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SHE Management for STFC Technical Managers - Day 3

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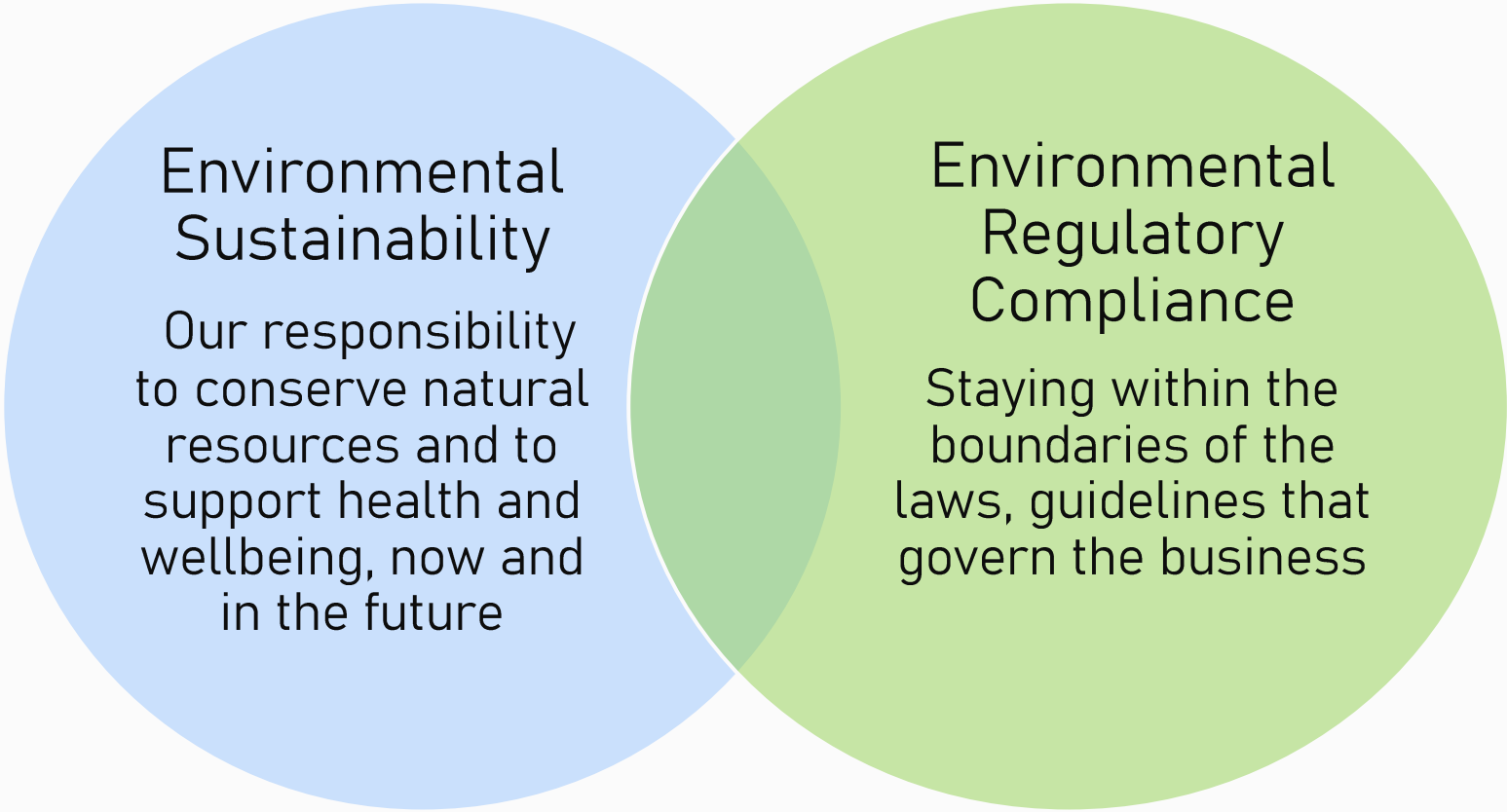
Environmental Management and Sustainability (Part 1)

Environmental compliance & sustainability

- What's the difference ?



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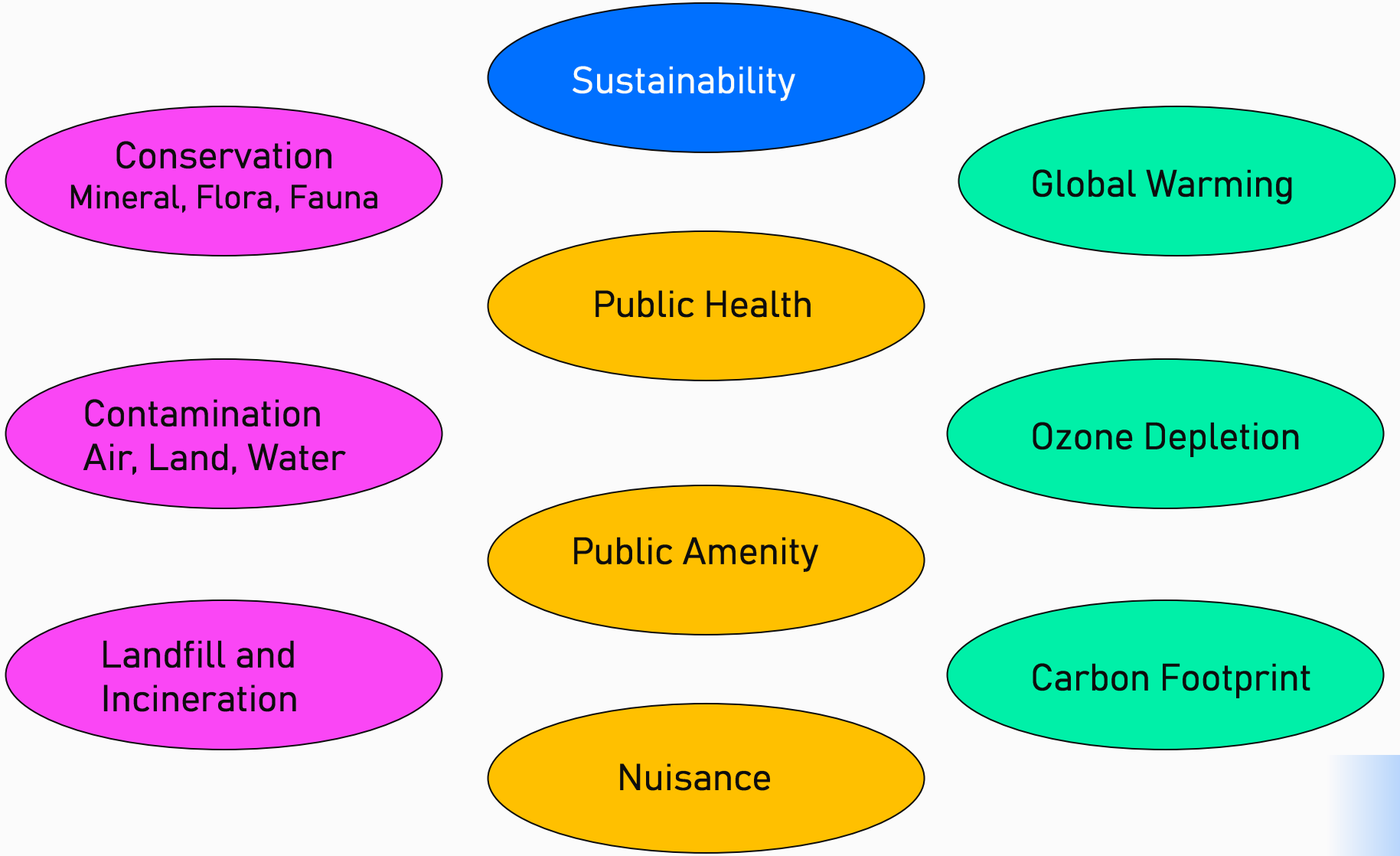
What are the issues to worry about?



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Timeline to a sustainability plan

- The UKRI Environmental Sustainability Strategy was launched in May 2020 and set out the ambition of 'embedding sustainability in everything we do' and achieving net zero carbon by 2040

- STFC's action plan was launched in 2021 and updated in 2022. It aims to deliver key outcomes in:
  - Leadership, Staff Empowerment, Physical Environment, Science Delivery, Collaboration and Procurement.



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The 2025/2026 figures

Solar panels on all sites generated **4,696,093** kWh of electricity

We emitted a total of **29,216** tonnes of CO_2
This equates to the emissions of ~233,823 flights between Heathrow and Edinburgh

We consumed 129,137,967* kWh of electricity
= to **37,443** average UK homes
*total electricity from the grid, onsite solar and gas-powered CHP (combined heat and power plant)

Waste and Recycling

We produced **769** tonnes of waste
= weight of **55** double decker buses

Water Usage

We consumed **139,965** m^3
This equates to **~ 56** Olympic-sized swimming pools
30-40% of this water was linked to cooling experiments

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The challenge

- Big science requires vast resources
- Quantifying the positive impact of enabled research (as part of any carbon calculation) is significantly challenging
- Sustainable technical solutions may be a long way from realisation (still only conceptual) and may require a global collaborative approach
- Significant funding could be required to investigate, develop and implement sustainable solutions
- Embedding environmental sustainability thinking in every aspect of our work is a major culture change for us ALL



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Green laboratory

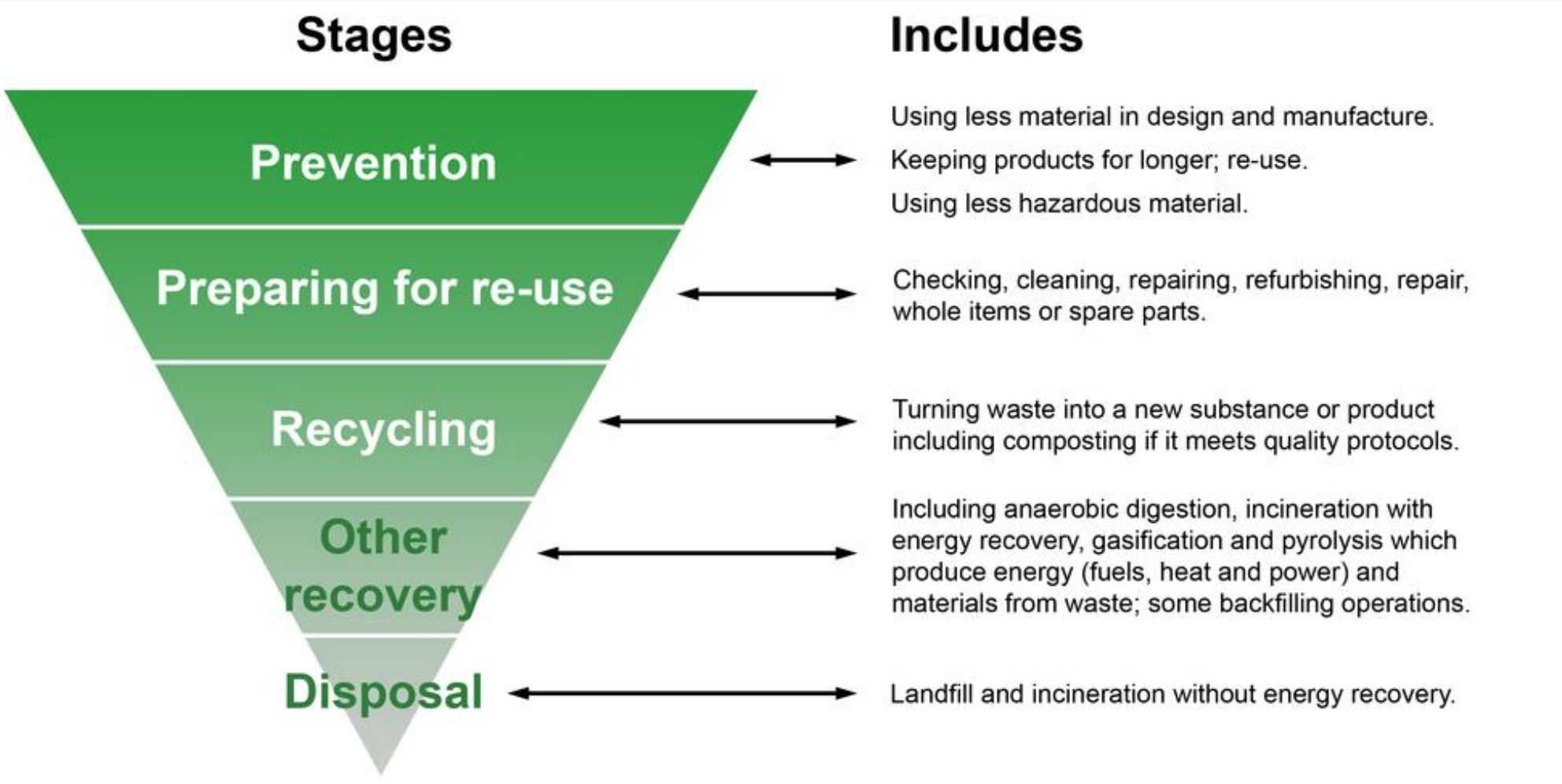


- Waste management & Water usage
- Net Zero by 2040 will profoundly impact how a science lab works

  - Do we know the carbon footprint of common Laboratory equipment: freezers, refrigerators, water baths, fume hoods, furnaces, X-ray sets, autoclaves etc.
  - Extensive use of single use plastics to prevent contamination, assure H&S etc.
  - Water usage, cleaning and sterilising
  - Disposal, scrapping of redundant equipment
  - Microscale chemistry techniques, hazardous chemical substitution
  - Hazardous waste management: handling, packaging, storage and disposal, & clinical and radioactive waste management …

Waste management heirachy

- It's everyone's duty to follow the hierarchy



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Motivators for good environmental control

- Potential for legal sanction arising from non-compliance with environmental legislation
- Government greening commitments:
  - Mitigating climate change: working towards net zero by 2050
  - Minimising waste and promoting resource efficiency
  - Reducing water use
  - Procuring sustainable products and services
  - Nature recovery – making space for thriving plants and wildlife
  - Adapting to climate change
  - Reducing environmental impacts from Information Communication Technology (ICT) and digital
- Savings arising from reduced resource costs and reduced waste
- Financial consequences of 'the polluter pays' principle
- Major moral and reputational image consequences in both directions



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Environmental Management and Sustainability (Part 2)

Environmental Essentials

- A single page summary, accessible from the SHE website, summarising the basic responsibilities of all members of staff and pointing to location of further information

- They currently focus on legislative compliance – not sustainability

- Guidance given under 4 main headings:
  - Environmental management – what can you do?
  - Disposing of waste
  - Controlling pollution to air, land and water
  - Environmental risk management



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Relevant SHE Codes

- The following codes are directly relevant to environmental management:
  - SHE Code 21: Management of radioactive waste
  - SHE Code 27: Receipt and dispatch of hazardous substances
  - SHE Code 31: Controlled and hazardous wastes
  - SHE Code 41: Controlling pollution to air land and water

SHE Code 21 - The Management of Radioactive Waste

- This code contains a large quantity of technical information on how compliance with a number of overlapping regulations is achieved through the appointment of specially trained staff, such as:

  - RPA – Radiation Protection Adviser
  - RWA – Radioactive Waste Adviser
  - RWM – Radioactive Waste Manager
  - RMC – Radioactive Material Consignor

- If staff are required to deal with or are planning to deal with any radioactive substance, they must contact the RWA to discuss the application of the Code

Exercise 7: Environmental SHE Code review

- In groups, look at a single code and prepare a 5 minute presentation highlighting the most important information for managers and supervisors

- Group 1: Receipt & Dispatch of Hazardous Substances (SHE Code 27)

- Group 2: Controlled and Hazardous Waste (SHE Code 31)

- Group 3: Controlling Pollution to Air, Water and Land (SHE Code 41)



Other related SHE Codes

- The following codes may be relevant to environmental management:
  - SHE Code 16: Biological Safety
  - SHE Code 35: Asbestos
  - SHE Code 37: CoSHH
- The need for an environmental risk assessment should be considered for all work activities
- Note that Environmental Management is incorporated into ALL codes as necessary, e.g. SHE Code 6 Risk Management explicitly includes assessment of environmental hazards

So what can you do to contribute?

Think:

- Before disposing of waste – is it the correct waste stream?
- Before disposing of washings down the sink - are you aware of the Trade Effluent Permit conditions?
- Before you leave for the weekend/holiday – are all non-essential electrical items switched off?
- Do you know how to dispose of hazardous waste?
- Do you know how to report an environmental incident?
- Do you know who to speak to get advice?



Question?

Can you think of anything else you can do to contribute?

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Safety training and Training Needs Analysis

Introduction

- The provision of information, instruction and training is a core legal requirement of the Health & Safety at Work Act and many safety regulations introduced under it

- Training is linked to the competence needed by any employee to do the work required

- Dealing with training is a core Management Responsibility in the STFC H&S Management Arrangements

- *"If you do nothing else, ensuring your staff are effectively trained is perhaps THE most important action a manager can undertake to assure their safety"*

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Scope

- SHE training needs to be considered for all personnel including:
  - STFC employees and tenants
  - Temporary staff including agency staff
  - Short and long term visitors
  - Facility Users
  - Sandwich and vacation students
- Any personnel in the above categories working at STFC sites on average for more than 2 days a week for 3 months require the same level of mandatory SHE training as STFC employees

Mandatory SHE training

- Induction training:
  - Mandatory induction session on joining STFC which is delivered on first arrival followed by a suite of 3 mandatory training courses for all staff, all refreshed 5 yearly:
    - Fire Safety
    - DSE training and self-assessment
    - Safe Manual Handling
  - Plus an additional 3 mandatory training courses for all staff within 6 months, all are available on-line and no automatic refreshment required:
    - STFC Health and Safety Management Arrangements bite size
    - Electrical Safety Essentials
    - Asbestos Essentials

Mandatory SHE training

- Is followed up by location/activity specific training as set out in the HR Induction Check Sheet
  - Management training :
    - Training on appointment to a first managerial role in STFC with SHE responsibility for others
      - **SHE Management for Non-Technical (Office based) Managers** (1/2 day course, refreshed 5 yearly); or
      - **STFC SHE Training for Technical Managers (3 days, refreshed 5 yearly with 1 day course) - this course**

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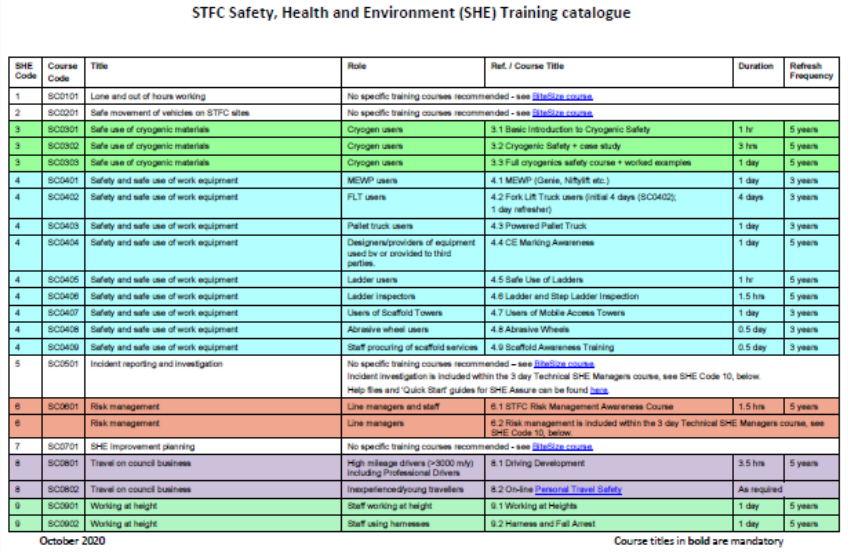
Job or hazard specific SHE training

- Role/project related training identified by Line Management for staff through a training needs analysis conducted on appointment, and reviewed annually through APR or more frequently when required

- Requires proactive management/staff to request this training – SHE Group proactively manage initial mandatory training and refresher training

- See every SHE Code!

- Collated in STFC SHE Training Catalogue
  - Find this on the website



STFC Safety, Health and Environment (SHE) Training catalogue

SHE Code	Course Code	Title	Role	Ref. / Course Title	Duration	Refresh Frequency
1	SC0101	Lone and out of hours working	No specific training courses recommended - see RiteSize course.			
2	SC0201	Safe movement of vehicles on STFC sites	No specific training courses recommended - see RiteSize course.			
3	SC0301	Safe use of cryogenic materials	Cryogen users	3.1 Basic Introduction to Cryogenic Safety	1 hr	5 years
3	SC0302	Safe use of cryogenic materials	Cryogen users	3.2 Cryogenic Safety + case study	3 hrs	5 years
3	SC0303	Safe use of cryogenic materials	Cryogen users	3.3 Full cryogenics safety course + worked examples	1 day	5 years
4	SC0401	Safety and safe use of work equipment	MEWP users	4.1 MEWP (Genie, Niftylift etc.)	1 day	3 years
4	SC0402	Safety and safe use of work equipment	FLT users	4.2 Fork Lift Truck users (initial 4 days (SC0402); 1 day refresher)	4 days	3 years
4	SC0403	Safety and safe use of work equipment	Pallet truck users	4.3 Powered Pallet Truck	1 day	3 years
4	SC0404	Safety and safe use of work equipment	Designers/providers of equipment used by or provided to third parties.	4.4 CE Marking Awareness	1 day	5 years
4	SC0405	Safety and safe use of work equipment	Ladder users	4.5 Safe Use of Ladders	1 hr	5 years
4	SC0406	Safety and safe use of work equipment	Ladder inspectors	4.6 Ladder and Step Ladder Inspection	1.5 hrs	5 years
4	SC0407	Safety and safe use of work equipment	Users of Scaffold Towers	4.7 Users of Mobile Access Towers	1 day	3 years
4	SC0408	Safety and safe use of work equipment	Abrasive wheel users	4.8 Abrasive Wheels	0.5 day	3 years
4	SC0409	Safety and safe use of work equipment	Staff procuring of scaffold services	4.9 Scaffold Awareness Training	0.5 day	3 years
5	SC0501	Incident reporting and investigation	No specific training courses recommended – see RiteSize course. Incident investigation is included within the 3 day Technical SHE Managers course, see SHE Code 10, below. Help files and 'Quick Start' guides for SHE Assure can be found here.			
6	SC0601	Risk management	Line managers and staff	6.1 STFC Risk Management Awareness Course	1.5 hrs	5 years
6		Risk management	Line managers	6.2 Risk management is included within the 3 day Technical SHE Managers course, see SHE Code 10, below.		
7	SC0701	SHE Improvement planning	No specific training courses recommended - see RiteSize course.			
8	SC0801	Travel on council business	High mileage drivers (>3000 m/y) including Professional Drivers	8.1 Driving Development	3.5 hrs	5 years
8	SC0802	Travel on council business	Inexperienced/young travellers	8.2 On-line Personal Travel Safety	As required	
9	SC0901	Working at height	Staff working at height	9.1 Working at Heights	1 day	5 years
9	SC0902	Working at height	Staff using harnesses	9.2 Harness and Fall Arrest	1 day	5 years

October 2020

Course titles in bold are mandatory

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Staff, facility users, visitors and tenants

- Are required to attend all training and associated refresher training identified by their manager

- Utilise and apply SHE training at all times

- Raise any perceived shortfall in SHE training with their manager at the earliest opportunity

- Ensure that all visitors for whom they are responsible are aware of:
  - The H&S hazards to which they could be exposed
  - Local safety control measures
  - Relevant emergency procedures

Line manager & supervisor responsibilities

- For New Starters:
  - Consider the competence, experience and personal qualities of staff at selection and again at deployment
  - Ensure STFC SHE induction is delivered to new starters **before** they start work duties
  - Ensure that a **local workplace safety induction** is delivered to new starters before they start work duties: see appendix 2, and HR induction checklist
  - Pay particular attention to young and inexperienced staff

Line manager & supervisor responsibilities

- For All staff:
  - Complete a Training Needs Analysis (TNA) within 4 weeks of the appointment or change of duties
  - Review the TNA annually or following any significant change in duties
  - Make full use of the STFC SHE Training Catalogue and if appropriate contact SHE Group for advice
  - Consider the need for local ‘On the Job’ training by existing expert staff for specialist activities or equipment specific training provided by manufacturers

Line manager & supervisor responsibilities

- SHE training administration:
  - Ensure all staff complete agreed SHE training in a timely manner
  - Training organised or delivered by SHE Group will be recorded and filed by SHE Group
  - Training provided locally at Department level or lower, including On the Job training, must be recorded locally.
  - Training records should include proof of attendance and completion by signature

Line manager & supervisor responsibilities

- Training Needs Analysis (TNA):

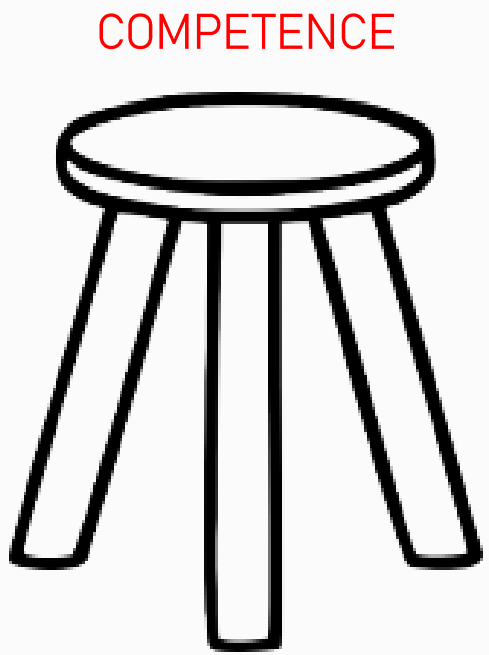
Step	People	Action
1	Employee & Line Manager	• Jointly complete a risk assessment identifying hazards and risks of the proposed work or role • The pro-forma in SHE Code 06 should be used to structure this assessment

2	Line Manager	• Identify and document required SHE training by referring to:
		  • Relevant SHE Code or SHE Training Catalogue or
		  • Specialist / equipment specific training required

3	Line Manager	Record these in individuals APR 'Learning and Development' log
4	Employee & Line Manager	• Ensure training in the SHE Catalogue is booked through SHE Group • Other job related training is organised by line management
5	Employee & Line Manager	• Ensure training is completed, recorded and reviewed for effectiveness • In the case of significant hazards, training must be completed prior to starting the work

SHE Competence

- The SHE Group follow a simple competence model (consistent with the existing HR/SBS recruitment model):
  - Knowledge/training
  - Skills/Experience
  - Attitude/Behaviours



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Exercise 8: SHE Code 8 bite size

- Use the laptops to complete the bite size introduction to SHE Code 08 : Travel on Council Business

- In reported road collisions in Great Britain in the year ending June 2024 there were an estimated:
  - 1,607 fatalities, -2% compared to the year ending June 2023
  - 29,540 killed or seriously injured, slight increase compared to the year ending June 2023
  - 128,920 casualties of all severities, -4% compared to the year ending June 2023

  - Reported road casualties in Great Britain, provisional estimates: year ending June 2024 - GOV.UK (www.gov.uk)



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SHE Code 30
SHE Auditing and Inspection

SHE Audit and inspection strategy

- The code sets out three distinct audit and inspection activities:
  - A programme of Departmental led location/activity inspections (SHE Tours) on a 2 year cycle
  - A programme of STFC SHE Code **Compliance Audits** undertaken on a 5 year cycle
  - An externally led independent **System Audit** of the effectiveness of the STFC SHE management system as a whole undertaken every 5 years



Departmental SHE tour programmes

- SHE tour programmes are organised by departmental management and approved and overseen by Departmental SHE Committees

- Appendix 4 provides guidance and supporting pro formas

- As a minimum all geographic areas must be covered at least every two years depending on circumstances, staff and incidents

Departmental SHE tour programmes

- SHE Tours must be carried out by suitably trained staff and where possible inspectors should operate outside their own work areas (a SHE Tour training course is available on-line)

- The SHE Tours schedule should be communicated to the areas affected in advance

- Actions identified by SHE Tours must be recorded in the Evotix Assure system

- SHE Tours should include safety representatives, SHE Group, and local management

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SHE Compliance audits

- The underlying question in these audits is:
  - "Are we following the SHE codes and **can they be improved**?"
- The priority for audits will be based on:
  - SHE performance measures such as incidents and near misses
  - Planned changes to work programmes
  - Results of previous audits and
  - Changes in SHE management system or new legislation

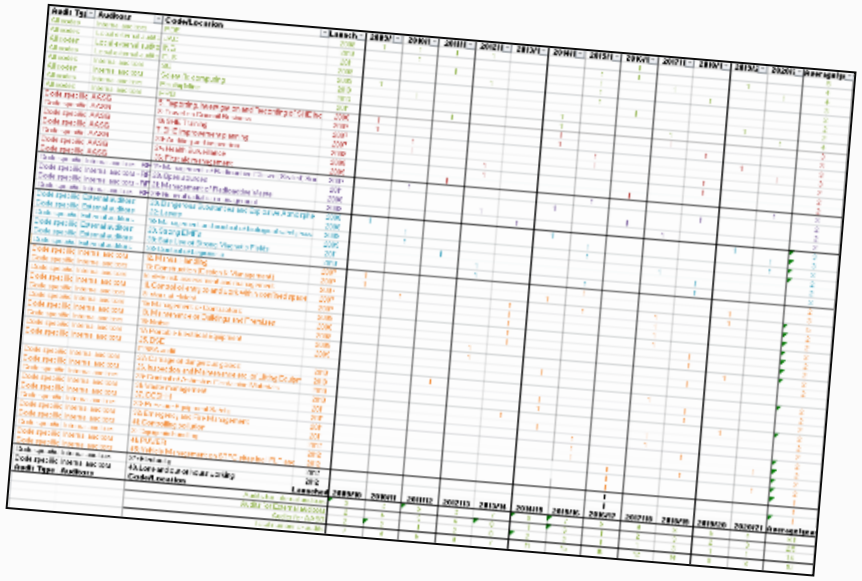
SHE Compliance audits

- Audit programme approved by & undertaken on behalf of the STFC SHE Committee

- The programme is managed by the SHE Group and communicated in advance

- Audits may be code specific or, for low hazard profile Departments, address all relevant codes

- Appendix 2 provides guidance



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STFC SHE system audit

- The remit of this audit is :

  "To assess whether the STFC SHE Management System meets STFC needs and legal requirements and whether it identifies opportunities for improvement"

- Audit carried out every 5 years by independent external consultants and based on compliance with HSE safety management model HSG65

- Audit will be organised by SHE Group and will report to the STFC SHE Management Committee

- Appendix 3 provides further details

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Managers and supervisors responsibilities

- Co-operate fully with the inspection or audit team by providing full information and access as required

- Remember the inspector/auditor has been instructed to find opportunities to improve any aspect of SHE management or operation

- Consider the findings of SHE audits and inspections and act in a timely manner on any non-conformances or recommendations. If any such recommendation is not accepted, the basis for this decision should be recorded in writing

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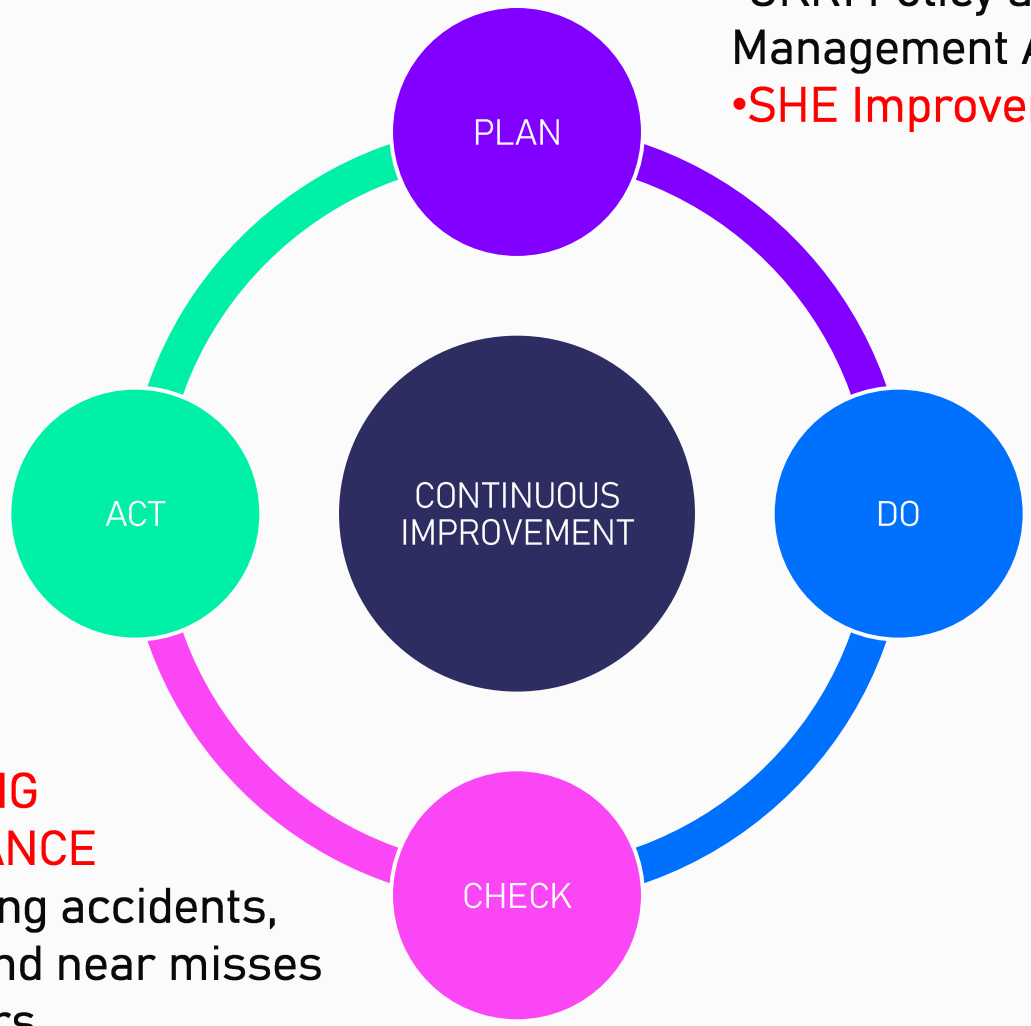
SHE Code 7 - Safety, Health and Environment Improvement Planning

SHE Management System PDCA Cycles

•UKRI Policy and STFC H&S Management Arrangements
•SHE Improvement planning



•Risk assessment
•Assign responsibilities
•Implementing
•Training and competence

•Reviewing performance
•Learning lessons

•MEASURING PERFORMANCE
•Investigating accidents, incidents and near misses
•Safety tours
•SHE auditing

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Performance monitoring : Lagging or reactive indicators

- These indicators tell you how you are doing by looking at what has happened
  - "driving your car by looking in the rear view mirror"



- Many of these indicators will be derived from STFC's Incident investigation and reporting system (SHE Code 5) or from SHE audit and inspection activities (SHE Code 30)

- Helpful as a retrospective measure of output performance

Lagging or reactive indicators

Numbers of injuries categorised by severity	Number of RIDDOR reportable injuries
Numbers of reported instances of occupational ill health	Numbers of environmental incidents
Number of attendances at occupational health centres	Numbers of breaches of environmental consents
Lost time due to injuries or occupational ill health	Volumes of waste
Costs of civil claims	Power and water consumption

Performance monitoring : Leading or active indicators

- These indicators attempt to measure the effectiveness of the key SHE controls an organisation has before an incident occurs

- They are often the result of measurement, inspection or audit of the workplace

- Some of these will be derived from SHE Group databases and others from within Departments, Projects or Groups

Leading or active indicators

Proportion of risk assessments reviewed within 2 years	Failures rates of registered equipment items
Numbers of risk assessment actions completed as scheduled	Numbers of near misses closed out and fed back
Safety Tours and SHE Code audits completed as scheduled	Completion rates for mandatory SHE training
Numbers of safety tours and audit completed as scheduled	Completion rate for SHE refresher training
Emergency exercises and fire drills completed as scheduled	Completion rate for actions arising from emergency exercises and fire drills

Project specific performance indicators

Departments managing higher risk activities may need to establish performance indicators tailored to their specific needs

BN 4: Maintenance	
Leading indicators	**Lagging indicators**
Maintenance backlog (percentage of equipment not maintained against prioritised targets). Percentage of maintenance jobs not checked (that require to be checked). Relative percentage of reactive (corrective) versus proactive (planned) maintenance. Timescale for closure of work orders, against targets. Number or percentage of equipment inspections/tests undertaken against target schedule.	Number of loss control reports/ reported failures, including key component failures, attributable to lack of maintenance. Total number of critical system breakdowns. Percentage of reported maintenance errors/number of tasks requiring re-work. Number of times issues reported with equipment that has been maintained or repaired (i.e. maintenance incorrectly performed leading to latent defects/maintenance induced failure).

BN 7: Training and competence	
Leading indicators	**Lagging indicators**
Presence of a formal competence management system. Number or percentage of employees trained per period as compared with schedule. Percentage training records complete/up-to-date. Number or percentage of safety critical staff assessed to be competent in their roles (based on competency assessment programme / use of simulator re-assessment). Number or percentage of staff satisfactorily completing refresher training as compared with schedule (this is not the same as competence; also, the number of non-attendees may indicate staffing pressures).	Percentage of candidates failed after training and assessment. Shortage of required skills and experience for specific tasks. Workmanship problems in maintenance. 'Mission failures' during operations. Feedback on staff competence from third-party body (based on annual audits).

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Energy Institute Briefing No 17: Human Factors aimed at the on-shore and off-shore chemical and fuel process industry, 2011

STFC Health and safety objectives 26/27



1. **Improve Contractor Management**:
A new half day contractor management course has been developed for staff who manage contractors carrying out short-duration work on site, such as chiller servicing, routine maintenance, inspections, or minor repairs.
   - 100% of staff in each department who require this training identified
   - Once identified, these staff are registered with SHE Training to attend the next available course.



3. **Improve Mental Health and Wellbeing**:
Departments to have a goal of 10% Wellbeing Allies trained in accordance with department numbers with a focus on senior management.



4. **Overseas Travel Compliance**:
Ensure that 100% of staff travelling outside of the UK on work business complete the new Overseas Travel Approval Form. This will include downloading and registering on International SoS, ensuring a risk assessment is in place and giving Digital Infrastructure sufficient notice to provide temporary IT equipment which staff will test before travelling.



2. **SHE Directory and Resilience**:
Depts to review the SHE Directory to check it is up to date with all current staff. Review 100% of roles to ensure there is suitable cover for safety roles, and that appropriate deputies are in place.



5. **Improve Risk Assessment**:
100% of moderate and SoPS rated incidents to result in a review of relevant risk assessments, e.g. activity, CoSHH, etc. and these reviews to be documented on the risk assessment form or review section of Evotix Assure.

UKRI Science and Technology Facilities Council

https://www.she.stfc.ac.uk/wp-content/uploads/2026/06/STFC-SHE-Objectives-26_27.pdf

Departmental SHE improvement plan

- Reviews the SHE performance of the previous financial year – incidents; safety tours; SHE audits etc.

- Reviews progress against objectives/actions agreed for the previous year

- Reviews how Department can contribute to the annual STFC H&S and Environmental objectives

- Sets out SMART objectives/actions for the coming financial year committing the resource necessary to complete them

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SHE Code 15 Management of Contractors

Legal basics

- Health and Safety at Work Act

- Section 3 “It shall be the duty of every employer to conduct his undertaking in such a way as to ensure, so far as is reasonably practicable, that persons not in his employment who may be affected thereby are not thereby exposed to risks to their health or safety.”

- Fundamental duty to look after non-staff/others working in your department and STFC

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Legal basics

- Management of Health and Safety at Work Regulations 1999
  - Reg. 3: Absolute duty on the employer to carry out risk assessment – with specific reference to persons involved in work but not in direct employment
  - Reg. 8: Everyone – staff/non-staff – to be made aware of procedures for serious and imminent danger
  - Reg. 11: Co-operation and co-ordination on safety where there are two or more employers in a shared workplace – this is also a key parts of other legislation!
  - Reg. 12: Provision of comprehensible information to other persons working in the host organisation and their employer
  - Reg. 15: Duties for temporary workers – fixed term contracts, agencies and agency workers

HSE Guidance in INDG 368 (rev 1)



- Host organisations must:
  - Identify/specify the job and the associated safety issues
  - Select a suitable contractor with sufficient competence
  - Assess the risks – consulting those involved:
    - To the contractor from host activity & to the host staff from contractor activity
  - Host and contractor produce Risk Assessment and Method Statement proportional to the hazards and risks identified
  - Co-operate and co-ordinate with the contractor i.e. work out arrangements in advance
  - Provide information, instruction and training to both host staff and contractors including special arrangements and emergency procedures
  - Manage and supervise the work
  - Review safety arrangements for the contract when complete

STFC's strategy

- To be world class in what we do and comply with all aspects of legislation through the provisions of STFC Code 15: Management of Contractors including provision of training to those involved (which is based on INDG 368)

- Contractor management is no exception and is achieved by setting out clear responsibilities for:
  - Staff Letting Contracts (SLC)
  - The Contract Supervising Officer (CSO)
  - The Contractor



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Summary of SHE Code 15 requirements

- When employing a contractor STFC is obliged to:
  - SLC must consider safety at the planning stage and ensure contractor competency at the selection stage
  - SLC and CSO must undertake full assessment of risks and controls in both directions prior to work starting
  - SLC and CSO must agree the supervision arrangements prior to work starting
  - SLC and CSO must confirm competency of contractors before work starts
  - CSO must deliver training and induction as necessary
  - CSO must ensure adequate monitoring throughout the project
  - SLC must ensure review performance and feedback to procurement

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Safety Culture, Leadership and Supervision

Motivations for safety management

A “Life Changing Experience” :

- Hindsight : The Ken Woodward Story

Lattitude Productions Ltd

Safety culture failings



















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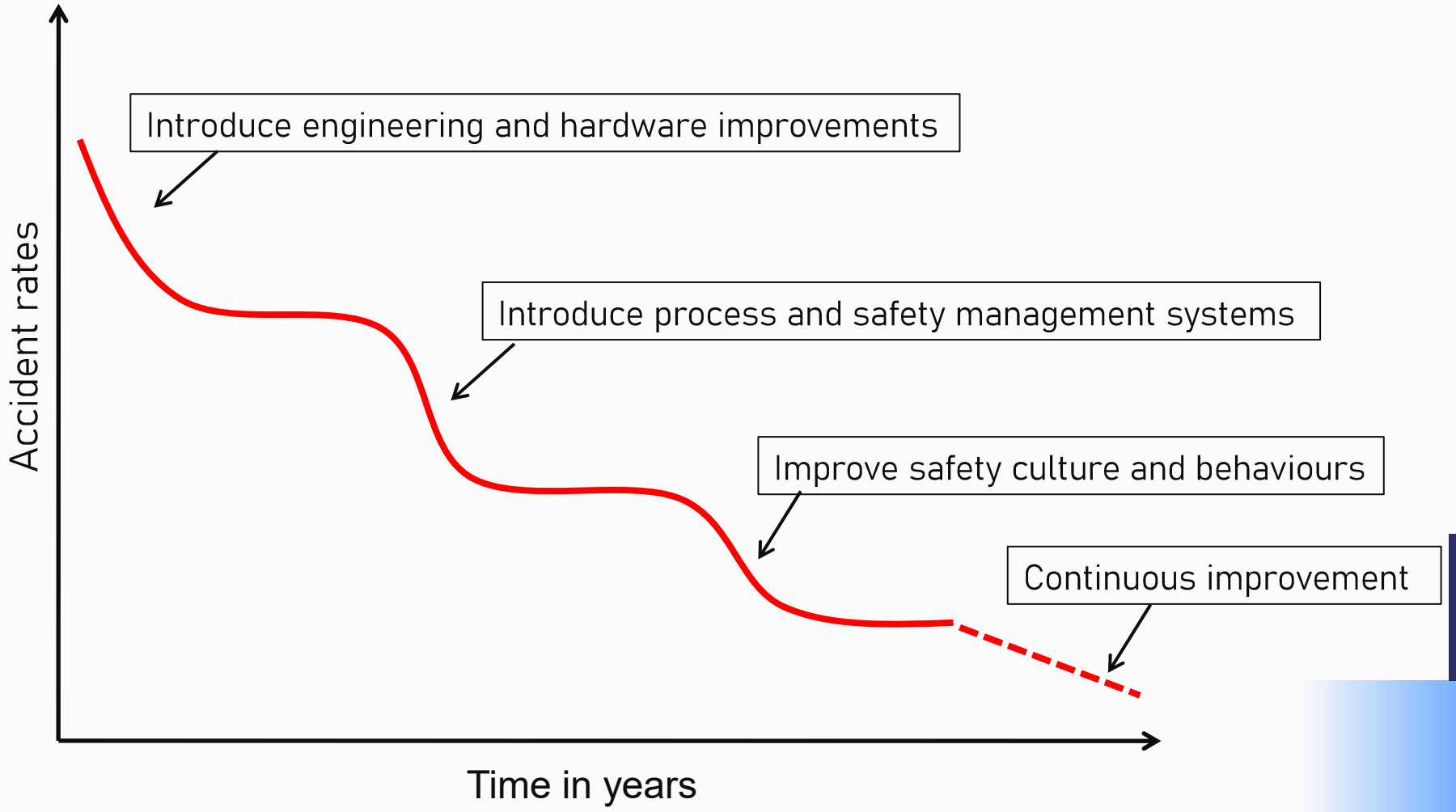
Why improve safety culture?

A model for reducing accident rates



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Definition of safety culture

A widely adopted definition is:

"The product of individual and group values, attitudes, perceptions, competencies and patterns of behaviour that can determine the commitment to, and the style and proficiency of an organisation's health and safety management system"

(From UK Health &Safety Council Advisory Committee for the Safety of Nuclear Installations 1993)

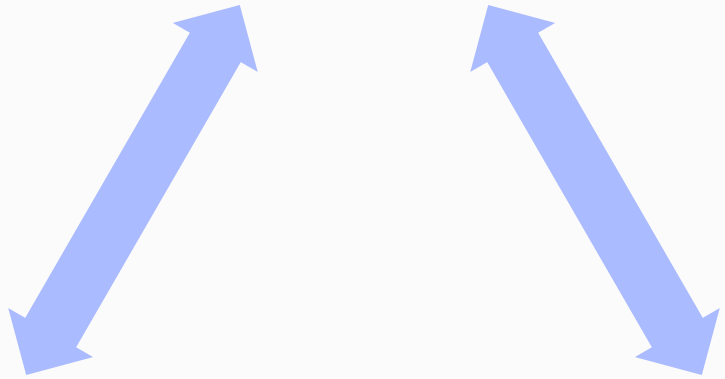
Components of a safety culture

Behavioural Aspects

- "What people do"

Safety related actions and behaviours

Policies, procedures, regulation, organisational structures and the management systems



The "safety climate" of the organisation which is concerned with individual and group values, attitudes and perceptions

Situation Aspects

- "What the organisation has"

Psychological Aspects

- "How people feel"

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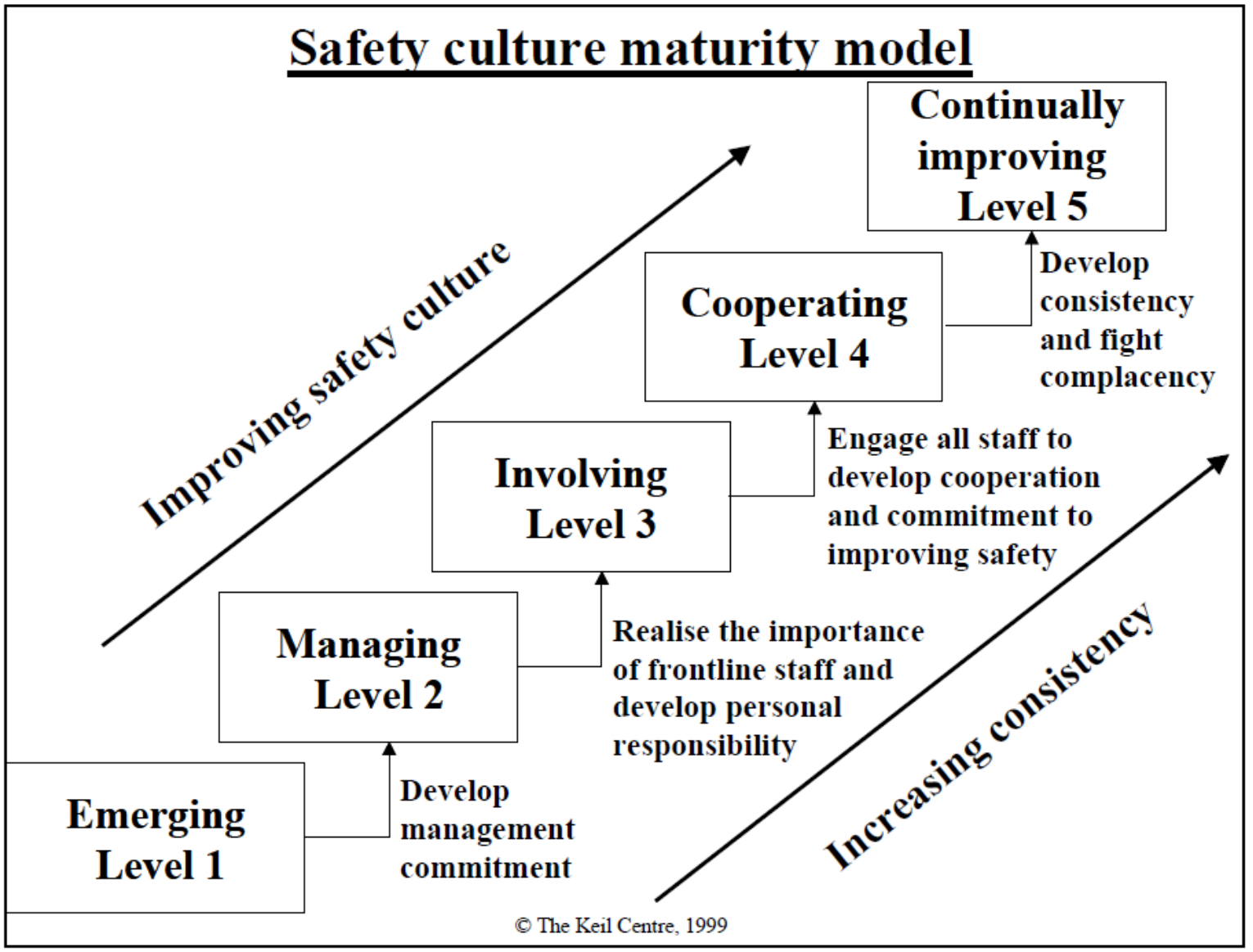
Safety culture factors

Poor safety culture	Strong safety culture
No management commitment	Total management commitment
Evasion (of the rules)	Compliance (with the rules)
Safety as an ‘add-on’	Fully integrated safety
Blame culture	No-blame culture and accountability
Reactive	Proactive
Revolutionary	Evolutionary
Auditors as enemies	Auditors as friends
Safety as a hindrance	Safety as a help
Safety as a cost centre	Safety as a means of saving money
Safety as a single-point responsibility	Safety as a line or multi-point responsibility
No or cursory risk assessment	High quality/proportional risk assessment

Fleming's safety culture maturity model



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Measurement of safety culture - climate

- The following “elements” are typical of the management and organisational characteristics used to measure safety culture
- This climate measurement is normally carried out by questionnaire to all staff

Management commitment and visibility	Participation
Communication	Shared perceptions about safety
Productivity versus safety	Trust
Learning organisation	Industrial relations and job satisfaction
Safety resources	Training

STFC's Culture survey and results

- STFC has conducted a questionnaire based safety culture assessment based on the Fleming model

- The survey was first carried out in 2010, 2014, 2018 and again in 2023

- The measurement elements were modified to match specific STFC concerns

H&S Codes and Instructions	Communications	Environment
Incident reporting	Management commitment	Personal Commitment
Personal perception of safety in STFC	Rule breaking/Risk Taking	Training Competence

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STFC climate survey results

Row Labels	2010	2014	2018	2023
Health and Safety Codes and Instructions	67%	68%	70%	69%
Communications	72%	73%	73%	71%
Environment 2023 (focus on env. compliance)				72%
Environment (2010-2018)	69%	70%	69%	
Incident Reporting		75%	77%	76%
Management Commitment	79%	81%	83%	83%
Personal Commitment	79%	79%	80%	80%
Personal Perception of Safety Within STFC	82%	83%	85%	84%
Risk Assessment			74%	74%
Rule Breaking / Risk Perception	77%	76%	77%	77%
Training Competence	77%	80%	80%	79%
Average overall rating	75%	76%	77%	76%

Overall Response Rates	2010	2014	2018	2023
Number of people who submitted a response	866	925	879	1273
Response rate (compared to no. of staff)	44%	45%	40%	41%

Department	2010	2014	2018	2023
ASTeC	75%	75%	77%	78%
Business and Innovation	74%	75%	76%	79%
CLF	76%	78%	78%	79%
Corporate Services	77%	77%	79%	79%
DI			71%	72%
Estates			81%	77%
Finance	74%	71%	76%	78%
ISIS	76%	76%	78%	77%
NQCC				77%
PPD	77%	78%	80%	80%
Programmes	72%	73%	73%	72%
RAL Space	75%	77%	76%	77%
Scientific Computing	77%	77%	75%	77%
Strategy, Performance and Comms	76%	77%	77%	73%
Technology (incl. UKATC)	74%	77%	79%	77%
Other (incl. RC@H and CEO/COO)	78%	78%	79%	77%

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STFC Culture survey: Recommendations

- Continue action to improve ease of use of SHE Codes and Instructions
- Raise profile of environmental management and increase communication
- Improve close out of actions arising from incidents/near misses, RAs, safety tours and SHE audits
- Maintain strong emphasis on SHE training programmes
- Continue to integrate SHE management system into all aspects of STFC activity
- Continue with visible leadership of SHE issues from the top

STFC climate survey: Key findings

- The consistency in scores with performance remaining strong shows an embedded safety culture – even with staff turnover

- With significantly increased staff numbers, STFC has a strong SHE culture and either recruit's people who fit well into this culture or have a strong established SHE culture that new starters follow.

- STFC is currently at Level Four : Co-operating on the Fleming safety culture maturity model

Most staff consider H&S to be important from both moral and economic point of view
Managers and staff recognise the wide range of accident causes and the likelihood that management decisions will be involved
Staff accept responsibility for their own H&S and that of others
The importance of all employees feeling valued and treated is recognised
Organisation puts significant effort into pro-active accident prevention
Safety performance is actively monitored using all data available
Non-work accidents are also monitored and a healthy lifestyle is promoted

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STFC Culture survey: Recommendations

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STFC SHE communication survey

- The SHE culture survey was also used to identify preferences, issues and suggestions for improving SHE communication through the following channels:

- STFC Executive Chair's staff forum/webinar
- Departmental meetings
- Line manager team cascade
- Departmental intranet/newsletters
- Department Safety Contacts (DSCs)
- SHE website
- SHE committees
- SHE Group
- STFC Source
- In Brief
- STFC Viva Engage
- Site noticeboards
- Site TV displays

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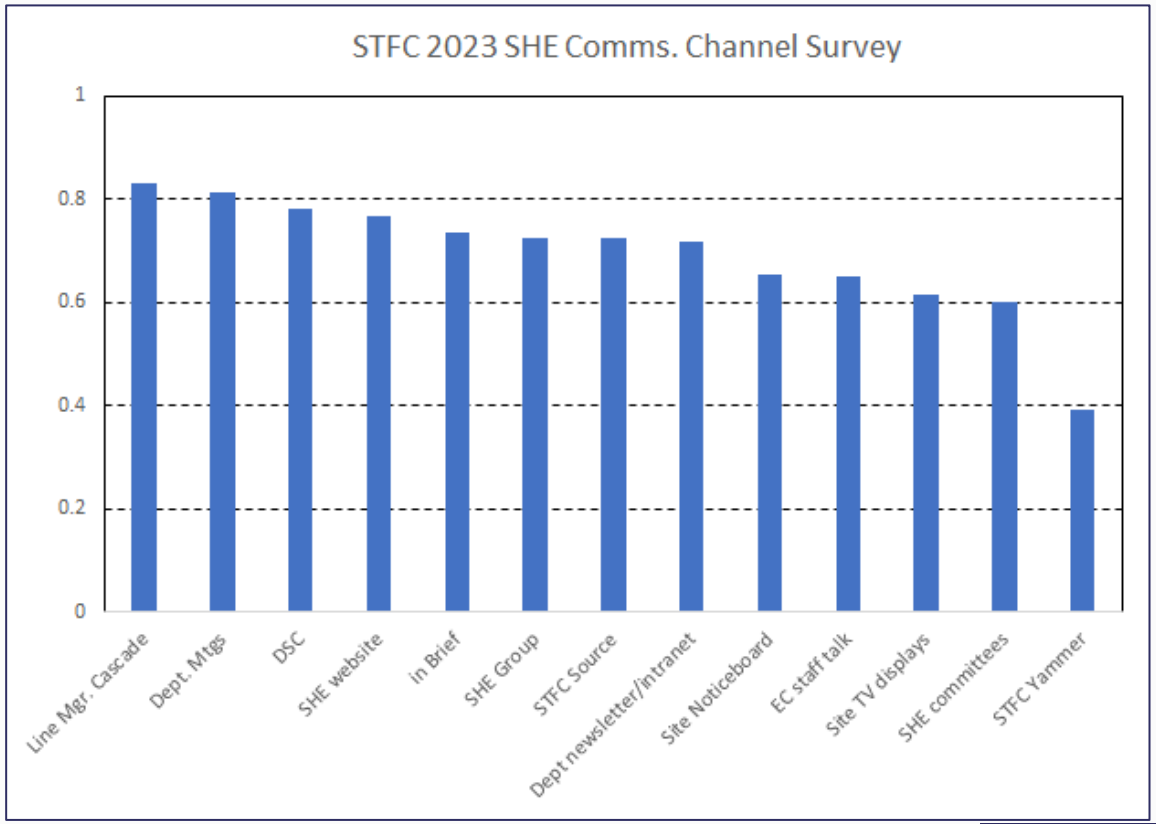
STFC SHE communication survey

- The survey highlighted staff preference for SHE information to be 'pushed' to them by line management – so it can be filtered and focussed on what matters locally though the following channels:
  - Line managers
  - Dept meetings
  - Department SHE Contacts (DSCs)
- In terms of frequency of use, the survey found that the SHE website was the most frequently used source of SHE information.



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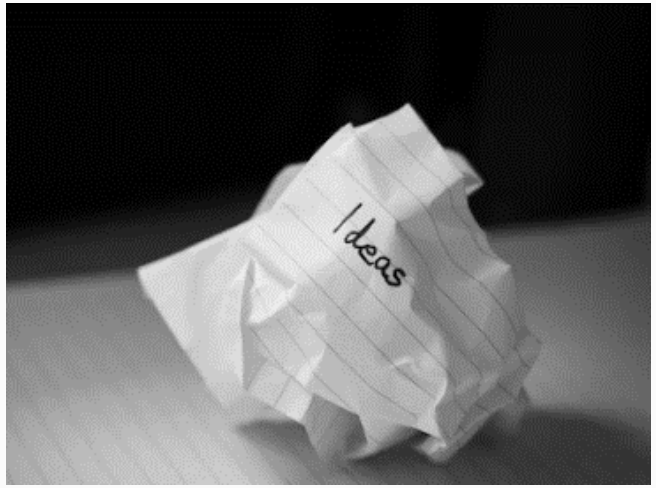
STFC SHE communication survey

- From the free text comments, the key expectations of staff were:
  - Communication through email, newsletters, texts, webinars, and In Brief updates
  - Making use of DSCs to send information
  - Communicating SHE information through line management
  - Breaking down SHE information into smaller, concise pieces
  - Clear and non-complicated wording in communication
  - Making SHE website (and SHE info on Source) easier to navigate
  - Regular safety bulletins and updates
  - Disseminating important information through offline communication platforms, e.g. posters, TVs, EC staff talk, etc.
  - Providing customised training based on job categories
  - Feedback provided on actions taken after creation of an incident report



STFC SHE communication survey



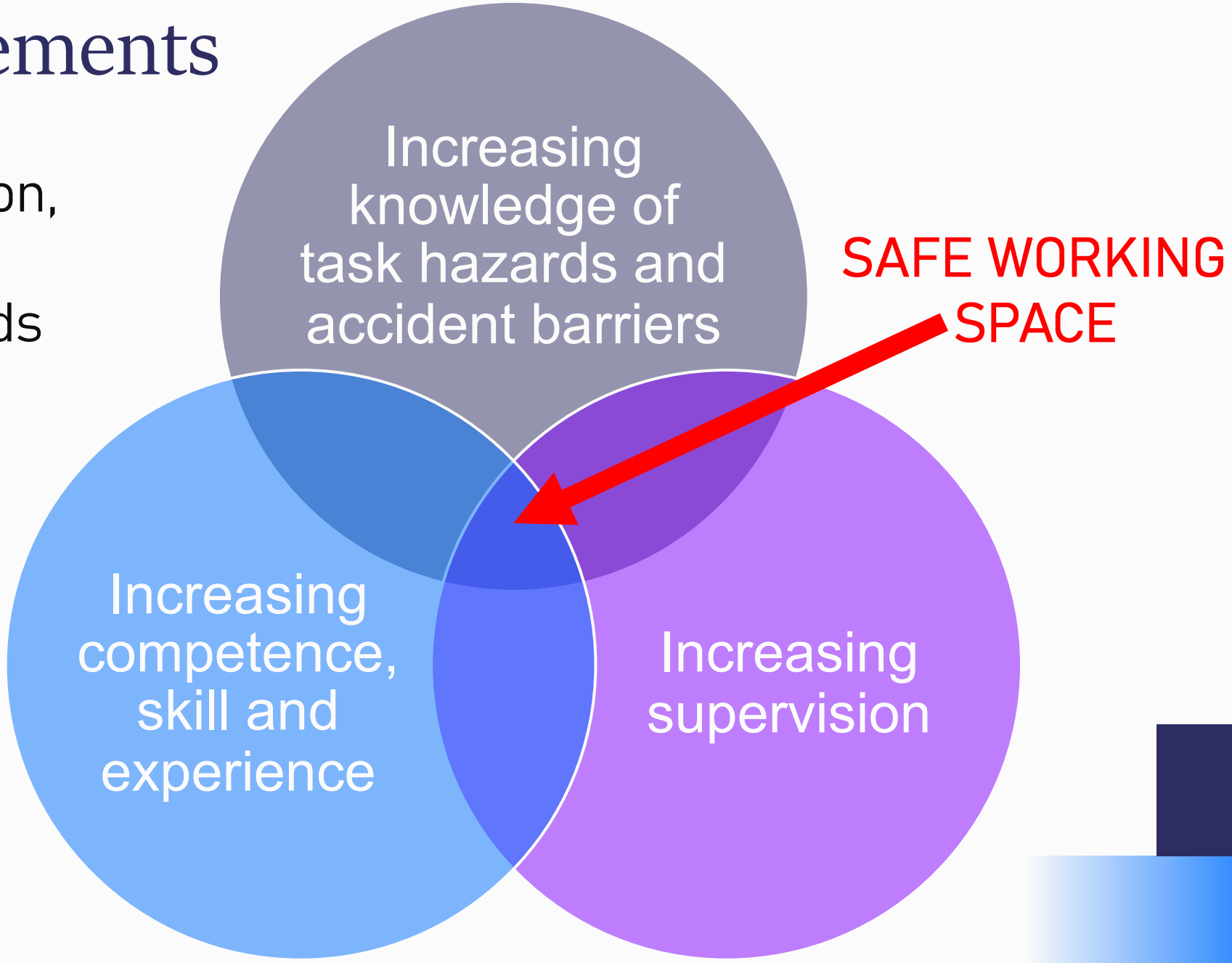
- As a result of the survey, SHE Group is currently working on:
  - Providing a regular stream of SHE items to the Exec chair forum
  - Having an in person launch for new SHE Codes or major updates
  - Making SHE training course feedback available to staff
  - Re-marketing the SHE website, staff to register areas of interest and specific news pushed to them
  - Links from Dept intranet sites to SHE website
  - Making SHE committees, minutes, and quarterly reports more available to all staff
  - Supporting line managers so they can cascade relevant info
  - Using SHE Directory to push relevant info to the correct staff
  - Piloting at DL the use of new TV screens in Depts for relevant SHE info
  - Evotix Assure – providing video mini tutorials to assist staff

Guidance on supervision

- Supervision is covered within HSG65 safety management model:
  - Emphasis on matching the level of supervision to the competence of the work team
  - Emphasis on the opportunity for the supervisor to inform and educate
  - Emphasis on the execution of judgement on how to proceed with a task and when it is necessary to call for expert advice and guidance

Supervision elements

Balancing supervision, competence and the knowledge of hazards



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Felt leadership

- Originally developed by DuPont
- Provides concept for leadership
- Health and safety focussed
- *Felt leadership is the name given to a style of leadership in which management wants employees to feel that their supervisors respect them and are deeply invested in their well-being. Felt leadership is about showing, not telling.*



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Felt leadership

- Leadership that is both visible to employees and also ‘felt’ to be genuine

- The principles of ‘felt’ leadership add value to a safety management systems by:

  - Inspiring people with a clear vision of what success looks like
  - Leaders setting a clear and unambiguous example
  - Empowering people to think and act safely whilst maintaining accountability
  - Using praise wherever possible to re-enforce safe and healthy behaviours
  - Coaching rather than telling

Leadership in practice



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Leadership in practice

- Understand the research and what people are doing
- Anticipate operational risks and change
- Discuss hazards and take action
- Be alert for unsafe conditions – look for upcoming accidents
- Follow up and problem solve
- Inspect often – audit intelligently
- Take effective corrective actions – immediate and effective
- Investigate incidents (accidents) – five why's!
- Maintain discipline – just culture
- Know your people – capabilities, motivations and preferences
- Recognise, praise and reward good health and safety practices
- Make safety part of the 'day job'
- Set a good example – what shadow do you cast



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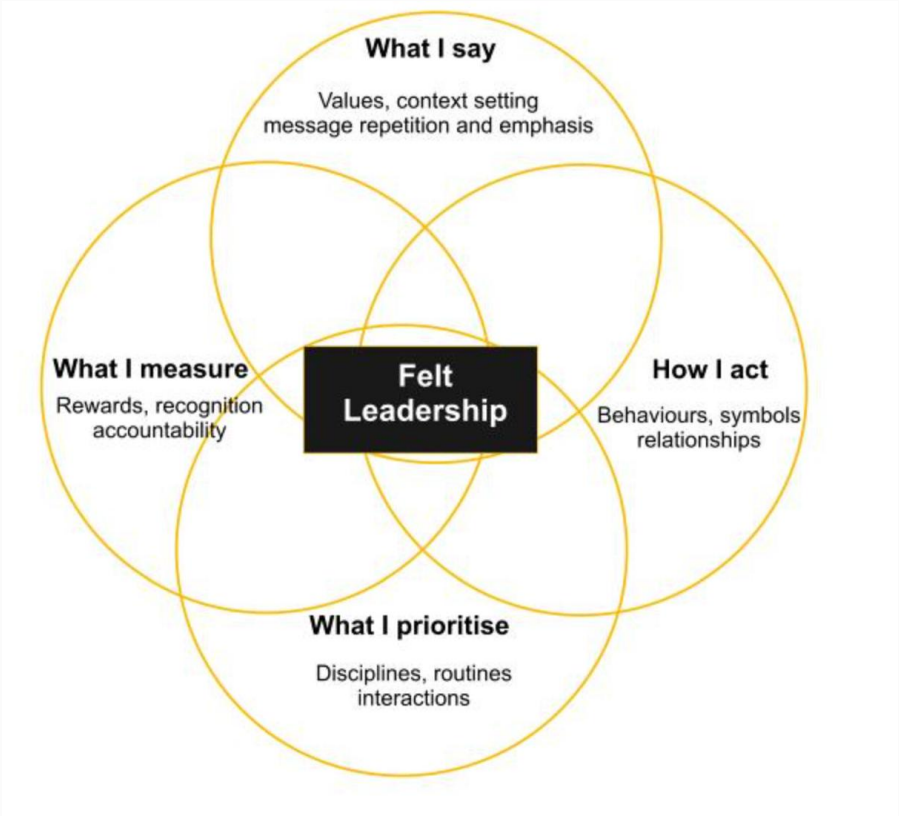
Exercise 10: Leading SHE

- Based on the Felt leadership model, look at:
  - What I say
  - How I act – what I do
  - What I prioritise
  - What I measure
  - What sort of shadow I cast
  - Where I need help





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Line Managers Action Summary

Common elements of SHE hazard codes

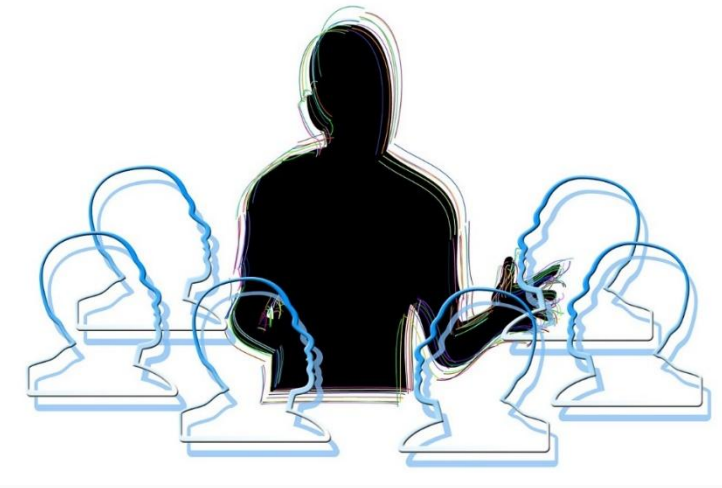
- All STFC SHE Codes are underpinned by a requirement for competence
  - This includes “actively” knowing the hazards
  - And understanding individual limitation
- Take specialist advice
  - The specialist may be a code appointment (SHE Directory)
  - If not look internally/externally as necessary
- Get trained
  - Requirements specified in the codes
  - Courses listed in SHE training catalogue

Common line manager responsibilities

- The line manager is always responsible for the production of the risk assessment – with input from their staff and external experts as necessary

- The line manager is responsible for implementation of risk assessment controls and their staff are required to adopt them and to co-operate in implementing them

- Always recognise that the line manager is responsible for the safety administration related to the hazard – training, maintenance, record keeping etc. Your staff are required to co-operate and assist



Assurance

Do you undertake periodic SHE reviews of the activities for which you are responsible:

- Do you know what's happening on your "patch"?
- For hazardous equipment and materials, do you know "what you've got"?

- As part of this review, have you:
  - Considered the applicability of the SHE Code library and the compliance of your activities with the latest versions?
  - Reviewed the latest SC06 Risk Management Arrangements document, particularly:
    - Sections 4.2 and 4.3 on delegated responsibilities to all staff and all line managers?
    - Guidance to all Line, Area and Project Managers in App 2?

Risk assessments

- Have you reviewed the risk assessments for your personal activities and discussed them with your line manager?

- Have you reviewed the risk assessments for the activities of your staff:
  - Were they involved in their preparation?
  - Are all fields of the proforma filled out correctly?
  - Are all staff aware of the control measures and are they followed?

- Have you considered the mix of generic and specific RAs?
  - Have the different categories of people who might be affected been considered?

Risk Assessments

- Are the control measures resulting from the risk assessments reasonable and are the residual risks low?

- Are the details in the risk assessments proportional to the severity of the risks?

- Are you familiar with the RA processes in SHE Code 6 Risk Management:
  - Documented RA using the STFC proforma
  - On The Job RA
  - Formal techniques: e.g. HAZOP, safety case, etc.

- Have you considered the risk assessment training requirements for yourself and your staff?

Training and Supervision

- Have you and your line manager agreed a SHE related Training Needs Analysis (TNA) for yourself, and have you conducted a SHE related TNA for all your staff?

- Given the outcome of the TNA, the competence of the individual, and any special requirements of the individual, is the supervision of the individual adequate?
  - E.g. young or inexperienced people

- Are any of your staff involved in matrix management arrangements – contributing to a multi department project for example?
  - If yes, is there clarity and agreement between the different managers on who is responsible for what with regard to SHE training and supervision?

SHE Performance Improvement

- Encourage reporting
- Support incident investigation
- Support SHE tours and SHE Code audits
- Take account of STFC Corporate SHE objectives and any actions arising from the Departmental Improvement Plan
- Recognise and reward good SHE management

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Thank you