



Promoting Safety Culture and Safe Work Practices at Fortum Oil

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This presentation

- describes a case study that
 - demonstrates how a safety culture development programme in Fortum Oil was planned and implemented
- was carried out as a joint project initiated and jointly funded by the Finnish Work Environment Fund, VTT and the companies
- started Nov/2001; the project ends Sept/2004



Työsuojelurahasto
Arbetarskyddsfonden
The Finnish Work Environment Fund

The *Safe Work Practices* project

- focuses on behavioural safety and safety culture improvement tools
- aims to import, develop and distribute them, as well as, to support their exploitation in Finland
- offers three modules to be used to analyse and change behaviours and the safety culture and to support the change
 - *Work Practices Analysis* to plan and decide what needs to be done
 - *Observation and Feedback Programme* to establish systematic support to safe work practices
 - *Safety Discussions* module to improve management visibility
- six pilot case studies in three companies were carried out during the development of the tools. The Fortum tanker truck terminal case is one of them.

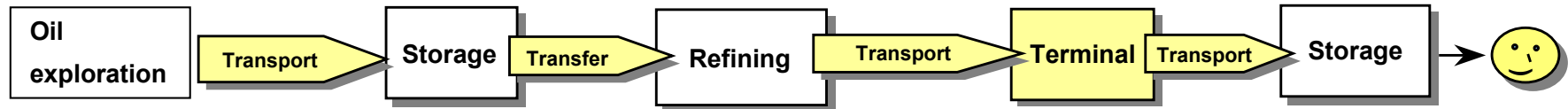
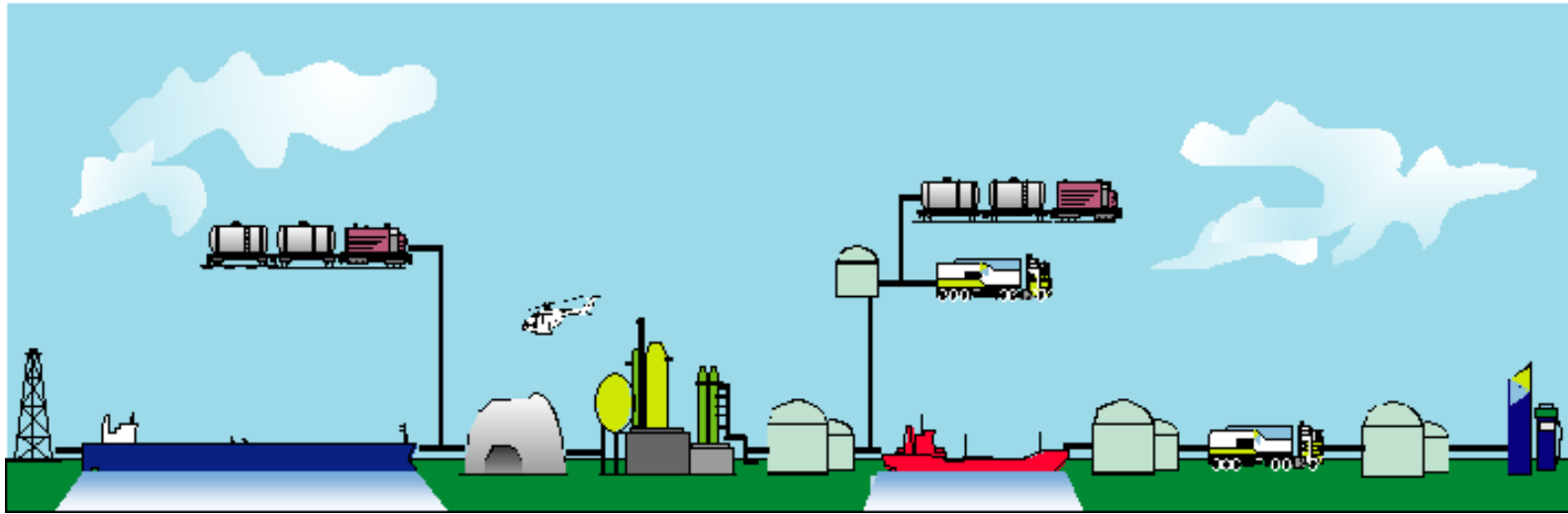
VTT

- VTT Technical Research Centre of Finland is a contract research organisation
- with its 2800 employees, VTT provides a wide range of technology and applied research services for its clients, private companies, institutions and the public sector

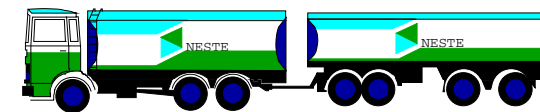
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Fortum Oil



Terminals	4
Traffic contractors	54
Truck drivers	450
Trucks	150
Kilometres	25 million / year
Call rate	500 000 deliveries / year
Transport volume	4 million m ³ / year



Why? - Health and Safety at Fortum Oil

Fortum's LWIF 2003 was 8.5

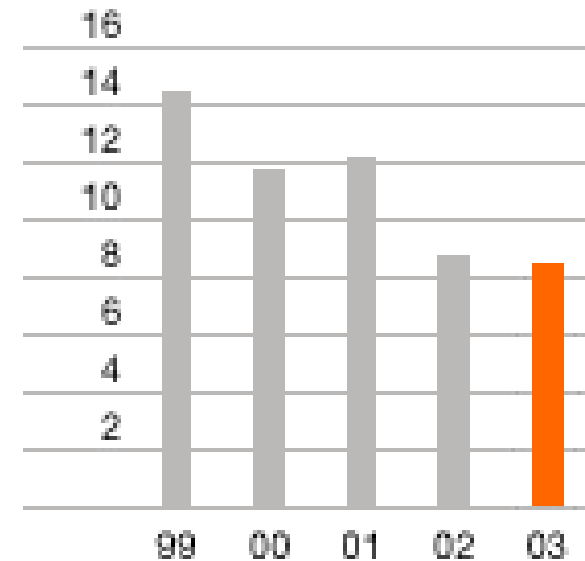
The ultimate goal is zero accidents

New safety procedures both at corporate
and business unit level

Focus on safe behaviour and safety leadership

LOST WORKDAY INJURIES

Injuries/million hours worked



How? In principle

We want to increase safe behaviour and understand that

- behaviour is a function of its consequences
- behaviour can be measured and managed
- behaviour can be influenced by providing immediate, regular and specific feedback and positive reinforcement
- working conditions and organisational procedures have to be considered as prerequisites for safe working habits



Organising the developmental work

- comprehensive training sessions to participating personnel at Fortum and partner companies
- companies in charge, researchers as facilitators
- a work group, a development team, running the programme
- all documents available to anyone interested, regular information to personnel and partner companies

What? - In practice Main activities in implementation

Start-up (Nov-Dec/2001)

- kick-off meeting, training sessions

Analysis of selected behaviours and improvements in working conditions (Jan-Apr/2002)

- focus on behaviours where risk-taking and unsafe acts had been identified

Planning the observation and feedback procedure (Jun-Oct/2002)

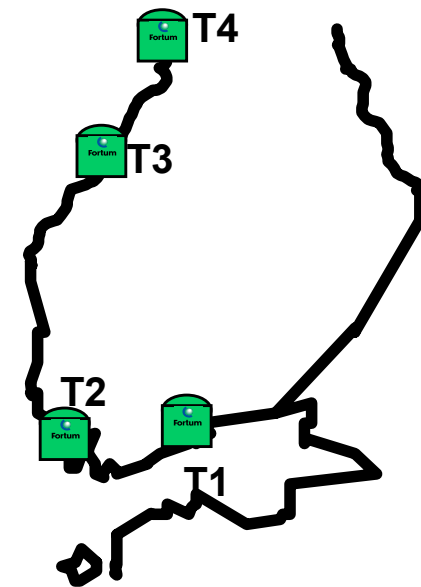
- designing the process and management's role, training sessions for terminal personnel and truck drivers

Running the observation and feedback process (start Oct/2002)

- to provide consistent reinforcement

Expansion (start Apr/2003)

- starting observation programme in three other terminals, transferring model to other units



Results

- Improvements in antecedents and consequences of tanker truck loading tasks
- Impact on behaviour
- Impact on work climate and job satisfaction



Improving antecedents and consequences of tanker truck loading

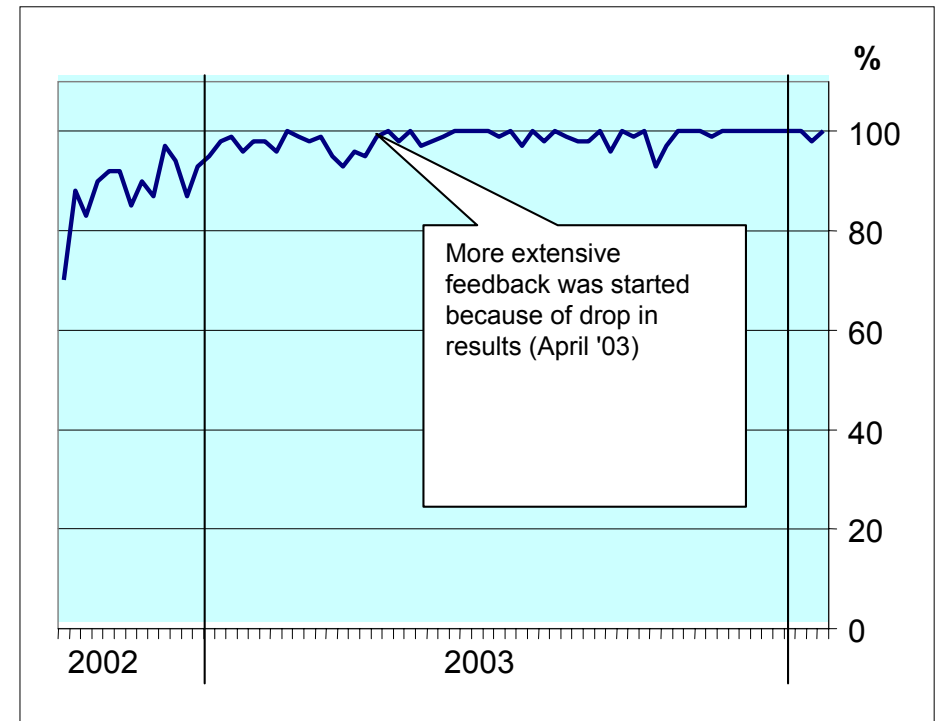


In six separate analyses of 10 loading tasks 34 corrective actions were proposed

Impact on behaviour

- helmet
- safety goggles
- gloves
- shoes
- working clothes
- use of mobile phone
- grounding
- use of overfill protector
- use of vapour recovery system
- monitoring the flow
- housekeeping (loading platform, loading booms)
- turning off the engine

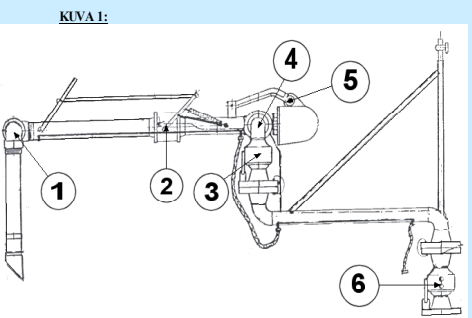
Safety goggles



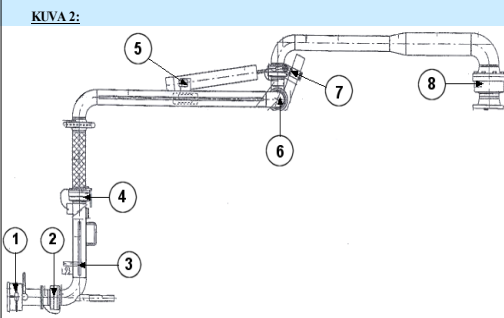
Impact on work climate and job satisfaction

VIKAILMOITUS

KUVA 1:



KUVA 2:

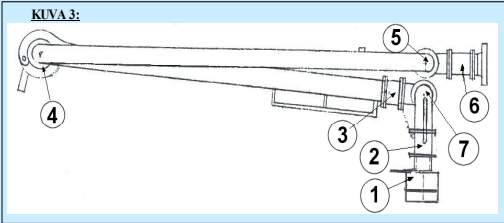


PVM/VIKAILMOITUKSEN TEKIJÄ:

Puh.N:o

PVM/KORJAUKSEN TEKIJÄ:

KUVA 3:



KOHDE						VIKA	
LAITURI	VARSII	NRO	VUOTO	JÄYKKÄ	MAADOITUS	YLITÄYTÖN ESTIN	MUU

Parannusehdotukset käännä sivu →

Reporting of failures and hazards improved

- user-friendlier report form with sketches
- reports gathered in folders available for drivers to follow the progress of repairs



- more precise reports
- shorter repair times
- valuable history data for argumentation of investments
- constructive co-operation between repairmen and drivers instead of name-calling and accusations

What was learned?

The programme - as a one-time activity - was effective

- regular observation and feedback increased the rate of safe behaviours
- preceding analyses resulted in several technical and work environment improvements
- remedies could easily be transferred as one-to-one applications to other units

Getting there is a continuous effort

Further development is needed to get behavioural safety programmes sustainable and adaptive

- thinking and talking in "behaviour terms" - "it is my responsibility, I can choose to work safely or unsafely" - must be encouraged
- materials have to be as practical and easy to apply as possible
- behavioural aspects of safety have to be strengthened in managers' training

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Injuries/million hours worked

