Reduce supply chain disruptions with second sourcing

Situation

A contract development and manufacturing organization (CDMO) was at risk of a facility shutdown following an interruption of raw material availability with one of their suppliers. One of the high-volume raw materials critical to the organization's manufacturing process was experiencing global shortages due to increased demand for its usage in all biologic processing. The shortage made the chemical difficult to reliably source in alignment with their production schedule. The CDMO's current demand for use of the chemical surged by 172%, and future demand was expected to increase by another 165%.

Additionally, the CDMO received notification from the incumbent supplier that the lead time for this material would increase from 8 weeks to 24 weeks—three times longer than the standard lead time—leaving the CDMO with little time to react. The lack of supply chain visibility amplified several risks within their single-sourcing strategy, including discontinuity of supply, potential of manufacturing facility shutdown, and added expenses for expedited shipping. The short-term solution for counteracting these risks was to hold excessive safety stock in their warehouse, increasing the inventory carrying costs. However, management knew that this was not a sustainable practice for their facility in the future.

Solution

To assess the severity of the supply disruption, the CDMO's directors of materials management and operations collaborated with Thermo Fisher Scientific to better understand its impact.

Key observations included:

- Inefficient supply chain planning and transparency, resulting in the need to expedite shipments
- Lack of supplier communication regarding poor lead times that affected the production schedule

- Lack of sufficient qualified manufacturing origin sources for several critical chemicals
- Nearly full capacity of warehouse due to holding of safety stock; projections indicated it would be at 100% capacity within one month

To address the operational and business challenges observed, Thermo Fisher proposed alternate sources from our global supplier network within the Thermo Scientific[™] Production Chemicals and Services business and facilitated discussions between the CDMO and a potential new chemical supplier, just a few days after the organization reached out for sourcing support.

Second sourcing strategies

With the assistance of Production Chemicals and Services, the CDMO was able to select an alternate supplier from a network of reliable suppliers that met their raw material supply and specification needs. By accessing the strategic relationships and expertise within our global supplier network, the CDMO was able to:

- Use market intelligence on supply chain conditions and sources, to help them gain flexibility to quickly identify an alternate supplier
- Receive their production-critical chemical within a lead time that was shorter than initially estimated, offset by manufacturers' prioritization of supplying raw materials to Production Chemicals and Services when there were supply disruptions or materials on allocation
- Gain assistance in auditing and qualifying the new supplier
- Obtain a clearly defined Management of Change (MOC)* process and material documentation equivalent to buying directly from the source manufacturer
- Improve operational efficiency by avoiding production delays and shutdowns through established shipping lanes, freight charges, and timing to accelerate material delivery

^{*} Certified ISO 9001:2015 Quality Management System incorporating applicable elements of 21 CFR Parts 210 and 211 and the IPEC Good Distribution Practices Guide.

Result

The CDMO's experience exposed significant risks brought about by relying on a single sourcing option for critical production materials, which was resolved by reevaluating their supply chain strategy.

Through collaboration between the CDMO's newly identified source manufacturer and Production Chemicals and Services, enough material could be sourced to meet the CDMO's rapidly growing demand.

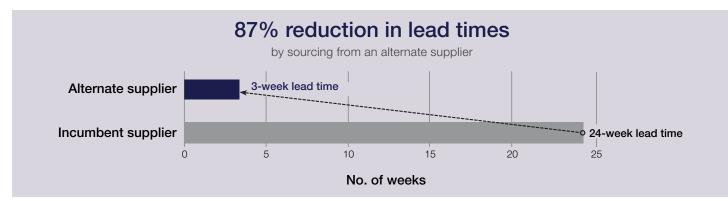
Overall, the CDMO realized the following results:

\$3M avoidance in lost revenue

by adhering to the production schedule and minimizing the risk of production delays and shutdowns*

\$30K annual savings

projected for raw material sourcing through leveraging economies of scale when working with a new supplier



* As estimated by data from Thermo Fisher Scientific.

Production Chemicals and Services works with biologic developers and manufacturers who want to do what matters most: innovate and produce life-changing therapeutics. With over 30 years of experience providing production chemicals and direct material supply chain solutions, we offer strategies to support risk mitigation, improved operational efficiencies, and reduced total cost of ownership so our customers can accelerate their speed-to-market and time-to-clinic, and improve productivity.



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