

Sadler's Wells Theatre, the Peacock Theatre, and the Lilian Baylis Studio

Health and Safety Requirements for Visiting Companies

Introduction:

These Safety Rules have been produced in order to comply with the duties under the Health and Safety at Work etc Act 1974 and all subsequent Regulations. The rules define the procedures and working practices which must be followed onsite.

Please ensure that these are passed to your Production Manager and/ or the Director of Health & Safety

Nothing contained within this document relieves the visiting company of their obligations to comply with any statutory legislation or duties under common law and no permission or consent by or on behalf of Sadler's Wells or its agents under these safety rules and requirements shall in any way relieve the visiting company of their liability for accidents, injury and/or damage under the Contract.

These precautions are additional to any for which the company may be responsible by statute.

These conditions may be varied or added to at any time by Sadler's Wells

Sadler's Wells accept no responsibility for any direct or indirect losses caused by the enforced delay or suspension of works imposed as a result of non-compliance with the Site Safety Regulations

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1. Fire and evacuation procedures - Sadler's Wells and Lilian Baylis Studio

Fire is a major hazard in the theatre complex. The fire hazard is controlled with an automated fire alarm system and comprehensive management procedures.

What to do in case you discover a fire

- Break the fire break glass (these are the small red boxes by exit doors)
- If you are confident in using a fire extinguisher, and the fire is small, try to extinguish the fire – provided that you do not put yourself at risk
- Report to Stage Door to the Emergency Coordinator, who will brief the emergency services as to the location and extent of the fire

In the event of a fire alarm evacuation

- In performance mode the Duty Manager/Technical Team will manage and support safe evacuation of the auditorium and stage areas.
- Listen to the instructions given over the voice alarm – the Fire Evacuation alarm is a two-tone siren followed by a voice message
- Evacuate the building following the 'Running Man' green signs which lead to the final exit door
- Report to the Assembly Point in Owen's Row (at the top of Rosebery Avenue).
- Persons in charge and the Visiting Company Manager must check number of staff safely clear of the building and report to the Emergency Coordinator at Stage Door, paying particular attention to ensure bathrooms and shower rooms are clear.

Notes for evacuation

- Do not use lifts
- Wheelchair users should proceed to the nearest refuge point by following the 'green wheelchair' signs
- Deaf persons and Contractors in remote areas are alerted to fire by Xenon (red light) beacons. These are activated immediately the fire alarm is raised and this may be well in advance of the voice alarm
- Blind or partially sighted persons should be made aware of their exit route and/or be escorted.
- DO NOT listen to radios or Sadler's Wells staff – obey the fire alarm instructions.

Security

Listen for the alert tone and any voice broadcast. Evacuation may be to an external assembly point or internally to a safe haven (usually the Auditorium) dependent upon the threat.

Should a company member discover a suspicious object or receive any sort of threat report to Stage Door immediately.

2. Fire and evacuation procedures - Peacock Theatre

Fire is a major hazard in the theatre complex. The fire hazard is controlled with an automated fire alarm system and comprehensive management procedures.

What to do in case you discover a fire

- Break the fire break glass (these are the small red boxes by exit doors)
- If you are confident in using a fire extinguisher, and the fire is small, try to extinguish the fire – provided that you do not put yourself at risk
- Report to Stage Door or to the Emergency Coordinator, who will brief the emergency services as to the location and extent of the fire

In the event of a fire alarm evacuation

- Listen to the instructions given over the voice alarm – the Fire Evacuation alarm is a two-tone siren
- Evacuate the building following the 'Running Man' green signs which lead to the final exit door
- Report to the Assembly Point outside **John Watkins Plaza** in Portugal Street
- Persons in charge and the Visiting Company Manager must check number of staff safely clear of the building and report to the Emergency Coordinator at Stage Door.

Notes for evacuation

- Do not use lifts / elevators
- Wheelchair users should proceed to the nearest refuge point
- Deaf, Blind or partially sighted persons should be made aware of their exit route and/or be escorted.
- DO NOT listen to radios or Sadler's Wells staff – obey the fire alarm instructions.

Security

Listen for the alert tone and any voice broadcast. Evacuation may be to an external assembly point or internally to a safe haven (usually the Auditorium) dependent upon the threat.

Should a company member discover a suspicious object or receive any sort of threat report to Stage Door immediately.

3. Medical Emergencies

For all medical emergencies please report to Stage Door.

The Theatre Receptionist will assist with any medical emergency and summon First Aid within the Theatre or an ambulance for more serious medical emergencies.

There are First Aid Boxes with the Stage Door Receptionist and on stage.

The accidents should be reported to Stage Door reception where an incident report will be completed. A report should be completed for every accident that occurs in the Theatre complex.

4. Accidents and Dangerous Occurrences

All accidents at Sadler's Wells (no matter how slight), which result in personal injury to visiting company employees, must be reported to Sadler's Wells Management.

Any incidents of concern, or any near miss which did not result in an accident, must also be reported. This is to enable investigations to take place to ensure no repeat of the incident, and to prevent future accidents.

Any accident or dangerous occurrence reportable under RIDDOR (the Reporting of Injuries Diseases and Dangerous Occurrences Regulations), will be reported to the enforcing authority by the Director of Visitor Experience & Health and Safety.

5. Fire and Site Safety Rules

Fire Fighting Equipment

Fire hydrants, hose reels and other firefighting apparatus shall be kept clear and readily accessible. Neither they, nor signs indicating their positions, should be removed or obscured without the express written permission of the Director of Visitor Experience.

Fire hydrants or other equipment are not to be used for any other purpose other than fighting fires.

Refuse Disposal

Combustible refuse which cannot be safely disposed of onsite shall not be allowed to accumulate but will be removed from site each on each working day.

All waste must be disposed of according to the Environmental Protection Act 1990.

Fire escapes

Must be kept clear and accessible at all times.

Flammable and Highly Flammable Substances

All Flammable and Highly Flammable Substances must be stored, handled and used in accordance with the current legislation. If such substances are kept and/or used on site then suitable signage must be placed in the area concerned. In particular the no smoking rule must be observed.

Fire Detection

Sadler's Wells has an automatic Fire Alarm System with various detection devices and firebreak glass points scattered around the theatre complex.

Explosives

Explosives, or cartridge operated fixing tools, must not be used, not brought to the site, without the express prior, written permission of Sadler's Wells Health and Safety Management.

Compressed gas

Whether or not the gas is flammable, cylinders must be kept away from sources of heat and any means of escape. Full and empty cylinders not in use must be kept in a safe well-vented storage area designated by the Building Services Manager and full notification and agreement must be provided before such items comes onto site.

When handling cylinders, care must be taken not to damage valves.

Only cylinders required for operating an appliance must be brought in to a building or enclosed space. In the case of liquefied petroleum gas cylinders must not be greater than 15kg.

Unlike mains gas, liquefied petroleum gases (butane and propane) are heavier than air and may accumulate at low level.

When agreement is given for storage of hazardous items, security and stage door must be informed, with full details of the items, location and the time which they will be on site.

6. Equipment storage and disposal

Equipment used must be compatible with the list held by the local authority, be suitably constructed for the particular effect required and have an indication of electrical safety, if appropriate.

Explosives must not be delivered or returned by post. It is our policy not to store explosives, except for use on current shows: arrangements will be made for the supplier to collect any unused explosives.

Explosives for use on a current show will be stored in their original packaging bearing the correct legend 'Explosive material – No naked flame'. A suitable fire extinguisher must be nearby.

If it should happen that theatrical explosives cannot be returned to certain suppliers, the effects shall be detonated following the correct procedures or soaked thoroughly in water and disposed of via a foul drainage system.

Dry ice will be kept in a suitable thermal container in a well-ventilated area.

Smoke fluids and pressurised gas bottles will be stored according to Sadler's Wells' COSHH code.

Firearms and replica weapons must be approved by the Technical Director and approved for use by the local licensing authority. They must be kept in a locked container in a secured room before and after use, and risk management procedures must be in place and approved before use.

7. Use of Special Effects onstage

Advance warning of all special effects to be used, including smoking onstage, must be communicated in advance to the Technical Director or the Technical Manager, so that suitable risk management procedures can be in place and the appropriate local authority or fire authority permissions can be sought.

Attached as an appendix to this document are the Safe Systems of Work in place for various special effects. These are reviewed annually.

When agreement is given for storage of hazardous items, security and stage door must be informed, with full details of the items, location and the time which they will be on site. This will be given by the Technical Director.

8. Smoking

Sadler's Wells operates a no smoking policy. This policy is a legal requirement and is in the interests of all occupiers, your active co-operation in maintaining a no smoking building would be greatly appreciated.

9. Risk Assessments

Before undertaking work at Sadler's Wells, the Peacock Theatre, or the Lilian Baylis Studio, visiting companies must:

- Carry out a risk assessment to establish any special precautions necessary to ensure the safety of their own employees and others.
- Establish a safe system of work

To help meet this requirement Sadler's Wells has in place general risk assessments and safe systems of work (*see Appendix 2*) on all its stages. These however will not cover all hazards to be found in your particular show, as each show is unique, and risk assessments particular to your show or working practices may be required.

Risk assessments are also required under other more specific legislation e.g. COSHH (the control of substances hazardous to health). Please seek the advice of the Technical Director or the Technical Manager should you require any further information or advice.

In the event of a visiting company member committing any unsafe act or working in unsafe conditions they shall be liable. Any company member found to commit an unsafe act may be asked to leave the theatre by a representative of Sadler's Wells Management.

10. Personal Protective Equipment (PPE)

All employees and contractors engaged by the visiting company must be provided with the appropriate personal protective equipment for the task being carried out. All persons must comply with site rules regarding personal protective equipment, and Sadler's Wells reserves the right to call a halt to work that is unsafe if PPE is refused.

11. Electrical

All those engaged by the visiting company who are working with electricity must be competent to do so.

All toured or hired equipment must be safe and in good working order. Sadler's Wells reserves the right to remove electrically unsafe equipment from stage and will work with the visiting company to find an alternative.

Equipment used in dressing rooms and wardrobe, including but not limited to hairdryers, irons, laundry equipment, must similarly be safe to use and must be double insulated. Sadler's Wells reserves the right to test and remove equipment from use if it is electrically unsafe.

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Relevant Legislation

When carrying out work at Sadler's Wells all visiting companies must comply with all current* health and safety and safe legislation, directives, and approved codes of practice, including:

Health and Safety at Work Act 1974

The Environmental Protection Act (EPA) 1990

Confined Spaces Regulations

Construction (Design and Management) Regulations

Construction (Head Protection) Regulations

Construction (General Provision) Regulations

Construction (Working Places) Regulations

Control of Asbestos Regulations

Control of Optical Radiation at Work Regulations

Control of Substances Hazardous to Health Regulations

Dangerous Substances and Explosive Atmospheres Regulations

Electrical Equipment (Safety) Regulations

Employers Liability (Compulsory Insurance) Act and Regulations

Hazardous Waste (England and Wales) Regulations

Health and Safety (Safety Signs and Signals) Regulations

Health and Safety (First-Aid) Regulations

Health and Safety (Information for Employees) regulations

Health and Safety (Display Screen Equipment) Regulations

Health and Safety (Consultation with Employees) Regulations

Highly Flammable Liquids and Liquefied Petroleum Gases Regulations

Ionising Radiations Regulations

Lifting Operations and Lifting Equipment Regulations

Management of Health and Safety at Work Regulations

Manual Handling Operations Regulations

Noise at Work Regulations

Personal Protective Equipment at Work Regulations

Provision and Use of Work Equipment Regulations

Reporting of Injuries, Diseases and Dangerous Occurrences Regulations

Safety Representatives and Safety Committee Regulations

Supply of Machinery (Safety) Regulations

The Regulatory Reform (Fire Safety) Order

Vibration at Work Regulations

Workplace (Health, Safety and Welfare) Regulations

Work at Height Regulations

Working Time Regulations

**In all cases the most recent iteration of any and all regulations and orders shall prevail*

APPENDIX 1

Safe Systems of Work applicable to Visiting Companies

1. Stage: Sadler's Wells
2. Power flying Sadler's Wells
3. Stage: Peacock Theatre
4. Stage: Lilian Baylis Studio
5. Winch bars: Lilian Baylis Studio
6. Loading and unloading trailers
7. Tallescope
8. Ladders and Stepladders
9. MEWP – elevating work platforms
10. Box Boom rigging: Peacock Theatre
11. Top Dock and Hoist: Peacock Theatre
12. Followspot operation and rescue
13. Working at Height: circle rails
14. Hot Works
15. Noise at work policy
16. Orchestra pit and noise exposure
17. Special effect: fire and pyrotechnics
18. Special effects: firearms and weapons
19. Special effects: smoke and vapour effects
20. Special effects: lasers
21. Drones in performance
22. COSHH Policy
23. Personal Protective Equipment (PPE)
24. Wardrobe

1. Safe System of Work for Stage: Sadler's Wells

If barriers are in place at any entrance to the stage non authorised persons should not access stage, and technical staff should ensure the stage is safe including any overhead work before proceeding.

Working at height – general note:

It should be noted that risks from working at height are present at the front of the stage (with or without an orchestra pit) and loading and unloading from the back of wagons. Due care and attention should be taken at all times.

A visible marker (rope or barrier tape) should be present at the front of the stage during get-ins and get-outs. It must only be removed during the get-in and subsequent fit-up once work begins that requires a clear line of sight, and all show staff have been familiarised with the stage layout.

Whilst unloading/loading wagons you must:

- Wear protective footwear.
- Wear high visibility jackets. Jackets are stored Stage left by the dock door.
- Always be aware of people walking past the dock door and give them the right of way.
- On large pieces of equipment have one or two dedicated people watching for people and traffic.
- At night ensure adequate lighting is provided.

Whilst working in the Grid you must:

- Complete a grid Induction with a full-time member of the technical team.
- Inform the fly person that you are about to enter the grid.
- Inform the senior member of staff onstage that you are about to enter the grid.
- Activate the beacons.
- Ensure you leave EVERYTHING from your person, including emptying your pockets, that is not attached by a lanyard.
- Ensure that EVERY tool is attached safely to your person.
- Keep in constant contact with a member of staff onstage if your location in the grid changes.

Whilst people are working in the Grid the senior person onstage must:

- Inform EVERYONE on stage that people are working in the grid.
- Activate the beacons (if not already activated)
- Assess if the work being carried out in the grid requires everyone onstage to wear hard hats.
- if the work is restricted to one area then cordon off the area with safety barriers.
- In the case of anything being hauled/rigged from stage, ensure you have a dedicated member of staff on the ground allocated to the task at ALL times.

Rigging and Calling movements on flying bars:

- Only the Designated Person for the task should ask for bar to be moved. Inform the fly person who this will be.
- If the operator requires it, use a dedicated comms channel for communication between Stage and Fly floor.
- If comms are being used (instead of calls) then the person calling the bar from stage MUST ensure they give the fly call before calling a movement, in the absence of a fly operator doing so.
- Ensure that the bar is completely clear to fly before calling a bar in or out.
- Watch the bar in or out until the move is completed. DO NOT walk away after calling a bar.
- All technical equipment and scenic items must be securely attached to a bar with appropriate fixings, including safety bonds for items with single hanging points and secure attachment of accessories such as colour frames.
- Safe working loads AND point loads for bars must be respected, consider spreading loads if the point load is likely to exceed the maximum permitted.
- Ensure hard hats are being worn whilst unrehearsed movement of fly bars are occurring during the fit up or get outs.
- All heavy rigging installations must be signed off for safety and completion by the production teams. A copy of the rigging completion form template can be provided upon request.

Whilst working in the basket of any MEWP or Tallescope, or using ladders, you must:

- Ensure that EVERY tool is attached safely to your person.
- Ensure that the people at the bottom of the Tallescope wear hard hats AT ALL times.
- Ensure that you have a dedicated crew member working on the ground clearing any objects that may impede your progress across the stage.
- If working on a ladder you must always have at least one member of staff at the foot of the ladder.

Whilst using the orchestra pit lifts you must:

- Wear protective footwear.
- Have a full time member of staff in control of the remote for the lifts.
- Always have the designated front of stage barriers across the front of the stage.
- If using more than one lift to transport goods; always make sure that no item is across two lifts, as the lifts are unpredictable and can sometimes go out of sync from one other.
- Ensure the operator first walks the edges of the lift about to be moved, to remove any items which may fall inadvertently into the gaps (and then into the mechanism) when moving the lifts.
- Ensure the hinged flaps are chained up and are in the 'out' position to ensure the safe edge can function correctly.

Personal Protective Equipment

- The PPE cabinet is located stage right, the equipment is there for anyone to use.

2. Power Flying System: Sadler's Wells

- There is an **Emergency Stop** button located in each corner of the fly tower at every level, including the stage level.
- Maintain good communications between the stage and the fly floors, or wherever the operator is based. **Limit the number of persons calling instructions to the fly operator, particularly in show conditions.**
- Manual counterweight systems allow the fly operator to feel the effects of snags on the bar through the rope. This is not the case with power flying and, therefore, **it is extremely important that all moves are clearly observed**; if involving scenic pieces this should preferably be from the floor, and preferably both ends of the bar. There must be agreement in advance between Sadler's Wells crew and the visiting company for who will be responsible for observing moving bars at stage level.
- The system includes slack rope and overload detection, but these mechanisms must not under any circumstances be relied upon to stop movement in the case of accident: the loads and forces involved means that damage is almost certain to be done before the piece is stopped. The cross stage bars themselves weigh approximately 200kg.
- Ensure that artists are informed of all flying cues within a show, especially where bars are moving in blackout conditions, and that full and safe flying rehearsals have been held before the 1st show. **This includes a flying rehearsal in full working light if requested by the fly operator.**
- Do not work in the grid whilst the system is in use, unless this has been agreed with the operator beforehand.
- The Safe Working Load is 600kg for each cross bar. Make sure that there is a good estimate of the weight of each piece of scenery to be rigged. **If a piece is too heavy to rig on a single bar or hoist, Sadler's Wells should be notified in advance of the get-in.**
- The Power Flying System requires the operator to programme information on the show and the scenery, and to take certain decisions about how to control pieces of scenery in discussion with Stage Management. **Please note: the system cannot be pre-programmed, all flown elements must be in place, and the flying programming session should be uninterrupted and have dedicated time allowed in the schedule for it.**
- Provide as much information in advance of arriving, including a running plot for the operator in advance of any programming session or technical rehearsal. Without this information the technical rehearsals may take longer than necessary.
- All scene changes, including interval changes behind tabs, should be planned in advance, discussed with the operator, and programmed for both safety and efficiency. **Departing from a pre-programmed sequence will incur significant time delays and potential errors, so should be avoided at all costs.**

3. Safe System of Work for Stage: Peacock Theatre

If barriers are in place at any entrance to the stage non authorised persons should not access stage, and technical staff should ensure the stage is safe including any overhead work before proceeding.

Working at height – general note:

It should be noted that risks from working at height are present at the front of the stage (with or without an orchestra pit) and loading and unloading from the back of wagons. Due care and attention should be taken at all times.

A visible marker (rope or barrier tape) should be present at the front of the stage during get-ins and get-outs. It must only be removed during the get-in and subsequent fit-up once work begins that requires a clear line of sight, and all show staff have been familiarised with the stage layout.

Whilst unloading/loading wagons you must:

- Wear protective footwear.
- Wear high visibility jackets.
- Always be aware of people walking past the dock door and give them the right of way.
- On large pieces of equipment have one or two dedicated people watching for people and traffic.
- At night ensure adequate lighting is provided.

Whilst using the hoist you must:

- Wear protective footwear.
- Wear a fall arrest harness
- Ensure a clear line of sight to the floor
- Ensure no-one is underneath the hoist and erect barriers/signage if there is a danger of this happening
- Ensure that the receivers on stage are wearing protective headgear.
- Ensure that while the hoist is in use the barrier across the USL door is set and that the receivers are monitoring access.

Whilst working in the Grid you must:

- Inform the fly person that you are about to enter the grid.
- Activate the beacons.
- Inform the senior member of staff onstage that you are about to enter the grid.
- Ensure you leave EVERYTHING from your person, including emptying your pockets, that is not attached by a lanyard.
- Ensure that EVERY tool is attached safely to your person.
- Keep in constant contact with a member of staff onstage if your location in the grid changes.

Whilst people are working in the Grid the senior person onstage must:

- Inform EVERYONE on stage that people are working in the grid.
- Activate the beacons (if not already activated)
- Assess if the work being carried out in the grid requires everyone onstage to wear hard hats, or:
- If the work is restricted to one area then cordon off the area with safety barriers
- In the case of anything being hauled/rigged from stage, ensure you have a dedicated member of staff on the ground allocated to the task at ALL times.

Rigging and Calling movements on flying bars:

- Only the Designated Person for the task should ask for bar to be moved. Inform the fly person who this will be.
- If comms are being used (instead of calls) then the person calling the bar from stage MUST ensure they give the fly's call before calling a movement, in the absence of a fly operator doing so.
- Ensure that the bar is completely clear to fly before calling a bar in or out.
- Watch the bar in or out until the move is completed. DO NOT walk away after calling a bar.
- All technical equipment and scenic items must be securely attached to a bar with appropriate fixings, including safety bonds for items with single hanging points and secure attachment of accessories such as colour frames.
- Safe working loads AND point loads for bars must be respected, consider spreading loads if the point load is likely to exceed the maximum permitted.
- Ensure everyone working is aware that bars should not be de-rigged until weight has been removed from the cradle, and that bars being rigged should have the weight provided to the fly-floor before rigging starts.
- If crew are required to assist in pulling down bars to aid cradle de-weighting, a full time member of staff must check that anyone assisting knows to let go and isn't in a position to get caught and lifted

Whilst working in the basket of any MEWP or Tallescope, or using ladders, you must:

- Ensure that EVERY tool is attached safely to your person.
- Ensure that the people at the bottom of the Tallescope wear hard hats AT ALL times.
- Ensure that you have a dedicated crew member working on the ground clearing any objects that may impede your progress across the stage.
- If working on a ladder you must always have at least one member of staff at the foot of the ladder.

Whilst using the orchestra pit lift you must:

- Wear protective footwear.
- Have been instructed its safe use and correct procedure
- Always have the rope across the front of the stage.

Personal Protective Equipment

- The PPE cabinet is located upstage right, the equipment is there for anyone to use.

4. Safe System of Work for Stage: Lilian Baylis

All these points apply to ALL Sadler's Wells staff and Visiting Companies

Whilst unloading/loading wagons you must:

- Be aware of risks from working at height on the back of a wagon
- Wear protective footwear
- Wear high visibility jackets. Jackets are stored stage right.
- Always be aware of people walking past the load-in doors and give them right of way.
- On large pieces of equipment have one or two dedicated people watching for people and traffic.
- At night ensure adequate lighting is provided.

Whilst working in the Grid you must:

- Have been inducted by a fulltime member of staff
- Inform the senior member of staff onstage that you are about to enter the grid.
- Ensure that tools are attached safely to your person, and exercise caution when working overhead.
- Use safety barriers as provided to ensure no-one places themselves at risk by walking onto stage (when not working as part of the team) when you are working overhead

Whilst people are working in the Grid the senior person onstage must:

- Assess if the work being carried out in the grid requires everyone onstage to wear hard hats.
- If the work is restricted to one area and poses a risk then cordon off the area with safety barriers
- In the case of anything being hauled/rigged from stage, ensure you have a dedicated member of staff on the ground allocated to the task at ALL times.

Whilst working in the basket of any MEWP or Tallescope, or using ladders, you must:

- Ensure that EVERY tool is attached safely to your person.
- Ensure that the people at the bottom of the Tallescope wear hard hats AT ALL times.
- Ensure that you have a dedicated crew member working on the ground clearing any objects that may impede your progress across the stage.
- If working on a ladder you must always have at least one member of staff at the foot of the ladder.

Personal Protective Equipment

- The PPE box is located stage right, the equipment is there for anyone to use.

5. Winch bars: Lilian Baylis Studio

The winch bars are drill operated, a dedicated drill and dedicated PPE are located by the winches in the grid and must not be removed or used for any other purpose.

Anyone operating the winch bars must first have been instructed by a member of the Lilian Baylis technical team. Only full-time members of technical staff or trained members of the casual technical team may operate the winch bars.

Precautions to be taken before using the drill-operated winch bars:

- Ear defenders are kept in the grid with the winches. These must be worn by the person using the drill to operate the winch
- Ensure there is always a dedicated member of staff on the floor to watch the bar until the move is completed. This person must remain in the line of sight of the person operating the winch and communicate clearly using pre-arranged hand signals.
- Ensure that the bar is completely clear to fly before operating the winch. Due to the noise level and subsequent difficulties in communication there should be no-one working at height in the upstage area, including use of the tallescope.
- Clearly inform everyone on stage that the bar is about to move and to expect continuous loud noise before you operate the winch.
- Ensure those working in the space are wearing head protection whilst bars are moving and operators are in the grid space

Use of the drill-operated winch bars is as follows:

- The drill allocated for this purpose and associated PPE will be stored on the grid at all times in a dedicated storage box.
- When the bar is at stage level the drill should be disengaged and stored safely to one side until such time as the bar is ready to raise to its final position.
- The Safe Working Load is 350kg distributed on each bar, ensure that weight is distributed as evenly as possible.
- Once the bar is raised into its final position the drill and PPE must be returned to the storage box on the grid.
- A backup drill is available on request.

Furthermore:

- All technical equipment and scenic items must be securely attached to a bar with appropriate fixings, including safety bonds for items with single hanging points and secure attachment of accessories such as colour frames.
- Safe working loads AND point loads for bars must be respected, consider spreading loads if the point load is likely to exceed the maximum permitted.

6. Loading / unloading trailers

Staffing

- The visiting company must ensure that a competent person is appointed to supervise the unloading and loading of the trailer(s). If necessary, a member of staff will be appointed to supervise safe passage and pedestrian access.
- ALL crew will be competent, well rested at the beginning of the shift, and sober.
- ALL crew will follow Sadler's Wells requirements for Personal Protective Equipment and will wear protective footwear throughout any loading or unloading.
- Sufficient breaks must be scheduled as per working time regulations and staff contracts. This should be half hour every 5.5 hours worked according to staff contracts (at the absolute minimum for safety and working time regulations no less than 20 minutes per 6 hours worked). If in doubt please consult with Sadler's Wells technical management.
- Sufficient crew must be provided or requested of Sadler's Wells in advance. If loading/unloading is deemed unsafe as a result of insufficient crew, Sadler's Wells reserves the right to delay any unsafe activity until such time as additional crew can be deployed.

Loading/unloading

- Be aware of risks from working at height on the back of a wagon at all times.
- The visiting company will have ensured the truck is safely packed, with no dangerously balanced items at risk of falling and injuring any member of any crew.
- The visiting company will have ensured that boxes, skips and flight cases are safely packed to avoid any unbalanced loads. Weight should be indicated on each item.
- Stage props, costumes, and cloths should be in wheeled cases, where Tri-Wall skips (large cardboard skips) are used the load should not exceed 50kg, and they should be transported on wheels.
- The visiting company will request any necessary lifting equipment (example: forklift truck with driver) in advance of their arrival (should there not be an adequate tail lift or ramp provided on their truck).
- Sadler's Wells will provide lighting should there not be suitable internal lighting on the truck.

Reporting

- Any and all accidents and near misses MUST be reported immediately to a member of Sadler's Wells crew who will ensure that the relevant persons are informed immediately.

7. Tallescopes

Tallescope safe working practice – general rules

- At least one person in the team of 4 using the Tallescope must be a full-time member of Sadler's Wells Technical staff or a trained Duty Technician. All full-time staff will have Tallescope training.
- The Supervisor role must have Tallescope training, furthermore all Sadler's Wells casual staff should have undergone the Sadler's Wells Tallescope and Ladder safety course as proof of competency. Visiting company staff using the Tallescope will be given a safety briefing before ascending.
- The Tallescope must be visually inspected before use and taken out of service if faulty.
- Those at the base of the Tallescope will wear hard hats and protective footwear at all times.
- Noise levels should be kept to a minimum to allow safe communication when working at height.
- All tools used by the technician in the cage must be fixed by a lanyard.
- Climb the Tallescope slowly and steadily and plan the work to minimise the number of ascents to reduce the risk of fatigue.

Static use

- Lone working at height is not permitted, even if the Tallescope is used as a static ladder there must be 2 other people present onstage.
- For static work only 1 set of outriggers need be used, at 90 degrees to the base.
- The brakes must always be applied when the Tallescope is used for static work.
- If using the Tallescope on a raked stage as a static ladder it must be positioned with the long axis up and down the rake.

Moving the Tallescope when occupied

- There must be a team of 4 persons: 1 supervisor, 1 in the basket, 2 moving the Tallescope.
- The stage must be flat; this method of work is not permitted on a raked stage.
- There should be no obstructions at stage level or overhead along the route of the movement.
- The outriggers must be locked off with the feet no more than 10mm above the floor.

- The outriggers should be equally spaced, i.e. approx 60 degrees angle between scope and outrigger.
- The Tallescope must only be moved along its long axis; to move it on its short axis (sideways e.g. when moving upstage/downstage between bars) please ensure the technician in the cage descends first.
- The Tallescope must be moved by the end posts only, and should be moved slowly and smoothly.
- The technician in the cage will give the instructions which must be acknowledged by the crew before the Tallescope is moved.
- Apply the brakes when hauling or moving loads. However for light work (e.g. most focusing) the manufacturers advise that the brakes need not be applied.
- Do not lift the Tallescope over obstructions e.g. cables (not even a tiny lift). Move the obstruction or descend from the Tallescope first.

Furthermore:

The following items must be attached and/or remain with the tallescope at all times:

- Long uprights
- Harness
- Hard hats

8. Safe use of ladders and stepladders

Ladders

- Ladders should be in good condition and examined regularly for defects
- They should be secured so they cannot slip, usually by tying them at the top
- Access ladders should extend about 1m above the working platform. This provides a handhold for people getting on and off
- Avoid overreaching, if you are working from a ladder, make sure it is long enough and positioned to reach the work safely
- No ladders should be used if there is the possibility of contact with overhead electric wires or unprotected electrical equipment
- Do not climb or work off a ladder unless you can hold onto it

Stepladders

- Stepladders should be in good condition and examined regularly for defects
- The stepladder should be examined before use
- It should be fully open with locking devices in place
- The stepladder must be on firm level ground
- Avoid overreaching
- Avoid side-on work
- Do not use the top platform of a stepladder unless it is designed with special hand-holds.

9. Mobile Elevating Work Platforms (MEWP)

- Any permanent or casual member of staff, or visiting company or crew member using an in-house or hired MEWP must have the relevant qualification and be able to produce proof of this.
- When assessing visiting companies from overseas with different means/methods of qualification, competency must be demonstrated and management approval sought before they are permitted to use in-house or hired equipment.
- On Sadler's Wells' sites all technical staff have the authority to cease or place limits upon any perceived unsafe activities. On other sites Sadler's Wells staff have the same authority to cease or limit their own activities due to safety concerns, and to raise those concerns with the venue. At no point should any member of Sadler's Wells staff put themselves or others at risk.
- Any MEWP must be visually inspected before use, and taken out of service if faulty.
- The unit must be used in accordance with the manufacturer's instructions.
- Lone working at height is only permitted indoors and never on Sadler's Wells or Peacock stages. A radio must be carried by the operator when doing so (this will include activities such as relamping strip lights under the Lilian Baylis bridges).
- Onstage work on Sadler's Wells main stage and the Peacock main stage must involve at least 2 persons, due to the raised risk factors including but not limited to sprung floors and orchestra pits. The grounds persons must know the emergency descent procedure for the MEWP.
- Movement of any self propelled MEWP onstage must be guided at ground level for the safety of anyone working in the vicinity, or in the vicinity of any scenic pieces.
- Unless designed to do so, the MEWP should not be used on a raked stage.
- Due care and attention must be paid to the weight of the MEWP and the load capacity of the floor before use, this is particularly significant in the event that a false floor is laid on the venue's floor.
- All tools used by the technician in the cage must be fixed by a lanyard.
- Where possible, no persons will be present at or around the base of the MEWP. Appropriate PPE must be worn if such works are unavoidable (such as paging soft goods)
- Noise levels should be kept to a minimum to allow safe communication when working at height.

10. Box Boom rigging: Peacock Theatre

All users must have had relevant instruction before work commences.

Rigging:

- This activity will include all structural rigging work and rigging of lights over head-height. The Technical Manager (or in his/her absence the Duty Technician) must approve all methods of work on the box booms before work commences.
- Any such rigging work above head height will require a harness with 2 work positioning lanyards.
- When the final work position has been reached, both lanyards must be attached so that both hands may be used to safely rig or position lights.
- The area below the ladder must be made safe so that no-one works or passes directly underneath, this may be by cordoning off the area, or use of a groundsperson, or other supervisory role.
- If the load is not easily manageable then a rope and pulley/chainblock must be used, with a groundsperson assisting with the lift.
- Loads must be surely attached to ladder with both primary and secondary fixings (e.g. wire safety bonds).

Focusing/gel change:

- Low level rigging activity (up to head height) will not require a harness.
- In addition, gel changing or focusing lights up to a safe working height will not require a lanyard.
- As every rig is different, and as light fixtures vary so much, this safe working height will be determined on a show by show basis by the Technical Manager (or in their absence the Duty Technician).
- The lighting levels in the auditorium and whether audience are present or not will all play a part in making a decision as regards safe working height.

11. Top Dock and Hoist: Peacock Theatre

Before starting work:

- All operators using the hoist must have had suitable training.
- There must be a designated person allocated to receiving the winch at stage level who must wear a hard hat throughout this activity.
- Operators and staff receiving the winch at stage level must wear protective footwear.
- Operators must wear fall arrest equipment stored in the dock. An inspection should be carried out by the user each time a harness is used.
- The dock area must be checked for any substance or item that could cause slips, trips or falls.
- A warning barrier will be placed across the fire doors directly under the dock doors to warn people approaching from the substage of the work going on overhead.

Procedure:

- The stable doors must be opened first to allow for safe retrieval of the harnesses and clipping into the system, without exposing the dock edge.
- No other persons are allowed in the marked zone, and the doors should not be fully opened until other staff have moved behind the line.
- All lifting equipment shall be inspected prior to use. Any equipment that appears susceptible to any foreseeable failure should not be used.

Load:

- No load shall exceed 1000kg, and all lifting accessories (roundslings, shackles) must be in good condition, and fastened securely.
- No load shall be carried or suspended over people.
- Do not load in any scenic items or technical equipment if it is not stable and if lifting will cause it to fail.
- The hoist shall not be used for the lifting of persons under any circumstances.
- If any of the safety equipment or lifting equipment is faulty it should be reported to a full time member of staff immediately and all work should cease.

12. Followspot operation and rescue procedure

Followspot operators must use the harnesses provided and be supervised and instructed before they do so for the first time.

- Followspot operators must be fully instructed, in position with a physical demonstration, before being permitted to work. Those who are experienced and have a record of working in any of our theatres should be checked regularly (3 monthly, documented) by the relevant permanent member of staff to confirm continued competency.
- The harnesses must be full body harnesses and the lanyard will be fall restraint (not fall arrest). Once the lanyard is tightened the operator will not be able to move into a position where they could fall from the bridge.
- The harness must be securely attached to the designated point before approaching the front of the bridge. At the Peacock this should be attached once the operator reaches the top of the ladder and before passing along the bridge.
- The operator must conduct a pre-show and post show check of the unit before all rehearsals and shows, verified by the Duty Technician. This must include:
 - Clips on gel frames must be secure and fully in position
 - Gel frames must move smoothly past each other.
 - Sights must be securely fixed and any retaining bonds checked.
 - Locking handles and other operational mechanisms moving smoothly and tightened appropriately.
 - No personal and/or loose items near the operating position and/or the front of the bridge.
 - Any Q sheets should be safely taped in position, no loose clips permitted.
 - Reading lights must have a safety bond.
- Any drinks taken onto the bridge must be in a sealed bottle/container. No open drinks and no hot drinks are permitted on the bridge at any time.
- Any personal loose items taken by the operator onto the bridge must be placed in a box provided, which will be secure (Peacock) and/or at the back of the bridge (Sadler's Wells). During rehearsal and show conditions the operator must step back from the followspot to access this box and use any items therein (e.g. water bottles).
- During show conditions any pens or pencils used by the operators in devising their Q sheets should also be placed in the secure personals box.
- On shows with followspotting, the Duty Technician will make no less than weekly supplementary physical checks of the followspots (prior to the first show of each new week), and always before the first night of any production, regardless of the length of the run. These weekly checks are to be documented in the relevant safety folders

In the event of a medical or other incident:

- If the operator is incapacitated and cannot descend from the followspot position of their own accord, the emergency services should be called to site.
- Do not attempt to move the individual under any circumstances. They will be wearing a full body harness. Do not remove this.
- Follow 1st aid training or ask a 1st aider to attend, while waiting for medical assistance to arrive.
- In all cases, the incident must be logged as per H&S procedures and the equipment should be taken out of operation until it can be checked for safe use

13. Working at Height: Circle Rails

- A full-body fall arrest harness to be worn when leaning over to rig and focus lights or other equipment such as projectors, where a safe working position cannot otherwise be maintained by the individual.
- The harnesses are subject to regular inspection under LOLER and PUWER Regulations, nevertheless a visual inspection should be carried out by the user each time a harness is used
- The harness must be fitted with a suitable work positioning lanyard that can be tightened to restrict movement (i.e. not a fall arrest lanyard with dynamic release built in). The purpose of the lanyard is to restrict the movement of the user, to enable a physically comfortable work posture, but one where the individual cannot overextend and be at risk of falling.
- If a work posture cannot be gained using this procedure, and the user has to overextend to the point they are now in a work positioning situation (and placing body weight on the lanyard) they must seek another method of work, usually by accessing the rigging position from below by ladders.
- The lanyard may be fixed to the seating bank behind. At no point must the user put their bodyweight on the lanyard and use the method as a work positioning system. The lanyard is to offer a measure of restriction to enable a comfortable and safe work posture, not for work positioning (which would require 2 lanyards and secure fixing points).
- The area beneath may need to be cordoned off or otherwise supervised to ensure there is no risk of injury for anyone who may be working beneath. This must be assessed on a case by case scenario in line with good practice, depending on the activity.

14. Hot Works

Hot Works will include (but is not limited to) the use of any flame or spark producing equipment including soldering, welding, cutting, brazing, blowlamps and angle grinders.

Contractors must follow the Site Safety Rules for Contractors and must always apply for a hot works permit via the Permit to Work System

All Building Services and permanent Technical staff will be fire warden trained and must follow these procedures:

- Stage Door must be informed of all hot works so that smoke heads can be isolated if necessary.
- Minor daily workshop activities such as soldering do not require a permit if carried out by Sadler's Wells staff.
- All other irregular or major works carried out by Sadler's Wells staff such as angle grinding do require a permit. This includes works on visiting company sets and scenery.
- All rubbish and combustible material must be removed from the vicinity of the work. Where material is fixed it must be protected with non-combustible material such as sheet metal or a fire blanket.
- Floors which might otherwise be damaged must be protected.
- Special care must be taken if there are any holes or ducts nearby that might channel heat or sparks.
- Special care must be taken if there is any metal work nearby that might conduct heat.
- Flame or spark producing equipment must not be used on or near flammable materials, liquids or compressed gases.
- Equipment must not be left alight or with hot elements exposed when unattended.
- Appropriate firefighting appliances must be readily to hand throughout the work and the inspection of the area immediately after completion of the work.
- Immediately after completion of work the area must be examined closely to ensure that there is no smouldering or possibility of later ignition.
- Regular checks must be made after the works are complete, frequency depending on the works and location, and a final check made 8 hours after work is complete.
- If the 8 hour point happens after-hours, this final check must be done by Security who should be fully informed about the work activity and location.

15. Noise at Work Policy

Noise at Work Regulations

The Control of Noise at Work Regulations 2005 (the Noise Regulations) aim is to ensure that workers' hearing is protected from excessive noise at their place of work, which could cause them suffer hearing damage:

- Hearing damage is permanent and irreversible
- Causes deafness and can lead to other illnesses
- Causes stress, pain and irritation
- May cause tinnitus (permanent ringing in the ears)

The level at which employers must provide hearing protection and hearing protection zones is 85 decibels A weighted (dB(A)) (daily or weekly average exposure) and the level at which employers must assess the risk to workers' health and provide them with information and training is now 80 dB(A). There is also an exposure limit value of 87 dB(A), taking account of any reduction in exposure provided by hearing protection, above which workers must not be exposed.

The table below shows how quickly you can get an equivalent dose in a loud stage environment:

Average noise level	Time taken to receive dose
85 dB (A)	8 hours
91 dB (A)	2 hours
100 dB (A)	15 minutes

Both the 1989 and the 2005 sets of noise regulations are based on European Union Directives requiring similar basic laws throughout the Union on protecting workers from the health risks caused by noise. They do not apply to members of the public exposed to noise from their non-work activities, or when they make an informed choice to go to noisy places or from nuisance noise.

Exposure to noise for Audience members:

Members of the public attend performances voluntarily for their own enjoyment. Although they are not exposed to loud noise for the same length of time as those who work there, their hearing may be at risk depending on how often they choose to attend performances and on their exposure to noise from other leisure pursuits or their work.

Information should be provided for the public as to the noise level so they can make an informed decision about protecting their hearing (see below for level).

There is no legislation setting specific noise exposure limits for audiences, but the general requirements of HSWA Section 3 apply. This means that the employer must ensure that the noise exposure from a single event is not in itself likely to damage hearing, which might be the case, for example, if people were allowed to spend several hours immediately in front of the speakers.

The HSE's *Event Safety Guide* states that:

- The event equivalent continuous sound level (Event Leq) should not exceed 107 dB(A), and the peak sound pressure level should not exceed 140dB.
- where practicable, the audience should not be allowed within 3 metres of any speaker, for example by the use of approved safety barriers and dedicated stewards
- if the Event Leq (continuous sound level) is likely to exceed 96 dB(A) it recommends that it is good practice to warn audiences about the risk to hearing in advance publicity, for example in programme advertising, notices at entry points or on tickets.

Action to be taken by Sadler's Wells

- All incoming companies are encouraged to provide previous noise level measurements (where possible) and warnings of excessive noise to allow for appropriate actions to be taken by Sadler's Wells Trust.
- Where appropriate, responses to noise exposure levels will be in line with HSE approved guidelines
- Sadler's Wells Trust reserve the right to have any noise levels exceeding 107dB(A), or continued noise levels that will cause members of staff to exceed exposure limits, to be restricted, regardless of the circumstances. This may include the use of equipment designed to limit the total level of sound from a PA, re-scheduling of noisy activities, or other solutions as deemed suitable
- All shows should be monitored in rehearsals or performance at several locations, including onstage, to determine risk to employees or audience
- If the event equivalent continuous sound level (Event Leq) is likely to exceed 96 dB(A) both Programming and Front of House management should be informed, to warn audiences about the risk to hearing in advance publicity if possible, and through appropriate signage.
- The event equivalent continuous sound level (Event Leq) should not exceed 107 dB(A), and the peak sound pressure level should not exceed 140dB.
- where practicable, the audience should not be allowed within 3 metres of any speaker, for example by the use of approved safety barriers and dedicated stewards – this is particularly appropriate during events such as Breakin' Convention, when suitable hearing protection must furthermore be afforded to all persons working in such areas.

16. Orchestra pit and occupational noise exposure

Please be mindful of the conditions under which you are working, and consider the long term health of your hearing. Orchestra pits are often confined spaces with low ceilings, and musicians are often playing directly into each other's and the conductor's ears. The low, overhanging ceilings prevent sufficient sound escaping to the audience, resulting in louder playing levels, or even amplification.

You will also be exposed to noise levels in your daily life which will add to the daily noise dose you receive. Remember to allow time for your ears to recover from exposure to loud noise. The time required to recover fully from the temporary effects of noise is related to the level of noise and the duration of exposure.

The Control of Noise at Work Regulations

The Control of Noise at Work Regulations 2005 (the Noise Regulations) aim is to ensure that workers' hearing is protected from excessive noise at their place of work, which could cause them suffer hearing damage:

- Hearing damage is permanent and irreversible
- Causes deafness and can lead to other illnesses
- Causes stress, pain and irritation
- May cause tinnitus (permanent ringing in the ears)

The level at which employers must provide hearing protection and hearing protection zones is 85 decibels A weighted (dB(A)) (daily or weekly average exposure) and the level at which employers must assess the risk to workers' health and provide them with information and training is now 80 dB(A). There is also an exposure limit value of 87 dB(A), taking account of any reduction in exposure provided by hearing protection, above which workers must not be exposed.

Most musical instruments have the potential to produce hazardous noise levels, and touring companies and freelancers should be mindful of the different conditions in each orchestra pit, as they will require different control measures.

The following are control measures that may be considered, and which you should raise with a member of Orchestra Management if you have concerns.

- using sound-absorbent materials
- position of performers
- Amplification
- using acoustic screens or risers

17. Special Effects: Fire and Pyrotechnics

Only competent persons must be nominated to carry out any fire or pyrotechnic special effect, and trained if competency requires this. There must be enough time and the necessary means to enable them to carry out their duties safely

Fire and pyrotechnic effects must be rehearsed thoroughly, both for performers and for stage management and the production team

Fire damping equipment to be readily available and on standby at all time, both during rehearsal and during show

There must be a comprehensive management procedure outlined for every fire and pyrotechnic effect, and risk assessments must be submitted to the local authority and fire authority

Clear lines of sight must be maintained at all times between the operator(s) and the effect. If there is no clear line of sight the pyrotechnic must not be triggered

The operator or performer carrying out any effect must be clearly advised of the risks and any procedures as identified by the risk assessment

Any person from another employer (i.e. visiting crew) who is in charge of the effect must be clearly advised of the fire evacuation procedure of the theatre

Training must be provided where necessary, and certainly whenever crew changes or changes to the special effect happen

All pyrotechnics must be stored in their original packaging, stock should be kept to a minimum on site, and any remaining at the end of the production must be disposed of responsibly

The storage location, type of product and quantity of pyrotechnics or show based explosives is to be approved and recorded by the Technical Managers who will then inform the security, emergency coordinator and stage door teams. This notification will enable the information to be passed to the emergency services if necessary

18. Special Effects: Firearms and/or Weapons

Productions at Sadler's Wells may at times use firearms or weapons which either fire blank rounds or which are imitation. Any such item has an associated risk or varying degrees. Ensuring the security of all firearms and weapons, including imitation, is essential both during the show and at all other times they are in the building. Theft is of particular concern, and imitation weapons must be treated with equal weight as regards risk management.

Blank firing firearms have the potential to cause injury from the exhaust expelled from the firearm when fired, the release of the blank if in close proximity, and the physical action of the firearm (i.e. movement of the hammer or slider). There is also the hazard presented by the noise of the shot(s) for both performers and audience. Those handling or using blank firing firearms should be aware of the hazards involved, be instructed in their safe use, and only use and handle them as instructed.

Each production that uses firearms or other weapons will need a production specific risk assessment, prepared or authorised by the production's Technical Director or equivalent.

Firearms:

- The production specific risk assessment must be approved by the Technical Director and the Technical Manager for the relevant theatre (Sadler's, Peacock, or Lilian Baylis).
- Any firearm and all ammunition must be locked up in the company safe or appropriate toolbox, which itself should not be portable or should be locked in a secure office at all times the firearm is not required.
- There must be a clear procedure of handling the firearm and associated ammunition, with nominated show staff being the only ones permitted to hand the firearm to, and receive back from, the nominated performer(s).
- Use of the firearm or weapons onstage should be rehearsed thoroughly, and all staff in the proximity (onstage and offstage) to be considered and accounted for in the production risk assessment.

Blades and other weapons:

- There must be a similar procedure in place for all blades (including blunt blades) and other weapons or items with potential to cause harm.
- The production specific risk assessment must be approved by the Technical Director (Sadler's, Peacock, or Lilian Baylis).
- Any blades or other weapons should be stored securely at all times the production is in the building.

The storage location of all weapons is to be approved and recorded by the Technical Managers who will then inform the security team, emergency coordinator and stage door teams. This notification will enable the information to be passed to the local authority as part of the venue's licencing requirements

19. Special Effects: Smoke and Vapour effects

Dry ice When dry ice, solid carbon dioxide (CO₂), is immersed in hot water or steam, the cold gas that comes off causes the water vapour in the air to condense, creating a water mist. The effect is a heavy 'mist' that lies on the stage. A similar effect can be created using liquid nitrogen.

Haze Oil mists are produced by passing compressed air through a reservoir of highly refined mineral oil.

Glycol or mineral oil smoke 'Smoke guns' all work on the same principles although their size, precise method of operation and the chemical used do vary. The basic principle is that a mineral oil or glycol based substance is heated, atomising the substance. This is then forced out of the machine under pressure.

Pyrotechnic effects pyrotechnics are for flash or smoke effects and give off a range of by-products which are harmful. The storage and use of pyrotechnics is specialised and may be subject to specific legislation concerning explosives.

Hazards

Smoke and vapour effects can give rise to a variety of hazards depending on the substances used. Manufacturers and suppliers **must** provide information about the hazards which may arise from their products.

The following general hazards may need to be considered:

- Freeze burns or frostbite caused by skin contact with liquid nitrogen or blocks or pellets of dry ice
- Skin irritation from mineral oils or glycols
- Asphyxiation due to high concentrations of carbon dioxide or nitrogen gases
- The presence of toxic substances in the smoke or vapour
- Smoke or vapour may obscure visibility and so increase the possibility of slips, trips or falls.
- Slips due to spilt oil

Work with smoke effects will be subject to the Control of Substances Hazardous to Health Regulations 1994 (COSHH) if adverse health effects are possible. Any person operating such effects should be provided with appropriate information and training.

If there is any doubt about the level of exposure that may result from using a particular effect, on-site monitoring should be used.

Precautionary measures

Smoke effects should be under the control of people competent in that activity. Good planning and regular maintenance is essential in the safe use of these effects. The risk assessment should be discussed with the person in charge of the production. People involved in the production should be warned in advance that smoke effects are to be used. Where possible a full rehearsal should be carried out to ensure that no unforeseen risks have emerged, e.g. problems due to reduced visibility.

Preventing exposure

Correct usage of these smoke and vapour effects should allow you to limit the number of people exposed. It should be possible to prevent exposure to the audience and certain members of the production team if care is taken to minimise the amount of smoke used, and to control and direct the smoke.

Since CO₂ is heavier than air, particular attention should be paid to low-lying areas, basements, orchestra pits and under-stage areas. It may be necessary to arrange for a competent person to monitor the CO₂ and oxygen levels in these areas if they are to be occupied by any person.

Controlling exposure

If monitoring has indicated potentially high levels of exposure, the following precautions should be taken to control and minimise exposure.

- Always use the minimum amount of smoke required
- Ventilate areas well immediately after use
- Minimise the exposure time of those concerned
- Keep people away from areas in front of all machines since concentrations are at their highest here

Personal protection

PPE should only ever be used as a last resort when it is not possible to reduce the risk by other means. It may occasionally be necessary to use Respiratory Protective Equipment for the machine operators. If this is the case respirators may be sufficient for oil or glycol effects, but full breathing apparatus may be required for CO₂. Those using dry ice or liquid nitrogen should always wear well insulated impervious gloves to protect against freeze burns. The use of tongs should be considered. Goggles or visors should be worn to prevent eye injuries.

Audiences

As productions have no control over the composition of their audiences special care needs to be taken to minimise risks to the audience. Exposure to the effects should ideally be avoided altogether. The person in charge of the production should know if smoke is likely to reach the audience. If this is the case the following precautions should be considered:

- Limit the amount of smoke/vapour to the minimum necessary for the desired effect
- Direct and control smoke effects to the desired place to prevent overspill into audience areas
- Printed warnings on or with the tickets
- Warning notices on the premises (reinforced by verbal warnings before the performance if this is considered necessary)

All warnings should indicate the type of persons who may be particularly at risk.

20. Use of Lasers in performance

The use of hazardous lasers with high radiant powers (typically from 200mW to 40W+ i.e. class 3B and 4 lasers) will require action to control the risk of a significant eye injury. High power lasers with radiant powers that exceed around 500mW may also burn skin on contact and can be a fire risk.

Use of lasers in productions at Sadler's Wells and its associate venues will therefore require specific risk management.

The risk management requirement for lasers exist in a separate document that may be shared with visiting companies and must include the following conditions:

Safety measures should be put in place including:

- Lasers must be rigged according to published plans submitted in advance to Technical Management for approval.
- The appointment of a designated and trained laser safety person for the production
- Beam paths and coverage being clearly planned and mapped
- Failsafe measures in place for the operator
- The use of screens or masking to protect audience against accidental positioning errors
- Stage and Auditorium areas should be cleared of all personnel not required for the laser set up and testing.
- Restricted areas should be clearly indicated and signs in place, staff should be allocated for the enforcement of these restrictions
- Dedicated testing and rehearsals before any performance in front of the public or invited audience.
- The designated laser safety person must be present and in control of the effect throughout set-up, rehearsals, and performances.

21. Use of Drones in performance

Drones may not be used over the audience at any point, including in pre-show conditions with cameras, unless significant precautions such as full netting is used.

Drone will be permitted on a case by case scenario in performance. The following parameters should be considered:

- Drones should be very lightweight so that any collision with a person will be low risk.
- The drone control system must have a manual override that allows the operators to either land any drone(s) or kill the power to any drone(s) at any time.
- The use of technical crew as spotters should be considered.
- Consider a wifi signal net over the stage, so that all drones will shut off propellers if signal from antenna is lost.
- All non-essential Wi-Fi signals should be switched off for the duration of the drone flight to mitigate against conflicting signals.
- Drafts from outside and the use of fans in the theatre must be guarded against to avoid disturbance to the drone flight pattern.

22. COSHH - Control of Substances Hazardous to Health

- No chemical products are permitted onto stages without approval from the Technical Managers. Catering and Events Director will approve all Catering COSHH systems.
- No hazardous material or substance should be introduced or used unless there is a Safety Data Sheet on record for its use and following the substance storage guidance.
- Copies of the manufacturers' Safety Data Sheets will be kept at Stage Door in both theatres, readily available to the emergency services.
- Materials include cleaning chemicals and agents, paints, dyes, smoke and haze fluids, gases, welding materials, fibre glass, glues, cleaning products, etc.
- All information must be made available to relevant staff using and handling hazardous substances, and all information must be kept up to date.
- Exposure will be prevented or adequately controlled.
- Materials must be stored in correct containers and in proper storage containers/areas/cupboards. The storage container must be labelled by hazard type e.g. corrosive, flammable and harmful and warnings must be posted.
- If there is a danger of vulnerable persons coming into contact with hazardous substances (e.g. children and cleaning materials) the cupboard or room must be locked or similar precautions taken.
- Chemicals and empty containers must be disposed of through an appropriate chemical disposal company in such a manner as not to endanger public health or the environment.
- No member of staff should carry out any work which is liable to expose themselves or anyone else to a substance hazardous to health, unless a suitable and sufficient assessment has been made of the risks to health created by the work and the necessary measures to control exposure.

23. PPE: use of lifting equipment and working overhead

The use of PPE should be as a last resort to risk. To avoid creating a culture of complacency, an effective policy of PPE use must be followed by all production staff working at Sadler's Wells: permanent staff, casual staff, and visiting companies

- Lighting bars must be checked by a nominated member of the staff before they are flown, all safety bonds should be present and fixed, and all fixtures and fittings secured. If the bar is not safe to fly over the heads of crew and performers in show conditions, it should not leave the floor. Industry practice for flying should be adhered to.
- All personnel working on the stage areas to wear protective headwear during the construction phase periods This safe working practice will apply whilst there are maintenance tasks, rigging activity and sound and lighting work being conducted on the grids, gantries or bridges. This will also be applicable when there is unrehearsed movement and rigging of overhead fly bars during fit ups and get outs and at any time whilst the grids or bridges are being accessed
- The assembly of scenery that would require the use of tools or that would create risk to those underneath during construction by the nature of the scenery, dictates that appropriate PPE (safety helmets) must be worn under these circumstances.
- When using lifting equipment for focusing (genie, tallescope or extendable ladders), risk is present due to the use of tools and the manual nature of the overhead work. Appropriate PPE in the form of safety helmets must be worn by all those at the base of the access equipment.
- Industry standards and codes of practice (see following) dictate that flying operations should incorporate checks and measures that must minimise the risk to those onstage at all times. PPE should be used where appropriate.
- All members of staff are required to adhere to Sadler's Wells Health and Safety policy, and to realise that they have a duty of care to themselves and to all others working with them.

24. Safe System of Work for Wardrobe

The work of the Wardrobe department presents a unique set of hazards, please ensure the following safe system of work is followed to ensure the safety of both Sadler's Wells and visiting company staff.

- Do not use equipment which appears faulty. Although all electrical equipment is inspected regularly, please report any faults or damage immediately to any member of the technical team.
- Do not leave irons or steamers unattended. Please turn them off when leaving the work area.
- Take regular breaks from repetitive tasks such as ironing and ensure you do not maintain a single position for long periods of time. Rotate the tasks you perform to reduce your risk of injury and maintain good posture throughout such tasks.
- Advise the Technical Manager or Technical Director immediately of any existing or change to any medical condition, particularly when considering the use of solvents, detergents, hairsprays and other volatile agents that may cause skin or respiratory complaints
- Do not use chairs or anything unstable to reach from upper shelves, ask a member of the technical team to assist with a ladder if required.
- Practice good manual handling and do not carry heavy or awkward loads; ensure you have enough people to assist, split the load into more manageable portions, and make sure you can clearly see the route ahead of you when carrying loads between dressing rooms and on staircases.
- Be mindful of heavy loads when loading and unloading washing machines and dryers.
- If you identify the needs for extra assistance or equipment such as lifting aids or wheeled transport, speak to the Technical Manager or Technical Director at the earliest opportunity so assistance can be provided promptly.
- Report any injury immediately to the Duty Technician and/or Stage Door

Infection control - Wardrobe

The work of the Wardrobe department presents a unique set of hazards and risks with infection transmission due to the close and contact nature of the work, please ensure the following safe systems of work and the guidance for infection control at Sadler's Well, including any specific RAMS are followed to ensure the safety of both Sadler's Wells, visiting company staff and performers.

- If you identify the needs for extra assistance or PPE please contact the Technical Manager or Technical Director at the earliest opportunity so assistance can be provided promptly.
- Ensure there is suitable ventilation in the room or place of work.
- Report any symptoms that you or anyone may have to Technical Management and Stage Door
- Increasing equipment and surface hygiene. For example, use air borne sanitising sprays, maintain minimum equipment, sterilise and disinfect equipment and surfaces after each application, use disposable brushes and applicators. Please consult Sadler's Wells Housekeeping for Guidance.
- Advise the Technical Manager or Technical Director of any existing or change to any medical conditions, particularly when considering the use of solvents, detergents, hairsprays and other volatile agents that may cause skin or respiratory complaints.