samsara

Understanding the FSMA Rule on Sanitary Food Transportation

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What is FSMA?

The Food Safety Modernization Act (FSMA) is a wide-reaching set of regulations that shifts the U.S. food safety industry's focus on responding to contamination to preventing it. The law specifies responsibilities for participants in food transportation. It also provides the FDA with new enforcement authority. The FDA expects the regulations will drive higher rates of compliance and accelerate the response to problems.

The Final Rule on Sanitary Transportation of Human and Animal Food (STHAF) [Section 111 of FSMA], pertains specifically to how shippers, carriers, and receivers transport food. Built as an addendum to the 2005 Sanitary Food Transportation Act, the FDA finalized the STHAF in April 2016.

This guide will help you learn how the new laws affect your business, and how you can ensure you're in compliance with the new regulations. Samsara offers FSMA compliant temperature monitoring, part of a complete solution to improve fleet efficiency and lower operating costs:

100% Compliant

Ensure you're compliant with temperature monitoring laws

Easy to Use

An intuitive experience for fleet managers and drivers

Improves Productivity

Optimize operations with complete visibility of temperature, vehicle location, and driving behavior

Does it apply to me?

The STHAF affects the majority of the US food supply chain. You are required to comply with STHAF if you produce, carry, or receive delivery of food.

There are a few exceptions. You may be exempt if you ship, receive, or carry food and your operations have less than $500,000 in annual revenue. The STHAF is not applicable to food shipped through the U.S. to other countries, or food that is imported for future export. The rule does not pertain to some specific foods, including shelf-stable food completely enclosed by a container, grade A milk, compressed food-grade gases, and live animals.

When will it take effect?

FSMA takes effect over multiple phases, dependent upon when each rule is finalized, as well as the size of your business. These are the compliance dates for the STHAF Rule:

Small Businesses — April 5, 2018

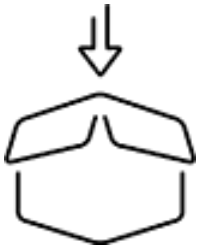
- Fewer than 500 full time employees, except motor vehicle carriers
- Motor vehicle carriers only (not also a shipper or receiver) with less than $27.5M annual receipts

All Other Businesses — April 5, 2017

- Any business not classified as a small business or otherwise exempt

How will it affect my business?

Compliance depends on your role in the food supply chain. The STHAF defines roles as shippers, carriers, and receivers.



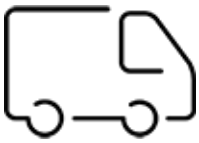
SHIPPERS

Any person who initiates shipment of food by motor or rail vehicle. The shipper is responsible for functions assigned to a shipper, even if another person performs the function. For example, a shipper is still responsible even if they hire another person to hold food or physically transfer it onto the shipper's vehicle. Shippers are ultimately responsible for their supply chain's conformance to the law.

Shippers are required to:

- Specify to carriers in writing the sanitary requirements for vehicles or transportation equipment to be provided for all food subject to the law and the temperature requirements for foods subject to temperature control requirements.
- Maintain records to demonstrate that they provided the sanitary requirements to carriers.
- Provide hand washing facilities to vehicle operators if they are expected to handle foods that are not completely enclosed during loading or unloading operations.

CARRIERS



Any person who owns, leases, or is ultimately responsible for the use of a motor vehicle or rail vehicle to transport food. The carrier is responsible for all functions assigned to a carrier even if they are performed by other people, such as a driver.

Carriers are required to:

- Show that they have maintained appropriate temperature controls for food during the transportation cycle and provide these records to carriers and, upon request, to receivers.
- Demonstrate to shippers that refrigerated compartments are satisfactorily pre-cooled when carrying food subject to temperature control requirements.
- Develop and implement procedures that describe how they provide temperature control records to shippers and receivers.
- Provide information to shippers about previous cargo hauled in bulk vehicles and the intervening cleaning of those vehicles.
- Develop written procedures for cleaning and inspection of vehicles and describe how they will meet requirements.
- Provide information to shippers about temperature conditions and bulk cargo protection, where applicable.
- Provide basic sanitary transportation practice training to personnel engaged in transportation operations, and keep appropriate records.

RECEIVERS

Any person who receives food after transportation, whether or not that person represents the final point of receipt for the food. A receiver does not include an individual consumer or others who are not in the business of distributing food.

Receivers are required to:

- Provide hand washing facilities to vehicle operators if they are expected to handle foods that are not completely enclosed during loading or unloading operations.
- May request records from carriers showing that the carrier maintained temperature controls for the food during the transportation cycle.

How will it affect cold chain procedures?

The STHAF has broad implications for cold chain procedures. We've built a checklist so you can ensure compliance throughout your operations:

	Shipper	Carrier	Receiver
Establish and provide written notice of temperature parameters to all parties	✓	✓	✓
Provide operating temperature specified by shipper, demonstrate compliance with specifications	✓	✓	✓
Check safety of food if temperature deviation occurs			✓
Carrier to pre-cool mechanically-refrigerated storage compartments per shipper specifications	✓	✓	✓
Develop and implement written procedures describing compliance with temperature control requirements	✓	✓	✓
Maintain training records for 12 months beyond when person trained performed duties for which they were trained	✓	✓	✓
Retain records, written procedures, and agreements for 12 months beyond termination of agreement or use of procedures	✓	✓	
Covered parties to make all records available to authorized individuals upon request	✓	✓	✓

✓ **Required to implement**

✓ **Required to verify compliance**

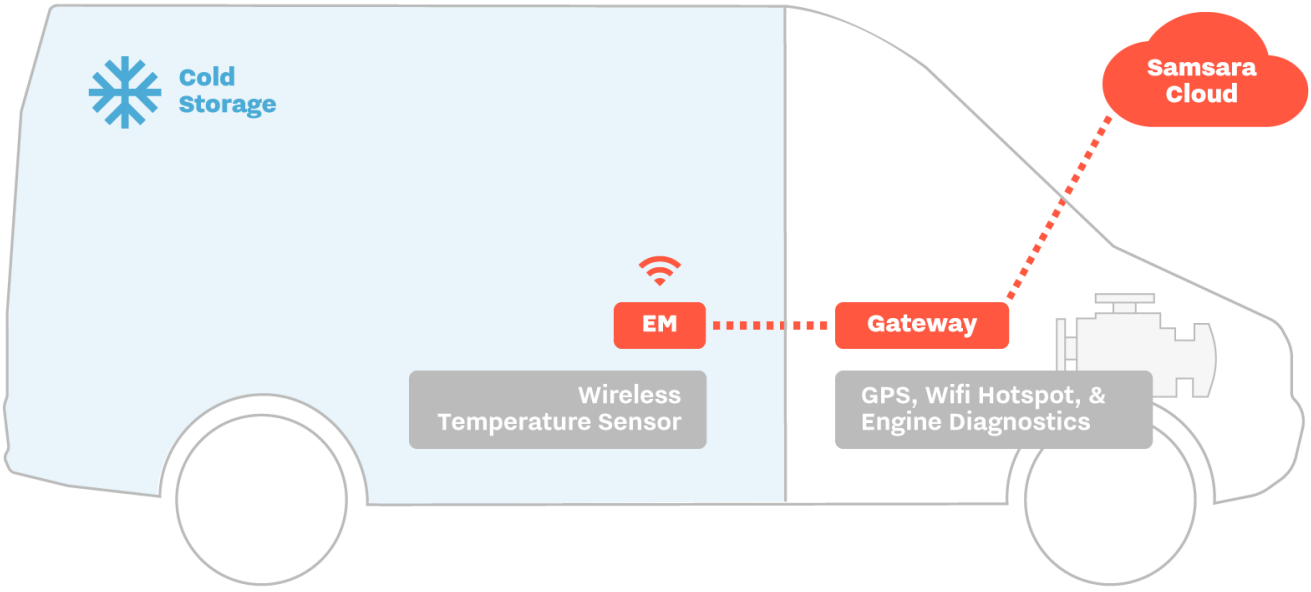
How Samsara Enables Compliance

Samsara's EM-series attaches to temperature-controlled areas like trailers, cargo bays, refrigerators, and freezers. The sensors wirelessly stream real-time temperature and humidity data to the cloud.

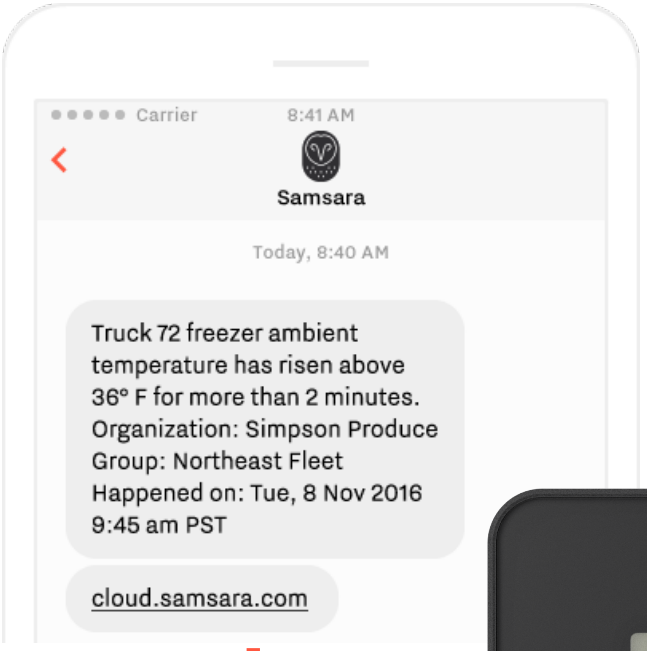
Staff can monitor refrigeration systems across vehicles and sites, day or night, from their desktop or mobile device. Alerts notify staff of temperature changes above or below thresholds so problems can be addressed before goods spoil.

Deploys in minutes, no IT integration required

- Fully wireless design of EM sensors simplifies installation
- Zero-configuration, plug-and-play Vehicle Gateways
- Secure cellular networking, no IT network provisioning required
- Cloud-hosted software eliminates servers, storage, and database maintenance

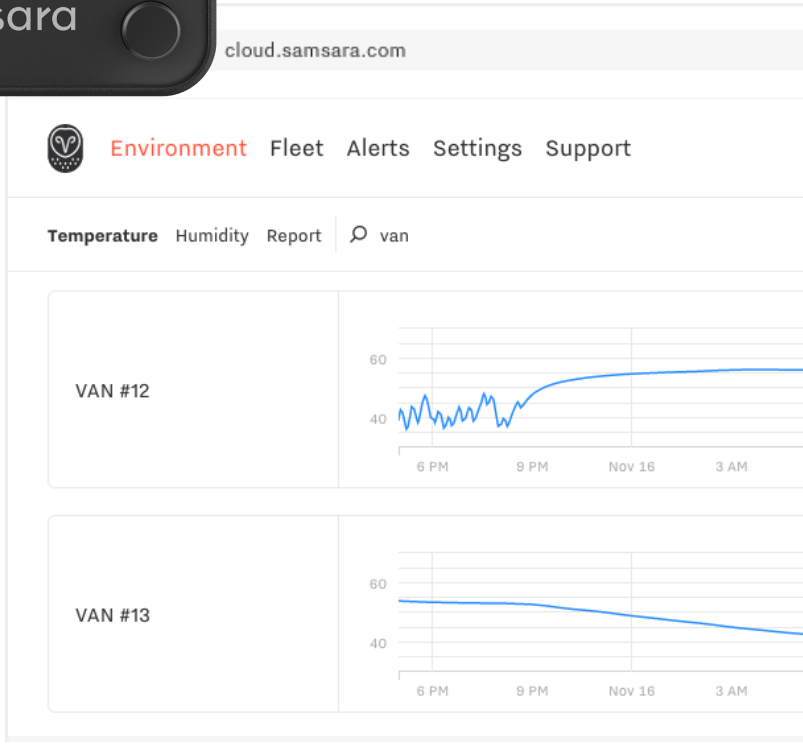


Samsara's Temperature Monitoring Solution



Receive real-time alerts to prevent spoilage and unsafe conditions

Receive real-time alerts by email or SMS when any EM sensor goes above or below your desired temperature range.

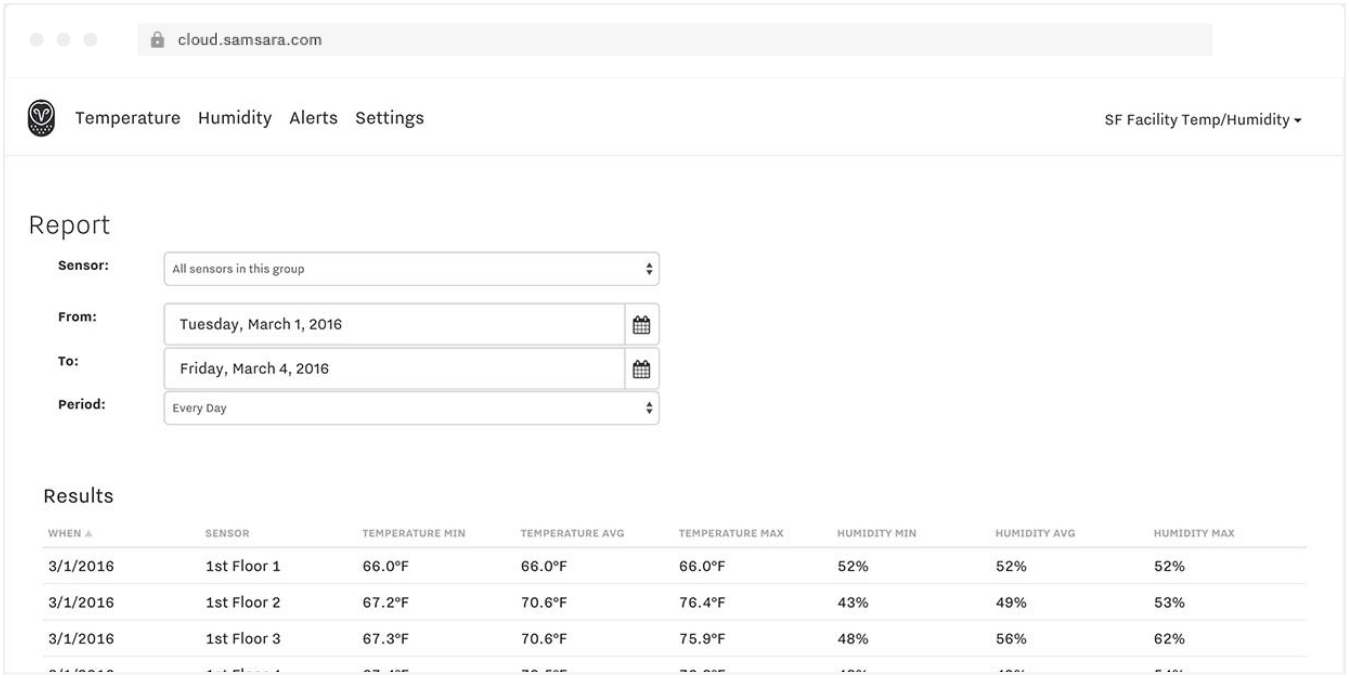


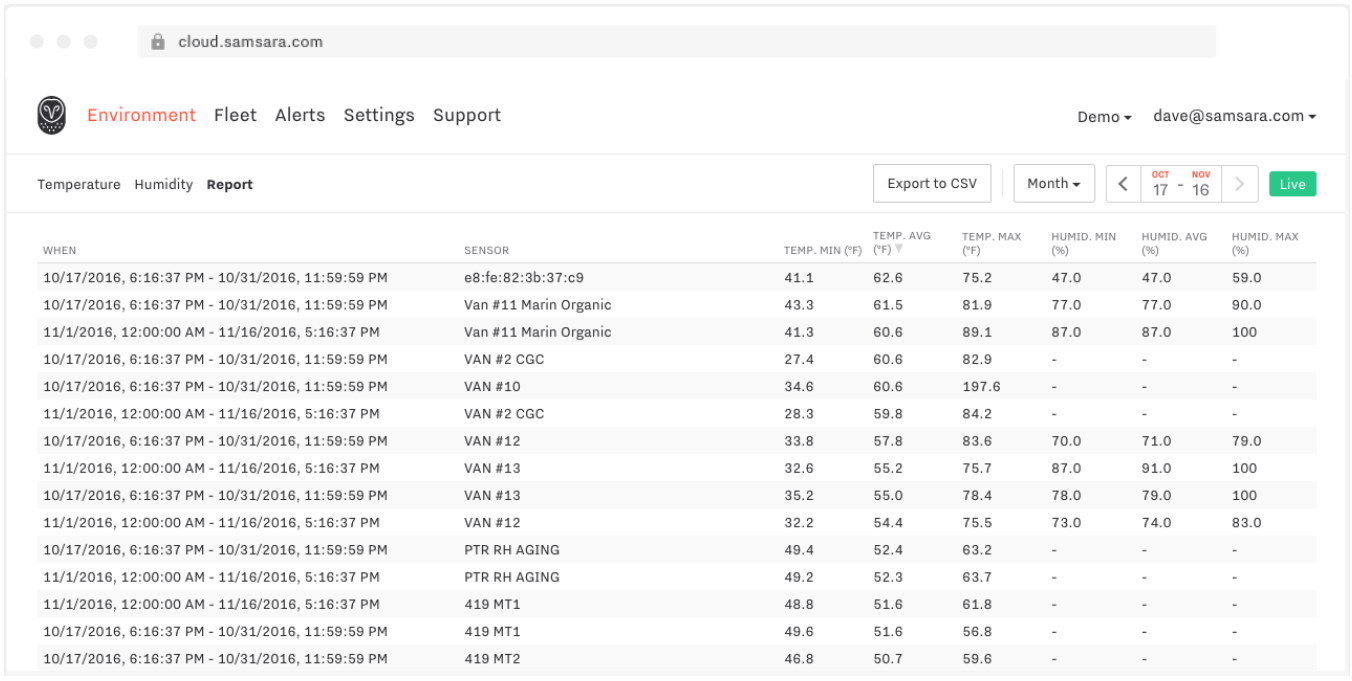
Gain end-to-end visibility to increase efficiency

Monitor the real-time temperature of all vehicles and share with experts and stakeholders across your organization.

Retrieve historical records on demand

View and analyze historical data from all of your EM sensors in a single web-based dashboard.





Cowgirl Creamery

Globally-recognized artisanal cheese maker ensures food safety compliance throughout production, aging, and distribution with Samsara's wireless environment monitoring and fleet tracking platform.

- Seven thousand square feet of cold aging, storage, and receiving areas, plus a fleet of Ford delivery trucks running daily deliveries throughout Northern California.
- Deployed Samsara EM12 environmental sensors, VG33 vehicle gateways, and GW22 industrial gateways to continuously monitor cold chain and fleet operations.
- Real-time temperature and humidity tracking enables greater control of production, storage, and distribution environments.
- Precise visibility into fleet operations enables real-time route changes and improves customer service.
- Complete, automatic temperature logging saves drivers and QA time otherwise spent on manual audits.

> "Samsara is exactly what we were looking for—one platform to track temperature, humidity, and our distribution operations."

Maureen Cunnie, Operations Manager, Cowgirl Creamery