# Reliability Engineer: Principal Reliability Manager

Develops, coordinates and conducts technical reliability studies and evaluations of engineering design concepts and design of experiments (DOE) constructs. Recommends design or test methods and statistical process control procedures for achieving required levels of product reliability. Compiles and analyzes performance reports and process control statistics, and investigates and analyzes relevant variables potentially affecting product and processes. Ensures that corrective measures meet acceptable reliability standards. Analyzes preliminary plans and develops reliability engineering programs to achieve company, customer and governmental agency reliability objectives. May develop mathematical models to identify units, batches or processes posing excessive failure risks. As necessary, proposes changes in design or formulation to improve system and/or process reliability. May determine units and/or batches requiring environmental testing, and specifies minimum number of samples to obtain statistically valid data.

### Discretion/Latitude

Works under consultative direction toward predetermined long-range goals and objectives. Determines and pursues courses of action necessary to obtain desired results. Completed work is reviewed from a relatively long- term perspective for desired results.

### Knowledge, Skills and Abilities

Applies advanced technical principles, theories, and concepts. Contributes to the development of new principles and concepts. Identifies, analyzes and develops new business opportunities. Answers unusually complex technical questions regarding products and services, and takes part in putting together proposals, configurations, and product offerings.

## **Problem Solving**

Works on unusually complex technical problems and provides solutions that are highly innovative and ingenious.

#### **Impact**

Develops technological ideas and guides their development into a final product. Erroneous decisions or recommendations would typically result in failure to achieve critical project objectives. Leads the planning and implementation of large projects/programs. Contributes to department goals and planning efforts.

## Liaison

Serves as organization spokesperson on projects and/or programs. Acts as advisor to management and customers on advanced technical research studies and applications.

## **Minimum Education and Experience**

12+ years with BS in designated Engineering or related field. Employees usually have advanced degree in field of specialization.