

Probing Temperature Abuse Claims

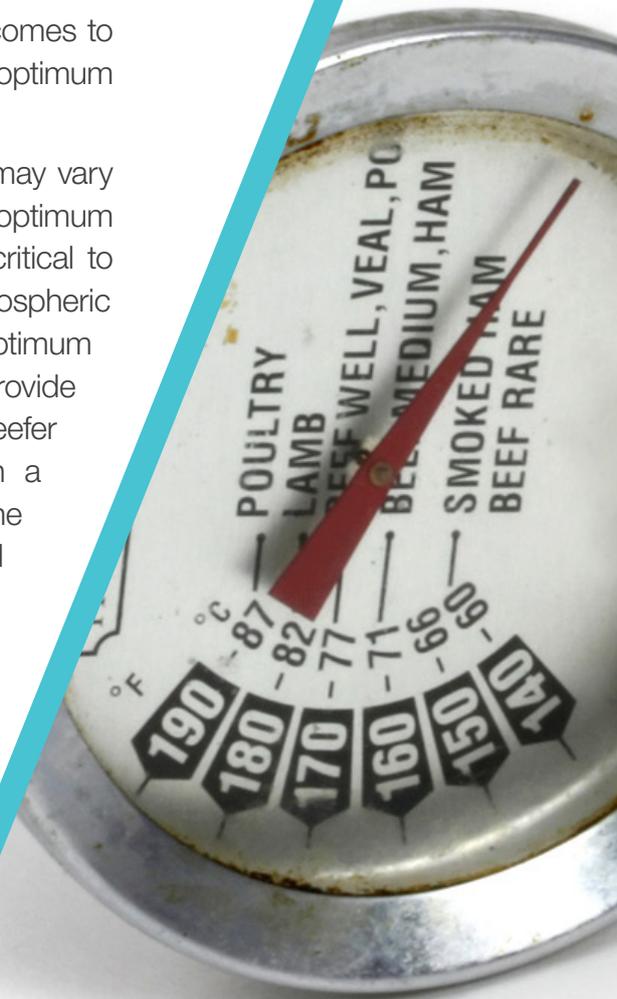
By Shubham Gupta, Loss Adjuster, CTA Canada

The sheer size of the refrigerated transport market may come as a surprise to many, estimated at 2.87 billion tons in 2016 and continuing to grow. At the same time, the refrigerated road transport market is projected to outpace this growth.

In a cold supply chain, refrigerated transport plays a critical role in transporting perishable items from point A to point B. When it comes to temperature sensitive products, it is imperative that the optimum temperature range is maintained during storage and transit.

This temperature range, depending upon the type of product, may vary but usually there is not much room for divergence from the optimum temperature. While transporting such products, it is therefore critical to make sure that the product (or cargo) is not exposed to atmospheric elements and/or to temperature ranges outside the permissible optimum range. For this reason, the shipper (or the cargo owner) would provide specific instructions on the temperature setting at which the Reefer Unit of the Refrigerated Trailer needs to be set to maintain a temperature favorable and necessary for the safe arrival of the Cargo to its destination. Any deviation from the requested temperature could result in an unsalvageable damage to the perishable cargo, leading to an insurance claim that may be hundreds of thousands of dollars. The damages may involve depleting the shelf life of the product or making the product unusable for its intended purposes.

This article will explore what steps should be considered when investigating a temperature abuse claim.



How is temperature maintained?

Reefers are temperature controlled insulated units that maintain the temperature of the cargo during transit. These are specially designed to allow adequate temperature controlled air flow inside the trailer, assisted by an independent Reefer Unit, which has components like household refrigerators such as a Condenser and an Evaporator. For adequate air circulation, these trailers have channeled floors and height restrictions on the cargo stowage. There is a Fabric Chute through which the temperature controlled air passes, as depicted in Figure 1. Further, sensors located at the nose end of the trailer record temperatures of the supply and the return air, and the data is available in the form of a reefer download from the refrigeration unit.

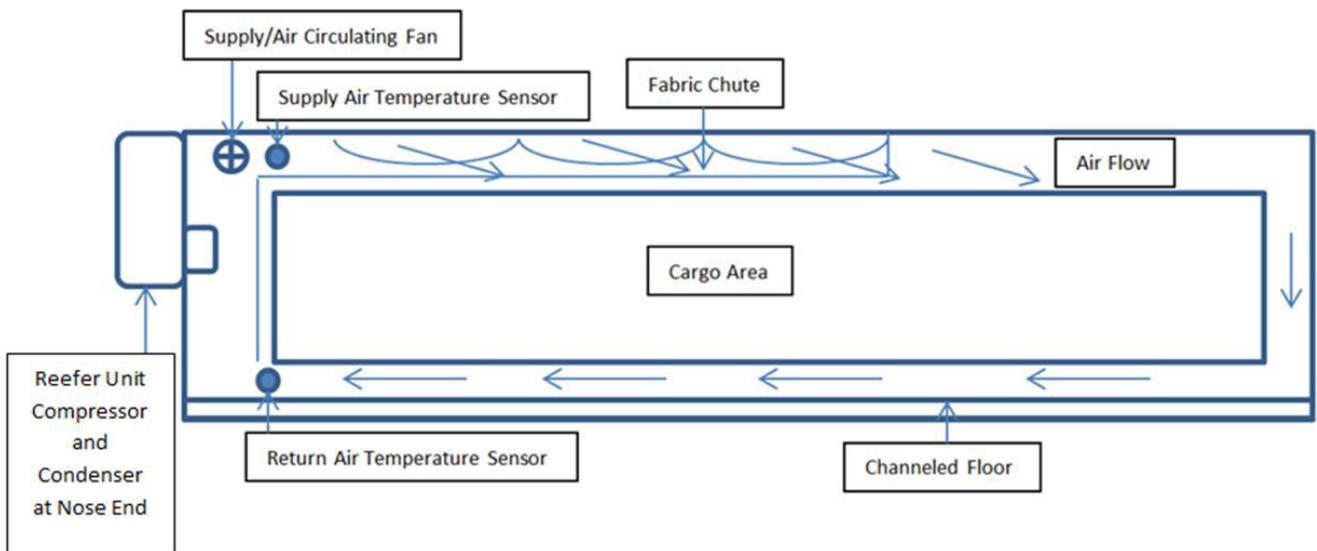


Figure 1

Operating Modes

The Reefer usually operates under either of the following two types of operating modes:

- Cycle Sentry
- Continuous

A Cycle Sentry mode has a total of three set points.

1. Set Point - the temperature at which the Reefer Unit is instructed to be set
2. Upper Threshold - the upper limit of the set point,
3. Lower Threshold - the lower limit of the set point

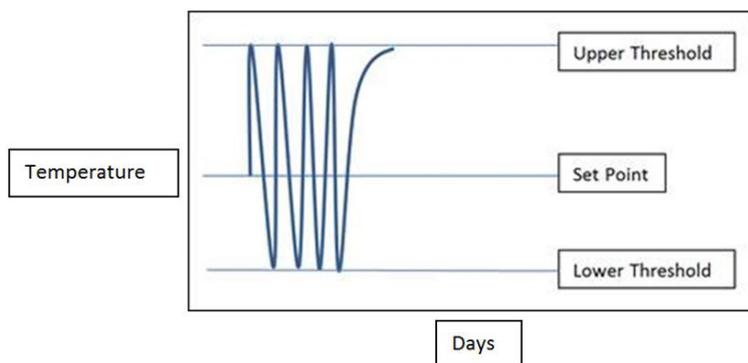


Figure 2

These thresholds could be factory set or be set afterwards and vary usually within 2-3 degrees Fahrenheit of the set point. This mode is generally used for Frozen Products only, which could sustain change in temperature up to respective thresholds. For example, suppose a Reefer is set at 18°F and is set to Cycle Sentry Mode, the Compressor unit will run until the Cargo temperature reaches the Lower Threshold, say 16°F and will then stop and will run in Unload Mode where the Compressor will stop running and only a fan will be operating that circulates the air inside the trailer. It will continue to run in the Unload Mode until it reaches the upper threshold, say 20°F, where it turns back on and then continues running until it reaches the lower threshold and so on and so forth. It is pertinent to note here that since the Compressor stays off for longer duration in this mode, it is cost efficient from the perspective of fuel usage to operate in this mode. Figure 2 below depicts an ideal scenario in a cycle sentry mode.

How could temperature abuse claims occur?

There could be two obvious scenarios for temperature abuse claims. Either the cargo has been alleged to have been received at warmer temperatures, or the cargo has been alleged to have been received at colder temperatures, relative to the requested temperature setting.

If we look at the Reefer Trailer Sketch shown in Figure A earlier, there are two temperature sensors. One is the supply air temperature sensor located at the top nose end of the trailer, right next to the condenser coil/fan. The other one is the return air temperature sensor located at the bottom nose end of the trailer.

Any allegation of temperature abuse may give rise to these two possibilities. Either the reefer unit did malfunction, causing temperature abuse or the cargo may have been loaded warm/cold at the shipper's end.

Interpretation of temperature data

The Reefer Download is the most critical piece of data in any alleged temperature abuse claim. A Sample Excerpt from a Reefer Download is shown in Figure 3 below.

Interpretation of the Reefer Download depends on the type of allegation involving whether the Cargo was received too warm or too cold.

Setpoint	Return Control	Discharge Control	Ambient	Op Mode
Power up				
Setpoint: 34.0				
34	----	----	----	Standby
34	64.6	65.2	67.9	Start, Diesel, Cycle-Sentry Mod
Clock Set				
34	64.6	65.2	67.9	Diesel, Cycle-Sentry Mod, High Cool
34	64.6	65	67.7	Diesel, Cycle-Sentry Mod, Mod Cool
34	41.9	40.4	89.6	Diesel, Cycle-Sentry Mod, Mod Cool

Figure 3

Warmer cargo

When a claim has been alleged for warmer cargo, the focus will be on the return air temperature readings. This is because the return air temperature sensor measures the temperature of the air that has been circulated through the trailer. This reading will usually be a bit warmer than the supply readings as the air, while travelling down through the trailer, would have captured some heat from the cargo and even from outside temperatures depending on the vent settings. Thus, focusing allegations of warmer product by taking into consideration the return air temperature may not be a completely correct interpretation.

Colder cargo

When allegations pertain to colder cargo, the focus will be on the supply air readings. These readings would tell at what temperature the air was being discharged from the reefer unit. If it could be established that the boxes lying closer to the supply air sensor were received frozen, there may be a valid claim and the reefer unit may have malfunctioned.

Types of Insurance Cover

Reefer Breakdown Coverage, usually afforded via an endorsement, is available to a Motor Truck Carrier with respect to Reefer Cargo Losses. It would indemnify the Insured against legal liability as a Motor Truck Carrier, for direct physical loss or damage to the cargo, caused as a result of one or more of the following perils:

- Reefer Mechanical Breakdown.
- Inefficient Operation of the Reefer unit (or associated accessories).

Further, the following warranties would usually be attached to the types of coverage listed above:

- a. Operating Signal Device Warranty, wherein the driver should be able to monitor the Reefer functioning and that would notify the driver in case of any reefer breakdown or its inefficient operation.
- b. Unattended Vehicle Warranty, wherein the vehicle should not be left unattended for more than a certain period.
- c. Maintenance Warranty for Owned Trailers, wherein regular maintenance activities should be carried out by the Insured in respect of Reefer Units.

There is another type of coverage that can be added for incorrect setting of the Reefer Unit. For example, the Insured's driver, inadvertently set the reefer unit to 8°F instead of 8°C, or set the reefer unit to Continuous mode instead of the Cycle Sentry Mode. This type of exposure due to erroneous setting can be covered by paying additional premium.

Claims Investigation

From a claims perspective, once inspection is completed, subject to availability of the cargo, Pre-Shipment Records are the most crucial part of any claim investigation for an alleged temperature abuse claim. It is pertinent to note here that often, the claim may not be reported in time and the cargo may either have already been disposed of and/or salvaged. Even if the cargo is still available for inspection, its condition at the time of inspection may not be truly representative of the cargo condition at the time of taking delivery.

The Pre-Shipment records would include loading reports, pre-loading data, trailer inspection reports, etc., prepared at the shipper's end, at the time when the carrier arrived to pick up the shipment. These records must establish the temperature of the cargo at the time of loading. It is important to note here that reefer trailers are designed to maintain and not change the temperature of the cargo. The cargo loaded at higher temperatures may cause reefer breakdown. Also, the trailer must be pre-cooled to the desired temperature before the loading starts, to make sure the ambient temperature inside the trailer has reached the desired set point. The onus to prove their claim is upon the cargo owners/claimants once the reefer download depicts no apparent breakdown and/or malfunctioning of the reefer unit. The cargo not loaded at adequate temperatures may be considered as "Shipper's Default" which is one of the few applicable defenses available with respect to strict liability of a Motor Truck Carrier.



Bill of Lading as Prima Facie Evidence

The claimants would usually argue that since the carrier accepted the goods with a clean Bill of Lading, without noting any irregularities at the time of pick up, a presumption could be made that the product was received in sound condition. Thus, it will be generally alleged that the temperature of the product, at the time of loading, was within the desired temperature range and was in line with the temperature setting requested on the face of the Bill of Lading.

This presumption is not necessarily true, since frequently the carrier's representative (the Driver) who arrives at the shipper's premises to pick up the shipment is not even allowed on the loading dock and/or is not usually given an opportunity to check the temperature at which the cargo is being loaded. In such circumstances, one cannot reasonably expect a carrier to be able to determine the condition of the cargo at the time of loading. The clean bill of lading does not

necessarily constitute prima facie evidence that the cargo was loaded in good order and condition, notwithstanding the fact that the driver signed on the face of the Bill of Lading clearly endorsing such remarks. The 2003 ruling by the Federal Court in *Elders Grain Co. Ltd. et al v. The "Ralph Misener" et al*¹ discusses a similar issue at hand.

During the discharge of the cargo of alfalfa pellets from the vessel's hold, a fire broke out and the cause of fire remained undetermined. The plaintiffs argued that the clean bill of lading issued by the master of the vessel shifts the burden on the defendants to prove and/or explain the cause of loss. Since the cause of the loss remained unknown, the plaintiffs argued that the defendants must therefore bear responsibility for the damages caused by the fire. The defendants, however, denied liability for the loss stating that the cargo was a dangerous cargo, i.e. it was of an inflammable nature.

Jude M.Nadon opined as under:

" The plaintiffs argued that since the master of the vessel issued a clean bill of lading, there was a presumption that the alfalfa pellets had been received in good order and condition and that consequently, the burden of explaining the loss fell on the defendants. On the basis of the evidence before me, I cannot subscribe to that submission. Although the bill of lading is clean, it is clear that it was extremely difficult, if not impossible, for those on board the vessel to properly observe the condition of the alfalfa pellets as they were being loaded onto the vessel at Thunder Bay."

¹ *Elders Grain Co. v. Ralph Misener (The)*, 2003 FC 837 (CanLII), <<http://canlii.ca/t/ghd>>, retrieved on 2017-11-06 <https://www.canlii.org/en/ca/fct/doc/2003/2003fc837/2003fc837.html?searchUrlHash=AAAAAQAVInRlbXB1cmF0dXJlIiAiY2FyZ28iAAAAAAE&resultIndex=1>

Inherent Vice

Another interesting situation may arise when the product itself deteriorates due to its own physical/chemical properties even though the Reefer Unit did not malfunction. Especially in the case of a shipment of fresh produce, there will likely be issues surrounding the fact that the cargo will need to be sold for a discount given that it was not received at the desired quality upon arrival at its destination. The cause of this deterioration in quality would be alleged to be temperature abuse in transit. In such a scenario, it is critically important to shift the onus onto the claimants to prove their claim. Once the carrier has provided the reefer download and it has been interpreted correctly and adequately, and it showed no evidence of temperature issues that may have led to the damages, there is a possibility that the alleged damages may have been due to inherent vice of the cargo. In the 2010 case of *Courtiers Breen Itée c. Mediterranean Shipping Company*² in the Court of Quebec, it was established that clementines were loaded in a state of over ripeness and spoilage and as such, temperature abuse allegations could not be substantiated.

Case Study

While dealing with a \$90,000 CAD claim for Frozen Pork alleged to have been received in warm condition, Charles Taylor Adjusting was able to establish that the product was loaded warm. The claimants alleged temperature abuse in transit leading to warmer cargo upon arrival at its final destination. They interpreted the Reefer Download by focusing on the return air temperature which was substantially higher than the supply air temperature readings. Further, the Reefer readings were showing frequent defrost cycles. Our investigation revealed that the very reason the return air temperature readings were significantly higher and that frequent defrost cycles formed part of the reefer download, confirmed that the product was loaded warm. Also, on requesting pre-shipment records, no records were produced depicting the product temperature at the time of loading. Finally, an inspection of the reefer unit from a third party authorized agency revealed no apparent issues and the reefer continued to operate without any problems while carrying other shipments.



² *Courtiers Breen Itée c. Mediterranean Shipping Company, s.a.* 2010 QCCQ 583

<https://www.canlii.org/fr/qc/qccq/doc/2010/2010qccq583/2010qccq583.html?searchUrlHash=AAAAQAVInRlbXB1cmF0dXJlIiAiY2FyZ28iAAAAAAE&resultIndex=3>

Conclusion

It could be challenging to handle a claim alleging temperature abuse. The major takeaway is interpreting the Reefer Download correctly and focusing on the correct set of readings.

Determining the nature and extent of loss could be very subjective in the case of cargo such as fresh produce, meat. Their own properties could have attributed to the deteriorated condition of the cargo upon delivery. Various involved parties may completely disagree on the nature and extent of loss, probable cause of loss, Reefer Download interpretation and similar details critical to a claims investigation. Hence, it is important to deal with these claims with caution.

Independent third-party expert witnesses may be hired contingent upon the severity of the claim. Services of Independent Insurance adjusters may be utilised to investigate all aspects of the claim and written/recorded statements must be obtained in case of differing opinions/allegations from the parties involved.

About Us

Charles Taylor Adjusting (CTA) is one of the leading loss adjusting businesses in the market. We provide loss adjusting services across aviation, marine, natural resources, property, casualty, technical and special risks along with average adjusting services for ship owners. The business primarily focuses on larger and more complex commercial losses arising from major insured incidents and claims. CTA is a business of Charles Taylor Plc (www.ctplc.com) which is quoted on the London Stock Exchange (CTR).

Charles Taylor plc is a leading provider of professional services to clients across the global insurance market. The Group has been providing services since 1884 and today employs over 2,000 staff in 76 offices spread across 29 countries in the UK, the Americas, Asia Pacific, Europe the Middle East and Africa.

The Group offers services, principally on a fee-based model and operates through three businesses – Management, Adjusting and Insurance Support Services. It also own insurers in run-off. Charles Taylor's vision is to become the professional services provider of choice to the global insurance market

Charles Taylor Adjusting (CTA) Expertise

CTA has qualified adjusters on staff throughout all our Canadian offices, where we provide loss adjusting services across aviation, marine, natural resources, property, casualty, technical and special risks. The business primarily focuses on larger and more complex commercial losses arising from major insured incidents and claims. We ensure outcomes are concisely reported to Insurers to match their requirements in documenting the circumstances of the loss in a clear and logical manner, allowing them to reach a conclusion in respect to policy response.

Shubham Gupta

CIP, FII

Loss Adjuster

T: +1 647 313 3205

M: +1 416 930 7540

shubham.gupta@ctplc.com

Michael Guy

BBA, FCIP, CRM

Vice President / Branch Manager

Executive General Adjuster

T: +1 647-313-3196

M: +1 647-981-2677

michael.guy@ctplc.com



www.ctplc.com/adjusting

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