

#### CHALLENGES IN THE TEMPERATURE CONTROLLED SUPPLY CHAIN



Intertek

ALAL LOGISTICS Certifie

ISO 9001:2008 Certifier





COLD CHAIN NETWORK (M) SDN BHD. No. 3, Jalan Perindustrian Puchong, Bandar Metro Puchong, 47160 Puchong, Selangor, Malaysia. GMPR Ver: 6 May 2014

## **CORPORATE STRUCTURE**



Khazanah Nasional is the investment holding arm of Malaysia and the Government's strategic investor in new industries and markets.



Malaysian Agrifood Corporation is an integrated food supply chain management company in Malaysia.



Cold Chain Network (M) Sdn Bhd (CCN) is a logistics, warehousing facility provider and a distribution centre.



		Temperature Controlled Warehouse	
Multi-compa Fleet • Equipped w • On-board te monitoring • Online temp monitoring	artment with GPS emperature oerature	<ul> <li>198,195 ft<sup>2</sup> floor space.</li> <li>18,828 pallet positions.</li> <li>39 loading bays with dock shelters.</li> <li>15 cold rooms <ul> <li>4 chillers</li> <li>4 freezers</li> <li>2 multi-temperature c</li> </ul> </li> </ul>	MS 2400:2010-1         Halalan-Toyyiban         Assurance Pipeline         Part 1: Management         System         Requirements For         Transportation of         Goods And/or         Cold-
FLE Fleet Type	ET No. of Units	- 5 dedicated picking	Services And Related Activities
40 Footers 18 Tonner 8.5 Tonner 5 Tonner TOTAL	23 10 16 5 54	chambers <ul> <li>Flexible cold room temperatures -30°C to 18°C.</li> <li>Sub-zero (-10°C) capable receiving/ante rooms</li> <li>Food S.</li> </ul>	Other Certifications • MS 1900:2005 Quality Management Systems- Requirements From Islamic Perspectives • MS 1480:2007 Food Safety According To Hazard Analysis And Control Point (HACCP) System • ISO 9001:2008 Quality Management Systems-requirements

# **COLD CHAIN KEY CHALLENGES**





- 1. Maintaining **temperature integrity** throughout the delivery chain. We sell temperature.
- 2. Ensuring Transports and deliveries are **IFOT**, and at the right temperature.
- **3. Securing "The Bank"** security, inventory integrity and accuracy.
- 4. Timely and accurate information on deliveries, to customer complaints.
- 5. Managing labour cold working conditions







#### MAINTAINING TEMPERATURE INTEGRITY TO ENSURE PRODUCT QUALITY & COST OPTIMISATION

- Electrical Consumption is rising.
- A slightest change in the activities such as the door opening frequency due to activities has an impact on the condensation rate in the chambers.
- Over a period of time, the refrigeration system is less efficient or malfunctioning.
- Generally outside temperature is recorded higher than normal, sometime up to 35° C – 38° C, has forced the Refrigeration System to work harder to maintain the temperature requirement.

## WINNING WITH INNOVATIONS

- Like all supply chains, cold chain operators must continually upgrade technology to ensure efficiency, integrity, and safety. This includes both back-end IT infrastructure and front-end devices to gather and report key data such as temperature reading in real time.
- Cold chain carriers have invested considerably in onboard equipment built into refrigeration units to track temperature and location, offering increased visibility and the opportunity to prevent or mitigate loss.
- We are also exploring "rapid cooling" systems.



# **GOING THE NEXT LEVEL - BIC**

- A dedicated team was formed to look into BIC strategies. The structure of the team mainly Sponsors, Project Leader & Team Member.
- Leaders normally are people not involved in the Operations or SME (Subject Matter Expert)



At CCN, a project called BIC (Best In Class) was launched in 2015, mainly looking into COMPLIANCE, SAFETY & PROFITABILITY.

One of the key deliverables of the Project is to review all the SOPs involving temperature integrity.

A team was also formed to explore the latest technology and new innovations to keep us abreast with our competitors.

#### SUMMARY

- Operating a cold chain net work is extremely challenging and competitive.
- In order to sustain business one has to be efficient and cost effective. The main focus will be on control of energy usage, manpower and facilities (warehousing and fleet) utilisation.

#### **Quality Certifications - CCN**





Certificate of Registration

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This is to certify that the HACCP Management System of COLD CHAIN NETWORK (M) SDN BHD No. 3, Jalen Parindustran Pucheng, Bandar Netro Pucheng, 4796 Pucheng, Bender Management States Management

> MS 1480:2007 Food Safety According to HACCP System

C Codex Food Program, Codex Alimentarius Commis to CACIRCP-1 (1965), Rev. 4 (2003) "HACCP System and Culdulates for its Analization"

e HACCP Management System is applicable in of Warehousing and Logistics Ser-Frozen and Chilled Food Products

Certificate Number : H183388 Initial Certification Date : 28 December 2007 Certificate Issue Date : 27 December 2013 Certificate Expiry Date : 26 December 2016

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Certificate of Registration

Intertek

This is to certify that the Quality Management System of COLD CHAIN NETWORK (M) SDN BHD No. 3, Jates Periodestern Dechog, Brody Mitro Pechog, 4790 Pechorg, Belleger Durut Ebasn, Marysis

> ISO 9001:2008 BS EN ISO 9001:2008

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MS 1900:2005 Quality Management Systems-Requirements From Islamic Perspectives





ISO 9001:2008 Quality Management Systemsrequirements

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> ISO 9001:2008 BS EN ISO 9001:2008

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#### MS 2400:2010-1 Halalan-Toyyiban Assurance Pipeline Part 1: Management System Requirements For

Transportation of Goods And/or Cargo Chain Services MS 2400:2010-2 Halalan-Toyyiban Assurance Pipeline Part 2: Management System Requirements For Warehousing And Related Activities