

Harlow Paddling Pools – Safety Review

(1st DRAFT)



By Damian Hall

Hall Associates

For Harlow Town Council

June 2019

Contents

	Page
Section 1.	
The Brief	3
Limitations, Method/Process	4
Section 2.	
Introduction	5
Executive Summary	6
Summary Recommendations	7
Section 3.	
Principles of Water Safety Applied	8
Legal Position	
Section 4	
Recommendations Expanded	12
- a) Access Control	
- b) Water Quality	
- c) Pool Plant	
- d) Surfaces	
- e) Signage	
- f) Supervisory Capability	
- g) Operating Standards	
Appendix 1) Consultant Resume	23

1.0 The Brief

Produce a health and safety report on 5 existing paddling pools and one small splash park owned and operated by Harlow

Include comment upon the health and safety and/or risk implications of the existing 5 paddling pools including:

- a) infrastructure safety requirements,
- b) councils responsibility in terms of paddling pool supervision and security of those pools,
- c) hygiene safety
- d) operational issues
- e) risk to the Council flowing from the operational issues, if any, identified.
- f) Any recommendations

Commissioned by: Dimple Roopchand
Principal Solicitor
Harlow District Council

On behalf of: Marysia Rudgley
Community Safety Team Manager
Community Safety Team
Community Wellbeing Service
Harlow District Council

The Pools:

Norman Booth

Town Park

Staple Tye

Bush Fair

Summers Pool

Potter Street

1.1 Limitations

In carrying out this Review Hall Associates points out that audits and reviews are, by definition, a sampling exercise – based on observations made during single or a limited number of site visits, on particular environmental conditions at the time of visit and on information provided by consultees and gathered as part of the review.

Therefore, the report cannot guarantee to identify all hazards, risks and related issues connected with the report. Opinion is formed by a review of the site at the time of site visit, and in prior and subsequent dialogue. The absence of comment on any issue should not be taken to imply the absence of risk from that issue.

Representatives of Harlow District Council are responsible for making known any information of relevance to this review including accident reports, expressions of concern about safety from any stakeholder and opinion of those with operational knowledge and experience in relevant aspects of Harlow District Councils remit.

1.7 Method/Process

- 1) Initial telephone contact and pre-site visit telephone discussion/s around issues aims and scope of work on 6th March 2019

Date of site visits and consultations set for 22nd March 2019.

- 2) Meeting and site visits on 22nd March with Marysia Rudgley and members of community safety team on 22nd March 2019
- 3) Scrutiny of various related documents including Risk Assessments and (some) Operating Plans and signage templates.

2. Introduction

The paddling pools were first built in the 1950s and have, over many years, provided immense pleasure to residents and visitors.

As well as a local amenity they may be viewed as destination attractions in their own right with some visitors travelling fair distances to enjoy.

However, a combination of wear and tear (despite regular maintenance), health and safety legislation, best practice guidelines and operational demands have created a developing concern about the safety of users.

Against this backdrop a proposal has arisen to replace the paddling pools with water parks which may present (significantly) lower operational management risks and operational costs whilst providing equivalent (or possibly greater) enjoyment value.

A cost/value comparison with water-parks is beyond the scope of this report which focuses on the health and safety of staff and of facility users.

The following are the key findings of my inspection visits to the pools and scrutiny of operational documents:

2.1 Executive Summary

These pools clearly bring great joy to many people and are a valued community amenity. However, the potential for serious harm is very real and the council is to be commended for opening up to the scrutiny of this report.

In the broadest terms the 5 paddling pools I visited are well managed. The most significant potential improvements to operational management lie in sharpening the cohesion of systems, procedures and documentation. These all and each in themselves are adequate – but weaknesses may arise in the face of the most robust forensic scrutiny following serious harm. Whilst, to my knowledge, harm of this type has never occurred at any of Harlow's Paddling Pool that does not mean it can't or won't.

The two most severe potential occurrences that could happen at the Harlow Pools include drowning and/or ill-health arising from contact with, or ingestion of, contaminated water.

Any standing water of almost any depth presents these and other hazards.

It naturally follows that controls to minimize the likelihood drowning should be carefully considered and robust.

Illness caused by water-borne contamination can also be life changing. Contaminants include

- Cryptosporidium
- Giardiasis
- Shigellosis
- Norovirus
- E. coli O157:H7
- Legionella

Whilst the pools are chemically treated and monitored - with the aim of reducing the likelihood of presence of contaminants – it is impossible, in these open-air, relatively open access, environments to guarantee acceptable levels of hygiene. Contaminants may be introduced by a wide range of agents including domestic and wild animals (and of course people) using the pool – particularly during times when the pools are intended to be closed and therefore not supervised.

It should be noted that none of the pools have toilets or hygiene facilities such as pre-use showers or footbaths– and this, along with anti-social behavior out of hours, is likely to have a significant bearing in terms of potential contamination.

Whilst the pools are supervised the nature of that supervision and associated issues requires clarification. For example when does supervision begin and end? And how does this relate to cessation of supervision at the end of a (busy) day when supervisors leave the site whilst people are still in the pool? When do the pools 'open' and when are they 'closed' and how are visitors informed? Finally, on this point, whilst Supervisors receive First Aid training this does not currently include Aquatic Rescue and preventative safety which is a minimum requirement of the HSE guidance document 'Health and Safety in Swimming Pools'..

My final comment relates to the increasing presence and ongoing occurrence of age related dilapidation of surface concrete and fixtures and fittings held in place by the concrete such as drain covers. It is likely that the extent and speed of degradation of these materials will increase in an exponential fashion with increasing risk of harm and/or of cost of repair.

Similar degradation and possible damage to underground pipework is also believed to be the cause of water leakage and related financial cost.

Summary Recommendations:

- 1) Access Control.** Re-assess arrangements – particularly at Norman Booth, Sumners and Town Park – where there is no access control between play area and pools
(or replace with water-park)
- 2) Water Quality.** Increase monitoring & notify users of risks
(and/or replace with water-park)
- 3) Physical Fabric.** Increase monitoring of degraded concrete
- 4) Signage.** Add information about depth and profile (shape)
(or replace with water-park)
- 5) Supervision.** Enhance capability in line with best practice guidance.
- 6) Operational Planning.** Produce individual, integrated safety folder/portfolio for each site

3.0 Principles of (Water Safety) Applied

The National Water Safety Forum (NWSF) is an association of organisations that have a wide variety of interests and responsibilities for water safety including sports governing bodies, rescue services,

regulators, navigation and harbour authorities, local government, utilities, and other representative groups.

The guiding principles applied in this review are those adopted by the NWSF for water safety advice and form the basis on which advice and guidance is framed. The Principles set out below are based on established risk and safety management principles and practice. In particular they draw on the following:

HSE Reducing Risks, Protecting People
Visitor Safety in the Countryside Group - Guiding Principles
Greater London Authority - Principles for Water Safety
The Principles of Good (Better) Regulation
The Principles of Managing Risks to the Public
Case law

3.1 Guiding Principles

- No activity can be made completely risk-free.
- Risks imposed on non-participants and over which they have little or no awareness or control, can only be accepted if they are very low.

The principle of the voluntary acceptance of risk - no nasty surprises

- All the benefits of water-related activities will be taken into account when making the balanced judgement of whether risks are acceptable or further risk control measures are necessary.

These benefits will include amongst others health and fitness, access to the countryside and coast, social inclusion, economic development, disability access and sporting objectives

- As above, all the dis-benefits and costs of water-related activity will similarly be taken into account.

These include provision of rescue services, access restrictions, transfer to riskier activities (e.g. swimming in docks when pools close)

- As far as possible, avoid restricting access to water spaces or facilities.
- Look ahead by assessing the risks that can be foreseen.
- Learn from the past.

Records of accidents, near misses and ill-health, together with reports from the participants inform present day decision-making

- As far as possible, avoid additional regulatory controls.

These should only be considered where accident rates are high, multiple casualties occur, children or elderly or disabled persons are involved, the risk is unclear to participants or affects non-participants (i.e. an involuntary risk).

3.2 Relevant UK Legislation and operational guidance

The Paddling Pools are subject to all Health and Safety legislation, civil liabilities and regulations including for example the following:

CRIMINAL LAW

- **The Health and Safety at Work Act 1974**

This is applicable in the same way that it is in any Council facility and applies equally to staff and to anyone affected by the undertaking.

Examples of liability arising:

- Operation of pool plant
- Cross contamination
- Handling chemicals
- Information, instruction, training and supervision

- **Management of Health and Safety at Work Regulations 1999**

Same as for the above 74 Act.

Examples of liability arising:

- Lack of effective, suitable and sufficient risk assessment/s
- Lack of sufficient information
- Periodic repetition of training
- Co-operation and co-ordination between different employers/teams
-

- **Personal Protective Equipment at Work Regulations**

Examples of liability arising:

- Must be risk assessed
- Training in correct use provided
- Proper storage

- **Control of Substances Hazardous to Health Regulations**

Examples of liability arising:

- Use of substances not risk assessed
- Incorrect storage
- Ineffective procedures for accidents and emergencies

CIVIL LAW

- **Duty of Care**

“You must take reasonable care to avoid acts or omissions which you can reasonably foresee would be likely to injure your neighbour...”

Acts, Regulations and best practice guidance may be used as an indicator of required standard of care.

Failure to provide a satisfactory level of care may be interpreted as ‘negligence’ for which damages may be sought.

COMMON LAW – DUTY OF CARE

- **Occupiers Liability Acts**

The occupier ‘Harlow Council’, owes a common law duty of care to all visitors:

“that visitors will be reasonably safe in using the premises for the purposes for which they are invited or permitted to be there. The act reminds the employer (or occupier) that **they must be prepared for children to be less careful than adults. A higher duty of care exist for visitors who are children**, which includes the need to foresee the attractiveness of everyday work things that may be considered to be allurements.

This is of particular relevance to Harlow in relation to:

- a) sites such as Norman Booth and Town Park where no access control exists.
- b) perception by parents and guardians of young children of ‘supervision’ and standard thereof.

3.3 Best Practice Guidance

In terms of categorisation Harlow Paddling Pools may best be described as ‘hybrid’ facilities and therefore advice and guidance about the range, nature, severity, risk rating and appropriate control options are drawn from a number of the most relevant best practice guidance documents:

- **HSE, HSG 179, Health and Safety in Swimming Pools**

The paddling pools have some of the characteristics of an indoor pool including that the water is filtered and chemically treated but differ in that animals as well as people have access and may introduce microbiological contaminants.

The pools are supervised during set hours but not supervised out of those hours.

The pools, are by their nature, relatively shallow making it generally unsuitable for adults to swim in.

- **ROSPA/RLSS UK Manging Safety at Inland Water Sites**

The reverse of comments above apply.

- **Pool Water Treatment Advisory Group**

- **National Water Safety Forum**

Whilst these documents are 'guidance' as opposed to 'the law' it is common practice for legal bodies to use guidance as an interpretation of the law in practice.

Health and Safety Offences, Corporate ManslaughterOffences Guidelines

Operators should be aware of new sentencing guidelines and potential for much higher penalties in the event of successful prosecution:

- Came into force on 1 February 2016.
- Ten months before the guideline was introduced, convicted companies were fined **£40,500 on average** for safety and health offences.
- Ten months after, financial penalties rose by an average of **447.4% to £221,700**. Only 31% of organisations received a fine below £20,000, while fines exceeded £60,000 for more than half (51%).
- PLUS defence and prosecution costs **AND** damages awarded as the result of private actions.

4.0 Recommendations Expanded

a) Access Control

Most of the pools have barrier railings around them providing protection from accidental access to the water and especially of access by young children.

This is not the case at:

- Norman Booth and Sumners – A barrier fence surround the pools but does not include the children’s play area within enclosed area. This means that young children have free unobstructed access from the play equipment directly to water.
- Town Park – No barrier fencing.



Apart from the risk of drowning harm arising from lack of access control, this presents an inconsistency and begs the question.” Why is there access control at some but not others?”.

Issues relating to Occupiers Liability Act especially arise.

Recommendation/s

Install access control **OR** install a water park which presents no risk of drowning and fewer operational demands.

b) Water Quality/Contamination

Although carefully filtered and chemically treated, open air standing water can be contaminated by airborne contaminants, animals and humans (especially out of opening hours & linked with anti-social behaviour) and present a risk of serious illness as the result of contamination.

Illness caused by water-borne contamination can also be life changing. Contaminants include

- Cryptosporidium
- Giardiasis
- Shigellosis
- Norovirus
- E. coli O157:H7
- Legionella

Recommendation/s

Significantly increase external microbiological testing

Provide Toilets

OR install a water park.

c) Pool Plant Operations

At present key workers hold the recognized 'Pool Plant Operators Certificate'. This should be supplemented with robust site specific safe systems (responding to risk assessments) for each and all plant rooms that may be worked in. These systems and procedures would be contained in a 'Pool Technical Operating Plan'

Any staff having access to the plant rooms and or carrying out water quality tests should receive robust recorded safety training.



Higher risk access to Plant Room down an internal ladder at Town Park.

d) Floor Surface



Much of the concrete shows sign of degradation and dilapidation evidenced by extensive and historical patching – and patching of patching. Whilst this is unlikely to present injury of the more serious type the council can expect a continuing increase in the frequency of minor cuts and bruises to feet and possibly slip, trip and fall injuries.

A more serious problem may arise if degradation occurs around metal fixings such as drains and outlet sumps. This could give rise to more serious wounding.

Recommendation/s

Monitor and/or re-surface.

e) Signage, Information, Education



Current signage meets the most basic standards at sites with barrier railings – but not at sites without barrier railings.

Depth Marking Inadequate

However, depth marking and information about changing profile is inadequate.

At sites without access control (fencing/railings) the signage (at points of access) is inadequate.

In the event of a high value contentious claim these areas would come under intense scrutiny and may be found wanting.

Recommendation/s

- Upgrade content of all signage to include:
 - Depths (and more clearly at water's edge)
 - Profiles (shapes and depths)
 - No diving

Supervisory Advice e.g. “let’s take care of the little one’s – phones down, eyes on, at arm’s length”. This possibly linked to wider water safety campaign involving schools.

Risk of microbiological contamination

Other



Position signs at all access points – i.e. at end of all paths leading to pools (Town Park)

AND/OR install water park



Depth marking should be:

- at eye level (as well as on ground)
- Pictorial and in accordance with signage regulations
- Linked to profile diagram showing relative depths at different points

f) Supervisory Capability

At present all supervisory staff holds a one day Emergency First Aid Certificate. This may be adequate for purely First Aid incidents but is insufficient for an aquatic emergency.

For example, an unconscious or semi-conscious young child retrieved from the pool following a drowning will present a highly challenging response in physical, emotional and technical terms.

Additionally, whilst pool supervisors are not Lifeguards, nonetheless they should have a minimum level of observation, scanning and accident prevention capability.

A more rigorous level of capability is required for this.

Recommendation

Replace First Aid Training with either:

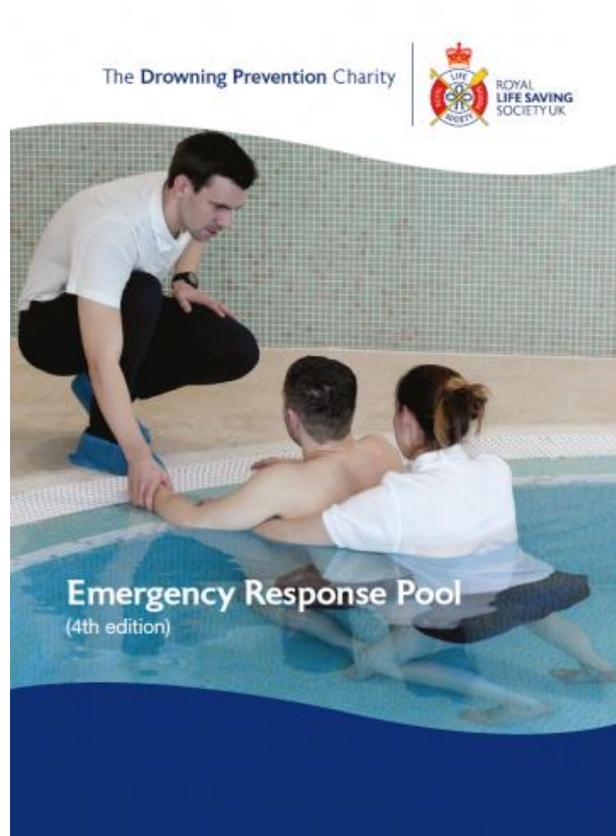
- **RLSS UK 'Emergency Response Pools' Certificate training**

This is a two day course which includes First Aid equivalent to EFA but also teaches aquatic rescue.

- **RLSS UK, National Water Safety Management Programmed**

Level One Water Safety Awareness and Level Two 'Still Water'
Plus Emergency First Aid.

In combination this would also equate to two days of training



g) Operating Standards

In the broadest terms the pools are being operated to an acceptable standard. However, some of the supporting documentation including Risk Assessments, safe systems, operational and emergency plans lack consistency and cohesion. In the event of forensic scrutiny it is likely shortcomings would be presented therefore the following improvements are recommended:

Recommendation

Policy for Paddling Pools

Create an overarching Health and Safety policy. Consider this as a 'master plan' guide or route map for all pools.

Site Specific Safety Operating Plans

Each site should have it's own well presented, indexed folder or folders containing:

- 1) Risk Assessment
- 2) COSHH Assessment (Hazard Data Sheets alone are insufficient)
- 3) Normal Operating Plan – the way the pool operates on a daily basis, including details of layout, equipment, manner of use, user group characteristics etc.
- 4) Emergency Action Plan – specific instructions on the action to be taken by all staff.
- 5) Safe Systems for key /higher risk tasks
- 6) Copies of training records & qualifications
- 7) Pool Technical Operating Plan (PTOP) Including a schedule of all plant and equipment, service and maintenance schedules and detailed instruction in usage

Norman Booth



Lack of access control between play area and water



Patching of dilapidated concrete

Town Park



Multiple unprotected access points close to housing and town centre



Depth signage does not meet regulation standard

Staple Tye



Summers



Bush Fair



Potter Street



Appendix 1 Damian Hall, BA, IOSH Tech., MCIMSPA, ACIEH

Experience

Senior Consultant, Royal Lifesaving Society UK
External Safety Consultant, Holiday Property Bond
Principal, Hall Associates, Registered CIEH Training Centre
Vice-Chair National Water Safety Council
Pier and Foreshore Manager, Southend on Sea Borough Council
National Pool Safety Advisor, Haven Holidays (now Bourne Leisure)
Chief Executive, Carn Brea Leisure Centre Trust
General Manager, (Start Up) Gwel an Mor Luxury Lodges
Beach Lifeguard Training Centre Owner Manager, Perranporth

Qualifications

BA (Hons) Water Leisure Management, Warsash Maritime Centre, Southampton
CIEH Advanced Health and Safety Certificate
CIEH Registered Training Centre
RLSS UK, National Beach Lifeguard Trainer/Assessor
RLSS UK, Senior Tutor, National Water Safety Management Programme (NWSMP)
RLSS UK, Pool Trainer/Assessor
Qualsafe First Aid Tutor
City and Guilds, 7307, Adult Education Certificate

Awards previously held include Swiftwater Rescue Technician, Surf Lifeguard (qualified in Queensland, Australia)

Membership

Chartered Institute of Environmental Health
Institute of Occupational Safety and Health (Tech)
Institute of Management of Sport & Physical Recreation

Recent Clients include:

Sunderland City Council	Shoalstone Sea Pool
City of London Corporation	Trifarm
HPB Management Ltd	Mandarin Oriental Hotel Group
Cotswold Country Park	Many Local Authorities
Knight Frank	Kings Cross Regeneration
CIEH	Danesfield House Hotel and Spa