

RR1100 – Evaluation of the DRIFT gas dispersion model version 3.6.4

The Health and Safety Executive (HSE) uses gas dispersion modelling in its assessment of the hazards and risks posed by toxic and flammable substances stored at major hazards sites. To update its dispersion modelling capability, HSE recently commissioned ESR Technology to develop a new version of the gas dispersion model DRIFT (Dispersion of Releases Involving Flammables or Toxics). The new version of the model, DRIFT Version 3 (DRIFT 3), includes a significant number of modelling enhancements over the version of DRIFT previously used within HSE (DRIFT 2.31). These include the extension of the model to treat buoyant plumes and time varying releases. Prior to DRIFT 3 being adopted for use by HSE, it must undergo thorough evaluation and assessment.

This report describes the evaluation of DRIFT version 3.6.4 in accordance with a Model Evaluation Protocol originally developed for the evaluation of liquefied natural gas (LNG) vapour dispersion models. The protocol sets out a method of scientific assessment, verification and validation for heavy gas dispersion models where the results are recorded in a model evaluation report (MER). Overall, the evaluation exercise found DRIFT version 3.6.4 to be fit for purpose.

Assistance in the use of Adobe Acrobat PDF files is available on our [FAQs](#) page.

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Free health and safety seminar programme at The Cleaning Show 2017

The Health and Safety Executive will be running a morning of free seminars at the cleaning show this year to help employers protect their workforce and reduce costs attributed to managing staff absence.

Topics to be covered include:

- working at height
- preventing slips and trips
- occupation respiratory health
- MSDs
- vulnerable workers

For more information and to book your place go to [The Cleaning Show 2017](#)

HSL: The Way Forward – Excelling in Health and Safety Culture and Leadership – Buxton, 19 July 2017

Book Course

HSL is to run a 1 day course on The Way Forward – Excelling in Health and Safety Culture and Leadership.

ETC Venues – Marble Arch
Garfield House
London
W2 2EA

19 July 2017

PLEASE NOTE THIS COURSE WILL BE HELD IN LONDON

- Have you reached a plateau in health and safety performance?
- Do you have an understanding of how good your health and safety culture is?
- Do you understand the impact of leadership on your health and safety culture?
- Are you seeking to improve how your business leads on health and safety?
- How confident are you in your ability to lead others to achieve health and safety cultural excellence?

What sort of leader are you? A variety of terms are used to describe the best leadership style: transactional, transformational, authentic, and resonant, to name a few. But what do these terms mean and which is the best?

HSL have undertaken research in the field of health and safety leadership, which identifies it as requiring a distinct set of competencies. Drawing on HSL's expertise as psychologists and human factors experts, this event will help you develop your understanding of these competencies. Coupled with an understanding of what excellent health and safety culture looks like, this event will help you in driving a consistent approach to health and safety leadership within your business.

This event will:

- Explore delegates' views on what health and safety culture is, reflecting on the importance of a just culture and the need to aspire towards becoming a high reliability organisation
- Define health and safety culture, reflecting on psychological, behavioural and situational components
- Safety culture and your business: enable you to understand the factors that can influence the development of a positive health and safety culture.
- Know how important it is to have an effective health and safety management system
- Consider methods that you might use to assess H&S culture and climate, including the use of KPIs, SPIs, leading and lagging indicators
- Know how important leadership is for health and safety culture
- Identify the key health and safety values and associated standards required for effective health and safety leadership introducing HSL's evidence based leadership model
- Give you an opportunity to reflect on your own leadership style and identify specific competencies [\[1\]](#) that you feel you need to meet the identified standards

You will leave the event with the knowledge required to reflect and enhance your own leadership skills, influence those of others and positively influence your organisation's health and safety culture and therefore business performance.

Event delivery

The event will be delivered by HSL consultants/trainers who are experts in the field of health and safety culture and leadership. The trainers will draw upon their experiences of working with a variety of industries and organisational sizes both within the UK and globally.

Who should attend?

Those with responsibility at any level for leading and managing in the field of health and safety e.g. Chief executives, H&S Directors, Operations Directors, HR managers, H&S managers, H&S professionals.

Venue

[ETC Venues – Marble Arch
Garfield House
London
W2 2EA](#)

Cost

The cost of this course is £450 per person (includes course notes, lunch and refreshments).

[1] Competency refers to the knowledge, skills, attitudes and behaviour required.

<!--[if !supportLists]--> <!--[endif]-->Give you an opportunity to reflect on your own leadership style and identify specific competencies that you feel you need to meet the identified standards

[Book Course](#)

Please note the invoice option is not available within 4 weeks of the course date, or for overseas customers. If you are selecting the invoice option for payment, it will be mandatory to input a purchase order/reference number as we are unable to process booking forms without this.

For further dates and additional information email: training@hsl.gsi.gov.uk or contact the Training & Conferences Unit at HSL directly on +44 (0)1298 218806.

[Back to Health & Safety Training Courses](#)

Container terminal in court after worker injured

London Container Terminal (Tilbury) Limited (LCT) has been fined after a worker was seriously injured when the 'straddle' carrier he was driving overturned at Tilbury Docks in November 2014.

Basildon Crown Court heard that on 16 November 2014 a worker inadvertently drove his straddle carrier into a large excavation at the docks. The court was told that looking down from his cab, the driver did not see the road cones, small flashing lights or the ticker tape around the excavation because it was dark and the weather conditions were poor.

The straddle carrier, a vehicle used in the port terminal for stacking and moving freight shipping containers, toppled over. The worker suffered life changing injuries, his head wound required 29 staples to close and he continues to suffer from post-traumatic stress disorder.

An investigation by the Health and Safety Executive (HSE) found the precautions taken by LCT were wholly inadequate to prevent the vehicle from being able to enter the excavation. The court heard that all of the straddle carrier drivers working in the vicinity of the excavation had been exposed to the risk for several days during the course of the excavation works.

London Container Terminal Limited of Northfleet Hope House, Tilbury Docks, Tilbury pleaded guilty to breaching sections 2(1) and 3 (1) of the Health and Safety at Work Act 1974 and have been fined £180,000 and ordered to pay costs of £73,296. London Container Terminal ceased trading in December the fine will be paid by the Port of Tilbury (London) Limited.

Speaking after the hearing, HSE Inspector Nicola Jaynes said: "This was a serious incident and that could have been much worse. This was preventable if LCT had the correct safety precautions in place. This case serves as a reminder that suitable precautions are required to protect both pedestrians and vehicles from entering excavations."

Further information on how to reduce the risks involved with workplace transport can be found at: <http://www.hse.gov.uk/workplacetransport/index.htm>

Notes to Editors:

1. The Health and Safety Executive (HSE) is Britain's national regulator for workplace health and safety. It aims to reduce work-related death, injury and ill health. It does so through research, information and advice, promoting training; new or revised regulations and codes of practice, and working with local authority partners by inspection, investigation and enforcement. [hse.gov.uk](http://www.hse.gov.uk)^[1]

2. More about the legislation referred to in this case can be found at:
legislation.gov.uk/ ^[2]
3. HSE news releases are available at <http://press.hse.gov.uk>

Journalists should approach HSE press office with any queries on regional press releases.