



A Workers Perspective;
Transitioning to Safer
Chemicals

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Closing the communication gap

- Smart manufacturers know that safety is as vital to their plant as customers. With less-skilled workers entering operations each year, it's even more challenging.
- Companies that successfully implement Safety Management System's at their plants know how important culture, compliance and technology can be.





“The Greening Of Southie”

- video



Maintenance and Operation

- The maintenance department and the operation side of a business are often disconnected. While both groups significantly impact an organization and its success, more often than not the two departments act like opponents rather than members of the same team.



Maintenance and Operation

Why is it common for these two groups to bump heads?

- The operations team is pressured to increase production.
- Operations focus on maximum production
- Maintenance value preserving the lifespan of the equipment.



What can help, Maintenance and Operations

Improving partnerships between maintenance and operations by:

- Include operators in basic inspections and essential care of equipment— promotes communication, builds ownership, and makes sure all parties are well informed.
- Agree on guidelines for priorities of work requests-getting everyone on the same page will define reasonable expectations.
- Communicate production plans— schedule regular meetings to review the plan and discuss complications. Knowing what the goal is the first step in accomplishing it.
- Make it your mission to foster working relationships between operations and maintenance staff at your facility. It is sure to make a difference!



Transitioning to Safer Chemicals

BARRIERS TO INTEGRATION

Too often:

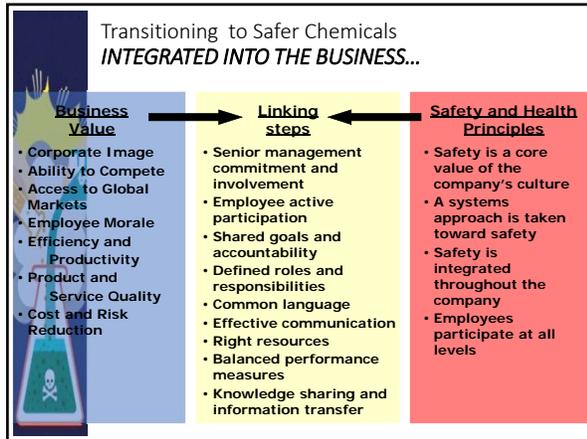
- Management is reactive rather than proactive
- Lack of understanding of the risks
- Risks & hazards are not fully understood
- Safety is often an afterthought, not an investment
- Cost/benefit analysis is not used to justify the safety investment
- Retrofitting is preferred over designing it right

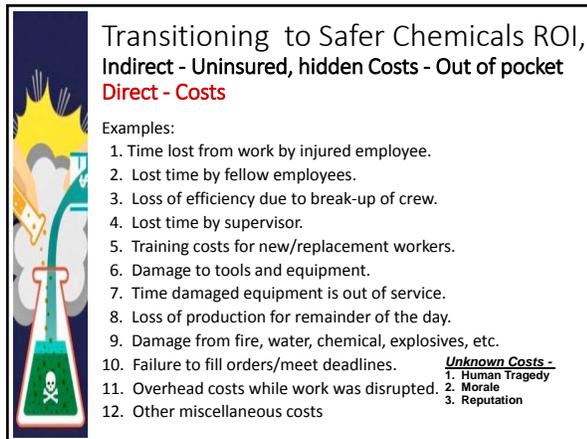


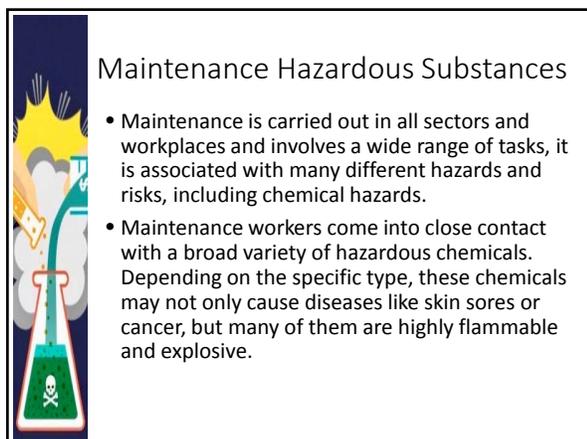


OSHA: Transitioning to Safer Chemicals

- video









In a nutshell...

- By law, employers must protect their workers from being harmed by HS in the workplace.
- In order to protect workers from HS, employers are required to carry out a Risk Assessment (RA). Workers should be involved in this task.



Take action

- Put in place preventive and protective measures
- Effective implementation involves the development of a plan that specifies:
 - Who does what
 - When a task is to be completed
 - The means allocated to implement the measures
 - When the assessment will be revised and by whom
- It is essential that any work to eliminate, substitute or controls risks is prioritised.



Risk Assessment for HS

- Whoever carries out the RA it is essential that employees are consulted and involved in the process.
- They:
 - Know their workplace
 - Are the ones who will have to implement any changes in working conditions/ practices.





Identify hazards and those at risk

- Look for substances that have the potential to cause harm, and identify any workers who may be exposed to the substances.
- Particular attention should be paid to groups of workers who may be at increased risk e.g :
 - Young workers
 - Pregnant women and nursing mothers
 - Migrant workers
 - Untrained or inexperienced staff
 - Cleaners, contractors and members of the public.

Reminder: a hazard can be anything — whether work materials, equipment, work methods or practices — that has the potential to cause harm.



Evaluate and prioritise risks

- Assess workers' exposure to HS that have been identified, looking at the type, intensity, length, frequency of exposure to workers
- Consider which work procedures are being used
- Consider combined exposures to substances
- Consider combined effects with other risks, for example:
 - Fire risks near flammable substances
 - Heavy physical work that can increase the uptake of chemicals,
 - Wet work that can increase the effect of chemicals on the skin
- The list can then be used to draw up a action plan.

Reminder: a risk is the chance, high or low, that somebody may be harmed by a hazard.



Decide on preventive action

Follow the hierarchy of control to prevent or reduce the exposure of workers to HS :

- Elimination – the best way to reduce the risks associated with HS
 - Remove the need to use the HS by changing the process or product in which the substance is used
- Substitution – if elimination is not possible
 - Substitute or replace the HS with non-hazardous or less hazardous alternatives





Substitution – work processes

- Start with substances and work processes that:
 - Have already caused problems in your enterprise (health problems, accidents or other incidents)
 - Make regular health monitoring (such as medical examination of workers) necessary
 - Are covered by specific national regulations imposing restrictions of use in the workplace
 - Lead to high levels of exposure among workers, or result in exposure to many workers.
- Work processes to consider include:
 - Open processes, e.g. painting large surfaces, mixing/compounding in open containers/vessels
 - Processes that generate dusts, vapours or fumes, or that disperse liquids in the air, e.g. welding, paint-spraying.



Decide on preventive action

- Administrative / Controls - if a substance or process cannot be eliminated or substituted
 - Prevent or reduce the exposure through:
 - Enclosure of the process that results in HS being emitted
 - Control of the emission at the source
 - Better management of processes
 - Technical solutions to minimise exposure
 - Reducing the number of workers exposed to the dangerous substance, and the duration and intensity of exposure
 - Where exposure cannot be prevented by other means, ensure that individuals have suitable personal protective equipment and are trained in its use.



Monitor and Review

- The effectiveness of preventive measures should be monitored
- The assessment should be reviewed whenever significant changes occur in the organisation:
 - When there are changes in the work procedure
 - When new chemicals and work procedures are introduced
 - When accidents or health problems occur
 - On a periodic basis, to ensure that the findings of the RA are still valid.



Advice for Workers

- To keep safe in relation to HS, workers should be kept informed about:
 - The findings of the RA
 - The hazards they are exposed to
 - How they may be affected
 - What they have to do to keep themselves and others safe
 - What to do in case of an accident or when things go wrong
 - How to know when things go wrong
 - Who they should report any problems to
 - What to do when carrying out maintenance work
 - The results of any exposure monitoring or health surveillance.



Advice to employers: "Communication"

- Good communication between employer and worker includes:
 - Having a list of hazardous substances that are used or generated through the work process
 - Communicating the results of the RA
 - Regularly asking workers about potential health and safety problems
 - Providing workers with all relevant information, instruction and training on the HS present in the workplace.
