

THE HEALTH AND SAFETY ONLINE 2021

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SOUTHALLS
A CITATION BUSINESS

MANUFACTURING NOISE – DO YOUR CONTROLS MEASURE UP?



Meet your speakers



Geraint Evans

Senior Health & Safety Consultant

 geraint.evans@southalls.com



Andrew Murray

Health & Safety Consultant

 andrew.murray@southalls.com





Why worry about noise?



- Prevent employees from suffering from Noise Induced Hearing Loss (NIHL).
- Compliance with the Control of Noise at Work Regulations 2005.
- Avoidance of HSE fee for intervention, notice of contravention letters and improvement notices.
- Avoidance of HSE prosecutions for injuries to health.
- Avoid compensation claims for NIHL - 2nd most common UK claim!
- Less noise equates to a safer, happier, less stressful work environment for all employees.



What is hearing loss like?

- Noise induced hearing loss is irreversible damage to the ears caused by exposure to high levels of noise.



- Young persons hearing can be damaged after a couple of years of working in a noisy environment.
- By the time a person in a noisy environment has reached 40 they will be noticeably deaf.
- If they remain working in that noisy environment until they are aged 65 they will be deaf and likely suffer from tinnitus.



What the law says?



- Lower exposure action values (LEP,d of 80 dB, LCpeak of 135 dB)
- Inform, instruct, train employees, provide hearing protection on request, maintain equipment provided to reduce risk/exposures.
- Upper exposure action values (LEP,d of 85 dB, LCpeak of 137 dB)
- Reduce exposure by a programme of technical/organisational measures, provide hearing protection to all exposed, ensure it is used, Provide health surveillance
- Exposure Limit Values (LEP,d of 87 dB, LCpeak of 140 dB)
- Maximum permitted exposure at the ear.



What do I need to do?





- Assess the risks (Get a Noise Survey by a Competent person)
- Take action - reduce noise sources that produce risks.
- Provide hearing protection – while considering what action to take, and if you cannot reduce noise exposure enough by other means.
- Make sure legal limits on noise are not exceeded.
- Provide information, instruction and training – get workers and their representatives involved.
- Carry out health surveillance for those at risk of hearing damage.





How to tell if you have a noisy workplace?





- Stand 2M apart from a colleague with normal hearing and have a conversation at normal volume with your colleague.
- If you have to raise your voice for them to hear you it is likely that your work environment exceeds 80dB!
- Check if staff use noisy powered tools or machinery for more half an hour a day.
- Try using a noise measurement app on your phone such as Sound Meter on Android or Decibel Meter Sound Detector on Apple.
- If that registers above 80dB, contact Southalls for a noise survey as you may be breaking the law and liable for compensation claims against your company!

Employers who have a business involves using:

- noisy powered tools or machinery
- explosive sources such as cartridge operated tools or detonators
- noise from impacts such as hammering, drop forging, pneumatic impact tools etc.
- Food manufacturers
- Wood mills
- Metal fabricators
- Steel stockholders



Case study

Getting a Noise Survey done

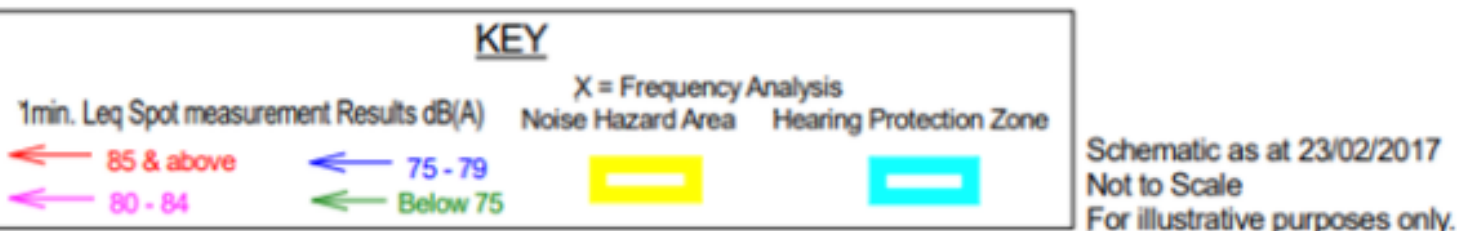
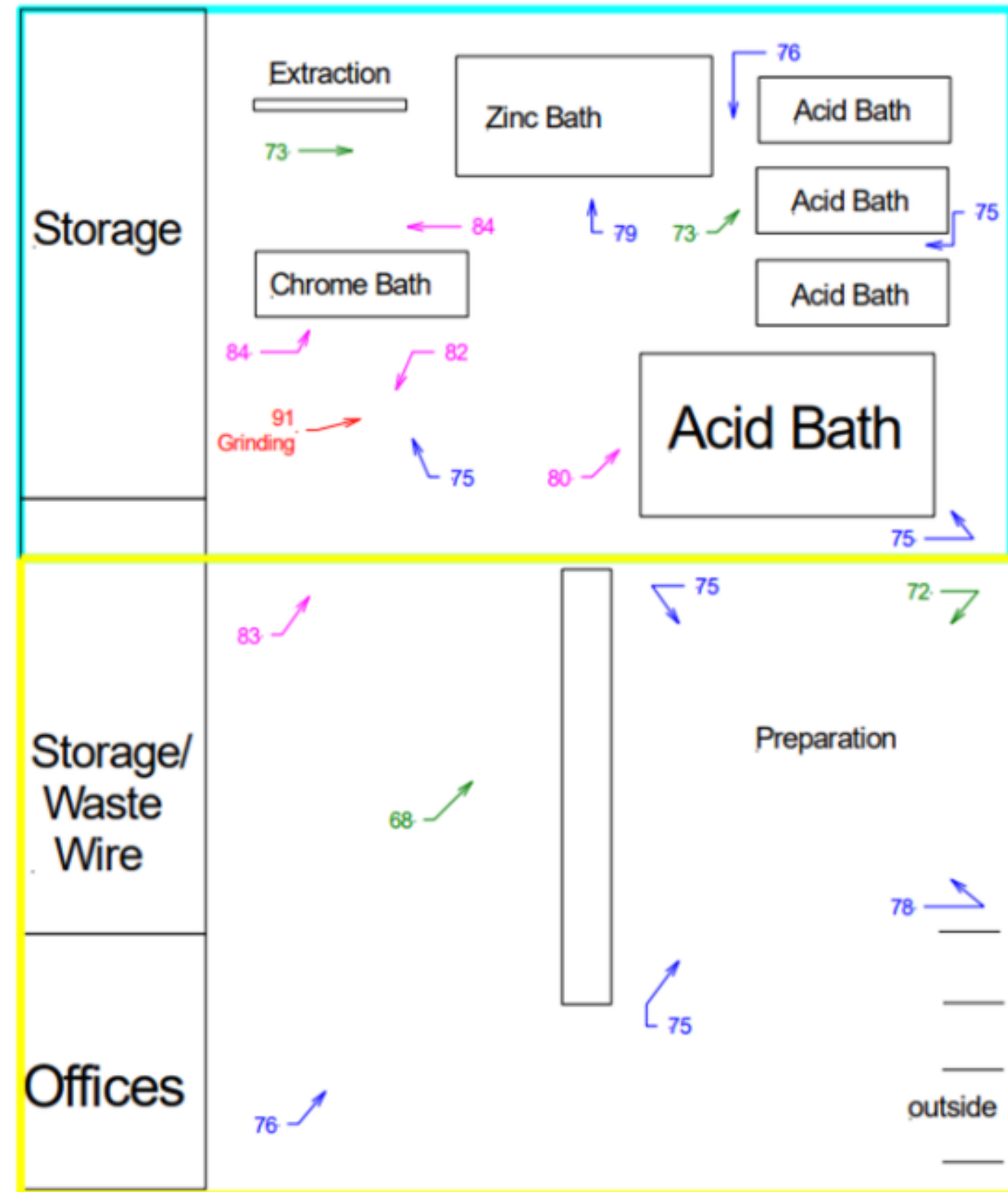
Your surveyor should do the following:

- Use validated equipment and calibrate it before each reading is taken.
- Be suitably qualified.
- Take several readings during normal work activities with the noise meter at ear height from places where people are likely to be working.
- Take a reading from a quiet break room for comparison/ job rotation.
- This should enable you to zone your factory, control noise exposure through job rotation and identify noisiest equipment.



Identifying the results

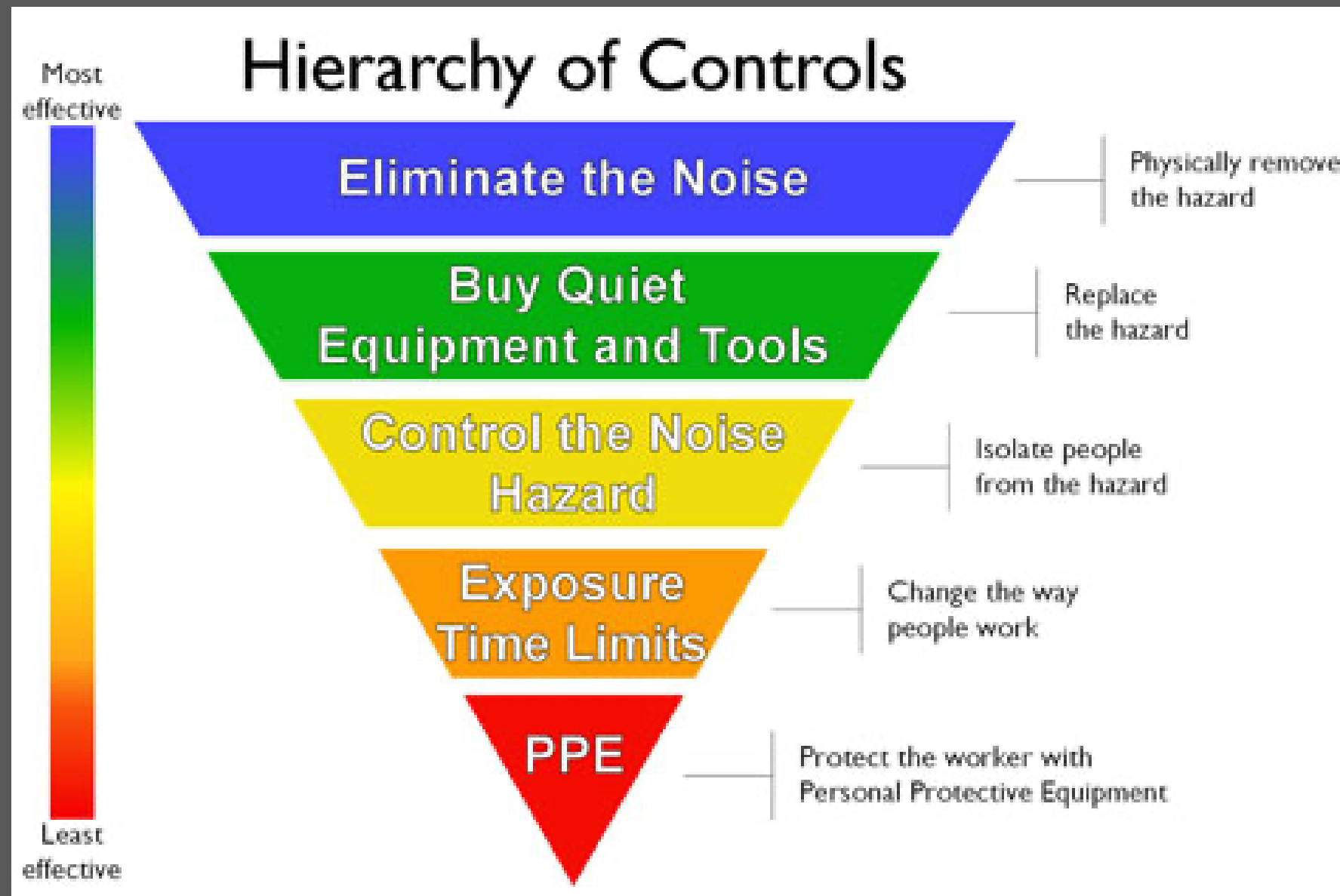
- Identifies zones where PPE is advised and signage required.
- Identifies zones where PPE is mandatory and signage and Health Surveillance required.





Hierarchy of control





- Outsource the operation or process?
- Source new /quieter equipment?
- Enclosures, sound-absorbing screens, rubber mounts?
- Identifying hearing protection zones, limiting time in noisy areas?
- Hearing protection?



Importance of selecting the right hearing protection

Vital to consider the following points:

- 1) SNR = Single Number Rating, a value of the level of attenuation provided by the hearing defenders...
- 2) Attenuation = the loss of noise energy / intensity
- 3) You need to make sure that you are reducing the noise level at the ear to under 85db but not lower than 70db

If exposure level has been measured at 100db....

100 - 20 = 80 so hearing protection with 20 SNR would be suitable to drop the noise level at the ear to 80db





Importance of selecting
the right hearing protectionwork



However, HSE recommend that you derate this by 4db to account for 'real world factors' i.e. human error so in this case an SNR of 25 is better!

Other important factors to consider are:

- Frequency and pitch db (A) vs db (C)
- Comfort
- Working environment
- Personal preference!





Making sure the team are trained



Importance of selecting the right hearing protection

Employees should be trained so they understand:

- The risk they are exposed to – was the lower or higher action level breached in the noise survey... was the noise issue related to a specific machine or process ... do they know how to spot signs of hearing damage?

Their responsibilities:

- complete noise awareness training
- attend hearing checks (Health Surveillance)
- wear the PPE provided
- take care of their hearing protection and report any defects

Also:

- make sure employees know how to use hearing protection e.g. how to put in foam type earplugs



Ongoing health surveillance



Ongoing health surveillance

- Where employees are likely to be exposed to noise levels above 85db you MUST provide Health Surveillance
- Normally in the form of audiometry – hearing tests
- Must be carried out by a trained / competent person (Occupational Health Specialist)
- The employer should devise a suitable program - ideally, screen new starters then provide periodic testing dependent on risk level
- The results should be reviewed along with 'fitness to work' records
- Where hearing damage has been identified you MUST act! Review your risk assessment, noise controls, training and PPE provision!





Questions?



We've
dedicated
health and
safety
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who love
making a
difference for
our clients.
Talk to us today.



SOUTHALLS
A CITATION BUSINESS

CONTACT US

Telephone Number



0345 257 4015

Email Address



hello@southalls.com

Website



www.southalls.com