

# Quality Control & Testing Engineer: Principal Quality Control & Testing Engineer

---

Analyzes chemical, biological or microbiological products, raw materials, in-process materials, release test samples or stability samples in support of the company's quality program. Interprets and evaluates the analyses in terms of accuracy and precision compared against established specifications and recommends and implements corrective action where necessary. Develops, validates and implements controlled environment methods. Applies existing techniques and procedures with recommendations and implementation of modification for improved efficiency, or devises and develops new analytical methods and techniques. Performs qualitative tests or quantitative assays on samples using techniques that vary from use of standard analytical equipment to highly modern and automated instrumentation. May also be involved in establishing requirements for the transfer of methodology from R&D.

## **Knowledge**

Exhibits an exceptional degree of ingenuity, creativity and resourcefulness. Applies and/or develops highly advanced technologies, scientific principles, theories and concepts. Viewed as an expert within the field.

## **Problem Solving**

Develops information which extends knowledge in a given field. Information may form the basis of newly developed concepts, theories and products.

## **Discretion/Latitude**

Often acts independently to uncover and resolve issues associated with the development and implementation of operational programs. Plans R&D programs and recommends technological application programs to accomplish long-range objectives. Work is checked only to the effectiveness of results obtained, typically requiring a long-term perspective. Virtually self-supervisory.

## **Impact**

Designs research and develops highly advanced new applications resulting in new product/business opportunities for the company. Erroneous decisions or recommendations would have a long-term negative effect on organization's reputation and business posture.

## **Liaison**

Serves as consultant to top management in long-range company planning concerning new or projected areas of technological research and advancements. Prime spokesperson on company's technical capabilities and future directions. Often instrumental in attracting and obtaining major new company business.

## **Work Products (Examples may include but are not limited to)**

Performs Failure Analysis (FA), Construction Analysis (CA), Chemical Analysis and conducts re-verification investigations utilizing the necessary electrical tests and measurements, plus many of the advanced analytical techniques of physics, metallurgy and chemistry. May be required to perform special assignments and/or supervise and lend technical direction to subordinate quality/reliability personnel. May perform other assignments which are related to the work of the Product Assurance function. Determines and establishes product assurance requirements and costs for assigned project. Develops methods and procedures to meet the project quality requirements and develops quality data using standard techniques. Assures proper preparation of Product Assurance instructions to advise all concerned parties of these requirements.

## **Minimum Education and Experience**

20+ years with BS; 18+ years with MS; 15+ years with PhD; 15+ years with JD; 9+ years with MD; 9+ years with DVM