EMERGENCY PLANNING –
A Multi Agency Partnership

COMAH EMERGENCY PLANNING & SIMULATION

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FROM CIMAH TO COMAH

The coming into force of the Control of Major Accident Hazards (COMAH) regulations in 1999 was by general consensus considered an evolution of the then current requirements in the Control of Industrial Major Accident Hazards (CIMAH) Regulations, introduced in 1985, rather than a revolution in the compliance requirements. The COMAH regulations require safety reports to be prepared for top tier sites (sites processing or storing hazardous substances above predefined threshold quantities). Advantica has prepared such reports for a number of operators. The CIMAH regulations required top tier sites to have onsite and offsite emergency plans together with providing information to a local population in the vicinity of the sites. COMAH has the same basic framework for top tier sites as before, with the key changes in the new regulations having a greater emphasis on the environment and, specifically for emergency planning requirements, the requirement to test both on-site and off-site plans and arrangements for charging by local authorities for preparing and testing off-site plans.

COMAH EMERGENCY PLANNING REQUIREMENTS

Currently under the requirements for COMAH an operator has the following duties for emergency planning:

1. Top tier
   Prepare on-site emergency plan, provide information for off site emergency planning, practice the on-site plan, participate in offsite plan practices and pay local authority costs.
2. Lower Tier
   In a Major Accident Prevention Policy support document, detail policy on identification of foreseeable emergencies and the preparation, test and review of emergency procedures.

TOP TIER REQUIREMENTS

Guidance on implementation of the COMAH regulations was supplemented for emergency planning by a specific guidance document in which the COMAH Competent Authority provided practical advice for all participants in the emergency planning process. Advantica has prepared emergency plans for a number of operators to assist them in complying with the COMAH regulations. For emergency planning on top tier sites, the off site plan is perceived as positioned between the onsite plan, prepared by the Operator itself, and 'disaster' planning which is the responsibility of local authorities.

In the context of off-site emergency planning, a key COMAH requirement for the operator is supplying information to the local authority for preparing an off-site emergency plan for a site. To handle this COMAH compliance requirement, Advantica has developed a generic template for a Report to provide the required information. The approach follows the recommendations in guidance and is based on the core concept that the major accidents hazards described in the operator's COMAH Safety Report should be utilized to provide the basis of the off-site emergency plan. In fact the information can almost entirely be abstracted from the operator's COMAH Safety Report for a site.

The Information Report for the purposes of off-site emergency plan covers:

- Contact information – responsible person (operator).
- Substances on site – potential hazards of dangerous substances/other substances.
- Site information – geography, geology, and hydrology, site drainage, environmentally significant sites and species, site operations, people on site.
- Hazard information – release scenarios, hazards range criteria, hazard scenarios.
- Operator emergency response – organization, COMAH on site plan interface, warning arrangement, site isolation arrangements.

Further if the local authority requires more information, the Operator is obliged to supply additional information that the local authority may reasonably request.

SIMULATION

All emergency plans must be tested for top tier sites at least every three years and put into operation immediately in the event of an accident or an event, which could lead to an accident.

Advantica's Emergency Planning Simulation software enables individual organisations to put into practice emergency planning provisions in a virtual environment.

The software is fully Internet compliant and can be accessed by all parties involved in the execution of these plans regardless of location.

DEPENDABLE SOLUTIONS

Advantica's Emergency Planning Simulation software provides a web based "virtual desk". Emergency Planning Tests can be set up to consist of a number of standard scenarios which cover emergency events that could occur on a range of major hazard sites.
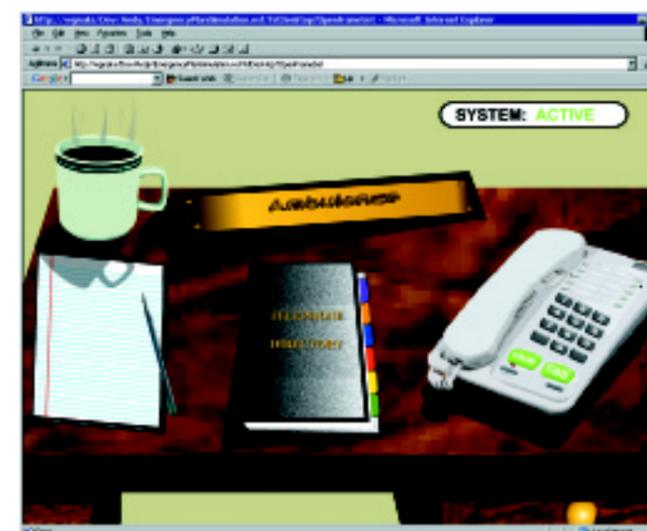
The "virtual desk" has been developed to permit Role Players to participate in emergency simulations and to contribute to the test plan.

Their textual conversations and action notes are logged for reporting after simulation has concluded. The Emergency Planning System then provides a full transcript of recorded injects, responses and actions for each exercise.

The "Virtual Desk" consists of four elements:

- A name plate to identify the role/person logged in.
- A phone with click able keys to call another role player and start a logged chat room style conversation and receive injects.
- An address book holding the numbers of the other role players.
- A note pad to record any actions made or instructed outside of the logged phone calls.

The desk is a highly graphical interface requiring a low level of computer literacy and, as far as is possible, emulates the operation of a real life incident. The Role Player logs onto the system though a web page which offers two options; either to join an active simulation or to view the log of a completed simulation by date/time, by authority/organisation or by action type i.e. phone call or recorded action.

The test director's screens are split into three main groups:

- Administration of the Simulation, to set up/store simulations.
- Running of a Simulation, to monitor/control an evolving simulation.
- Viewing of completed Simulations to enable the director to administer the Simulation they need to be able to do all the following tasks:
- Create predetermined injects
- Link injects together into an incident scenario
- Schedule the injects through the scenario
- Define Role Players for a scenario
- Maintain the Role Player Phone book

During the running of a simulation the director is prompted that an inject is scheduled for sending and has the option to edit the text of the inject before sending or cancel the inject if not required. The director can also create injects on the fly as required and assume any role while sending this inject or replying to injects. The director, in addition to closing the simulation, has the ability to suspend the simulation and restart at any time. On completion the director can view completed simulations and add comments to the actions and events recorded during a simulation.

THE COMPLETE SOLUTION

Advantica Stoner's Emergency Planning Simulation software is delivered with a basic level of implementation in order to allow the end user to configure the required scenarios and exercises.

However we can provide system configuration and consultancy services in our capacity as product provider and experienced software consultants in the utilities market.

BENEFITS

There are many benefits that the simulation product provides, these include;

- The system can be primarily used as a powerful training tool for briefing staff in the procedures surrounding an emergency.
- Organisations have the benefit of obtaining a full transcript of events once the simulation is complete.
- Businesses subject to COMAH regulations will experience significant reductions in the costs of completing 'live' emergency plans.
- The software provides businesses with increased communication and connectivity across all parties involved in the simulation.
- With regards to safety performance for a business the emergency planning software provides the ability to quickly and effectively identify areas of weakness in the emergency planning procedure.

Advantica, part of the FTSE 100 listed Lattice Group plc, is recognized as a leading commercial provider of advanced technology and systems solutions. Blending skills in technology, software, engineering, training and testing, Advantica's solutions have been invaluable to clients in over 50 countries, improving financial performance while maintaining safe and reliable operations.

Advantica Technology delivers operating performance improvements for the onshore and offshore oil and gas industries while Advantica Stoner offers network management solutions for energy and water delivery companies.