**Appendix B**

**BUCKINGHAMSHIRE COUNCIL - SCHOOL SWIMMING POOLS**

**MANAGEMENT OF HEALTH AND SAFETY AT WORK REGULATIONS 1999**

**MODEL RISK ASSESSMENT - SCHOOL SWIMMING POOLS (INDOOR)**

The **Risk Assessment** is to be signed by a senior member of the School Management Team and/or Governors, and must be reviewed, signed and dated on an annual basis.

The **Normal Operating Procedure** and **Emergency Action Plans** are compiled from the findings of a **Risk Assessment**, and therefore, there may be alterations that need to be made to meet individual schools’ operations.

Once set and agreed, the **NOP** and **EAP** must be made available to all members of staff accompanying pupils to their school swimming lesson and those who may be required to operate or manage the swimming pool and its use, and their understanding of its use be tested.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Assessor and Date** | **Approval and Date** | **Adopted as School Policy and Date** |
| **Initial Risk Assessment:** |  |  |  |
| **NOP/EAP:** |  |  |  |
|  |  |  |  |
| **Review #1** |  |  |  |
| **Review #2** |  |  |  |
| **Review #3** |  |  |  |
| **Review #4** |  |  |  |
| **Review #5** |  |  |  |
|  |  |  |  |

|  |  |  |
| --- | --- | --- |
| **HAZARD FACTOR**  **What hazards exist to health and/or safety?**  **(Severity)**  The severity/type of the injury that is likely to be sustained:   1. Negligible injury 2. Minor injury 3. Major injury 4. Fatality 5. Multiple fatalities | **PROBABILITY FACTOR**  **What risks do they pose to employees and other persons?**  **(Likelihood)**  The likelihood and/or frequency that an accident will occur.   1. Remote possibility 2. Unlikely 3. Possible 4. Very likely 5. Certainty | RISK FACTOR:  The product of the Severity Rating and the Likelihood Rating gives a Risk Factor score out of 25. The higher the score the greater the priority for action.  **Hazard Factor X Probability Factor = RISK FACTOR** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Likelihood v |  |  |  |  |  |
| 5 | 5 | 10 | 15 | 20 | 25 |
| 4 | 4 | 8 | 12 | 16 | 20 |
| 3 | 3 | 6 | 9 | 12 | 15 |
| 2 | 2 | 4 | 6 | 8 | 10 |
| 1 | 1 | 2 | 3 | 4 | 5 |
| Severity > | 1 | 2 | 3 | 4 | 5 |

The pool risk assessment checklist is based on the guidance on the Health and Safety Executive Book. Managing Health and Safety in Pools HS (G) 179.

A suggested Hazard score is included in brackets at the end of the hazard. Numbers over 7 need urgent action to eliminate the risk.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **HAZARD** | **HAZARD FACTOR**  **[1 – 5]** | **PROBABILITY FACTOR**  **[1 – 5]** | **RISK FACTOR**  **[1 – 25]** | **MEASURES THAT SHOULD BE IN PLACE TO REDUCE THE RISK FACTOR** | **ARE ADDITIONAL**  **MEASURES NECESSARY** |
| **GENERAL SWIMMING:** |  |  |  |  |  |
| Accident and Incident Prevention and Reporting: |  |  |  | All accidents, incidents and near misses reported in accordance with Council procedures. |  |
|  |  |  |  | The pool rules prominently displayed at two separate points in the pool hall/compound. |  |
|  |  |  |  | A notice is prominently displayed indicating that the pool must not be used if the bottom of it is not visible at all points. |  |
|  |  |  |  | All class sizes are within the Swim England Safe Supervision in Pools and Bucks Safe Practice in School Swimming Policy and Guidance 2021 |  |
| Are employees competent to carry out their duties? |  |  |  | All school staff who support with the teaching of school swimming have completed Swim England Support Teacher of School Swimming as a minimum |  |
|  |  |  |  | At least 1 member of staff on poolside must hold as a minimum, a current RLSS National Rescue Award for Swimming Teachers and Coaches (NRASTC) |  |
|  |  |  |  | There is a clear policy in place for adequate removal of a person with a suspected final injury from the pool. |  |
|  |  |  |  | A lifeguard chair is provided to give the lifeguard clear vision of all parts of the pool. |  |
| Protecting children: |  |  |  | Children are monitored while changing. |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | All staff and observers have been DBS checked and formal checks have been made of the details of the hirer’s Safeguarding policies. |  |
| Managing Un-Programmed Sessions, and external hiring’s: |  |  |  | If un-programmed sessions take place, procedures are in place for monitoring weak swimmers - these are prohibited for school swimming lessons |  |
|  |  |  |  | There are procedures in place for the use of the pool by the public and the supervision of children under 8. |  |
| **Disabilities/Special Needs:** |  |  |  |  |  |
| Dealing with persons with special needs |  |  |  | An individual written risk assessment has been made for all users of the pool who have disabilities/special needs. |  |
|  |  |  |  | If persons with special needs or mobility difficulties, use the pool suitable hoisting equipment is available and sufficient additional helpers will be present, including 1:1 supervision, if required. |  |
| Manual handling and lifting of persons |  |  |  | All persons involved in lifting persons with mobility difficulties in and out of the pool receive training and refresher training in back care and the use of the hoist, slings and other lifting equipment. |  |
|  |  |  |  | All hoists and slings are examined and inspected by a competent person every six months and records of these inspections are kept? |  |
|  |  |  |  | All slings are cleaned and laundered regularly. |  |
| **Epilepsy:** |  |  |  |  |  |
|  |  |  |  | The emergency evacuation of this group has been considered and recorded in the Emergency Action Plan? |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | If the pool is used by persons with Epilepsy, is there a documented policy in the Normal Operating Procedure, and the evacuation of this group has been documented in the Emergency Action Plan?  Pupils with epilepsy require careful 1:1 observation, as shimmering water or flickering lights may trigger a seizure - asthma inhalers must be labelled and brought onto poolside by swimmer |  |
| **POOL SECURITY:** |  |  |  | **Indoor pools:** |  |
| Can unauthorised persons gain access to the pool, or ancillary areas? |  |  |  | The pool hall must be kept locked when not in use. |  |
|  |  |  |  | There is a list of authorised key holders and an emergency key kept in a secure location known to authorised persons. |  |
|  |  |  |  | “Danger Deep Water” signs complying with the Safety Signs and Signals Regulations must be displayed in a visible location. |  |
|  |  |  |  | The pool is protected by a CCTV camera? |  |
| **POOL SURROUND AND BATHER CIRCULATION:** |  |  |  |  |  |
| **Indoor Pools:** |  |  |  | **Indoor Pools:** |  |
| Are there any structural or design conditions that could become hazardous? |  |  |  | Where access to the pool hall or pool area is located close to deep water (deeper than 1.2 metres) a barrier is in place to minimise the risk of non-swimmers falling or jumping into deep water? |  |
|  |  |  |  | The ceiling is in a sound condition with no loose material? |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | Safety signs are in appropriate positions and unobstructed. Where there are any sudden changes in depth, these are clearly marked, especially at shallow and deep ends. Any areas where it is unsafe to swim or dive should be clearly marked.  “Danger Deep Water” signs complying with the Safety Signs and Signals Regulations are displayed on the pool hall walls. |  |
| Is there adequate lighting? |  |  |  | There is an adequate mix of natural and artificial lighting.  Automatic emergency lighting, powered by an independent source, should be provided where sudden loss of light would create a risk, for example during a power failure, so that emergency evacuation procedures can be carried out safely. |  |
|  |  |  |  | The pool surface is free of glare from either natural or artificial lighting. |  |
|  |  |  |  | All lighting units are appropriate for use in a pool area, and are adequately protected against moisture. |  |
| Are bathers exposed to any hazards in the pool hall? |  |  |  | The pool hall walls adjacent to wet circulation areas up to 2m above the floor are in sound condition and free of sharp or abrasive areas. |  |
|  |  |  |  | Any pool equipment which might cause injury to bathers is stored safely at all times. |  |
| Is there any possibility of scalds or burns to bathers? |  |  |  | Any low level radiators or heating pipes below 2m around the perimeter of the pool which could cause burns or scalds are protected. |  |
| Are there any trip hazards? |  |  |  | The pool surround is of adequate width and unobstructed. |  |
|  |  |  |  | Any steps in the pool hall (indoor pools), are clearly defined and in sound condition. |  |
|  |  |  |  | Any flights of steps in the pool hall are provided with appropriate handrails. |  |
|  |  |  |  | Any ramps in the pool hall should not have a gradient of less than 1 in 15. |  |
| ***Pool Signage:*** *All safety signage must comply with the Health and Safety (Safety Signs and Signals) Regulations 1996 and made of robust weather resistant material. They should also be of an appropriate size to be visible from any position in the pool compound including to people with visual impairment.* |  |  |  | The exit from the pool hall is clearly signed with an approved sign.  The fire exit(s) from the pool hall are clearly signed, with approved illuminated signs (indoor pools).  In pool halls which are used after lighting up time, emergency lighting is provided and is regularly checked. |  |
|  |  |  |  | The following signs are prominently displayed in the pool hall/compound:-   |  |  |  | | --- | --- | --- | | “No Diving” | “No Bombing” | “No Running” | | “Shallow End” | “Deep End” | Pool water depth | |  |
|  |  |  |  | In the case of a deep water pool, of variable depth and/or sudden slopes, a pool profile is clearly displayed at the side(s) of the pool with depths indicated. |  |
|  |  |  |  | The deep water area is clearly indicated to non-swimmers. |  |
| **Pool Outlets:** |  |  |  |  |  |
| Is there a possibility of entrapment, or vortex formation? |  |  |  | All outlets are protected by a grille with a mesh size of less than 8mm to prevent entrapment and are securely fixed to the outlet so that it cannot be removed. |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | There are at least two outlet grilles on each suction line to prevent excessive pressure causing entrapment if one is covered. |  |
|  |  |  |  | If there is only one outlet grille on a suction line, it is covered with a suitable grille to prevent entrapment and  vortex formation if it is covered by a person’s body. It has been tested in accordance with PAS 39: 2003, to ensure that there is no risk of hair entanglement. |  |
|  |  |  |  | The water velocity at the outlets is less than 0.5 metre/second. |  |
| **PHYSICAL STRUCTURE:**  Pool Interior (Flooring/Lining) |  |  |  |  |  |
|  |  |  |  | There are no sharp or exposed edges to the tiled finish; nor broken or missing tiles, including at tile expansion joint positions. |  |
|  |  |  |  | The pool floor is in sound condition, free from abrasive surfaces, sharp edges and is not slippery |  |
| Pool Edge Definition: |  |  |  | The pool edge is well defined and colour contrasted with the pool surround or pool tank edge. |  |
| Handrails and Rest Ledges: |  |  |  | Any rest ledges or handrails are secure and free from risk of limb entrapment |  |
| Pool Access Steps/Ladders: |  |  |  | Pool access ladders are securely mounted, free of excessive movement or gaps in which limbs could be trapped. |  |
|  |  |  |  | The ladders are positioned to prevent risk of entrapment between the ladder and the poolside |  |
| Blind Spots: |  |  |  | Any concealed areas or blind spots are covered by existing lifeguard positions. |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | Where permanent starting platforms or underwater projecting features or fittings are fitted, adequate supervision and controls are in place. |  |
| **WATER TREATMENT SYSTEMS:** |  |  |  |  |  |
| **Pool Plant Room Security** |  |  |  |  |  |
| Is the plant room adequately ventilated? |  |  |  | The plant room is well ventilated either by air bricks, grilles or by louvres in the door itself. |  |
| Can the plant room be accessed by unauthorised persons? |  |  |  | The plant room door is robust and secure. |  |
| Is the plant room safe and secure? |  |  |  | There is a list of authorised key holders, and there is an emergency key kept in a secure location, known only to authorised persons. |  |
|  |  |  |  | The plant room floor is in sound condition, level, not slippery, unobstructed and clean. Any changes in level are clearly indicated? |  |
|  |  |  |  | The doorstep to the plant room is in sound condition and marked with yellow non-slip paint to make it clearly visible. |  |
|  |  |  |  | The door to the plant room can be fastened open, when in use, to facilitate good ventilation |  |
|  |  |  |  | The plant room is lit with corrosion, damp resistant lighting, and is decorated with a light coloured paint to enhance visibility. |  |
| **Plant Room Procedures:** |  |  |  |  |  |
| Is there any form of communication whilst in the plant room? |  |  |  | Emergency communication is available so that help can be summoned in an emergency. |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Are the operators protected from electricity and chemicals? |  |  |  | The electrical supply to the plant room has been tested within the past year and a current test certificate or sticker available. |  |
|  |  |  |  | All electrical switchgear and cable is protected from damage. |  |
|  |  |  |  | A chemical spill kit is available in a holdall in an easily accessible location. A dustpan and brush for solids and a container with lid to place spills in after clean-up is available. |  |
|  |  |  |  | Filter backwashing is only carried out at the end of the day when there are no implications for bathers and the bed has a chance to settle. |  |
|  |  |  |  | There are written procedures for changing the strainer baskets, and the full backwash procedure displayed on the plant room wall? |  |
| **Water Treatment Standards:** |  |  |  |  |  |
| Chemical safety |  |  |  | Chemical injection points and lines are clearly labelled and protected where appropriate. |  |
|  |  |  |  | Acid and disinfectant points are a minimum distance of 1.5m apart. |  |
|  |  |  |  | A water test is taken at least once every three hours each day. The first water test is taken prior to use of the pool every day. |  |
| Ensuring the quality of pool water is fit for use. |  |  |  | Chemical levels are maintained in accordance with PWTAG recommendations. |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Bacteriological safety |  |  |  | Bacteriological testing of the pool water takes place to prevent risks from microorganisms, in accordance with PWTAG recommendations. |  |
| **Personal Protective Equipment:** |  |  |  | A holdall is provided for each pool operator to store their personal protective equipment. |  |
|  |  |  |  | The following items of PPE are available to the pool operator:-   * A full face mask respirator, with (A2, B2, E2, K2 P3) cartridge(s) in good condition, still effective and in date. * PVC gauntlets which fit the operator, in good condition, without holes and clean. * Clean/transparent chemical goggles in good condition. * A clean chemical proof apron or overall. * Wellington boots that fit the pool carer. * EN 149 2001 FFP2 toxic disposable toxic dust masks. * Ear defenders are available. * A first aid box is available in a prominent and readily   accessible position and is adequately stocked with  supplies that are in date.   * An eyewash station, readily accessible to the plant   operator, with eyewash bottles that are unopened and  in date. |  |
| **Pool Test Kit:** |  |  |  |  |  |
| Electrical testing equipment |  |  |  | The pool test kit is kept in a known location where it is not likely to be accidentally damaged. It is kept clean and in good working order. |  |
|  |  |  |  | If a photometer is used, it has been calibrated within the past year and the calibration certificate is available. |  |
|  |  |  |  | Adequate quantities of pool testing tablets are available and in date:-   * DPD No 1 * DPD No 3 * Phenol Red * Cyanuric Ac * Total Alkalinity * Calcium Hardness |  |
|  |  |  |  | A total dissolved solids meter is available and has been calibrated within the past year. |  |
|  |  |  |  | A pool thermometer is available. |  |
| **Pool Test Records:**  Retention and availability of records. |  |  |  | An approved standard form for recording pool chemical test records is used and kept in a safe place eg. the plant room where they are not likely to be damaged by water. They are available for inspection. |  |
|  |  |  |  | Microbiological tests carried out by an independent approved UKAS registered contractor and records are kept available for inspection. |  |
|  |  |  |  | All records are kept on file for at least five years. |  |
| **Pool Chemicals:** |  |  |  |  |  |
| C.O.S.H.H. and Safety Data Sheets |  |  |  | The operator is aware of all the chemicals used in the plant room. |  |
|  |  |  |  | There is a written procedure for the handling and storage of pool chemicals. |  |
|  |  |  |  | There is an up to date inventory and location of all pool chemical stocks held. |  |
|  |  |  |  | Supplier’s Safety Data Sheets are available for all chemicals stocked at point of use and in the school office. |  |
|  |  |  |  | COSHH Risk Assessments are available for all chemicals stocked at point of use and in the school office. |  |
| Safe storage of chemicals |  |  |  | Chemicals are stored away from public areas and ventilation inlets. |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | Dry chemicals in storage are raised off the floor. |  |
|  |  |  |  | Pool chemicals are stored securely in a cool, dry, well ventilated place, and are protected from bright sunlight and heat sources. |  |
|  |  |  |  | Chemicals are stored in their original containers, clearly labelled with the name of the substance and the appropriate hazard warning sign. |  |
|  |  |  |  | Incompatible chemicals are stored in separate, lockable, clearly labelled, robust containers to minimise the chances of accidental mixing. |  |
|  |  |  |  | Any liquid chemical stocks are bunded against leaks with bunds of capacity greater than 110% of the volume of liquid stored. |  |
|  |  |  |  | All chemical spillages cleared up immediately. |  |
| Disposal of chemical containers |  |  |  | Any empty chemical containers are stored safely and disposed of as soon as possible after they become empty. |  |
|  |  |  |  | Arrangements are in place for the safe disposal of any unwanted chemicals via a licensed waste contractor. |  |

**NB. RISK ASSESSMENT IS A CONTINUOUS PROCESS – SIGNIFICANT CHANGES IN THE WORKING ENVIRONMENT REQUIRES A RE-ASSESSMENT OF THE WORK.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date of Review** | **Reviewed by** | **Approved by** | **Date of Approval** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **School** | **Name of Assessor** | **Position** | **Assessment Date** |
|  |  |  |  |
| **Approved by** | **Approval Date** | **Review Date** | **Assessment Reference No** |
|  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Indoor/Outdoor Pool** | **Width** | **Depth** | **Principal Disinfectant** |
|  |  |  |  |