



Improve the effectiveness of emergency exercises by introducing the human factor.

A Case Study with Nynas

forum interactive





## Introducing...

### Forum Interactive

Forum Interactive is a learning and development consultancy specialising in culture change, behavioural safety and safety leadership. We design and deliver tailor-made events of any size as well as learning resources (e.g. interactive training films).

The stories we create show how human behaviour affects the implementation of safety management systems. The stories are based on evidence from industry research, incident reports and experiences from inside your own organisation.

### Nynas

Nynas is a different kind of oil company. We use oil to create sustainable value. Our business is specialised oil applications and within our field we're a world leader. We have over 800 employees, we maintain production facilities in Europe, North and South America and have offices in some 30 countries. All this generates a €2 billion turnover and stable growth.

In order to meet changing needs and demands, we work closely with our customers to continually develop oil's unique possibilities. That's what we call – Taking oil further.

introducing the human factor  
to emergency exercises



## Nynas Camperdown Emergency Exercise October 2011

Camperdown Emergency Exercise was a multi-agency emergency exercise carried out at Caledon West Wharf and Nynas Refinery in Dundee, Scotland. This exercise forms one of an on-going series of exercises carried out by Nynas personnel with the Emergency Services.

Working closely with Nynas in its planning and co-ordination were Tayside Fire and Rescue, Scottish Ambulance Service, Tayside Police, Briggs Environmental, Forth Ports and Forum Interactive.

Usually, casualty simulators – dummies – are used in such exercises. However, in this exercise the level of challenge was increased by using actors to introduce authentic and unpredictable human responses.

### **Glen Robertson, Director, Forum Interactive**

“Our role in this exercise was no different to the role we play in any learning and development intervention: we provided a significant authentic challenge to the participants in the exercise in order to enable an effective and sustainable learning experience.”





## The incident scenario

A tanker vessel is unloading crude oil into the refinery. Nearby, the driver of a minibus carrying workers has a fatal heart attack at the wheel, resulting in the vehicle crashing into the pipework manifold next to a security barrier.

The pipework is breached and hot crude oil sprays out. This burns the occupants of the minibus and the security guard at the barrier. It continues to spray out for 10 minutes, entering the River Tay.

A road tanker driver carrying fuel oil sees this incident and, distracted, crashes into an electrical switch cabin. He is trapped with a broken arm and the fuel oil runs out.



## Increasing the challenge

Actors were used to test systems and processes in relation to casualties and information management. All those participating were informed of this in advance.

**Casualties:** emergency services arriving on the scene were confronted by 'real' casualties – people in pain and distress – who remained as such for the duration of the exercise.

The presence of 'real' casualties provided an urgent and continual need for attention to the victims of the incident. For the first time, factors like response time, quality of medical attention and degree of compassion became part of the exercise with feedback from the actors about their experience.

**Journalist:** Meanwhile, a journalist was wandering about asking questions and gathering information about what was happening until he was challenged and removed.

He put anyone he encountered under pressure to answer questions and they had to stick to the correct response. No-one made an unofficial statement to him. However, this part of the exercise did highlight a couple of improvements to the communication procedure, which have since been made.

**Phone calls:** Another actor phoned key personnel in the organization, playing various roles (e.g. concerned relative, journalist) to test responses.





**Nick Ashton, Health, Safety, Security  
and Environment Manager - Nynas UK A.B.**

“Forum Interactive’s involvement made our Emergency Exercise very realistic. The Emergency Services, SEPA and our employees found the whole exercise much more useful and learned many more lessons as a result of FI’s input.

FI were great to work with during the development of the exercise and their expertise and professionalism helped me deliver an interesting and challenging scenario to all the participants.”

**Roy Dunsire, Station Manager of Tayside Fire and Rescue**

“Our service has been involved in numerous emergency exercises. During the Camperdown Emergency Exercise we had actors simulate specific roles instead of using casualty simulators. This created a far more realistic training scenario for the fire crews and other first responders attending.”





## Contact us

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