Guidance on the operation and use of small swimming pools

Issued by the

Lincolnshire Health & Safety Liaison Group

East Lindsey DISTRICT COUNCIL

Contents

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Guidance on the operation and use of small swimming pools

Developed by the Lincolnshire Health & Safety Liaison Group

We would like to acknowledge Great Yarmouth Borough Council for the text

Introduction

The aim of this guide is to provide pool owners and operators with information on the main risks associated with swimming pool operation together with details of measures that can be taken to ensure that a safe environment is provided for pool users and employees.

The information provided in this guide is what is recognised and generally accepted as good practice for pool operation. The Health and Safety matters that are common to most businesses including swimming pool operators are listed below:

i) Risk Assessment

ii) First Aid and Accident Reporting

iii) Control of Substances Hazardous to Health

v) Electrical Safety

v) Young Workers

vi) Health and Safety Policy Documents

At the end of this guide you will find a number of inspection checklists which have been developed for your use.

More detailed information on swimming pool operation and design can be found in HSE Guidance 'Managing Health and Safety in Swimming Pools' available from HSE Books www.hse.gov.uk. It is recommended that all pool operators obtain a copy of this guide.

The information in this guide is by no means exhaustive and you may have specific hazards in your premises that it does not cover. The Health and Safety Team at your local Environmental Health will be happy to advise you on any health and safety query you may have. Please do not hesitate to contact them.

1. The Pool

General Environment

- The swimming pool area, including changing rooms, should be maintained at a comfortable temperature. (As a guide, the air temperature should be 1°C higher than the water temperature.)
- Ventilation should be draught-free.
- Lighting should be such that users and lifeguards are not subject to excessive glare and all of the pool area must be clearly visible.
- Emergency lighting must be provided where a loss of light would create a safety risk and should be tested daily.
- Glazing should be of a suitable safety material and be marked if there is a danger of people coming into contact with it.
- The pool, surround, changing rooms and other areas must be kept in a clean condition.
- The steps providing access into the pool must be securely fitted, be in good condition and not create a risk of entrapment between the treads and the pool wall.
- The floor area around the pool must be in a good condition not slippery and any large changes in level must be adequately highlighted.

Maintenance

Due to the wet and corrosive nature of the pool and associated areas, a system of correct and regular maintenance by competent persons is essential. In particular:

- Manufacturer's guidance on maintenance requirements should be complied with. If any works need to be undertaken when the pool is open, suitable precautions must be taken to protect the public.
- Boilers should be thoroughly examined on a regular basis by a competent person.
- Ventilation systems should be examined.
- Asbestos was often used in boiler rooms around the boiler and for lagging pipes. Boarding containing asbestos materials may have been used in the construction of your shower rooms or in other facilities you provide. In most cases if the asbestos material is in good condition it can be left in place however if any asbestos needs removing the work may need to be carried out by a licensed asbestos removal company.

Preventing Access to the Pool

It is important that you have effective measures in place to prevent unauthorised access to your pool, plant rooms and chemical stores when they are not in use. If pool covers are your means of preventing access to the pool, they must be able to be secured continuously around the edges and be able to support the weight of a person falling onto them.

Outdoor Pools

High walls and fences around pools may be inadequate so you should assess the risk and take appropriate measures. This may mean the installation of intruder lighting/alarms, in addition to fencing. Signs prohibiting unauthorised use of the pool should also be displayed in conspicuous positions or around the pool area.

It is important that you assess the maximum number of persons that can be safely admitted to the pool. As a guide $3m^2$ per person should be allowed for bather safety. You will also need to consider the number of young children allowed in the pool. The current guidance is that children under 8 should be accompanied by an adult and that one adult should only accompany up to two children under 8. However, this may need to be altered if your pool has a lot of water features and high risk activities. In this case you may decide to increase supervision requirements.

Electricity

The main risks of electricity (shocks, burns, fires, explosions) are increased in the wet and corrosive conditions around pools. Precautions therefore need to be taken.

- Socket outlets should not normally be located in wet areas. However where this is necessary they must be designed for this type of environment.
- Any sockets should be protected by a residual current device (not exceeding 30 milliamps). This should be checked daily and tested by a competent person. It is advisable to record when checks have been completed.
- Any electrical equipment used near the poolside should be designed to withstand immersion. If not it must only be used when the pool is not occupied and fitted with a restraint (e.g. chain or a barrier) so that it cannot fall into the pool.
- Appliances including audio equipment should be located in dry areas.
- Isolating facilities should be provided to enable parts of the installation to be disconnected to allow for routine maintenance/repair.
- It is important that the electrical installation and portable appliances are maintained in a safe condition.

Safety Signs

Vital safety information can be conveyed by means of suitable and prominently positioned safety notices.

Signs are important where:

- There are sudden changes in depth, especially at shallow and deep ends.
- You need to show where it is unsafe to swim or dive.
- It is necessary to provide instructions on safe use of the pool or equipment e.g. slides.

The picture on the left shows an example of a safety sign used at a poolside. Signs should comply with current Safety Signs Regulations. That is that they should be pictorial, supplemented by text as necessary.

They must be clearly visible and maintained in good condition. The signs used have a red border with the symbol being black on a white background see overleaf.

Equipment provided for bathers use

Many small pools do not have diving boards or large slides so detailed guidance on this equipment has not been included within this guide. However for those pool operators who have such equipment a brief information checklist sheet on slides and diving boards is included at the end of this guide.

Further detailed information on equipment such as slides can be found in the HSE document referenced in the introduction.

Pool Outlets

In recent years there have been fatal accidents where persons, often young children, have become trapped by the pressure on a pool outlet. It is important that:

- Where possible at least two outlets, spaced a minimum of two metres apart should be provided to the suction line.
- Outlet covers are secure, kept in good condition and tamper-proof.
- Outlet covers are visually checked daily. On a regular basis someone should also dive down to carry out a more through check.

Consideration should also be given to providing an emergency stop button that shuts down circulation pumps and associated equipment. The most serious accidents occur with pools with only one outlet. If you have one outlet you must seek the advice of a pool specialist on methods that can reduce the risk of entrapment.

Pool Grilles

Any grille openings in the pool must be designed to prevent limbs and fingers getting trapped. The size of any aperture should not exceed 8mm, if this dimension is exceeded you should obtain advice on replacing the grilles.

2. Chemical Safety

The Control of Substances Hazardous to Health Regulations [COSHH] require an assessment to be undertaken of the hazards created by storing handling and using chemicals.

However the following specific precautions should be taken with swimming pool chemicals:

- Chemicals should be kept upright in a clearly marked, cool, well ventilated and locked store. They must not be kept in direct sunlight.
- They must be correctly and clearly labelled.
- Acids and alkalis must be stored separately.
- Liquid chemicals must be kept in bunded areas that are clearly marked. This is illustrated in the picture overleaf.
- Correct personal protective equipment such as gloves, goggles, aprons, boots, respirators, must be provided and staff trained in their use. The picture below shows a respirator and goggles for use in a plant room.
- Facilities for hand washing should be easily accessible
- Where there is no readily available water supply near where the chemicals are being handled, then an eye wash station must be provided in the event of spillage of a chemical.
- There must be suitable, written procedures in place to deal with spillages and uncontrolled releases of toxic gas.Staff must receive adequate training on the storage, handling and use of chemicals.
- Properly designed equipment should be used to transfer liquids from one container to another e.g. manual transfer pump.
- Disinfectants must not be stored with other chemicals e.g. oils, solvents, cleaning materials etc.

- Respirators should be provided at or near plant rooms. You need to ensure the cartridges are in date and are frequently replaced. Employees working with chemicals on a regular basis should be provided with their own respirator and trained in its use.

Please note safety data sheets for all chemicals are available from your supplier. These provide information on what harmful effects are possible and the precautions to be taken with each chemical. Written safety information on the chemicals should be displayed near where they are being used and brought to the attention of staff.

3. Pool Water Treatment

Pollution is introduced almost continuously into a pool, mainly from bathers. It is important that this pollution is minimised and dealt with by appropriate water treatment including disinfection.

Problems that may arise if there is inadequate treatment are:

- Irritation of bathers and poolside staff's skin, eyes and respiratory system.
- Unclear opaque or cloudy water.

Filtration/Turnover

The main purpose of filtration is to ensure the clarity of the pool is maintained and to aid the removal of bacteria following disinfection. A readily identifiable mark must be clearly visible at the deepest part of the pool, e.g. sump cover.

If the bottom of the deep end is not clearly visible, the pool must be kept closed until clarity is restored.

If sand filters are used, back washing should be carried out when the pool is not in use or suitable precautions should be taken to protect bathers from the reduction in pool level.

Turnover is the time taken for a volume of water equivalent to the entire water volume of the pool to pass through all of the pool plant & back to the pool. The shorter the turnover period the more frequently & thoroughly the pool water is being treated.

Pool Water Disinfection

Chemical Testing

Disinfectants can be harmful to bathers if they are not correctly used. It is therefore very important that chemical levels are checked on a regular basis. When dosing is manual the pool should be tested for chlorine and pH levels prior to use, and every 2 hours until closing on heavily used pools, and at least three times a day on lightly used pools. It is strongly recommended that records of these checks are documented in case of queries/complaints. You may wish to use the Swimming Pool Log at the back of this guide for this purpose.

It is very important that the chemicals in the pool are maintained at the correct levels. A guidance sheet at the back of this guide provides recommended levels for different chemicals.

It is also important that any pool test equipment is kept clean and that tablets are in date. Staff must know how to carry out tests and know what action is required where chemicals do not meet recommended levels.

Microbiological Testing

It is important that bacteriological monitoring is carried out on a regular basis. This is necessary to ensure that the pool is being adequately disinfected and that no person is being exposed to any micro-organisms in the pool. This should be done monthly for premises open all year, for seasonal premises, 3 samples spread over your opening period as well as at the beginning of the season should be sufficient. This type of testing is carried out by specialist laboratories and the Health and Safety Team at Environmental Health can provide you with more information on this matter.

A management system must be in place to ensure the correct action is taken if poor results are received, at the end of the guide there is information on what are satisfactory microbiological results.

Legionella

This is a severe form of pneumonia created by a bacterium which survives and is spread in contaminated water where there are sprays. Poorly managed spa pools, pool water features with spray effects and showers can become contaminated. It is important that all pool features are adequately maintained, backwashing is sufficient and disinfectant levels are adequate. Where showers are provided the water should be heated to at least 60°C and be supplied to heads at 50°C. All shower heads, including those on pool features must be descaled regularly.

Spray effects in pools such as fountains should have their heads descaled regularly and be periodically flushed with 5-10mg/hypochlorite.

4. Supervision and Lifeguard Duties

All pools require some measure of supervision but the arrangements for each pool should be determined by a risk assessment. When deciding on the level of supervision required you should consider the following factors:

a) The pool structure – Are there hidden areas or extensive deep waters?

b) Manner of Use - Bather loads. Is the pool used by unaccompanied children? Is food, drink or alcohol available?

c) Facilities provided – Slides, inflatables, diving boards, etc.

It is recommended that you use the flowchart at the back of this guide to determine your particular need for supervision.

Remember, constant supervision is the best assurance of pool users' safety.

However, if you are sure having considered all the risks that you do not need constant poolside supervision then the following is essential:

- A clear written safety plan (normal operating procedure [NOP] and emergency action plan [EAP] displayed in changing rooms, pool entrances and poolside. These should make it clear that the pool is not supervised and provide rules of use. There is a blank NOP and EAP in section 5 which can be adopted for your use.
- Signs in pool area showing depth of water, especially at the deep and shallow ends.

- Poolside alarm and a clear and simple notice of how to summon help. The alarm must be checked daily and written records of these checks are strongly recommended.
- Easily accessible rescue equipment that is suitable for the size and type of pool (poles, throwing ropes and buoyancy aids) with instructions for use. These should be checked daily and maintained in good working order.
- A member of staff trained in pool rescue, resuscitation techniques and first aid, is designated as on call at all times when the pool is available for use.
- Maximum bather loads are set. As a guide $3m^2$ per bather is allowed to ensure physical safety.
- If lone bathing is permitted there must be adequate controls on who is entering.

Number of Lifeguards

Where you do need or wish to provide poolside supervision you should provide a sufficient number of trained lifeguards.

The following table provides guidance on the suggested number of lifeguards for standard rectangular pools with no diving or specialised equipment. This should be increased if there is diving, inflatables, slides, chutes, or large areas of deep water etc.

Approx. pool size (m)	Area m^2	Minimum no. of lifeguards	Recommended no. in busy conditions
25 x 10	250	1*	2
25 x 12.5	312	2	2
33.3 x 12.5	416	2	3
50 x 20	1000	4	6

** If you have one lifeguard you must ensure they have means of calling for assistance in the event of an emergency.*

Duties of Lifeguards

The key functions of a lifeguard are to:

i) Have concentrated observation to anticipate problems in all areas of the pool.

ii) Communicate effectively and intervene where appropriate to prevent behaviour which is unsafe.

iii) Effect a rescue/give immediate first aid.

iv) Be physically fit and mentally alert.

v) Be adequately trained to ensure competence is maintained (see below). The employer must ensure that lifeguards are:

- Properly supervised
- Clear about their duties
- Know who is in charge
- Provided with adequate training
- Provided with distinctive clothing and whistles to communicate with bathers and summoning help, note: Red Shorts/Skirt and Yellow Shirts are internationally recognised.
- Given regular breaks.
- Provided with suitable clothing/suncream to protect them from the sun if they work outside. You should also consider the frequency of breaks and the provision of shade and drinking water

Qualification and Training for Lifeguards

All lifeguards should hold a current qualification from an appropriate organisation e.g. The Royal Life Saving Society UK and an appropriate first aid qualification. Skills and knowledge must be maintained at this level through ongoing and refresher training. Lifeguards should regularly practice emergency procedures and practices to include rescues, first aid, power failure, toxic gas release, use of alarms and other equipment. Records of this training should be kept.

Hire of Pool to Outside Organisations

In 2003 a Local Authority was fined £75,000 following the death of a six year old girl. She drowned because only two lifeguards and two adults were present to supervise 36 children at a birthday party.

This case makes it clear that it is important that where the pool is hired to outside organisations adequate supervision is maintained. If it is agreed that the outside organisation is to provide cover, this should be clearly detailed in the hiring agreement and the pool operator must ensure that such supervision of adequately trained persons is provided.

5. Normal Operating Procedure (NOP) and Emergency Action Plan (EAP)

It is strongly recommended that you have a written operating procedure to include emergency situations. This is especially important where the pool is unsupervised. At the end of this Section there is a blank NOP and EAP that can be adopted for your business.The normal operating plan sets out your pool operation on a daily basis and should include:

- Details of the pool – depth, size, equipment provided, plan of building, etc,
- Potential risk factors – e.g. diving/slides, water clarity and quality, maximum bather loads,
- Dealing with the public – e.g. poolside rules, controlling admissions,
- Duties of lifeguards – supervision levels, lifeguard training,
- Details of alarm systems and emergency equipment,
- First aid supplies and training,
- Conditions of hire to outside organisations,

- General information, e.g. key holders, maintenance arrangements, cleaning schedules/procedures, call out procedures, etc

The emergency action plan provides details of the action taken should something go wrong.

It usually covers:

- Overcrowding,
- Disorderly behaviour,
- Lack of water clarity,
- Outbreak of fire,
- Lighting/structural failure,
- Emission of gases,
- Injury to a bather.

This plan should provide details of how to evacuate the pool and the building.

Staff must be trained in the NOP and EAP and where the pool is hired out to outside organisations, plans must be made known to and understood by them.

Normal Operating Procedure and Emergency Action Plan Checklists

Name of Pool:

Date: .....

Person responsible: .....

For drawing up plan: .....

Pool Dimensions: .....

Depth: .....

Review Date: .....

Plan of Pool

(Include in this section a plan of your pool. Detail location of any features and safety equipment, e.g. ladders, slide, including poolside alarms, fire alarms, first aid posts and other relevant information.)

The following areas of the pool create potential risk factors:

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(Detail any area of high risk in the pool such as electrical, structural or chemical hazards. Detail what arrangements are in place for communicating safety messages to the public.)

Method for controlling access to the pools:

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Maximum Bathing Load

The total number of persons permitted in the pool is: .....

Bather access to the pool will be controlled by: .....

When maximum bather load is reached the following action will be taken:

.....

.....

First Aid Supplies

The First Aid kits are located:.....

.....

The following first aid equipment is also provided: .....

.....

The person responsible for maintaining first aid equipment is:

.....

Accident reporting

All accidents/incidents should be recorded. The accident book is kept:

.....

Any major incident/occurrence must be reported to the Incident Control Centre under the requirements of RIDDOR tel 0845 300 9923 fax: 0845 30 9924 or email: riddor@connaught.plc.uk

Refer to HSE.gov.uk website for current requirements and reporting forms.

Lifeguards' Duties and Responsibilities

The main tasks of the Lifeguard are:.....

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All lifeguards will hold a current lifeguarding qualification.

The following number of Lifeguards will be on duty: .....

Lifeguard Positions:.....

.....

.....

The Lifeguards will wear the following distinctive clothing:

.....

.....

.....

The following are the lines of supervision for the pool: .....

.....

.....

.....

Times

Lifeguard Maximum Poolside Times: .....

Call Out Procedures: .....

Contact telephone numbers: .....

.....

Operational Systems

The following procedure is to be followed when the pool is closed:

.....

The methods used for preventing access are:

.....

Alarm Systems and Emergency Rescue Equipment

The following emergency rescue equipment is provided at the stated locations:
An alarm is provided at:

1. .....

2. .....

3. .....

4. .....

5. .....

This must be tested: .....

Alarm Procedure

On hearing the alarm:.....

.....

Alarms are also provided at: .....

.....

The nearest telephone is: .....

.....

Refer to the EAP for detailed information on what action should be taken in an emergency.

Fire Extinguisher

Fire extinguishers are provided at the following locations: .....

.....

Maintenance

It is important all emergency equipment/alarms are maintained in a safe condition. If something becomes damaged/unsafe, or does not work correctly, then it should be immediately reported.

every .....

by .....

Detailed Work Instructions

Cleaning Duties: .....

.....

House Rules

Detail here any of your own specific house rules you may have.

On the Poolside: .....

.....

.....

.....

In the Water: .....

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Emergency Action Plan

This document details what action should be taken in emergency situations.

Overcrowding

The maximum bather load for the pool is: .....

If the maximum bather load is reached the following procedure will be taken to control admissions: .....

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.....

In the event of a bather disobeying house rules, the following procedure should be followed: .....

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.....

Water Clarity

The water clarity must be sufficient at all times to enable you to see all points of the pool and bathers. If the pool clarity becomes poor then the pool must be cleared of bathers and kept closed until the clarity is restored.

UNDER NO CIRCUMSTANCES SHOULD THE POOL REMAIN OPEN WHEN THERE IS POOR POOL CLARITY.

Outbreak of Fire

If there is an outbreak of fire and an alarm sounds, the following procedure should be followed: .....

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Lighting Failure

If the pool lighting should fail, lifeguards should instruct and assist bathers to leave the pool, and if necessary, the building.

Bathers should not return to the building until normal lighting is restored. Emergency lighting is provided at the following locations:

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Structural Failure/Emission of Toxic Gases

Remove public from the area where the damage is and evacuate as necessary, call emergency services as necessary. Ensure that the following procedure is also followed:

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Serious Injury to Bather

Sound Pool Alarm if applicable.

The following Procedure must be taken: .....

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Note Spinal Injury: If this is suspected, appropriate handling must be carried out to ensure the risk of further injury is minimised.

Discovery of Casualty in Water

Guidelines for Lifeguards in cases of emergencies in a pool.

If you find a casualty you should: .....

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.....

Note: In the event of an emergency it is important to keep full details of the incident.

Diarrhoea and Vomiting

The pool should be kept clear of excrement and vomit. If either are found in the pool, the following action must be taken: .....

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Play Equipment and Swimming Pool Slides - Checklist

A Guide to Inspection, Design and Condition

Consider width of staircase, condition of stair treads. Slides should not allow a running start. Interior surfaces should be smooth. Riders should be safely ejected off the end of the slide.

The run out area should, where possible be in a separate pool. Landing pools should be safely designed.

Maintenance

There should be routine maintenance for all areas, including slide, floors, splash tanks, etc. This should include daily checks before opening.

Signage

Signage should be clearly displayed, indicate how the slide must be used and height restrictions where appropriate. Signs containing post use instructions, may

also be needed e.g. on leaving the splash tank. All signs must conform to current Safety Signs Regulations.

Supervision

There must be a sufficient number of supervisors to see all parts of slide and be able to control usage. The following must be prohibited:

- people going down in pairs,
- people too close to one another,
- people standing up on the slide and
- people not leaving pool.

If the slide is very large, there will need to be communication between a supervisor at the top and the bottom for example by use of radios.

Slide Checklist

Is the slide adequately maintained? ☐

Is there a daily inspection routine? ☐

Is the slide and staircase safely designed? ☐

Is the entry and landing area safely designed? ☐

Is supervision of the slide satisfactory? ☐

Are there adequate notices on how the slide should be used? ☐

Comments: .....

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Equipment in Swimming Pools - Diving Boards/Diving

Checklist for diving from the poolside

Is diving restricted to a certain area of the pool? ☐

Does the diving area have a minimum depth of 1.5? ☐

Is there a procedure for prohibiting running dives? ☐

Is there adequate forward clearance of at least 7.6m to prevent contact with the other end of the pool? ☐

Are there adequate "No diving" signs where diving is not permitted ☐

Is there adequate supervision of the diving area? ☐

Comments: .....

Checklist for diving boards

Is the board in good condition and adequately maintained? ☐

Is the board surface slip resistant? ☐

If the platform is more than 2m above the floor, is it guarded? ☐

Is there adequate supervision of the area? ☐

Are there procedures to prohibit diving during busy periods? ☐

Is there adequate clearance from surrounding structures? ☐

Comments: .....

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Swimming Pool – Daily checklist

Name of Pool: .....

Person completing checklist: ..... Date: .....

Mon: ..... to Sun: .....

Item	Satisfactory Y/N							Comments
	Mon	Tues	Wed	Thur	Fri	Sat	Sun	
Access around pool safe, e.g. paving in good condition								
Steps into pool secure in good condition								
Pool tank safe, e.g. No loose tiles, fitting secure								
Lifesaving equipment in place and in good working order								
All safety signs visible, in place and in good condition								
Poolside alarm tested and clearly marked								
Chemical store secure and clearly marked								
Different chemicals segregated								
PPE in good condition in place								
Pool test kit clean and intact								
Pool test carried out and documented								
First aid kit in place and fully stocked								
Electrical Appliances in good condition and RCD* tested								
Pool outlet covers in place and intact								
Slides – visual inspection done, signage displayed								
Diving boards visual inspection								
Measures in place to prevent unauthorised access to pool								
Changing rooms clean and in good order								

** RCD – Residual Current Device*

Swimming Pool Disinfection - Recommended Levels

Chemical

Sodium Hypochlorite & Calcium Hypochlorite

Free Chlorine	1.5 – 2.00 mg/l
Combined Chlorine	Should be less than the free (ideally half or less)
pH Value	7.2 – 7.8 (however 7.2 – 7.4 should be the target)

Chlorinated Isocyanurates

Free Chlorine	2.5 – 5.0 mg/l
pH Value	7.2 – 7.8 (the lower the pH the better the disinfection)
Cyanuric Acid Levels	These should be tested once a week until levels are consistent when this can be increased to monthly. (Recommended levels below 200mg/l (ideal range 50-100mg/l.)

Please note: Adding 60 mg/l of Cyanuric Acid to an outdoor pool using hypochlorite at the start of the season will help to stabilise your free chlorine levels, especially when there is strong sunlight.

Bromochloro – Dimethylydantoin (BCDMH)

Total Bromine	4.0 – 6.0mg/l
pH Levels	7.2 – 7.8

It is important that these levels are strictly adhered to as a number of bathers exposed to this chemical can suffer skin irritation and rashes.

Sodium Bromide Plus Hypochlorite

Total Bromine	1.5 3.5mg/l
pH Value	7.8 – 8.2
Total Alkalinity	100mg/l

Alkalinity

Acceptable Range 75 – 200 mg/l

Alkalinity should be measured weekly using alkalinity test tablets.

Total Dissolved Solids (TDS)

This is the sum of the weight of soluble material in the pool. TDS levels increase with addition of pool chemicals, bather pollution etc.The pool water is compared with your source water (e.g. mains) using an electronic meter. TDS should not be allowed to increase more than your source water by 1000mg/l, up to a maximum of 3000mg/l. Dilution by replacing up to 30 litres of water per bather per day should keep TDS to an acceptable level.

Calcium Hardness

This is the measure of the calcium salts in the water. Recommended levels are between 75 & 150 mg/l, below 40mg/l the water can be corrosive to the fabric of the pool plant, above 150 mg/l can lead to scale deposits. It should be checked weekly using appropriate tablets.

Microbiological Levels	Satisfactory Levels
Colony Count (37°C)	No more than 10 cfu/ml
Total Coliforms	Absent in 100ml
Escherichia coli	Absent in 100ml
Pseudomonas aeruginosa	Absent in 100ml for all spas and whirlpools

Swimming Pool Log Sheet

Name of Pool: .....

Date		Free Chlorine	Total Chlorine	Combined Chlorine	Ph Level	Pool Temp	Air Temp
Monday	1						
	2						
	3						
	4						
Tuesday	1						
	2						
	3						
	4						
Wednesday	1						
	2						
	3						
	4						
Thursday	1						
	2						
	3						
	4						
Friday	1						
	2						
	3						
	4						
Saturday	1						
	2						
	3						
	4						
Sunday	1						
	2						
	3						
	4						

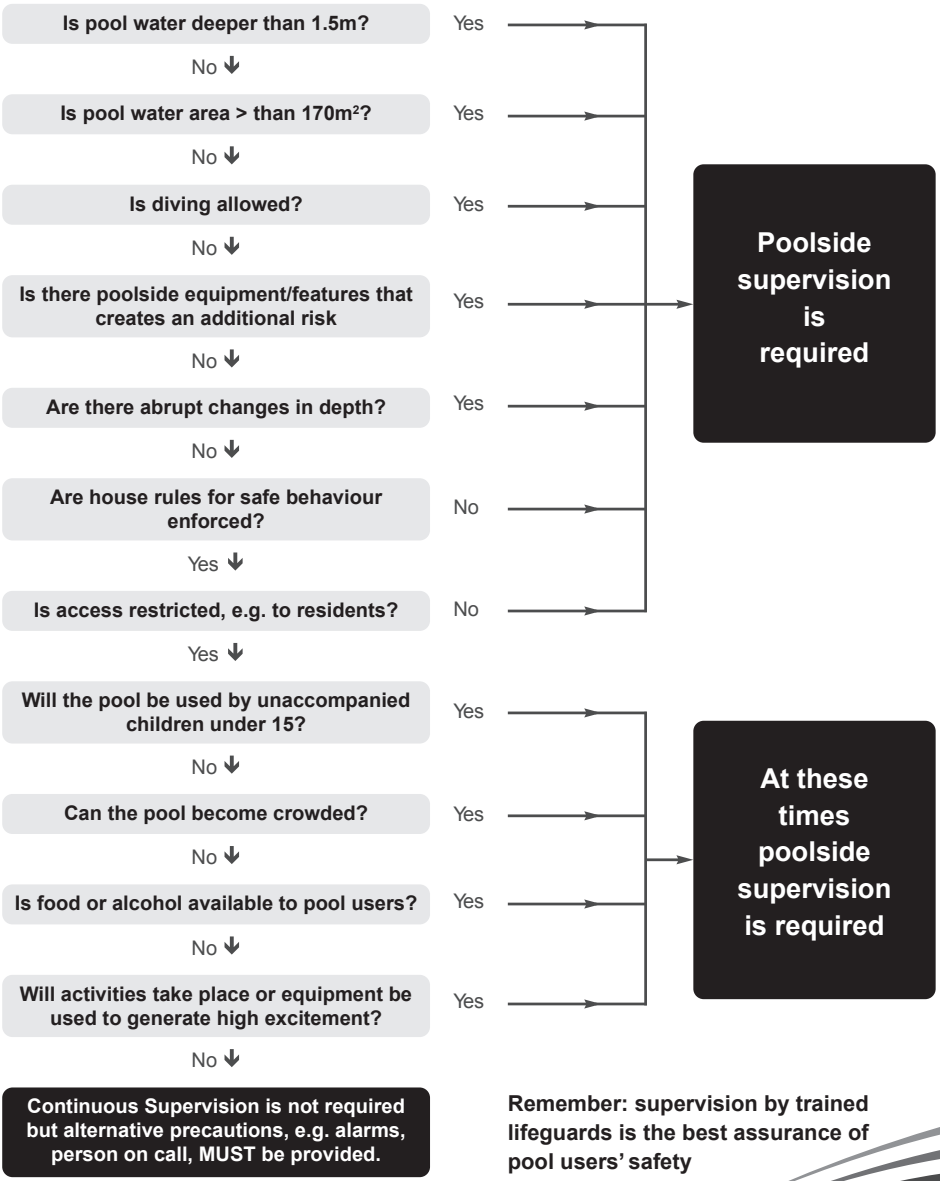
Alkalinity	Calcium Hardness	Actions, Chemicals Added & Further remarks
Water Balance Test Result Temperature factor, Alkalinity factor, Calcium hardness factor, Ph, Minus TDS factor = Result Plus figure = Scale Forming Minus = Corrosive Optimum = 0.1 to 0.4		

Date: Mon ...... /....../...... to Sun ....../....../......

No. of Bathers	Clarity of Water	Back Wash	Weekly Check: Tap PH	Weekly Check: Alarm	Weekly Check: Phone	Checked by:

Do you require Poolside Supervision?

Use the following Flowchart to determine if you need a Lifeguard at your pool.



Remember: supervision by trained lifeguards is the best assurance of pool users' safety

Notes


BOSTON
BOROUGH COUNCIL


CITY OF
Lincoln
COUNCIL


East Lindsey
DISTRICT COUNCIL


Lincolnshire
COUNTY COUNCIL


districtnk
100 flourishing communities
North Kesteven District Council


S O U T H
H O L L A N D
DISTRICT COUNCIL


SOUTH KESTEVEN
DISTRICT COUNCIL


West Lindsey
District Council
The Entrepreneurial Council