

Layers of Protection Analysis

Primatech is a leading innovator in the development and application of LOPA. Our comprehensive LOPA consulting services are utilized by companies beginning to implement LOPA and those with established LOPA programs.

THE PRIMATECH ADVANTAGE FOR LOPA

Primatech's innovative LOPA approaches and tools provide our clients with a clearer understanding of process risk. Our highly-trained and experienced consultants have performed LOPA studies in nearly every process industry. We assist clients in using LOPA to refine PHA risk estimates as well as to determine safety integrity levels for compliance with the IEC 61511 / ISA 84 standard.

Primatech consultants help to refine the LOPA approaches used by our clients, for example, with criteria for qualifying safeguards as independent protection layers and guidelines for crediting enablers. We also provide assistance in establishing suitable risk tolerance criteria.

Primatech teaches a series of training courses on LOPA topics and we offer webinars on LOPA. Primatech has developed the software tool, LOPAWorks®, to facilitate LOPA studies in conjunction with Primatech's PHA software package, PHAWorks®. We have also developed extensions of LOPA to address human factors and process security.

SERVICES OFFERED:

Facilitation of LOPA studies

We facilitate LOPA studies as part of PHA studies or as separate studies.

Development of a LOPA Program

We develop LOPA programs tailored to the needs of an individual company. Programs cover issues such as the LOPA approach and risk criteria to be used, screening PHA scenarios, and guidance on when to use LOPA.

Development of LOPA Guidelines

We develop technical guidelines for performing LOPA tailored to the needs of an individual company. Guidelines address topics such as failure data to be used, standardizing IPL PFDs, and guidelines for qualifying IPLs.

Development of Risk Tolerance Criteria

We assist your organization in the development or review of individual and group risk tolerance criteria for your facilities.

