

REFERENCE CASE CHEMICAL PLANT



Extensive safety services for pharmaceutical and chemical plants in Germany

Merck KGaA needed the services of experts in emergency response planning and hazard modeling for the preparation of accident recovery scenarios and the development of a software tool to support the operational planning of alarm and emergency procedures. That's why they turned to TÜV Rheinland.

Basic facts sheet

Client	Merck KGaA
Timeframe	2006 – ongoing
Project location	Darmstadt and Gernsheim, Germany
Main services	<ul style="list-style-type: none">▪ Analysis and preparation of accident recovery scenarios▪ Development of a software tool▪ Training▪ Consulting services
Involved regulations/standards	<ul style="list-style-type: none">▪ VDI 3782 Bl. 1▪ VDI 3783 Bl. 1 and 2▪ TRGS 900▪ AEGL EPA USA

Initial situation and requirements

Merck KGaA is a pharmaceutical and chemical company that operates worldwide with over 40,000 employees in 67 countries and offers innovative, high-quality products that are tailored to provide solutions for the individual and society. Since Merck is obliged to provide accident response scenarios for the competent authority, which serve as the basis for extreme incident recovery plans in accordance with SEVESO II, they required a partner with experience in the emergency response planning and accident simulation fields.

Solutions, results

In recognition of our expertise in plant safety services and our profound knowledge of accident simulation and emergency response planning, TÜV Rheinland was the provider of choice for Merck KGaA.

Thanks to our professional knowledge in accident prevention fields, combined with computer solutions, we could assist the company with the preparation and provision of the emergency response scenarios they needed.

As a result of the procedures arrived at, a software tool was subsequently developed to support the operational alarm and hazard response planning and for the preparation of civil protection for chemical accidents. This was provided to the operational control center in a geographical information system. In addition to continuous further development of the tool, we support Merck with program and substance data updates, training and consulting services to ensure the correct usage and effectiveness of the tool.

Did you know?

The experts involved in the project were drawn from the disciplines: disaster control and civil protection, emergency response, electro-mechanics, chemistry, toxicology, and information technology.



Benefits for the client

TÜV Rheinland helped Merck KGaA succeed by:

- Effective evaluation of accident response scenarios.
- Support of the local authority with emergency response planning.
- Disaster management from the works fire brigade's standpoint.
- Continuous improvement and further development of the software tool.

Your contact:

TÜV Rheinland Group
Industrial Services
is@tuv.com
www.tuv.com

About TÜV Rheinland:

Founded 140 years ago, TÜV Rheinland is a global leader in independent inspection services, ensuring quality and safety for people, the environment, and technology in nearly all aspects of life.

We inspect technical equipment, products and services, oversee projects and help to shape processes for companies around the world. Since 2006 we have been a member of the United Nations Global Compact to promote sustainability and combat corruption.

Due to our extensive knowledge in the field of plant safety, we can help you to optimize your processes and establish a viable safety management system that reliably supports you in preventing incidents and ensuring the safety of your plant, employees and the surrounding environment.

We offer you a variety of services, including the development of concepts for incident prevention, preparation and review of safety reports, disaster prevention and damage investigations.