

## ENVIRONMENTAL ANALYSIS

### Overview of Process

KKCM conducted a comprehensive environmental analysis by examining both internal and external factors affecting West Burlington Hydraulic & Supplies. Internally, we evaluated sales data, product inventory, customer base, and marketing efforts. Externally, we examined market conditions with a focus on key sectors such as agriculture, construction, and manufacturing, the primary industries served by the company's hydraulic hoses, fittings, and concrete tools.

### Key Trends Summary

#### Growth of Hydraulic Hose Industry

- According to Power and Motion who provides strategic review, technical information, market analysis and news related to hydraulic, pneumatic and electronic motion control systems "Global hydraulic hose and fittings market 2024-2028," Technavio is forecasting a compound annual growth rate (CAGR) of 4.36% through 2028"(Jensen).
- According to a Precedence Research report *Hydraulic Hose Market Size, Share and Trends 2025 to 2034* "The global hydraulic hose market size accounted for USD 11.65 billion in 2024 and is predicted to increase from USD 12.24 billion in 2025 to approximately USD 19.07 billion by 2034, expanding at a CAGR of 5.05% from 2025 to 2034"(Hydraulic Hose Market).
- "North America dominated the hydraulic hose market with the largest market share of 32.1% in 2024"(Hydraulic Hose Market).

#### Needs of Customization and Quick Turnaround

(Benefits of customization according to other companies)

- "Standard, off-the-shelf hydraulic hoses may seem convenient, but they often fail to meet the unique needs of specialized equipment. On the other hand, custom hydraulic hoses are designed specifically for application, ensuring durability, optimal fit, and long-term reliability"(Pirtek).
- "When you use custom hydraulic hose assemblies that are designed specifically for a particular machine or piece of equipment, you can perform a hydraulic hose replacement much quicker"(Metro)

#### Shift Toward Energy Efficiency and Sustainability

- Power and Motion has another article with research findings titled *The Rising Influence of Sustainability on Hydraulics and Pneumatics* "78% of respondents said sustainability is influencing their design and use of hydraulics and pneumatics"(Jensen).
- "Government regulations being enacted around the world are a driver for the creation and use of more sustainable fluid power technologies as well as companies' own desire to reduce emissions, material use and more"(Jensen).

### PESTLE Analysis

**Political:** Federal and state infrastructure initiatives continue to influence the hydraulic supply market. The *Bipartisan Infrastructure Law* is providing more than \$3.4 billion for Iowa highways and \$432 million for bridge repair through 2028, creating consistent demand for construction and maintenance equipment that relies on hydraulic systems (Iowa DOT, 2025). Iowa's sales tax exemption on replacement farm machinery parts also benefits WBH by encouraging local farmers to repair and maintain equipment rather than replace it. However, tariffs on imported steel, rubber, and fittings can increase costs for both suppliers and customers. Maintaining local sourcing and supplier diversity can help WBH reduce exposure to policy-driven price fluctuations.

**Economic:** The global hydraulic hose and fittings industry is expected to grow steadily, with forecasts showing a 4–5% CAGR through 2034 (Precedence Research, 2025; Power & Motion, 2024). While this long-term trend is positive, the National Fluid Power Association (NFPA) reported an 11% year-over-year decline in shipments in 2024, signaling a short-term slowdown as customers delay non-essential spending. At the same time, high interest rates and inflation continue to raise borrowing and operating costs. Locally, West Burlington's economy benefits from a strong manufacturing and agriculture base, providing WBH with a stable customer foundation. Still, economic downturns in either sector would directly affect sales volume. Rising labor costs and a shortage of skilled tradespeople remain challenges for small service-based companies like WBH.

**Social:** Rural Iowa's population is aging and slowly shrinking, with the largest growth occurring in residents over 65 years old (Iowa State University, 2024). This shift contributes to a shrinking local workforce and potential succession gaps among agricultural and industrial customers. WBH's success relies on its reputation, responsiveness, and customer trust. These are qualities that strongly influence purchasing decisions in small communities. Customers value fast turnaround, personal service, and reliability over national brand recognition, which gives WBH a relationship-driven advantage. However, younger buyers increasingly expect a digital presence, such as updated websites, online ordering, and social media visibility. Incorporating these channels could help WBH reach new generations of customers and maintain community relevance.

**Technological:** Advancements in smart hydraulics and condition monitoring are transforming the fluid-power industry. Sensors embedded in hoses can track pressure and temperature, allowing for predictive maintenance and reduced downtime (Power & Motion, 2024). Manufacturers are also introducing biodegradable fluids and high-efficiency polymers that extend product life and reduce environmental impact. Automation through Computer Numerical Control (CNC) machining and robotic hose crimping improves precision and production speed. For WBH, adopting digital inventory systems and modern assembly tools could shorten service time and improve accuracy. Implementing an online catalog or quoting system would align with modern customer expectations while maintaining WBH's small-business service quality.

**Legal:** Hydraulic service operations must comply with both EPA and OSHA regulations. The EPA's Used Oil Management Standards (40 CFR 279) require safe storage, labeling, and recycling of hydraulic fluids, as improper disposal can result in fines and environmental liability. OSHA's Lockout/Tagout Standard (29 CFR 1910.147) mandates proper energy isolation when servicing hydraulic systems to prevent injury from stored pressure. Liability insurance and warranty documentation are essential due to the potential for product failure or spills. Compliance not only protects WBH legally but also enhances trust with industrial clients that prioritize safety and accountability.

**Environmental:** Hydraulic operations carry environmental risks due to potential oil leaks and waste-fluid contamination. The EPA estimates that one gallon of used oil can pollute one million gallons of water, highlighting the importance of proper containment and disposal (EPA, 2025). Across the fluid-power sector, sustainability has become a key driver of innovation, and 78% of engineers report sustainability influencing hydraulic design (Power & Motion, 2024). As customers and contractors adopt greener practices, demand for biodegradable or low-toxicity hydraulic fluids is rising. WBH can strengthen its reputation by implementing recycling programs, ensuring environmentally safe waste handling, and offering eco-friendly product options to local clients.

### SWOT Analysis

Strengths	Weaknesses
<p>The growth of the industry is projected to continue growing in the next five years.</p> <p>Loyal and Established Customer Base</p> <ul style="list-style-type: none"> <li>Customers consistently choose West Burlington over manufacturers due to our ability to deliver customized solutions.</li> </ul> <p>Strong Reputation for Quality</p> <ul style="list-style-type: none"> <li>Known for consistently delivering high-quality products that meet or exceed expectations.</li> <li>Ongoing commitment to quality supports customer retention.</li> </ul>	<p>High Competition (Local &amp; National):</p> <ul style="list-style-type: none"> <li>Operates in a highly competitive market with numerous established players, both locally and nationally.</li> </ul> <p>Higher Pricing Compared to Competitors</p> <ul style="list-style-type: none"> <li>Premium pricing models may deter price-sensitive customers.</li> </ul> <p>Limited Brand Awareness,</p> <ul style="list-style-type: none"> <li>As a small business, overall visibility remains low, especially outside the immediate region.</li> </ul> <p>Limited Marketing Resources, marketing is not a common trend for this business.</p>
Opportunities	Threats
<p>Attract New Customers with Promotional Offers</p> <ul style="list-style-type: none"> <li>Launch targeted promotions for custom hoses to incentivize first-time buyers.</li> <li>Use special discounts or bundled deals to showcase the value of customization.</li> </ul> <p>Expand into Emerging Markets</p> <ul style="list-style-type: none"> <li>Identify and enter new geographic or industry markets with growth potential.</li> <li>Leverage expertise in custom solutions to meet the unique needs of these emerging sectors.</li> </ul>	<p>Rapid Technological Change</p> <ul style="list-style-type: none"> <li>Continuous innovation requires frequent adaptation to maintain a competitive edge.</li> </ul> <p>Intense Competition from E-Commerce Leaders</p> <ul style="list-style-type: none"> <li>Dominant online retailers, such as Amazon, pose significant threats to market share.</li> </ul> <p>Economic and Industry Downturns</p> <ul style="list-style-type: none"> <li>Market slowdowns or broader economic recessions may lead to diminished demand.</li> <li>Regulations into more sustainable materials and products.</li> </ul>

**Strengths:** When taking a deeper dive into West Burlington Hydraulics' strengths during our client interview, several important insights emerged. A key finding was that many of their current customers consistently return and repeat their business with West Burlington. Additionally, major companies that rely on hydraulics continue to work with them, supported by the strong relationships the owner, Donnie, has built with these clients. Research also indicates that the hydraulics market is projected to grow by over 5% in the next five years, with continued growth expected beyond that. This suggests that both the business and the industry have strong potential for increased sales and expansion.

**Weakness :** When examining the weaknesses, our client faces significant competition both locally and nationwide. As a small business operating in a highly competitive market, one major challenge is limited marketing reach. The hydraulics industry primarily depends on word-of-mouth referrals rather than widespread advertising or digital marketing efforts. This reliance restricts the company's ability to attract new customers beyond their existing network, making growth more difficult compared to competitors who invest in broader marketing strategies. Our research also revealed that 99% of West Burlington's products are priced higher than those of competitors and online retailers like Amazon, which may further limit their competitiveness in the market.

**Opportunities:** Opportunities for West Burlington include attracting new customers and increasing sales through targeted promotions that emphasize the value of customized solutions. Expanding into emerging markets with growing demand offers significant potential by leveraging expertise in custom hydraulic products. Collaborating with competitors presents another opportunity to enhance service offerings, reduce costs, and extend market reach through strategic partnerships. Additionally, the hydraulics industry itself is poised for growth due to technological advancements and rising demand in sectors such as agriculture, construction, and manufacturing. Staying aligned with these industry trends can position West Burlington for sustained success.

**Threats:** The hydraulics industry faces rapid technological changes, requiring constant innovation to stay competitive, which can strain resources. Intense competition from dominant e-commerce retailers like Amazon threatens market share due to their ability to offer lower prices and greater convenience. Economic downturns and industry slowdowns pose risks by reducing demand for hydraulic products and services. Additionally, increasing regulations aimed at promoting sustainable materials and environmentally friendly products may raise operational costs and complicate compliance. Importantly, when speaking with our client, he identified his biggest immediate threat as the upcoming expiration of his business loan within the next year. It is crucial for the company to maintain steady growth and increase sales before this loan period ends to ensure financial stability moving forward.

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