The Total EHS Assessment System

In the late 1980s, the Daicel Group began to introduce comprehensive assessments in the Organic Chemicals business segment as a system for evaluating risk in its business activities. Since 1995, the Daicel Group has administered its Total Environmental, Health and Safety Assessment System ("Total EHS Assessment System").

Under the Total EHS Assessment System, a prior assessment of diverse risks associated with all business operations in new plans—including R&D, production, consumption and disposal—is initiated in order to ensure thorough consideration of environmental, health and safety issues in new plans.

The Group's Total EHS Assessment System has the following features.

- (1) The system evaluates the new plan based on prescribed standards for eight items: legal compliance, chemical safety, environmental preservation, occupational health and safety, operational safety at facilities, product safety, distribution safety and safety of production outsourcing, purchasing and sales.
- (2) New plan indicates all new changes include Establishment and modification of facilities, changes in matters related to manufacturing etc.
- (3) The system defines "Corporate Total EHS Assessment" covering new plans that may cause a significant impact on management and "Division Total EHS Assessment" undertaken by each division etc. The Group evaluate new plan with defining assessment rank (I and II), categories, assessment executor and final evaluator based on their scale and risk.
- (4) With regard to the adoption of new process and/or increased production volumes, we carry out "Technical Assessment" and "Equipment Design Assessment", underscoring the importance of design specifications for technologies and facilities. After a discussion of the results of these assessments, Corporate Total EHS Assessment is executed.

Breakdown of Total EHS Assessment System

Categories of the Total EHS Assessment System	
Legal compliance	Evaluate conformity with laws
Chemical safety	Evaluate hazards posed by all chemical substances handled
Environmental preservation	Evaluate based on environment-related laws and regulations
Occupational health and safety	Evaluate conformity in context of preventing labor accidents
Operational safety at facilities	Evaluate risk of explosion and fire Assess results of other evaluations and fitness of relevant facilities
Product safety	Evaluate products for risk of causing bodily injury
Distribution safety	Evaluate distribution safety
Safety of production outsourcing, purchasing and sales	Evaluate from perspectives of the environment, safety and preventing occurrence of health problems

In addition, the Daicel Group began undertaking the "Product Crisis Assessment" in fiscal 2014 with the aim of reinforcing product safety assessments. Moreover, the Company established a system a third-party specialist team to conduct risk assessments of pharmaceutical, food, cosmetics and other products.

The number of Corporate Total EHS Assessments that evaluate new plans with highest ranking has reached approximately 740 since the system was introduced. In accordance with global business expansion, the Total EHS Assessment System has been implemented at overseas production bases since 2010.

Details of New Plans

- > New product launches
- > New projects
- Establishment, expansion and renovation of facilities

• • • • • • • • • • • • • • • • • •

- Changes in matters (e.g. raw materials, synthesis methods, processes) related to manufacturing
- New contracts/changes in distributors, customers and sales applications
- > Acquisition and transfer of properties and equipment
- New contracts/changes in manufacturing outsourcing and purchasing/sales
- New/change in waste management

Outline of Total EHS Assessment System

Rank I

New plans that may cause a significant impact on operations are subject to assessments undertaken by the Assessment Evaluation Committee or an assessment team consisting of experts appointed from organizations all across the Group.

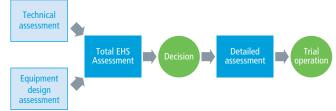


Rank I

New plans other than those designated as Rank I are assessed under rules for Division Total EHS Assessment.

Relationship of technical and equipment design assessments to Total EHS Assessment System

Basic process Response to abnormal reaction



Specifications, material, maintenance system, etc.