



CLEVELAND & ASSOCIATES

Empowering Businesses

Compliance, High-Consequence Operations & Operations Risk Management

High-Consequence Operations

Failure to properly perform a particular task or activity results in costly mistakes that can affect a company's success, reputation, and more.

High-consequence organizations are those with:

- significant business concerns in terms of managing, mitigating, or eliminating risk
- processes or technical complexities that resist simplification
- safety and regulatory/compliance standards required within their operating environment
- a high value placed upon industry/domain expertise

Our team evaluates activities and standards within the operating environment, and designs processes that address risk, introduces appropriate education opportunities to satisfy compliance requirements, and improves productivity.

Process Safety Management

Process Safety Management (PSM) refers to a set of interrelated approaches that manage hazards associated within process industries, and is intended to reduce the frequency and severity of incidents resulting from the release of chemicals and other energy sources (US OSHA 1993).

Using the Process Safety Management of Highly Hazardous Chemicals standard (29 CFR 1919.119) issued by the Occupational Safety and Health Administration (OSHA), our team develops a plan for the management of hazards associated with processes involving highly hazardous chemicals.

Control Room Operations & Alarms Management

Nearly 80% of production downtime is preventable, and half of this preventable downtime is the result of operator error. Monetary costs of downtime in the petrochemical industry alone top \$20 billion each year, requiring companies to re-evaluate how managers and operators are trained to deal with abnormal situations.

To minimize both production and monetary impact, information operators must be prepared to make quick, intelligent decisions. In most situations, companies expect operators to juggle walkie-talkies, telephones, and other system interfaces, when their undivided attention is required to effectively address the situation.

We evaluate current operator response protocols, determine which systems need to be addressed, and formulate procedures to ensure operators react quickly, confidently, and correctly to manage and mitigate the impact of unexpected events and risks.

Loss Prevention Engineering

Our team configures a system of loss prevention engineering and property loss techniques to mitigate or eliminate potential risk, and to help firms gain better control of risk exposures in existing, under-construction, and planned facilities.

EHS Management

The main objectives of Environmental, Health, and Safety (EHS) Management are:

- 1) to prevent incidents or accidents that may result from abnormal operating conditions, including the prevention of fire, explosion, and release of harmful substances into the environment or work area; and
- 2) to reduce adverse effects that may result from normal operating conditions, such as reducing the company's carbon footprint

United States-based organizations are subject to EHS regulations in the code of Federal Regulations, including CFR 29, 40, and 49.

Operational Risk Management

Our team evaluates the current risk management policies and procedures, and formulates Operational Risk Management (ORM) protocols, including risk assessment, risk decision-making, and implementation of risk controls. The aim of these protocols is to accept, mitigate, or avoid risk.

Crisis Management

In response to large-scale industrial and environmental disasters in the 1980s, crisis management has become an essential operational component, particularly within organizations involved in high-consequence product and service industries.

We review a company's current crisis management procedures, and create guidelines by which an organization deals with a major event that threatens harm to the organization, its stakeholders, or to the general public.



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