



**GUIDE**

# Design a Precision 4PL for Chemical Logistics

## Introduction

Dealing with disruptions prompted by economic and financial instabilities, along with a global pandemic, has changed how every business operates, no matter the industry. In response, supply chains have had to adapt quickly, but not every chemical shipper did as well as they could have. Smart, precision supply chain management means building in greater flexibility and adaptability to deal with the inevitable ‘what ifs.’

Supply chain and logistics managers have to make quick, informed decisions, and they need real-time visibility and information to do that. With well-designed precision-managed services, your chemical supply chain becomes truly valuable. Partnering with the right fourth-party logistics (4PL) provider is essential to delivering this benefit. An integrated approach, ability to identify and apply innovation, global supply chain skills, and hands-on practical expertise are exactly what this new world demands.

This guide aims to help you design a precision 4PL for chemical logistics to boost resilience and remain competitive.



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## What Is a 4PL for Chemical Logistics?

You're likely familiar with a 2PL or 3PL, but now, we often see the term 4PL used throughout the industry. A 4PL or fourth-party logistics provider is an outside transportation partner that delivers comprehensive planning and execution of all shipments for a client. That comprehensive planning and execution all fall under what we refer to as Managed Transportation Services.

A 4PL can go further with unique specializations in various industries, the chemical sector chief among them. Today's rapidly evolving supply chain landscape means chemical shippers need to consider the core competencies of their 4PL more than ever. The right 4PL combines a core focus on chemical logistics with a high level of experience and a wide range of precision capabilities that optimize efficiency and spend.

Due to the potentially hazardous nature of many chemical products, chemical logistics involves [maintaining compliance with regulations](#) to ensure proper safety, transportation, storage, and handling. Around the world, HAZMAT regulations change frequently, and experienced 4PLs must be diligent about staying up to date. It's critical for chemical manufacturers to partner with a 4PL that specializes in, understands, and complies with the regulations and responsibilities set by the federal government.



Read our [Guide to HAZMAT Classes in Transportation](#) to learn more about the various HAZMAT Classes defined by the FMCSA.

## What Does a Precision 4PL for Chemical Logistics Look Like?

A precision chemical 4PL enables chemical shippers to save time and money through expert guidance, specialized procedures and equipment, and up-to-date regulatory support. Modern chemical logistics effectively uses a combination of a core focus on chemical logistics, along with the right experience and capabilities to maximize your transportation spend and drive new cost-saving initiatives throughout your supply chain.

The most significant differences between traditional logistics and chemical logistics come down to the containers required to safely transport chemical freight and the extensive regulations chemical products must follow. Bulk ISO tanks are used to transport liquid chemicals across networks and modes and are standardized worldwide for safe use in bulk liquid chemical shipping.



Check out our [ISO Tank Capacity Guide](#) to learn about the formula and procedures CLX uses to identify the optimal ISO tank sizes for any given quantity of liquid chemical products.



## Define Your Current Supply Chain Logistics

To optimize the design of your supply chain, first, analyze your existing system. Chemical shippers and their supply chain partners are under constant pressure to reduce spending and increase margins. Technological developments open up new opportunities and trends in every aspect of a business to achieve new goals.

**With a clear understanding of where you are, you can better identify where to start optimizing your supply chain. Define your current supply chain by asking these questions:**

- Is chemical logistics a core competency of your managed services?
- Is the right technology in place to ensure all freight is optimized, automated, and competitive?
- Who controls continuous improvement and cost savings activities?
- What continuous improvement projects are active or awaiting resourcing?
- Does your logistics provider have the ability to set baselines and track savings?
- Do resources have the time and freedom to focus on critical initiatives?
- Does your logistics provider rely on manual processes for supply chain visibility?
- How do you evaluate core carriers and benchmark their rates?
- Is global chemical logistics a core competency of your provider's organization?



## 3 Keys to Designing Your Precision Chemical 4PL

A modern and smart supply chain requires operations leaders to find a sweet spot between optimization and risk management. With these three tips, you can improve the overall adaptability of your supply chain, find your sweet spot, and generate continuous opportunities for growth.



### 1. Don't Try to Over-Optimize Too Fast

A 2020 Gartner survey<sup>1</sup> found that 55% of organizations focused on streamlining supply chains and workflows to increase efficiency beyond COVID-19. Without a doubt, optimization is the key to a precision chemical 4PL operation, but a focus on current trends like AI and automation, distributed warehousing, and telematics isn't enough. Chemical manufacturers want to optimize nearly every aspect of their supply chain, including warehousing, inventory management, driver capacity, visibility, and pricing, but it must be done systematically with careful timing to avoid unexpected costs, delays, and complications.



### 2. Spend Time Fine Tuning

With the right chemical 4PL in place, you can begin to fine-tune your supply chain to attain the flexibility to transition between just-in-time and just-in-case freight storage models as needed. The key to balancing the two models is to pinpoint weaknesses in a chemical supply chain and reduce those risks instead of going too lean or too heavy in either direction.



### 3. Constantly Push for Greater Visibility

As you continue to understand how your supply chain operates at every single stage, you'll gain unique insights that are invaluable to optimizing your network. Precision 4PLs ensure all your historical data is complete and accurate while also allowing you to update relevant shipment information in real-time, helping to create the most comprehensive models possible. Like anything else, greater visibility doesn't come from a technology solution or a personnel solution alone – it takes modern data science and the right analytic talent to build models that support best-in-class decision-making in both operational and strategic matters.

Get Inspired by This Success Story

## Scott's Miracle-Gro

### Implementing Precision Chemical 4PL Solutions to Meet Demands

Multinational lawn and garden product manufacturer, Scott's Miracle-Gro, faced a massive increase in demand for their products after COVID-19 forced countless people to spend more time at home. For Scott's, this meant a 60% YoY increase in company growth. Scott's was using our partner BluJayTMS to manage their product transportation and sought out CLX Logistics to help optimize their operations and serve more customers faster, without taking on extra costs.

CLX Logistics was contracted to provide operational 4PL support to help Scott's handle their unprecedented growth. The shared platform of CLX TMS and BluJayTMS was quickly integrated, and several CLX Managed Transportation solutions started being leveraged immediately. CLX Logistics continues to provide day-to-day management of transportation activity in Scott's key distribution centers for the contract's duration, including:

- Load tendering
- Capacity management
- Track and trace functions
- Appointment scheduling
- Problem resolution

With these precision chemical 4PL solutions, Scott's could ensure their product was fully stocked at Home Depot and Lowes locations throughout the country before the 2021 spring season. The project is ongoing, but the results of the busy season are clear. CLX Logistics successfully fulfilled Scott's direct-to-store projects with a 100% success rate for on-time deliveries.



# Adopt New Capabilities to Build Chemical Supply Chain Resiliency

Reinforcing chemical supply chain resiliency can be expensive, challenging, and time-consuming. However, by intelligently diversifying your risk factors, a chemical 4PL specialist like CLX Logistics can improve and optimize resiliency over time without breaking the bank. Here are three elements of a resilient supply chain that you can adopt.



## 1. Technology

Think about what you want your chemical supply chain to look like in the future, and invest in technology that helps get you there. One of the most valuable benefits of technology is the expansive visibility it can enable. In the right hands, tools like IoT connectivity, telematics, artificial intelligence, and big data help expand visibility and efficiency, offering significant value in developing precision optimization strategies.



## 2. Partnerships

Consider your partners throughout your network, how they operate, and where they're located. Think about the potential benefits of diversifying distribution warehouse locations, inventory storage, and partnering with new local and international partners.



## 3. Risks

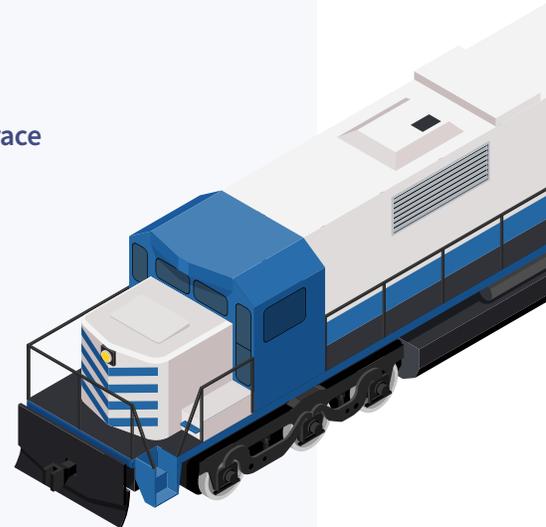
What level of risk are you comfortable with? The answer will be unique to you and your organization. With a challenging transportation climate ahead, consider the effects of decreasing your risk appetite and adding more protections to your chemical supply chain. The right chemical 4PL can help analyze your existing data, compare it with relevant global data from outside sources, and help you achieve the best balance for your situation.

## Conclusion

The right chemical 4PL combines a core focus on chemical logistics with the experience and capabilities to maximize your transportation spend and drive new cost-saving initiatives throughout your supply chain.

**Your 4PL's Managed Transportation program should include a flexible offering tailored to your company and your unique needs, such as:**

- Freight rate benchmarks and bids for all transportation modes
- Carrier procurement, negotiation, and contracting
- Management reporting and interactive dashboard tools
- Detailed analytics and reporting of service, cost, and performance
- Robust continuous improvement programs
- Multi-modal transportation planning and execution
- Proactive shipment monitoring via web-based track and trace
- Domestic and international shipment management
- NVOCC and freight forwarder credentials
- Brokerage and dedicated fleet capacity management
- Rail fleet management
- BulkTainer ISO container fleet
- Freight bill, audit, and payment



All of these solutions lead to better supply chain market intelligence, reduced global chemical supply chain costs, and improved service and visibility at every level.

## Get Started with Your Precision 4PL

CLX Logistics offers their signature CLX Managed Transportation with an a la carte approach to supply chain management that lets you utilize our expertise and capacity however you need. CLX easily integrates with your existing supply chain and provides access to seasoned HAZMAT-certified logistics professionals, advanced technology platforms, and analytics, no matter the level of support.

**Contact us today to schedule  
a detailed supply chain  
management consultation.**

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<sup>1</sup> Sarah Hoppold, "Gartner Survey Reveals 33% of Supply Chain Leaders Moved Business Out of China or Plan to by 2023," Gartner, June 24, 2020, <https://www.gartner.com/en/newsroom/press-releases/2020-06-24-gartner-survey-reveals-33-percent-of-supply-chain-leaders-moved-business-out-of-china-or-plan-to-by-2023>.

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