

COLD CHAIN EXCELLENCE:

10 Ways NSSL Can Help Reduce Spoilage and Boost Compliance

1 REAL-TIME TEMPERATURE MONITORING

NSSL's Shuntware® platform and integrated trailer monitoring sensors offer constant visibility into trailer conditions.

We monitor reefer units 24/7, and our system triggers real-time alerts the moment temperature thresholds are breached. This enables immediate intervention and proactive exception management to protect the load. Our continuous monitoring helps prevent spoilage before it starts and ensures consistent cold chain compliance at every stage.

2 MULTI-POINT VERIFICATION PROTOCOLS

Temperature control isn't one-and-done. NSSL enforces rigorous checkpoints throughout the trailer's lifecycle.

From gate-in to departure, our proven procedures for manual temperature and fuel entries are required at every move. This ensures accurate documentation at each critical point, keeping your records compliant and your cargo protected.

3 COLD CHAIN TRAINING FOR DRIVERS

Compliance starts with people. NSSL trains 100% of Cold Chain operators in best practices.

This commitment ensures every operator is equipped to spot temperature issues, take corrective action, and follow SOPs that protect product integrity and meet regulatory standards.



4 AUTOMATED COMPLIANCE LOGS

Shuntware® captures trailer moves, temperature checks, fuel levels, and gate activity in real time — creating audit-ready digital records.

Instant alerts flag issues like open doors or unauthorized trailers, helping teams act fast and prevent non-compliant loads from leaving the yard.

5 FLEET OPTIMIZATION

Bigger isn't always better. NSSL helps you do more with less.

By analyzing fleet utilization and trailer lifecycle data, we helped a client **cut their trailer count by 10%, unlocking \$8–10 million in operational savings** without sacrificing service. This optimization also reduced idle time and asset dwell, meaning less product was stored in trailers for extended periods, which significantly lowered cold chain risk while creating a leaner, more responsive operation.

Trailer Utilization				
Site Selection	Date Range	Trailer Property	Trailer Origin	
Count of Trailer	Arrival	Departure	% Delay Arrival	
788	880	799	14%	
Total Dwell Hours	Trailer Turn Time	Door Dwell %	Row Dwell %	
31,516	25.36	23%	77%	
Dwell Hour - Distribution				
KPI	Overall Dwell Hour	Avg. Dwell Hours	Count of Trailer	% of Hours
Loaded Inbound Row	927	9.27	98	3%
Loaded Outbound Row	5,714	8.25	412	18%
Inbound Door	1,197	6.57	175	4%
Outbound Door	4,657	6.81	422	15%
Damage Row	6,144	9.86	428	19%
Damage Door	437	4.55	95	1%
Site Trailer	5,905	53.68	110	19%
Yard Trailer	2,551	9.70	254	8%
Empty Trailer (Bare/Door)	3,984	10.83	338	13%

6 CUSTOM YARD MANAGEMENT SOPS

Every yard is different and your SOPs should reflect that.

NSSL builds site-specific procedures that align with cold chain best practices, improving consistency, safety, and compliance across locations.

7

API-COMPATIBLE SYSTEM INTEGRATION

Don't rip and replace — enhance what you already have.

Shuntware® integrates seamlessly with your TMS, WMS, and trailer telematics, making cold chain oversight frictionless. Real-time data flows through your existing systems for a unified view. This compatibility minimizes disruption, accelerates deployment, and maximizes the return on your existing technology investments.

8

DATA-DRIVEN DECISION MAKING

Stop reacting and start optimizing.

Access dashboards with key KPIs like dwell time, door usage, and yard efficiency to reduce bottlenecks, balance trailer loads, and make proactive improvements in your cold chain flow. With clear visibility into performance metrics, you can make faster, smarter decisions that drive operational excellence.

9

PROVEN SPOILAGE REDUCTION

We don't just promise results. We deliver them.

In 2023, NSSL saved a major grocery partner over **\$5.5 million by preventing temperature-related claims** and recovering 113 at-risk loads. That success represents measurable ROI grounded in our precision, technology, and cold chain expertise.

10

STRATEGIC PARTNER RELATIONSHIPS

Trusted by the best to protect what matters most.

NSSL serves the largest grocery chains across Canada and the United States as the strategic cold chain partner of choice. Our commitment to operational discipline, regulatory expertise, and end-to-end accountability makes us an essential extension of your supply chain team.

