



THE COMPLETE GUIDE TO FDA-REGULATED SUPPLIER QUALIFICATION & QUALITY MANAGEMENT

A risk-based approach to qualifying,
managing and auditing third party
providers



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OUTSOURCING UNDER GREATER REGULATORY SCRUTINY

As FDA-regulated manufacturers look to streamline their production processes, many turn to outsourcing as a solution. Today, it's not only ingredients and components being sourced from third-party suppliers, but partial or even entire processes—a trend which has given rise to "virtual" companies comprised almost entirely of third party providers.

Outsourcing can significantly improve operational efficiency and fill gaps you may be struggling with in-house, but failing to properly manage suppliers and vendors presents huge risks for product safety and compliance with FDA's Regulations.

On top of this, the Agency has repeatedly promised greater scrutiny of global supply chains while stepping up import inspections and penalties for noncompliance. This comes on the heels of changes implemented by Notified Bodies—strengthening its supplier oversight for companies seeking access to the European Union.

Supplier-related compliance issues aren't just *possible* risks—they consistently rank among the top reasons for Inspectional Observations, warning letters and recalls, revealing a broader struggle within FDA-regulated industries to validate suppliers and maintain quality through robust risk management systems.

This guide is designed to remedy that. We've gathered pertinent regulations relating to supplier/vendor activities and outlined a strategy for ensuring your supplier quality management system can withstand the increasingly complex regulatory environment well into the future.

Interested in professional and objective supplier auditing against global regulations? Our team of former FDA Investigators and industry experts will work closely with you to identify and resolve all quality issues related to your global supply chain.

Contact us today to learn more about our supplier auditing services.



SUPPLIER QUALITY MANAGEMENT & REGULATORY EXPECTATIONS

Many FDA-regulated manufacturers falsely assume that by outsourcing duties to suppliers, these third parties take on the responsibilities for maintaining regulatory compliance. This is a fundamental misunderstanding of the expectations laid out in 21 CFR Part 820 for medical device companies and FDA's Q10 Pharmaceutical Quality System guidance for the pharmaceutical industry.

Although a viable supplier business model demands high quality products and services, the regulatory burden ultimately rests on the company receiving their products or service. Monitoring and managing quality is extremely important when outsourcing anything that could potentially impact the product. This includes both the typical outsourced services like component suppliers and contract manufacturers, as well as consulting services, more generally.

To eliminate confusion around the expectations placed on manufacturers, we've summarized the key regulations governing supplier management for drug and device companies below.

Medical Devices (21 CFR Part 820)

All medical device companies marketing products in the United States must have a Quality Management System that satisfies the requirements of Part 820. Specific to suppliers, this regulation establishes Purchasing Controls (Section 820.50), which require manufacturers to develop and maintain procedures that ensure all purchased or otherwise received products and services adhere to a specific set of requirements.

- Evaluation of suppliers, contractors, and consultants. Each manufacturer shall establish and maintain the requirements, including quality requirements, that must be met by suppliers, contractors, and consultants. Each manufacturer shall:
 1. Evaluate and select potential suppliers, contractors, and consultants on the basis of their ability to meet specified requirements, including quality requirements. The evaluation shall be documented.
 2. Define the type and extent of control to be exercised over the product, services, suppliers, contractors, and consultants, based on the evaluation results.
 3. Establish and maintain records of acceptable suppliers, contractors, and consultants.



- Purchasing data. Each manufacturer shall establish and maintain data that clearly describe or reference the specified requirements, including quality requirements, for purchased or otherwise received product and services. Purchasing documents shall include, where possible, an agreement that the suppliers, contractors, and consultants agree to notify the manufacturer of changes in the product or service so that manufacturers may determine whether the changes may affect the quality of a finished device. Purchasing data shall be approved in accordance with § 820.40.

The use of the term “establish” is particularly important to interpret properly. According to FDA in 21 CFR Part 820.3, “establishing” means to define, document, and implement. In the context of Purchasing Controls, thorough documentation (written or electronic) is absolutely essential.

Pharmaceuticals (Q10 Pharmaceutical Quality System Guidance)

This guidance extends quality systems responsibilities for drug makers to the activities they outsource. One particularly important clause states that contract givers “should be responsible for assessing the suitability and competence of the contract acceptor to carry out the work required.” It also establishes that all responsibilities for quality-related activities between the two parties “should be specified in a written agreement.”

Beyond this, drug manufacturers must ensure that any product introduced into interstate commerce is neither adulterated nor misbranded due to the actions of a contracted facility, but rather due to the labeled drug manufacturer. This point is particularly crucial for “virtual” companies that rely entirely on outsourced manufacturing.

All companies, virtual or otherwise, are ultimately responsible for the products they place into interstate commerce. A risk-based approach to supplier quality management is recommended to ensure this expectation can be met. This should include, at minimum, the following actions:

- **Conduct a comprehensive risk assessment** to determine the appropriate controls for the supplier based on the products or services they provide and their criticality to your product.
- **Perform a supplier audit** to assess the company’s ability to deliver products and/or services, perform independent testing of any components or products, and review any previous compliance issues such as FDA 483s, warning letters, or consent decrees.



- **Monitor, document, and review supplier performance** on a regular basis. Address and resolve any issues that arise.
- **Establish appropriate written quality agreements** regarding responsibilities for cGMP activities. Create a table or chart detailing the responsibilities for each organization.

QUALIFYING SUPPLIERS, VENDORS, AND OTHER CONTRACTORS

Putting an effective qualification process in place is both a regulatory requirement and an essential precaution against supplier-related quality issues down the road. In this case, “qualification” should be thought of as a kind of quality system within a quality system. Candidates should be thoroughly evaluated against your own quality requirements, compared with other options, physically evaluated and reevaluated on a regular basis.

The following is a clear and concise five-step supplier qualification process that can be integrated and expanded upon to meet your organization’s unique needs.

1. Define requirements and develop questions for potential candidates

Before you can assess a supplier’s ability address your needs, you need to define and document those requirements thoroughly. Although each situation is unique, consider the following areas when putting together your list:

- Manufacturing/production capabilities
- Quality standards and certifications
- Regulatory and compliance requirements
- Technological capabilities
- Customer service standards
- Delivery and cycle times
- Product lifecycle management

In most cases, the change control system is the appropriate place to document this information.

2. Compile candidates and assess capabilities

Once you’ve fully defined and documented your requirements, begin engaging potential candidates to gauge their level of interest in partnering with you. Present your requirements to those open to a potential relationship. In return, you should



receive not only an explanation of how the supplier can satisfy your requirements, but full documentation to support these claims.

If a particular product is involved, request a sample to evaluate it yourself. Although your list of potential candidates may be lengthy, narrow this down to no more than five companies. Evaluate each of your top candidates to ensure their documentation provides everything needed to perform a thorough assessment.

3. Evaluate candidates and identify a top pick

With a shortlist of top candidates, a more thorough evaluation of each of them can begin. Start by comparing each candidate's relative ability to meet your requirements compared to the others.

A simple table like the one shown below can be used as a comparison tool. Devise a numeric rating system to apply to each requirement depending on a candidate's capabilities. This allows for easier comparison between candidates.

Candidates	Requirement #1	Requirement #2	Requirement #3
Supplier A	2	3	1
Supplier B	1	2	2
Supplier C	3	2	3
Supplier D	2	2	3

4. Perform a comprehensive supplier/vendor audit

Once a top candidate is identified, a thorough audit should be planned and executed either on- or off-site, depending on the nature of the product or service provided. Both critical and noncritical supplier and vendor roles deserve thorough auditing, but critical roles in particular should be subjected to an on-site audit with predetermined items requiring verification.

Acceptance or rejection of a supplier candidate should ultimately be determined after reviewing the results of the audit.

[Read page 12 to learn more about conducting effective supplier audit programs >>](#)

5. Requalify suppliers on a regular basis

After qualifying a supplier, performance must be monitored on a regular basis to identify and address any issues related to the products or services provided. Create a schedule for performing periodic audits to address both pre-approved audit verification steps as well as potentially problematic areas observed during previous audits.

WRITING AN EFFECTIVE QUALITY AGREEMENT

Supplier quality agreements are crucial documents both for establishing a mutual understanding of expectations as well as a guide that can be referenced if disagreements or other concerns arise in the future. This document should cover all appropriate cGMP requirements and responsibilities for the contracted facility.

Since many companies express confusion around when a quality agreement is or isn't needed, we've answered a few of the key questions that arise when deciding to write one or not:

ARE QUALITY AGREEMENTS NEEDED ONLY WHEN WORKING WITH CMOS OPERATING IN OTHER REGULATORY ENVIRONMENTS?

No. Every contract arrangement with an outsourced service or product provider should be supported with a quality agreement. This includes situations where multiple divisions of a company are being engaged separately.

WHO SHOULD BE RESPONSIBLE FOR PREPARING, REVIEWING AND APPROVING QUALITY AGREEMENTS?

Quality Assurance (QA) personnel should lead preparation with the support of all relevant operational personnel. Approval should come from QA functions along with leaders from both parties' operations staff. Regulatory and Legal personnel should also be involved in the approval process before any quality agreement is finalized.

Well-written owner/supplier agreements should include the following elements:

- Purpose/Scope
- Product(s) Governed by the Agreement
- Contact Information
- Agreement Terms and Expiration
- GMP Compliance



- **Quality Control**
- **Quality Assurance including:**
 - Deviations/Investigations
 - Product Disposition Responsibilities
 - Complaint Handling
- **Regulatory Compliance including:**
 - Handling of Regulatory Agency Inspections
 - Owner's Right to Audit
 - Handling of Recalls
- **Dispute Resolution**
- **Change Control/Change Management**
- **Process and Cleaning Validation**
- **Annual Reporting Support**

It's important to note that these agreements do not affect a contractor's obligations to meet cGMP or other regulatory requirements, even if items are not addressed in the agreement.

MANAGING SUPPLIER QUALITY: A RISK-BASED APPROACH

With an effective supplier qualification process in place, ongoing quality management becomes the next big challenge. Depending on the size and scope of your company, you may be dealing with anywhere from a handful to hundreds of suppliers around the world, engaged in a variety of duties and responsibilities. Managing this disparate network can seem like an insurmountable task.

For years, manufacturers have tried to apply a one-size-fits all approach to quality management for their entire roster of suppliers. But with so much variability from one supplier to another, this approach can be woefully inefficient and downright dangerous when lapses in management allow potentially serious compliance issues to develop.

Instead, a risk-based approach to managing supplier quality allows manufacturers to craft a more malleable quality system that can be shaped to fit each supplier individually.

This approach enables you expend the greatest effort toward mitigating the risks that pose the most damage. But putting such a system in place is easier said than done. Even the best efforts made to establish a robust risk-based system can stumble on their most basic elements.



The following five-step process we've outlined below should provide a clear and concise roadmap for building and maintaining such a system.

1. Categorize suppliers by risk level and prioritize accordingly

Organizing your suppliers by risk level is a key component of any risk-based system. But rather than considering "risk" as the likelihood of a problem occurring or how effective each of their quality systems are, classification should be decided based on how critical the component or ingredient is to your final product.

In other words, even though a supplier may be remarkably reliable, the fact that their component or ingredient is absolutely essential to your finished product makes them high-risk.

Striking the proper balance here is key. Components or ingredients that present a lower risk to product safety, but are essential to the manufacturing process may still deserve "critical" status, and should be managed closely to avoid potential supply problems.

Generally, it's best to classify your suppliers into four risk tiers:

TIER 1	TIER 2	TIER 3	TIER 4
Highest-risk suppliers with critical impact on the quality or availability of the product.	Heavy-risk suppliers with direct impact on the product, but for which alternatives are available.	Moderate-risk suppliers have more of an indirect impact on the product.	Low risk suppliers have no significant impact on the final product.

Using this rubric, you can focus most of your effort on the highest-risk suppliers. The more risk they pose to the product, the more vigilant you must be to perform quality assessments and establish control measures.

2. Exercise caution when building new supplier relationships

Although it's easy to get lost in the prospect of a new professional relationship, it's important to perform adequate due diligence when forming new partnerships with all third parties. In addition to an effective verification process as outlined above, here are a few ways to avoid stepping into a potentially problematic situation:



- **Use objective observers.** It can be difficult to remain truly objective when you're actively interested in building new relationships with suppliers and vendors. An objective observer, like an experienced third party consultant, can consider your needs and evaluate candidate companies from a fresh, unbiased perspective.
- **Be specific with your expectations.** Suppliers must understand precisely what your company requires to be sure they can live up to those expectations. Change control notification, for example, is one area where vagueness can result in serious problems when a change the supplier considers inconsequential actually has a huge impact on your product.
- **Monitor quality early and often.** Making the effort to identify and address issues early on goes a long way in preventing larger problems from developing in the future. When a supplier's quality systems don't completely align with your own, be sure to compensate accordingly with a receiving inspection program or other measures that ensure outsourced products are safe and reliable.
- **Don't let cost be your primary driver.** Cheaper products are not worth the short-term savings they may be perceived to bring as quality issues could increase total costs exponentially.

3. Take a risk-based approach when crafting quality agreements

Quality agreements are essential for defining--in writing--who is responsible for the tasks and duties laid out in the quality system. Depending on the nature of the relationship, these can be as simple as a purchase order or as complex as a detailed contract. With no standard criteria for how much detail is needed in each unique situation, the best general rule of thumb is to err on the side of too much rather than too little information, using risk to gauge how much detail is necessary.

Typical quality agreements should, at a minimum, include the following:

- Any standards or regulations you expect the supplier to meet. These may include FDA Quality System regulations, ISO Standards, European Regulations, etc.
- Responsibility for complaint handling and reporting
- Plans and schedules for regular assessments by the contracting company
- Change notification procedures and notification expectations for levels of changes
- Notification procedures for "out-of-specification" test results, manufacturing deviations, and nonconforming materials



Quality agreements should serve as both a protective measure and a tool for streamlining supplier performance. When possible, collaborate with new suppliers to work through the quality system and define responsibilities together, paying close attention to high-risk areas and hand-off points.

Define the controls needed to address risks in these areas and be sure to have your legal department involved in the process before anything is signed.

4. Use objective third party auditors to plan and conduct supplier audits

In-person, on-site auditing remains the most reliable way to evaluate a supplier's operations. However, ensuring an accurate and objective assessment requires audits be conducted by qualified, third party professionals whose judgement won't be influenced by internal forces.

Audits aren't just necessary for validating new suppliers—they're an important tool for ensuring quality and compliance over time. The recent rise in outsourcing only further underscores this point.

MAINTAINING QUALITY AND IMPROVING SUPPLIER PERFORMANCE THROUGH AUDITING

As stated before, manufacturers aren't just responsible for the quality, efficacy, and safety of their finished products, but also for the raw materials, components, and services that go into them.

If these elements fail to conform to FDA's regulations, they can directly trigger enforcement actions including a recall. Regulators have become more vigilant in monitoring drug and device manufacturers by holding them accountable for supplier-related nonconformance.

Supplier audits are an essential component of extending continuous improvement practices to your network of third party providers. Regulators clearly expect internal and supplier audits to be conducted as part of a broader quality management system in order to monitor quality and reveal potential and/or existing issues, as detailed in the following regulations:



Pharmaceutical

21 CFR 211.22(a):

“...The quality control unit shall be responsible for approving or rejecting drug products manufactured, processed, packed, or held under contract by another company.”

21 CFR 211.84(d)(3):

“...Containers and closures shall be tested for conformity with all appropriate written specifications. In lieu of such testing by the manufacturer, a certificate of testing may be accepted from the supplier, provided that at least a visual identification is conducted on such containers/closures by the manufacturer and provided that the manufacturer establishes the reliability of the supplier’s test results through appropriate validation of the supplier’s test results at appropriate intervals.”

ICH Q10 Section 2.7:

“The pharmaceutical quality system, including the management responsibilities described in this section, extends to the control and review of any outsourced activities and quality of purchased materials. The pharmaceutical company is ultimately responsible to ensure processes are in place to assure the control of outsourced activities and quality of purchased materials. These processes should incorporate quality risk management and include...”

Medical Device

21 CFR Part 820.50:

(a) Evaluation of suppliers, contractors, and consultants. Each manufacturer shall establish and maintain the requirements, including quality requirements, that must be met by suppliers, contractors, and consultants. Each manufacturer shall:

1. Evaluate and select potential suppliers, contractors, and consultants on the basis of their ability to meet specified requirements, including quality requirements. The evaluation shall be documented.
2. Define the type and extent of control to be exercised over the product, services, suppliers, contractors, and consultants, based on the evaluation results.
3. Establish and maintain records of acceptable suppliers, contractors, and consultants.

b) Purchasing data. Each manufacturer shall establish and maintain data that clearly describe or reference the specified requirements, including quality requirements, for purchased or otherwise received product and services.

Purchasing documents shall include, where possible, an agreement that the suppliers, contractors, and consultants agree to notify the manufacturer of changes in the product or service so that manufacturers may determine whether the changes may affect the quality of a finished device. Purchasing data shall be approved in accordance with 820.40.

When supported with proper documentation, supplier audits demonstrate diligence in measuring supplier quality and tracking corrective actions when issues arise.

A well-run, comprehensive supplier audit program is perhaps one of if not the most important way to monitor and maintain supplier compliance. These crucial programs can significantly minimize the costs of poor quality (COPQ) risks that can delay and/or completely derail current and new products, damaging sales and reputations in the process.



A well-designed and managed supplier audit enables manufacturers to establish a few crucially important quality measures, such as:

- A risk-based supplier quality program to meet the current and future trends of regulatory oversight
- Auditing and qualification criteria needed to evaluate new suppliers
- Internal regulatory responsibilities related to your suppliers
- The quality standards your suppliers will need to meet in order to align with your own

ELEMENTS OF A COMPREHENSIVE SUPPLIER AUDIT

1. Define objectives

The first step in planning a supplier/vendor audit is defining the goals of the project, such as:

- GMP compliance
- Compliance with Marketing Authorization, NDA, BLA, etc.
- Compliance with company policies and procedures
- Matching of health regulatory agency procedures to duplicate regulatory inspections
- Rehearsal of site staff to be part of regulatory agency inspections
- Compliance with the contract terms

2. Bring auditors up to speed

Auditors should have a thorough understanding of your facility's technical operations (equipment, facilities, processes and quality systems) before moving forward.

3. Establish an audit schedule

Depending on the size and scope of the project, you may not have the resources to audit everything. Prioritize the areas that deserve the most attention. In line with a risk-based approach, considerations should be based on which areas have the most direct impact on product quality. The higher the impact, the more attention auditors should devote to it.



4. Plan for the audit

Gather information from internal stakeholders regarding any problems that have been noticed and which items should be addressed during the audit. Build a flexible audit plan that can accommodate deviations if certain areas deserve more attention than anticipated.

5. Optimize resources to save time on-site

Since an auditor's time on-site is often limited, make the most of the visit by utilizing your resources efficiently.

- Prepare and review key documents in advance to save time
- Make necessary arrangements so most of the time auditors spend on site can be used to interview personnel and observe the facility/operations
- Arrange for any necessary subject matter experts to assist the auditor with technical processes when they arrive

6. Support auditors throughout the project

Proficient auditors are highly skilled and knowledgeable with the various areas of GMP, however assistance in key areas may be helpful. Provide product experts, engineers, chemists, and other specialists when necessary. Auditors should take the lead in conducting assessment and preparing reports with appropriate support and input from subject matter experts.

Interested in putting a comprehensive supplier auditing program in place? Our staff of over 350 consultants—60 of whom are former FDA Investigators—draw on decades of combined experience to plan and conduct supplier audits tailored to your organization's particular needs.

Contact us today to start a conversation about your next project.

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