Engineering Management
Field Project

A NEW LOSS CONTROL MANAGEMENT SYSTEM; ASSIMILATING LOSS CONTROL METHODOLOGY IN REDUCING THE OVERALL QUALITY LOSSES IN XYZ CHEMICAL CORPORATION

By

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Executive Summary

XYZ Chemical Corporation is a mid size company which serves the agriculture, architecture, housing, pharmaceutical industries. The chemical produced at XYZ is used as an intermediate in various end use applications like soaps/detergents, tires, household appliances etc. XYZ is located in Kansas City, MO and has twelve different manufacturing locations throughout the country. R&D and other regulatory department are located in the headquarters. The manufacturing location is supported by the laboratory and the QHSE department that plays an important role in the maintaining and improving the overall quality of the products that are being produced.

XYZ prides in providing high quality material and this is emphasized in the culture of the company. Many programs are being implemented to support high quality products and chief amongst them is the use of Statistical Process Control software called "STATPRO". STATPRO not only helps in computing and analyzing SPC but also track a record of changes that has occurred in recent past.

While the quality management system that is in place at XYZ monitors and improves the overall quality of the products, it does not capture the quality losses as it should. Quality losses occur due to human error or equipment malfunction. This results in non conforming batches and monetary losses. In 2010 these losses accounted for 8% of the total pounds produced and an approximate value of $500,000 dollars. These losses could be easily avoidable and the revenue lost could be recovered.

A loss control management system (LCMS) was designed to capture the quality losses and prevent the mistakes happening again in the product life cycle. The LCMS also keeps a record of the root cause analysis and any corrective action procedures. Since the records are stored in a central location, manufacturing locations can share these with each others as well as the R&D laboratory and the QHSE department.

An initial survey was carried out and based on the survey the LCMS project was designed and rolled out to the plants. The roll out also encompass adult education, statistical process control training, STATPRO software training and introduction to XYZ's central project database records. Once the entire LCMS program was implemented a survey was conducted to review the benefits of this program. Not only the program was liked by the various quality personnel, they were a sense of ownership amongst the manufacturing locations.

This program was designed not only to benefit the company in terms of avoiding monetary losses but also providing the ownership of the LCMS to the various locations as with their continuous support and future recommendation the program benefits would be achieved to its fullest.

Due to proprietary information, this project is not available.