

FMS 2018

Cold chain up-dates and requirements



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THE FMS:

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FALSE CODLING MOTH (FCM) RISK MANAGEMENT SYSTEM
for export of fresh citrus fruit produced in South Africa
(Citrus FMS)
(Revised 03 October 2017)

1. Introduction and Summary

The FCM Management System (FMS) incorporating the FCM Systems Approach (FCM SA) has been developed in the southern African citrus industry since 2013. Many of the pre- and post-harvest treatments included in the FMS have been developed over several decades and most have been successfully and extensively used for many years. In accordance with relevant guidelines provided by the International Plant Protection Convention (<https://www.ippc.int/en/core-activities/standards-setting/ispms/>) and its International Standards for Phytosanitary Measures (ISPMs), the Systems Approach component of the FMS combines multiple measures that cumulatively provide the level of phytosanitary protection required by trading partners of South Africa. The FMS supports a level of phytosanitary compliance appropriate to allow consignment certification of compliant fruit for export.

FMS Up-date

Verified by FMS steering committee on 2 May
Distributed to Industry where after it becomes
official version

Option	Container reefer shipments - Regime code	Load-out temp (°C)	Set point (°C)	Ports	Packhouse delivery sample size and qualification threshold	Specialised reefer vessels - Regime code
A	EC2	≤5	2	D, PE, CT	600 fruit. Live FCM ≤ 2.	
	EW2	≤25	2	D, PE (CT*)		EW2
	EC1	≤4	1	D, PE, CT		
	EW1	≤25	1	D, PE, CT		EW1
B	EC3	<5	3	D, PE, CT	600 fruit. Live FCM ≤ 1.	EC3
	EC35	<5.5	3.5	D, PE, CT	1000 fruit. Live FCM ≤ 1.	EC35
	EC4	<6	4	D	1000 fruit. Live FCM ≤ 1.	EC4
				PE	1900 fruit. Live FCM ≤ 1.	
				CT	2800 fruit. Live FCM ≤ 1.	
C	EC0	≤1.2	0	D, PE, CT	None	
	ECW0	<10	0	D, PE		ECW0
	EC01	≤0	-1	D, PE, CT		
	EW01	<25	-1	D, PE, CT		EW01

FMS Up-dates

Valid from start of May (*date to be confirmed*)

- **Packing requirements**

- CBS Risk Management System (CBS RMS) requirements shall also apply to EU: Fruit under cooling no later than 6d after packhouse inspection
- Only approved packaging (specified carton designs & bulk bins) may be used.
- A one year allowance for W-Cape to use old A15C cartons if shipped after FAC.
- Fruit wrapping is not permitted, only alternate row top layer wrapping, with prior FMS Steering Committee approval

- **Cold rooms/precooling**

- Loading point must measure pulp temperatures and provide records.

FMS Up-dates

Load-out at cold facilities/loading points

- No change of shipping regime code beyond 24h prior to load out of fruit into the container.
- The temperature set point shall be verified at point of loading (**CRITICAL TO FMS**)
- Use **void plugs** in all containers to EU.
- Insert an **air temperature data recorder in each container** to EU
 - This requirement is put in place to gather independent air temperature at the back of container (warmest area)
 - Settings of data logger: logging every 10-30 min
 - **NB. DOWNLOAD ALL RECORDERS on arrival** and made data available for analysis to CRI (FMS steering committee)
- Train from Tzaneen under investigation to incorporate in FMS



Shipping modes

- PE include Coega
- FMS allow shipment in A, B and C options for
 - Specialised refers (conventional)
 - Reefer containers
- Follow same procedures
 - Orchard to packhouse in order to determine export regime code
- For specialised reefers
 - Contact shipping line for available temperatures per deck/cooling space

During voyage

- **Step-up procedure**
 - Carry at set-point for the first 30 days of the voyage.
 - Gate-in constitutes the first day of the voyage.
 - Thereafter raise the temperature to plus 4.0°C
 - Standing instruction on regime code (HP22)
- **Containerised shipping**
 - If fast sailing and shorter duration than normal are encountered, arrange for extra time under cooling in Port of Arrival
- **Container malfunction** or difficulty to maintain the setting according to regime code
 - Inform PPECB ASAP

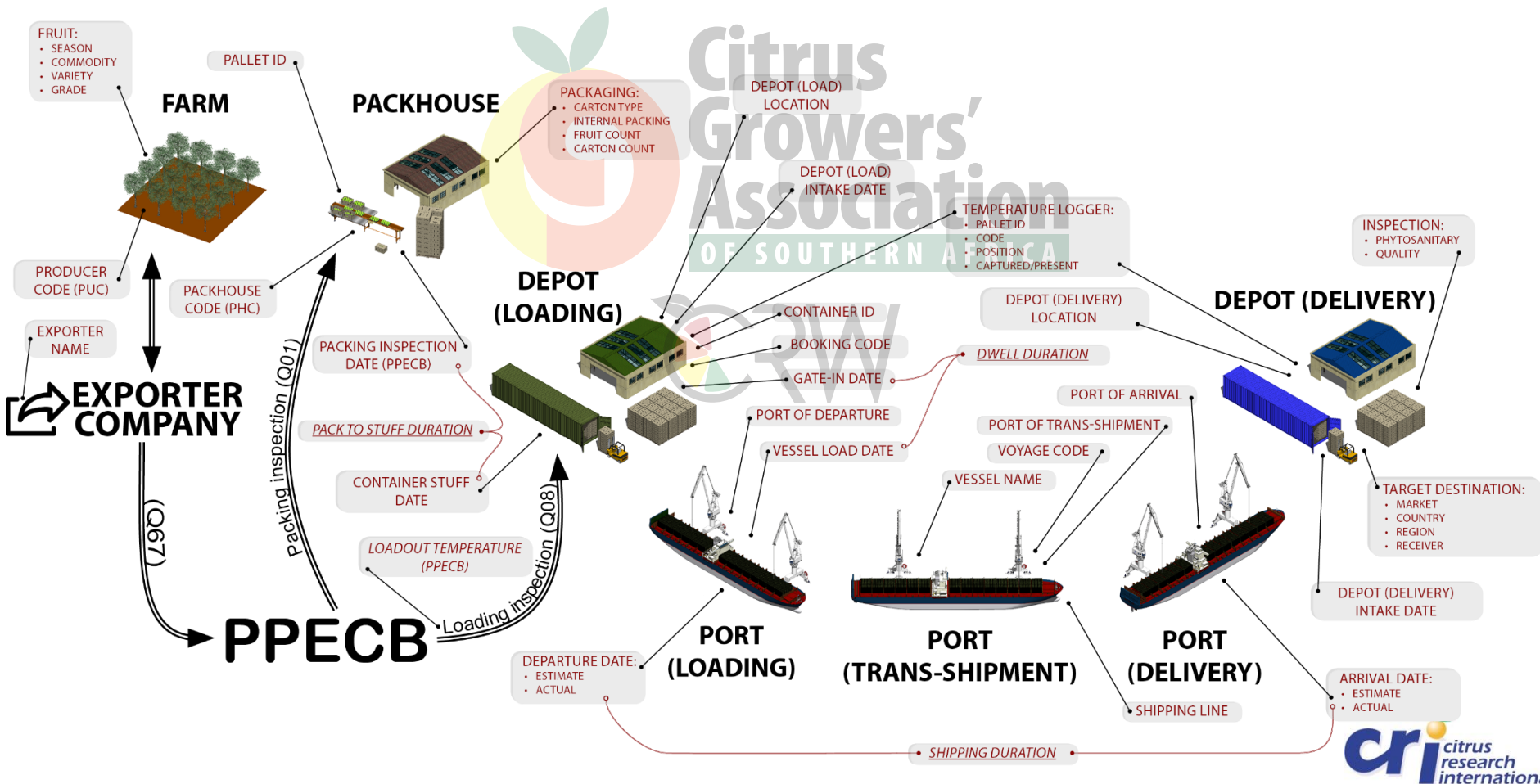
FMS Cold Chain Monitoring System

Building the database

- Objectives
 - To intelligently oversee all citrus exports to the European Union (EU).
 - Enable the FMS steering committee to actively streamline the FMS approach and circumvent potential challenges.
- Development goals 
 - Collect shipping related data from each respective source and compile into a larger database.
 - Output weekly reports:
 1. Overviewing recently completed shipments.
 2. Shipments currently underway (on the water).

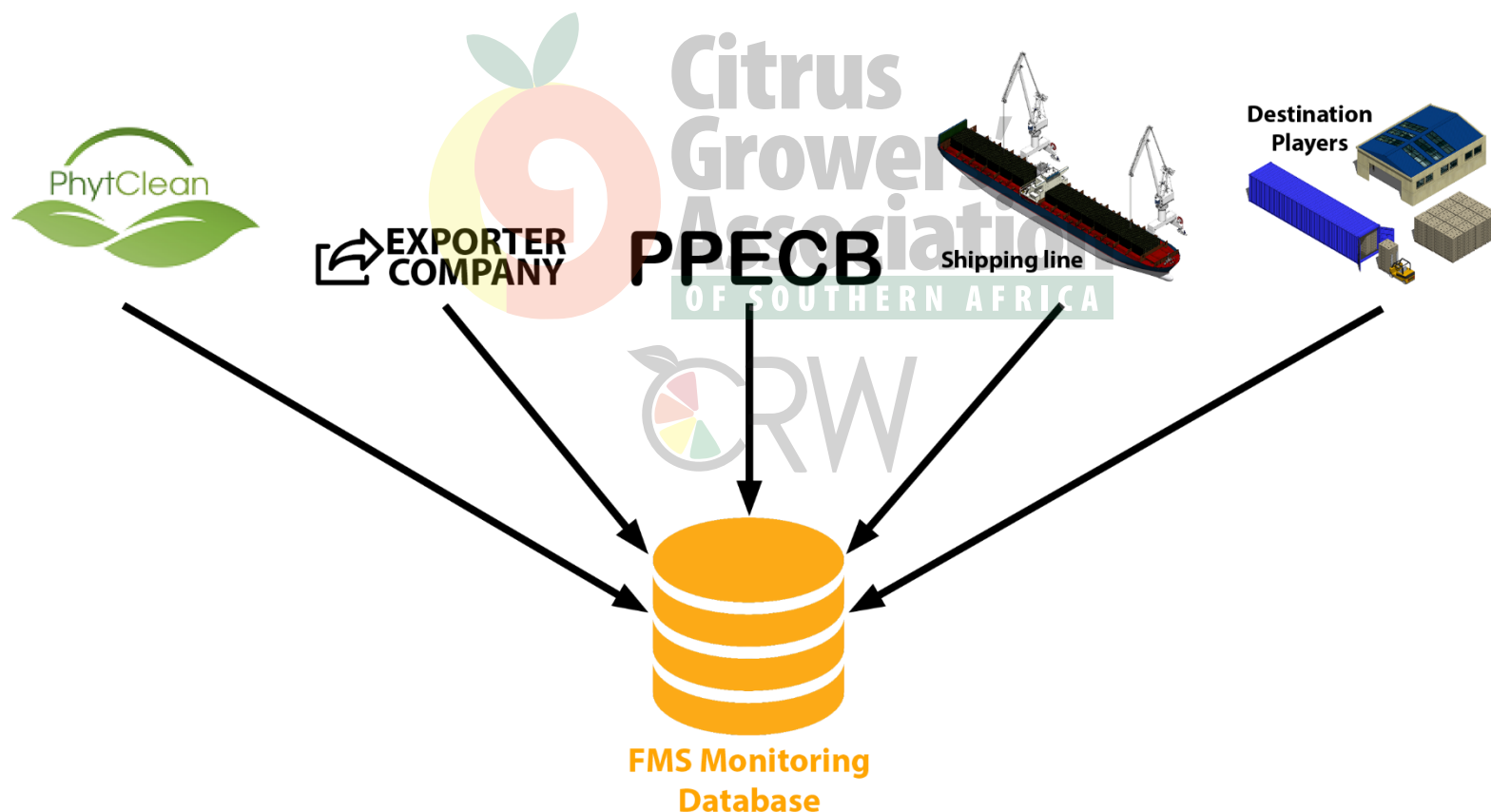
What data is needed?

- Data fields relating to the effectiveness of FMS are of highest importance.
- Temperature data (loggers), cold chain dates, locations, packaging materials used and product specifications.



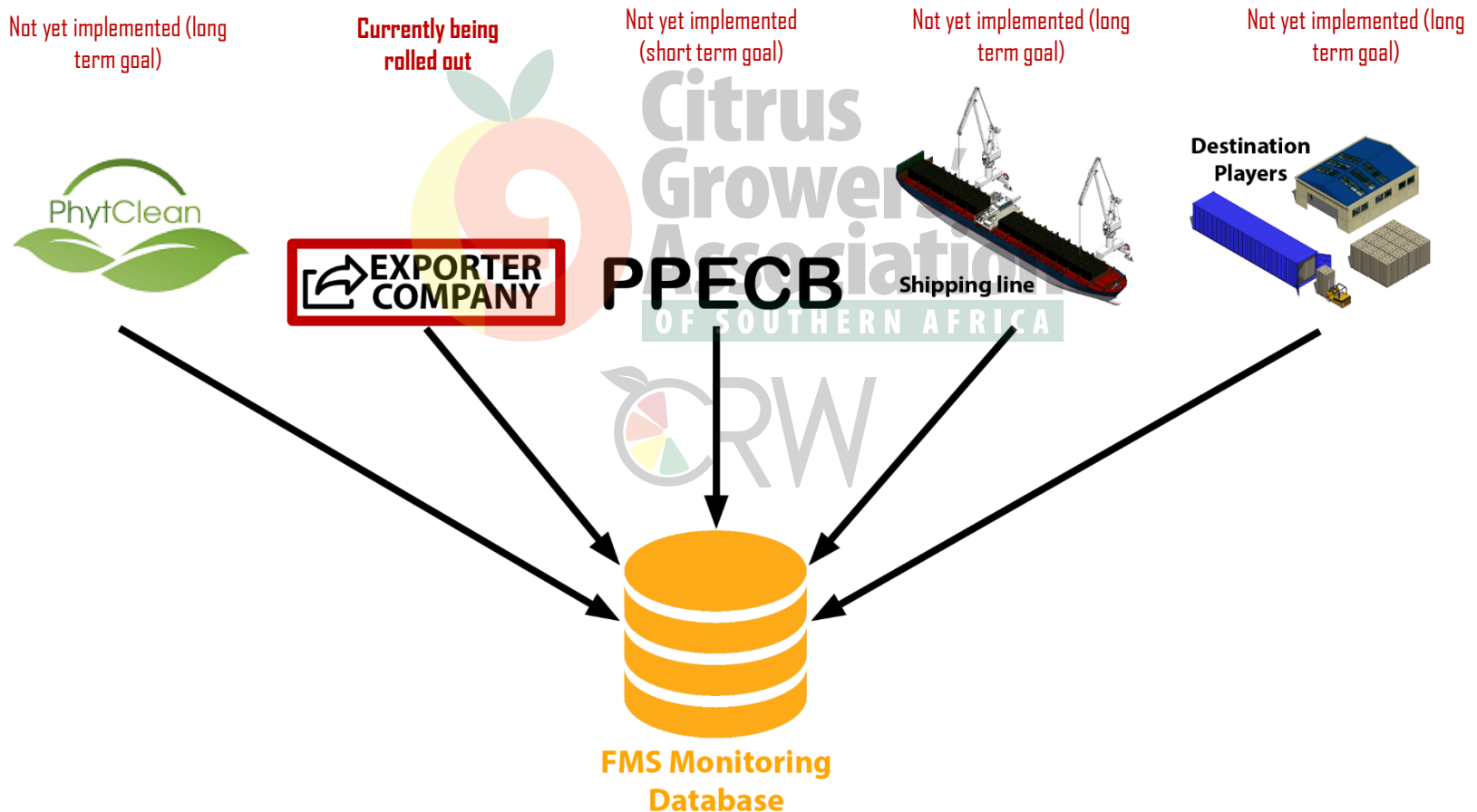
How is the data collected?

- Data from each player in the citrus cold chain will be collected, interpreted and compiled.
- Data will be collected from 5 primary sources:



Data sources

- As a first step, the database system will collect information from just the exporters.
- Other sources will be included at a later date



Collecting data from exporters

Data from exporters can be collected via:

- Email (Primary method) 
 - Shipping (and temperature) data are emailed to fms@cri.co.za.
 - The system then captures, interprets and compiles this information.
- Coldstream (alternative method) 
 - Convenient in some cases, as both the shipment data and logger data can be collected.
 - However, importing data from the system is not always optimal.

What data should be emailed and when?



- Within 3 days of vessel loading (from RSA port):
 - Email spreadsheet listing details of shipments.
 - e.g. pallet IDs, container number, stuff dates, ETD/ETA, ports, market info, etc.
 - See registration form for more details.
- Within 7 days of vessel unloading (at destination):
 - Email temperature logger data (csv or excel) + original files.
 - Email updated/completed spreadsheet listing all available data.
 - e.g. phytosanitary strikes (FCM, CBS), quality issues (CI, decay), etc.
 - See registration form for more details.

How to submit data via email

Very simple!

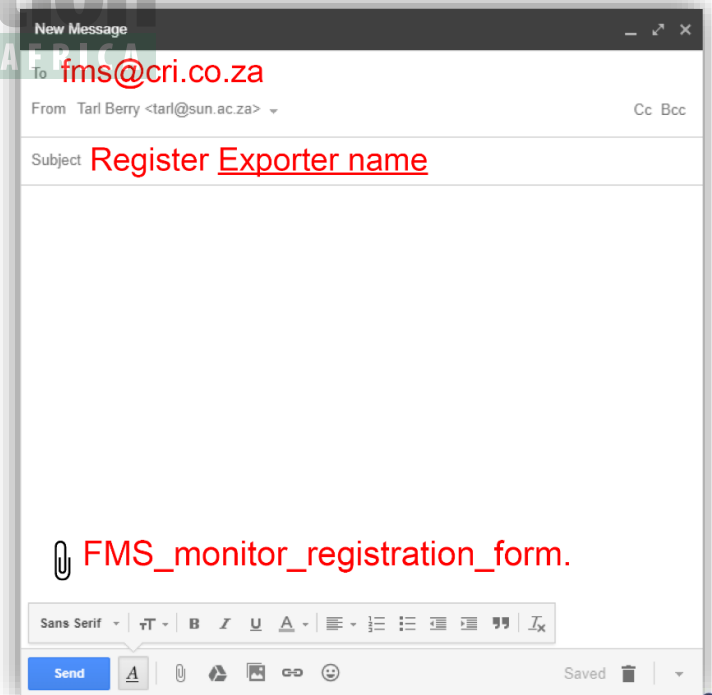
Step 1: Register exporter

- a) Complete the registration form (excel)
- b) Email registration form to fms@cri.co.za,
with subject of email = "register exporter_name"

FMS monitoring system (FMS-mon)		
Email Submissions Registration Form		
Exporter:	Company X	
Responsible person (RP):	Name Surname	
Contact email:	name@company.com	
Contact tel:	0821234567	
Exporters frequently use differing names (labels) in their databases, which can result in errors during processing. Please therefore list all labels to be used in your future submitted spreadsheets, and to the appropriate FMS label.		
Exporter label	FMS label	Priority
	DATA INPUT METHOD	NA
	EXPORTER NAME	NA
	PRODUCER CODE (PUC)	If possible
	PACK-HOUSE CODE (PHC)	If possible
	FRUIT SEASON	If possible
	FRUIT COMMODITY	Must be included

Your info here

The column names used in your spreadsheets



How to submit data via email

2. Step 2: Submit spreadsheets

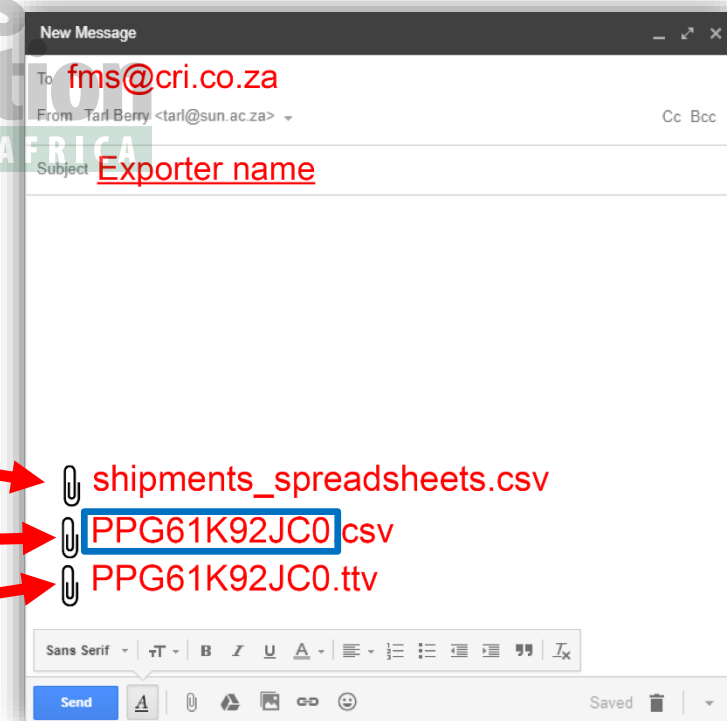
- Subject = Exporter name
- Email the spreadsheet and logger files
- Remember to rename the logger file so that it matches the temp-logger code in the spreadsheet.

TEMP-LOGGER PALLET ID	TEMP-LOGGER CODE	INSPECTION PHYTO	INSPECTION QUALITY
685191609856789465	PPG61K92JC0	CBS	CI
685191609856789465	PPG61K92JC0	CBS	CI
685191609856789465	PPG61K92JC0	CBS	CI
685191609856789465	PPG61K92JC0	CBS	CI
685191609856789465	PPG61K92JC0	CBS	CI
685191609856789465	PPG61K92JC0	CBS	CI

Excel spreadsheet
containing shipping data

Downloaded time/temperature
data in csv form

Original logger file



What should the spreadsheet look like?

1. Column based dataset

2. First row used for column labels



CONTAINER STUFF DATE	CONTAINER ID	GATE-IN DATE	LOADOUT TEMP (PPECB)	BOOKING CODE	SHIPPING LINE
2018/06/17	MNBU8911223	2018/07/19	2.1	EC0	Company Inc.
2018/06/18	MNBU8911224	2018/07/20	1.5	ECW0	Company Inc.
2018/06/19	MNBU8911225	2018/07/21	0.5	EC01	Company Inc.
2018/06/20	MNBU8911226	2018/07/22	1.3	EW01	Company Inc.
2018/06/21	MNBU8911227	2018/07/23	2.5	EC2	Company Inc.
2018/06/22	MNBU8911228	2018/07/24	2.1	EW2	Company Inc.
2018/06/23	MNBU8911229	2018/07/25	1.5	EC3	Company Inc.
2018/06/24	MNBU8911230	2018/07/26	0.5	EC0	Company Inc.
2018/06/25	MNBU8911231	2018/07/27	1.3	ECW0	Company Inc.
2018/06/26	MNBU8911232	2018/07/28	2.5	EC01	Company Inc.
2018/06/27	MNBU8911233	2018/07/29	2.1	EW01	Company Inc.

3. Remaining rows used for data

Summary

- Ensure you have access to new information FMS regulations
- FMS complete change for industry
 - Move towards pre-verification complex
 - Each step in cold chain accountable for actions
- FMS Monitoring a very necessary part of new cold chain
 - We need to ID and correct problem within season
 - Will soon contact all exporters/agents via CGA/CRI with complete instruction
 - All data kept confidential in FMS steering committee
 - NDA could be signed if so requested

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