |        |         | 13.0 14.0            |                  | P          | B         |          |                    |             |          |            |              |         |                |         |
| 11549          |      | 25.0 25. |        |         | 12.0 13.0            |                  |            |           |          |                    |             |          |            |              |         |                |         |
| 11548          |      | 25.0 26. |        |         | 13.0 14.0            |                  | B          | ®         |          |                    |             |          |            |              |         |                |         |
| 11547<br>11546 |      | 25.0 25. |        |         | 13.0 14.0            |                  | B          | B         |          |                    |             |          |            |              |         |                |         |
|                |      | 25.0 26. | 0      | 13.0    | 14.0 13.0            | ECI 14612 DE     | P          | (P)       |          |                    |             |          |            |              |         |                |         |

### **Certificate Portal SeaPest** Certificate No Consignment Li... Treatment Con AEI ID Consign Flags 53,555 195 10.029 18,319 01/09/2019.12:55 6.989 19.30% 1.671 12.84 07/09/2019, 12:50 TCKU6937057 14/09/2019. 12:50 SAMPCONT 25/09/2019. 13:00 SAMOCSAITCI Container Number MPH M02650 02/10/2019, 14:10 TGHU8374961 SAMPCS/HTC/... Container Number 16/11/2019. 13:15 SUDURSSMAR SAMPCS/HTC/... Container Number 10/09/2020, 12:56 SAMPCSAITC Ocean Bill of Lading B/L NO # DKG I Container Stat = Reportion 27/10/2020, 12:16 Ocean Bill of Lading 11110008540 05/12/2020, 12:12 INVOICE NO .: IE-E AE4001SB SAMPCS/HTC/... Other Configura 05/12/2020. 12:11 001110

- External facing
- Multi Factor Authentication
- Secure comms channel with TPs

- Level 1 Data validation
- Data only from

.

trusted/approved sources No invalid data



Level 2

- Transaction automated . compliance assessment
- Identify risk consignments to manage at border
- promote voluntary compliance

### **Power BI T3 Model**



### Internal facing

Business rules to assess transactional compliance

### Data analytics

Systemic non-compliance detection



- Provide feedback to TPs to



- Systemic analysis of TPs Identify deliberate noncompliance and fraudulent behaviour
- Level 1-3 and rank the Treatment Provider by risk rating Helps work out where we
  - need to direct resources

Level 4

Look at the whole system,

take information from

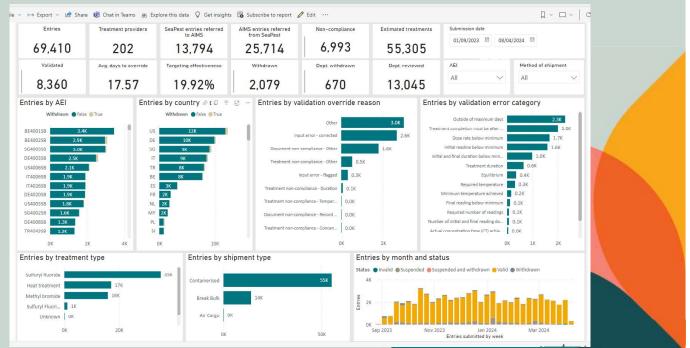


non-

compliance

# **PowerBI** System

Dashboard



# **PowerBI** System

**Risk rating** 

| =       | Submission date   |  | Method of sh                 | nipment | Entry ID  |                   | Treatment              | Cou           | ntry        | R  | eferred   | AEI |              |
|---------|---|--|------------------------------|---------|-----------|-------------------|------------------------|---------------|-------------|--|---|-----|--------------|
|         | 01/09/2023  | 08/04/2024   | All                          | $\sim$  | All       | $\sim$            | Multiple selections    | $\sim$ All    |             | $\sim$ A   | $\sim$  | All | $\sim$       |
|         |   |  |                              |         |           |                   |                        |               |             |  |   |     |              |
| AEI     | AEI name  |  |                              |         | Status    | Total risk rating | Prev. year risk rating | Last audit da | e Entries   | % Withdrawn  | Above average<br>volumes and<br>withdrawal rate |     | Dept. withdr |
| -       |   |  |                              |         | Approved  | 7309              | 340                    | Not audite    | d 1,916     | 0.78%  | 0   | 15  |              |
|         | antes 🏴 dentes  |  |                              |         | Approved  | 5168              | 3 2864                 | Not audite    | d 425       | 0.47%  | 0   | 2   |              |
|         |   | <u>, at 1 an</u>   | <del>, i, (i i i i i),</del> |         | Approved  | 3797              | 7 -36                  | Not audite    | d 1,087     | 2.94%  | 0   | 32  |              |
| 10.101  |   |  |                              |         | Approved  | 3614              | 1 5533                 | Not audite    | d 943       | 0.21%  | 0   | 2   |              |
| -9-17   |   | ni = 1   |                              |         | Approved  | 3434              | 1 NaN                  | Not audite    | d 1,111     | 1.44%  | 0   | 16  |              |
|         | 1995 🏴 Carriele   | •  |                              |         | Approved  | 2768              | NaN                    | Not audite    | d 10        | 0.00%  | 0   | 0   |              |
| ****    | nee 🕛 🛲   |  |                              |         | Approved  | 2504              | 1 250                  | 29/01/202     | 4 89        | 61.80%   | 0   | 55  |              |
|         |   |  |                              |         | Suspended | 2502              | 2 528                  | Not audite    | d 16        | 100.00%  | 0   | 16  |              |
|         |   | <u>, 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 </u>  | ÷                            |         | Approved  | 2316              | 5 772                  | Not audite    | ed 29       | 20.69%   | 0   | 6   |              |
|         |   |  |                              |         | Suspended | 2206              | 5 861                  | Not audite    | d 316       | 39.87%   | 0   | 126 |              |
| -       |   |  |                              |         | Approved  | 2045              | 5 298                  | Not audite    | d 310       | 0.32%  | 0   | 1   |              |
|         | inte 🏴 einemi   | inen terrenine free  |                              |         | Approved  | 2000              | ) NaN                  | Not audite    | d 15        | 0.00%  | 0   | 0   |              |
|         | 1999: 🏴 elinne  | did Tanigatian in pa   | reend Bryens Barri           |         | Approved  | 1912              | 2 2001                 | Not audite    | d 419       | 1.19%  | 0   | 5   |              |
|         |   |  |                              |         | Approved  | 1881              | L 58                   | Not audite    | ed 80       | LUAS COTOTES                                       | 0   | 0   |              |
|         | naa 🖓 Kaaniy  |  |                              |         | Suspended | 1768              | 3 500                  | Not audite    | ed 41       | 97.56%   | 0   | 40  |              |
| -       |   | Contraction of the Contraction o |                              |         | Approved  | 1753              | 3 48                   | Not audite    | ed 79       | 39.24%   | 0   | 31  |              |
| *****   | nanna 🧎 ainmir  |  |                              |         | Approved  | 1691              | L 373                  | Not audite    | ed 70       |  | 0   | 0   |              |
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|         | and 💾 diagan  | iin terre tegligiriilen  | ation to                     |         | Approved  | 1637              |                        | Not audite    | 10000       |  | 0   | 17  |              |
|         |   |  |                              |         | Approved  | 1585              | 5 1500                 | Not audite    |             |  | 0   | 0   |              |
| -       |   | •  |                              |         | Approved  | 1584              | 1 500                  | Not audite    |             |  | 0   |     |              |
| -       | ana 💾 Caminis   | -  |                              |         | Approved  | 1559              |                        |               |             | CONTRACTOR AND | 0   |     |              |
| Metter. | i de la companya de l | Computations   |                              |         | Approved  | 1527              | 7 0                    | Not audite    | d 62        | 1.61%  | 0   | 1   |              |

### **Certificate Portal**

| Assessment of Astronomy DAFF Forms Porta                              |                                |
|---|--------------------------------|
| ana   Submit Transmust Datalis   Summary of Transmusts   Summary of S | ubersinaisena Katany Grakaer - |
| are > Researchy > Testments > COP/cons > Researchy Testment indported |                                |
| iosecurity Treatment Lodgement  |                                |
| MBI CPORDETS  |                                |
| Treatment Certificate Number 10                                       | Treatment Let Identifier       |
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|   | Enode Description *            |
|   |                                |
| lasion for Treatment *  |                                |
| Select or search options  |                                |
| larget of Treatment *   |                                |
| Select or search options  |                                |

- External facing •
- Multi Factor Authentication .
- Secure comms channel with TPs



- Level 1
- Data validation
- Data only from .
- trusted/approved sources No invalid data

Level 2

- Transaction automated compliance assessment Identify risk consignments
  - to manage at border Provide feedback to TPs to
  - promote voluntary . compliance

| - Ale -  | Flags          | Treatment Completed | AEI ID   | Certificate No | Consignment Li       | Consignment No     |
|--|----------------|---------------------|----------|----------------|----------------------|--------------------|
| Australian Geverannen<br>Deperment of Agriculture,<br>Etheries and Farrowy | 1 <b>.W</b> .) | 01/09/2019, 12:55   | AE400158 | SAMPCS/HTC/    | Container Number     | MR5U3725208        |
| Seasonal Pest  | w              | 07/09/2019, 12:50   | AE400158 | SAMPCS//HTC    | Container Number     | TCKU6937057        |
|  |                | 14/09/2019, 12:50   | AE4001S8 | SAMPCS/HTC/    | Container Number     | MRKU4866384        |
| Home   |                | 25/09/2019, 13:00   | AE4001SB | SAMPCS/HTC/    | Container Number     | MRKU4836550        |
| Treatment Certificates   |                | 02/10/2019, 14:10   | AE400158 | SAMPCS/HTC/    | Container Number     | TGHU8374961        |
| Container Assessment   |                | 16/11/2019 13:15    | AF4001SR | SAMPCS/HTC/    | Container Number     | SUDURSSIM66        |
| MC Declarations  |                |                     |          |                |                      |                    |
| Container Status   |                | 10/09/2020, 12:56   | AE400158 | SAMPCS/HTC/    | Ocean Bill of Lading | B/L NO # DKJ2008   |
| Reporting  |                | 27/10/2020. 12:16   | AE4001SB | SAMPCS/HTC/    | Ocean Bill of Lading | 11110008540        |
| ICS Update   |                | 05/12/2020, 12:12   | AE4001SB | SAMPCS/HTC/    | Other                | INVOICE NO.: IE-E. |
| Configurations   |                | 05/12/2020.12:11    | AE4001SB | SAMPCS/HTC/    | Container Number     | OOLU1030563        |

SeaPest

Internal facing •

Business rules to assess transactional • compliance

.

### **Power BI T3 Model**



Data analytics •

• Systemic non-compliance detection





- Look at the whole system, take information from Level 1-3 and rank the Treatment Provider by risk rating
- Helps work out where we need to direct resources





captured



behaviour

Level 3

Systemic analysis of TPs

Identify deliberate non-

compliance and fraudulent

# Future

- Established in 2018 with NZ MPI
- Government-to-industry
- 220+ registered treatment providers
- Mandatory use of the treatment certificate portal



Department of Agriculture, Fisheries and Forestry

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# Thank you

Questions?



### 附件17



# Emerging Trends, vulnerabilities and opportunities

Presented by: Anna Brezzo



Australian Government Department of Agriculture,

### CED International Engagement Strategy

### Our biosecurity system

Australia's biosecurity system protects our economy, environment and people from the impacts of exotic pests, weeds and diseases arriving on our shores.

### International engagement

### Our purpose

To protect Australia from risks to our biosecurity and trade system by strengthening our compliance, intelligence and investigation outcomes through active engagement and collaboration with stakeholders within the international domain.

Our objectives



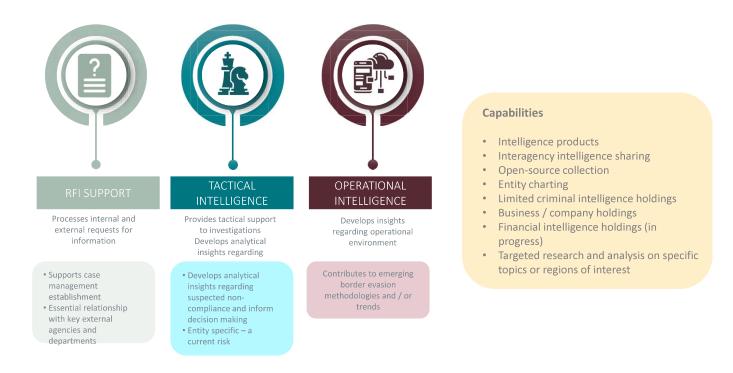
### Exporting to Australia

Australia has strong trade links around the world and to continue those arrangements, we have a strong biosecurity system to protect our agriculture and environment. Pests, weeds and diseases can arrive in Australia with:





### Intelligence Capability





ustralian Government epartment of Agriculture, <u>sheries a</u>nd Forestry

### **Domestic Border Intelligence Collaboration**



Australian Government

Department of Agriculture, Fisheries and Forestry





Australian Government

<sup>©</sup> Department of Home Affairs







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Australian Government Department of Agriculture, Fisheries and Forestry

# Questions

Thank you



附件18

Quarantine treatment alternatives to methyl bromide for perishable goods - preliminary trial experience with ethyl formate in Taiwan

> Dr. Kuo-Shiou, Huang Animal and Plant Health Inspection Agency(APHIA) MAY 13-17, 2024, 2024 QRM, Vietnam



# Outline

- Introduction
- Selection of alternatives
- Character of ethyl formate
- Preliminary trial
- •Ethyl formate issue



# Why need alternatives to MB?

- •Methyl bromide is an efficient fumigant but must be phased out following the Montreal Protocol
- •MB is a toxic material in particular occupational neurologic effects upon prolonged exposure for fumigation employees



# Which alternatives?

- ISPM 43: Requirements for the use of fumigation as a phytosanitary measure-Appendix 1: other 9 fumigants
- •Other than ISPM43: Treatment standard of US, JP, AU, NZ and TW: CO2, ethylene oxide

### **APPENDIX 1: Chemical pre**

| Fumigant<br>active<br>substance | Formula                                |
|---------------------------------|--|
| Carbonyl<br>sulphide            | COS                                    |
| Ethane dinitrile                | C <sub>2</sub> N <sub>2</sub>          |
| Ethyl formate                   | CH <sub>3</sub> .CH <sub>2</sub> .COOH |
| Hydrogen<br>cyanide             | HCN                                    |
| Methyl<br>bromide               | CH₃Br                                  |
| Methyl iodide                   | CH₃I                                   |
| Methyl<br>isothiocyanate        | C <sub>2</sub> H <sub>3</sub> NS       |
| Phosphine                       | PH <sub>3</sub>                        |
| Sulphur<br>dioxide              | SO <sub>2</sub>                        |
| Sulphuryl<br>fluoride           | $SO_2F_2$                              |





# Characteristics be considered

- •Resource
- •Regulated Toxic Chemical Substance
- Regulatory restrictions
- Safety
- Target and effect
- Processing time
- •Equipment cost
- Commercialized product



# No. 1: Ethyl formate

- •No MRL
- Not on the list of Regulated Toxic Chemical of EPA
- Sustainable, not ozone depleting fumigant
- Safety
- Common targets and well effect
- Short processing time
- Low cost of equipment modification
- Commercialized product



# Introducing chemicals

- Imported from AU
- •16.7% ethyl formate C<sub>3</sub>H<sub>6</sub>O<sub>2</sub> + 83.3% balance CO<sub>2</sub>
- Pesticide registration
  - •US, AU, NZ, KR
  - •No MRL



意意一部動相對物防疫加度

# Preliminary trial-1Cabbage, 120 g/m3, 1h



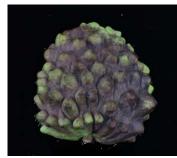
|      | C | abbage, a | phid  |           |
|------|---|-----------|-------|-----------|
|      |   |           | tube  |           |
|      |   | Ν         | Death | Mortality |
|      | 1 | 54        | 54    | 100.00%   |
| 1st  | 2 | 74        | 74    | 100.00%   |
| TSC  | 3 | 38        | 38    | 100.00%   |
|      | 4 | 23        | 23    | 100.00%   |
|      | 1 | 54        | 54    | 100.00%   |
| 2nd  | 2 | 36        | 36    | 100.00%   |
| 2110 | 3 | 48        | 48    | 100.00%   |
|      | 4 | 49        | 49    | 100.00%   |
|      | 1 | 49        | 49    | 100.00%   |
| 3rd  | 2 | 56        | 56    | 100.00%   |
| 310  | 3 | 37        | 37    | 100.00%   |
|      | 4 | 55        | 55    | 100.00%   |
|      | 1 | 22        | 0     | 0.00%     |
| СК   | 2 | 37        | 0     | 0.00%     |
| CN   | 3 | 33        | 0     | 0.00%     |
|      | 4 | 23        | 0     | 0.00%     |



# Preliminary trial-2 •Sugar apple, 420 g/m3, 2h







After 24 h, browning, no commercial value

•Sugar apple, 160 g/m3, 1h



Left: after 48 h Right: after 72 h



夏泉日野地植物防疫惊疫客 ANIMAL AND PLANT HEALTH INSPECTION AGENCY MINISTRY OF AGRICULTURE

# Ethyl formate issue

- Limited to approved commodities and pests
- •Equipment can be expensive
- Pesticide management regulation in Taiwan
- Limited availability through global supply chain



# **Questions?**





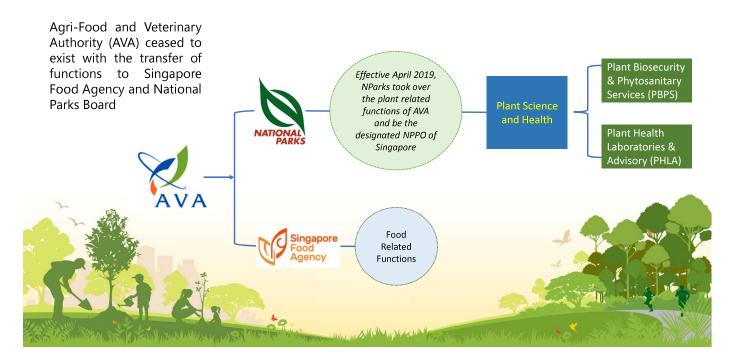
夏泉春日動植物防疫热度者 ANIMAL AND PLANT HEALTH INSPECTION AGENCY MINISTRY OF AGRICULTURE







### National Plant Protection Organization [NPPO] of Singapore



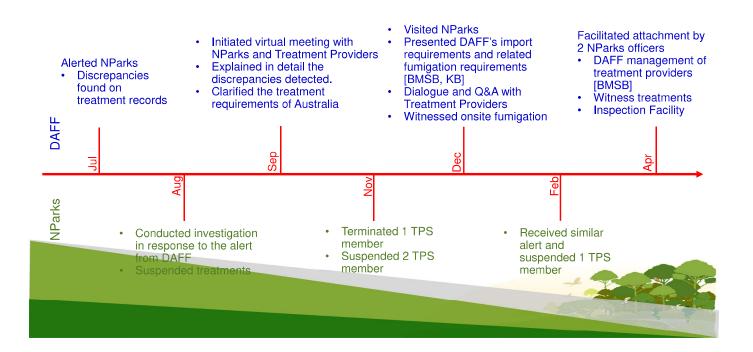
### Functions of NParks



## **Treatment Provider Scheme**

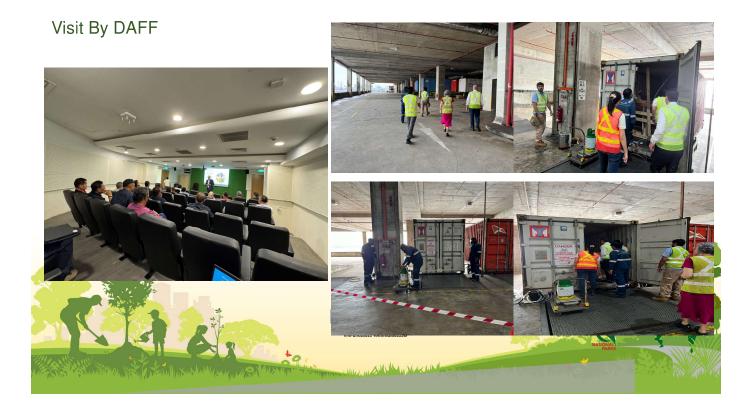


### Collaboration on regulation of treatment providers



### Visit By DAFF







# THANK YOU

## Regulation & Collaboration: the future of biosecurity



附件20

THE FUTURE OF BIOSECURITY IN THE OIRSA REGION Innovation and Development



ORGANISMO INTERNACIONAL REGIONAL DE SANIDAD AGROPECUARIA



OIRSA is an international organism whose mission is to support the efforts of each Member states' Ministries and Secretariats of State of Agriculture and Livestock in the development of Plant and Animal Health plans, Quarantine Services and Food Safety.

## Regional Direction of Quarantine Services

SEPA- is the Agriculture and Livestock Protection Service, currently operating in Guatemala and Honduras. Responsible for carrying out intrusive and non-intrusive inspection in maritime, air and terrestrial means of transportation, as well as international passenger's luggage.





SITC- is the International Quarantine Treatment Services, currently operating in all member states of OIRSA: México, Belize, Central America, and Dominican Repubic. In charge of applying quarantine treatments as needed due to interception of a regulated plage or pre-shipment requirements.



### NEW TECHNOLOGIES AND INNOVATION IN QUARANTINE TREATMENT SERVICES



### Ethanedinitrile

OIRSA is promoting the exploration of other fumigant options to reduce the use of methyl bromide, in accordance with the agreements established in the Montreal Protocol.

Progress has been made in Panama for the registration of EDN in the country to be used as a fumigant in wood.

Last February, with the support of the Plant Health Direction of the Ministry of Agricultural Development, MIDA, a first field application exercise of the EDN was carried out in Panama.



### NEW TECHNOLOGIES AND INNOVATION IN QUARANTINE TREATMENT SERVICES



### Irradiation

OIRSA is committed to offering the Ministries of Agriculture and Livestock of the member states the best tools for the care of their agricultural heritage, as well as promoting the opening of new international trade partners.

It is for this reason that the construction of an irradiation plant for products of animal and plant origin is sought in at least one of the countries in the region.

Actions have been carried out with support from the National Center for Electron Beam Research at Texas A&M University for the implementation of this irradiation plant.



### NEW TECHNOLOGIES AND INNOVATION IN QUARANTINE TREATMENT SERVICES





### INNOVATION IN K9 UNIT FOR NON-INTRUSIVE INSPECTION

The Canine Unit program in OIRSA region began in 2018. At this moment we have over 90 service dogs for agricultural quarantine protection.

In Dominican Republic, an innovative procedure was implemented in 2021 due to the declaration of presence of ASF, making the non-intrusive inspection in origin in departure passengers to prevent potentially risky products to reach free of disease countries.

Additionally, the canine unit has been adding new interest scents in their olfactory memory. Last April, a group of 21 canine units, traveled to Panamá to impregnate in their olfactory memory, the scent of New World Screwworm (NWS) to strengthen inspection of animals in borders and animal mobilization check-points.





### VIRTUAL SIMULATION ROOM WITH IMMERSIVE TECHNOLOGIES

Is a new project for the training of our quarantine officials, specially for scenarios that are difficult to access in real life situations, like aircrafts and ships, and in possible dangerous situations like first training in a fumigation site.



SCFG



Sea Container Focus Group – Update

QRM – May 2024

Australian Government Department of Agriculture, Fisheries and Forestry

Pacific Plant Protection Organization Representative

Rama Karri

## TOPICS

- Purpose
- Global Risk Context
- Sea Container Commerce Complexities
- Options Explored
- Key Areas Of Focus
- Potential Future Solutions
- Next Steps



### PURPOSE

The purpose of this Focus Group is to review all relevant materials and recommendations, develop viable options that will contribute to risk management, and provide CPM with recommendations, including the option of development of an ISPM.

Key functions, included, but are not limited to:

- identify and describe a preferred option or options;
- examine the practicalities needed for such options;
- explore the global commercially driven solution;
- revise CPM recommendation on Sea containers (R-06);
- consider and estimate the resources required by NPPOs and industry parties to establish and operate preferred options.

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### **GLOBAL RISK CONTEXT**

- Sea container cleanliness data from four countries
- International literature review to collect evidence of:
  - Pest spread linked to the sea container pathway
  - Costs associated with management of introduced and established pests

### **Results:**

- Interception rates 20 -56 % (packed); 15 -33% (empty)
- Over 90 % of external risks (undersides); internal risks (floors)
- 9 pests 100 of World's Worst Invasive Species GIS database

# Consensus – enough scientific evidence – global action required!





### INCORPORATING SAFE TRADE INTO SEA CONTAINER COMMERCE – COMPLEXITIES

- Over 250 million sea containers shipped per annum
- Complex and many supply chain interactions, therefore multiple stakeholders involved
- Clear understanding of roles and responsibilities required
- Ports and Terminals capacity and space
- NPPO's capabilities and capacities limitations

# Solutions MUST be practical, effective and cost-effective





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## **OPTIONS EXPLORED**

- Awareness raising, education and outreach
- Industry-led programs
- Best practices at critical points in the supply chain by industry
- Automated detection capabilities
- Improved container designs
- International phytosanitary standard
- Third party authorization with NPPO oversight
- Incorporating phytosanitary measures into multilateral frameworks
- Revisions to CTU Code





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## **KEY AREAS OF FOCUS**

- Revised CPM Recommendation
- Custodial Responsibility concept
- CTU Code updates
- Pest risk assessment
- WCO initiatives changes to Data Models and updates to SAFE Framework
- Improvements to sea container designs

## International Workshop in Australia - collectively discussed and considered the above.





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### **Revised CPM Recommendation on sea containers**

- Interim guidance
- 9 recommendations

### **Custodial responsibility**

- Industry-led solution
- Responsibility of the receiving container custodian to hold the previous custodian in the supply chain accountable

### **Updates to CTU Code**

- A joint publication of IMO, ILO and UNECE non-mandatory global code of practice for handling and packing of containers
- Updates a new chapter on pest contamination; replacing current Annex 6 with a placemat; amendments to chapter 4 regarding roles and responsibilities





### Sea container pathway – global risk assessment

- Analysed data collected from 4 countries
- · Reviewed International literature review on spread of pests
- Assessed costs associated with management of pests

### **WCO** initiatives

- Update to SAFE Framework Two proposals:
- Cooperation between Customs and Agricultural agencies to align compliance and other activities
- Collaboration between border agencies to harmonise border control process, measures and strategies





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### **WCO** initiatives

- WCO Data Models
  - Tracking container cleanliness through customs declarations
- Not possible for empty containers
- Responsible parties for customs declarations and cleanliness declarations identified

### Improvements to container designs

- Floor types that have no gaps, are less prone to developing cracks and crevices, and that are easier to clean
- Light-coloured coatings to container undercarriages to improve the detectability of pest contamination

Australia and China are undertaking container design trials to collect data to inform additional improvements to container designs.





## **EMERGING TECHNOLOGIES - POTENTIAL FUTURE SOLUTIONS**

### • eDNA and eRNA Testing

- Testing environmental samples such as dust or air for pest detection
- If successful, can be used at critical control points
- Can be applied to a variety of pests of concern
- Biosecurity Automated Threat Detection System
  - Cameras mounted on ship-to-shore cranes and applied machine learning to detect and identify the type of biosecurity risks in real-time
  - Several key findings from the trial in Australia
- Hand-held hyperspectral camera
  - machine learning and hyperspectral imaging technology, to detect and categorize potential biosecurity threats.
  - >95 % detection rate, but further development needed

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## NEXT STEPS

- Subject to data availability, assess the effectiveness and efficiency of the CPM Recommendation on Sea containers (R-06)
- Review all new, emerging and evolving technologies and opportunities.
- Continue to analyze potential regulatory and nonregulatory options in order to identify and describe a recommended option or options
- Provide recommendation to CPM on preferred regulatory and non-regulatory options including whether the development of an ISPM is feasible and desirable and draft specifications as necessary
- Develop an action plan and present it to The CPM Bureau for approval in October 2024

### Refer to the ToR for a full list of functions

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# THANK YOU

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