

REVISED REQUIREMENTS FOR AQUATIC FACILITY MAINTENANCE BUFFER TO THE CODE OF PRACTICE ON ENVIRONMENTAL HEALTH (2024 EDITION)

Reference : NEA-SCD-OM-CIR-ENVHYG-009

Date : 1 September 2025

CIRCULAR TO PROFESSIONAL INSTITUTIONS

Who Should Know

Developers, Architects, Engineers

Dear Sir/Madam,

REVISED REQUIREMENTS FOR AQUATIC FACILITY MAINTENANCE BUFFER TO THE CODE OF PRACTICE ON ENVIRONMENTAL HEALTH (2024 EDITION)

The current Code of Practice on Environmental Health (COPEH) requires a minimum 1-metre maintenance buffer space along the perimeter of licensable aquatic facilities (AFs) for maintenance purposes.

COPEH 2024 - Section 5, Aquatic Facilities

5.2.1 (b) AF edges and landscaping shall be of such design and materials to facilitate easy maintenance and minimise the contamination of water (e.g. accumulation of debris, etc.). The landscaping to enhance the appearance of the AF shall not be done to an extent that it can contaminate the water in the AFs or create a problem for the maintenance of the AF. The design of planting strips(s) close to the edge of AF shall incorporate measures to ensure no overflow of water or run-off from the planting strip(s)/ area(s) into the water. A space of at least 1 m along the perimeter of AF shall be buffered to facilitate maintenance.

2. With increasing competing needs for landscaping space and creative pool designs, industry shared that a continuous minimum 1-metre maintenance buffer along the entire pool perimeter is challenging to meet for development. After the consultation with the industry, NEA has put in place alternative solutions to ensure that maintenance of pool is not being compromised. **Table 1** below aims to demonstrate pool maintainability, based on a maximum cleaning pole length of 7 metres for effective exertion of strength during pool cleaning.

Table 1: Solutions to Demonstrate Pool Maintainability without a Continuous 1-Metre Maintenance Buffer Space (For Pool Depth Same as Pool Edge)

Pool Depth	Maintenance Coverage Verification Method
>0.6 to 1.2 metres	Demonstrate complete cleaning reach of an AF by drawing circles with 7-metre radius along the perimeter of AF.
>1.2 metres	Calculate the required cleaning reach using the Pythagorean theorem (right-angled triangle formula). Draw circles using the calculated radius along the perimeter of AF. The circles must be able to cover the entire pool area for cleaning.

Note: A continuous 1-metre maintenance buffer space does not apply to pool depth $\leq 0.6\text{m}$

Where structure within the AF (e.g. wall, feature, planter box) obstructs coverage from perimeter circles, additional buffer spaces shall be provided so that the entire AF can be cleaned.

*The centre of each 7-metres radius circle on the pool edge is where the maintenance staff would be standing to conduct the necessary cleaning and maintenance work, and these locations shall be provided with at least 1-metre buffer space. See illustrated examples in **Appendix 1**.*

3. A maximum height of 1 metre is allowed for lowered buffer floor so that the worker is able to clean the pool effectively. There should not have any barrier within the 1-metre maintenance buffer space as this will deter effective cleaning. See illustrated examples in **Part 3 of Appendix 1**.

4. These requirements will take immediate effect and will be incorporated in the revised COPEH 2025.

5. Should you require further clarification on the matter, please contact us via the OneService (www.oneservice.gov.sg) or the myENV (www.nea.gov.sg/myenv) mobile applications. Alternatively, you may reach us via the Online Feedback Form available on the NEA website (www.nea.gov.sg/feedback).

Thank you.

Sincerely,

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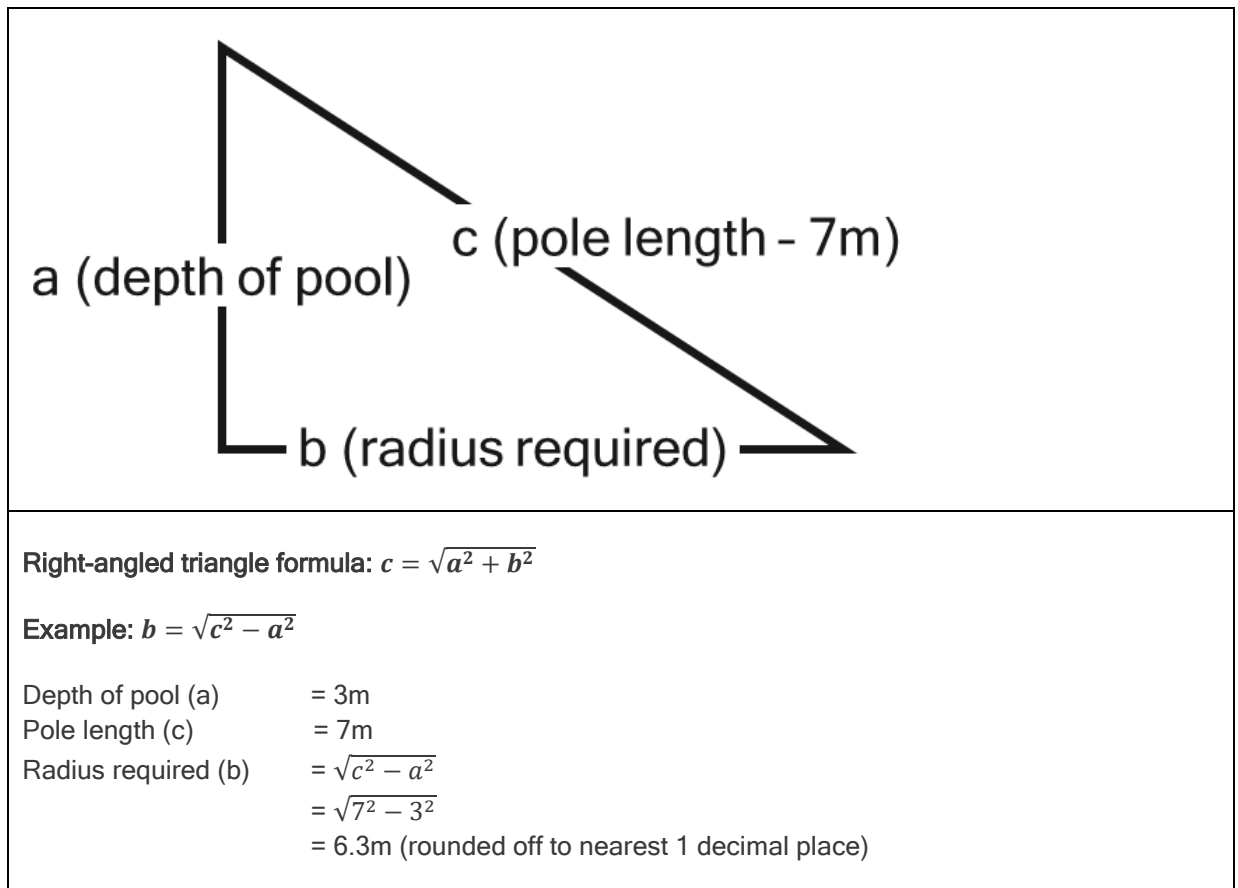
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APPENDIX 1 DETAILS OF MEASUREMENT FOR 1-METRE MAINTENANCE BUFFER OF AN AQUATIC FACILITY

1. Illustration Showing 100% Pool Cleaning Coverage

- a. To demonstrate the entire AF can be cleaned without having a continuous 1-metre buffer around the entire AF, draw circles of 7 metres radius along the AF perimeter for pool depth between >0.6 to 1.2 metres. For pool depth >1.2 metres, use Pythagorean theorem (right-angled triangle formula) to calculate the radius of the circles.



- b. The centre of each 7-metres radius circle on the pool edge is where the maintenance staff would be standing to conduct the necessary cleaning and maintenance work, and these locations shall be provided with at least 1-metre maintenance buffer space.

i. Buffer Space Covers Entire Pool Area

Figure 1a: Sufficient Coverage for Cleaning with 7-Metres Radius from 1-Metre Buffer Space for Cleaning

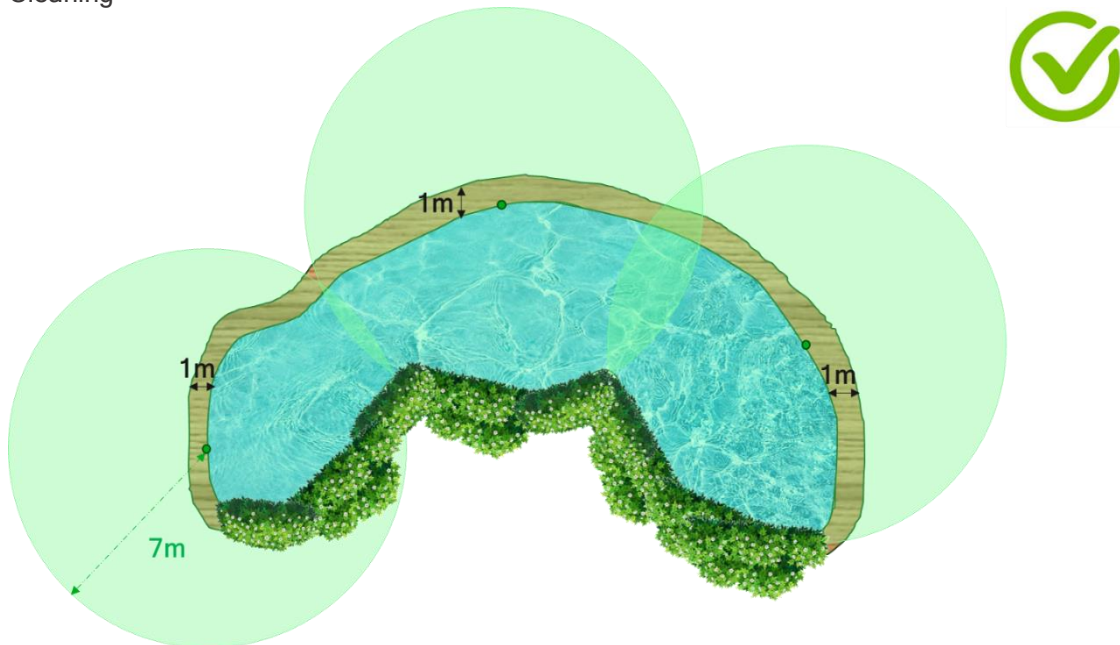
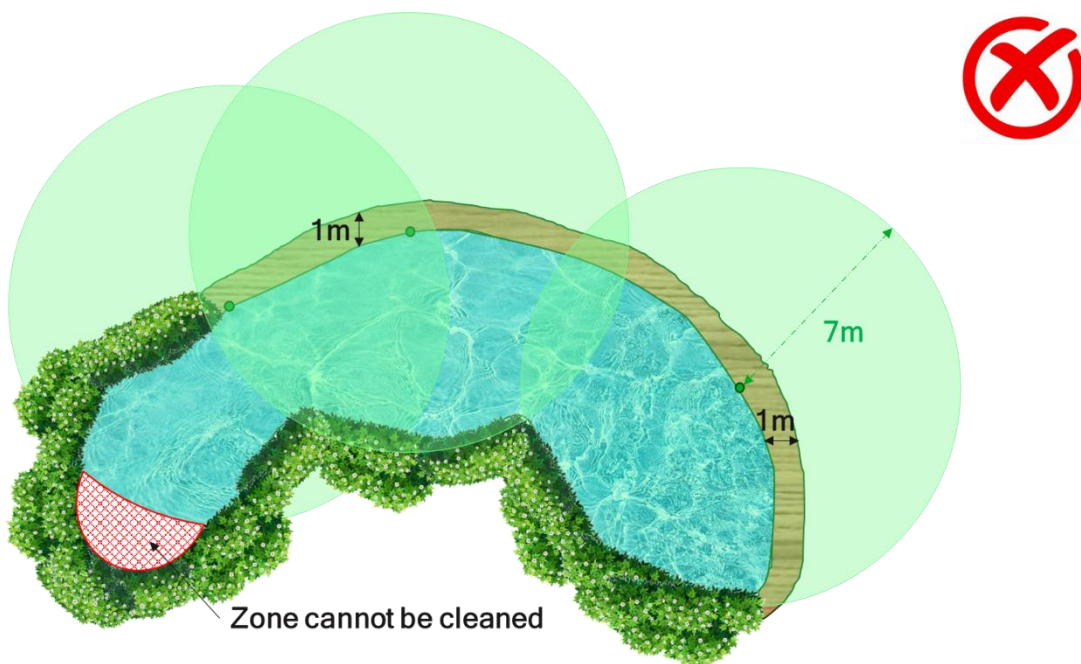


Figure 1b: Insufficient Coverage for Cleaning with 7-Metres Radius from 1-Metre Maintenance Buffer Space for Cleaning



ii. Buffer Space Covers the Entire Pool Area but Unreachable for Cleaning
(With Structure within Pool)

Figure 2a: Additional 1-Metre Buffer Space is Provided at the Green Buffer for Maintenance Staff to Conduct the Necessary Cleaning and Maintenance Work

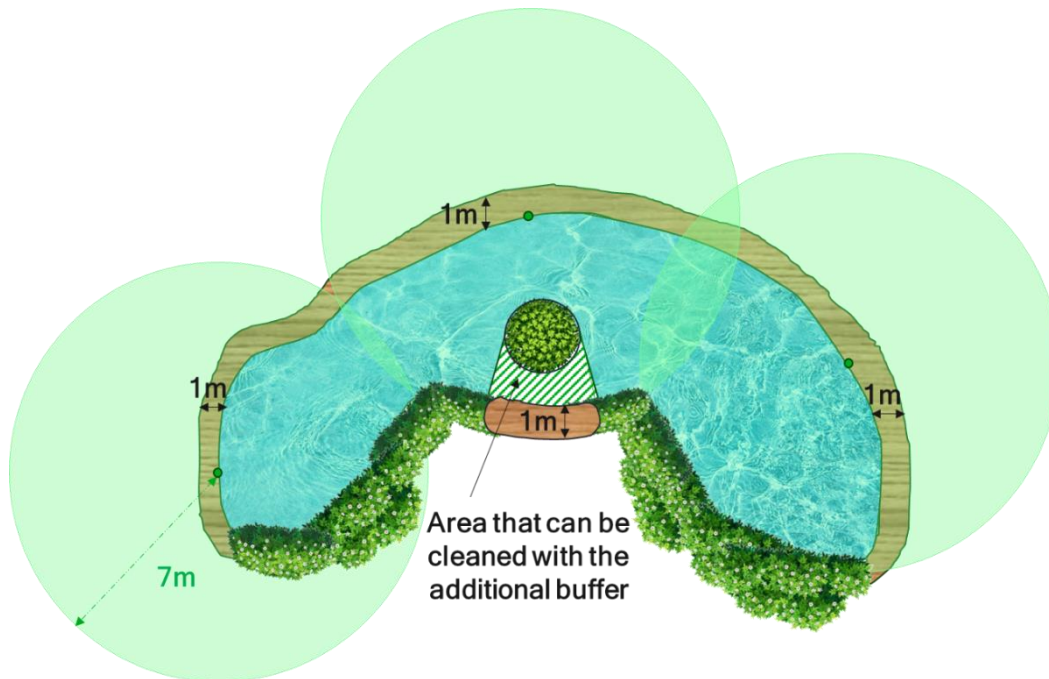
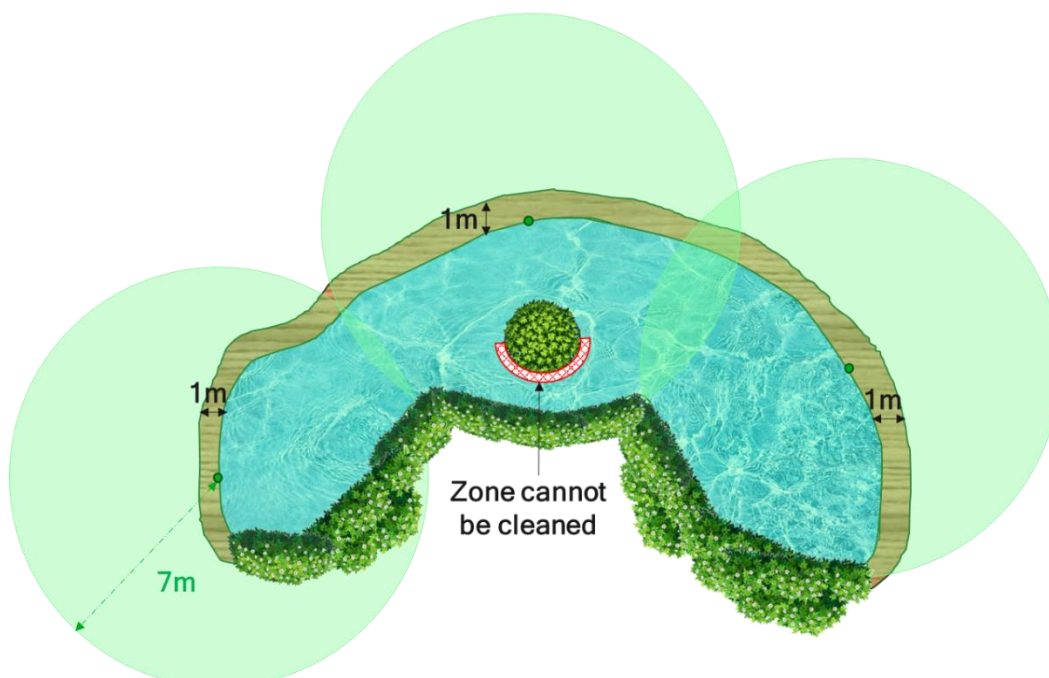


Figure 2b: Insufficient 1-Metre Maintenance Buffer Space for Maintenance Staff to Conduct the Necessary Cleaning and Maintenance Work for the Hindside of the Structure



iii. Buffer Space Covers the Entire Pool Area but Unreachable for Cleaning
(Without Structure within the Pool)

Figure 3a: 1-Metre Buffer Spaces are Provided along the Pool for Cleaning within 7-Metres Radius

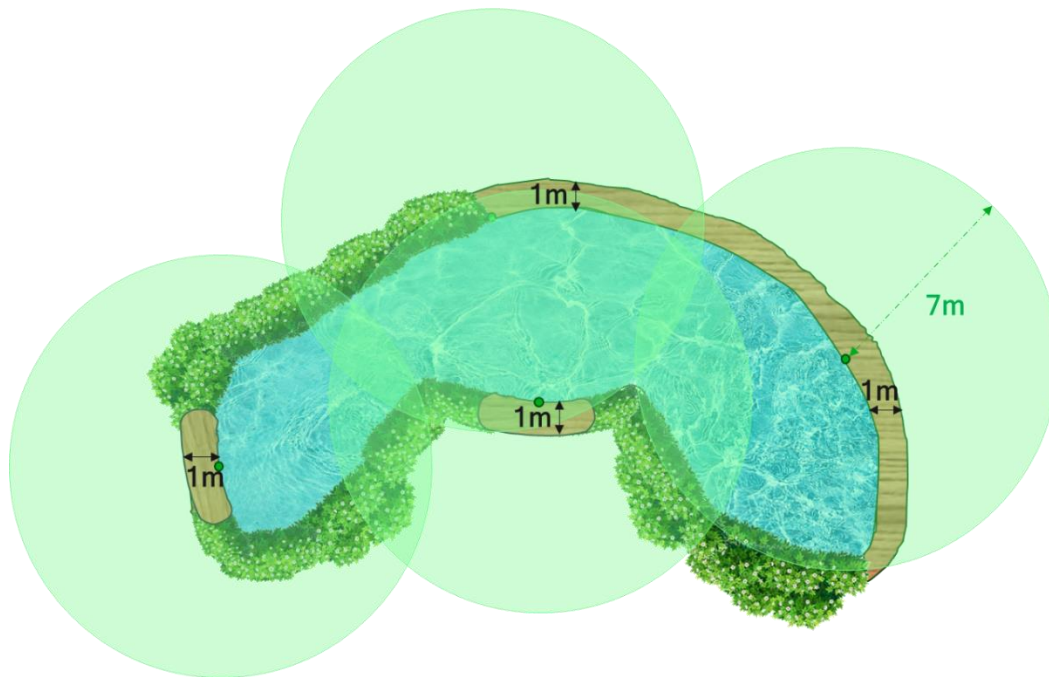
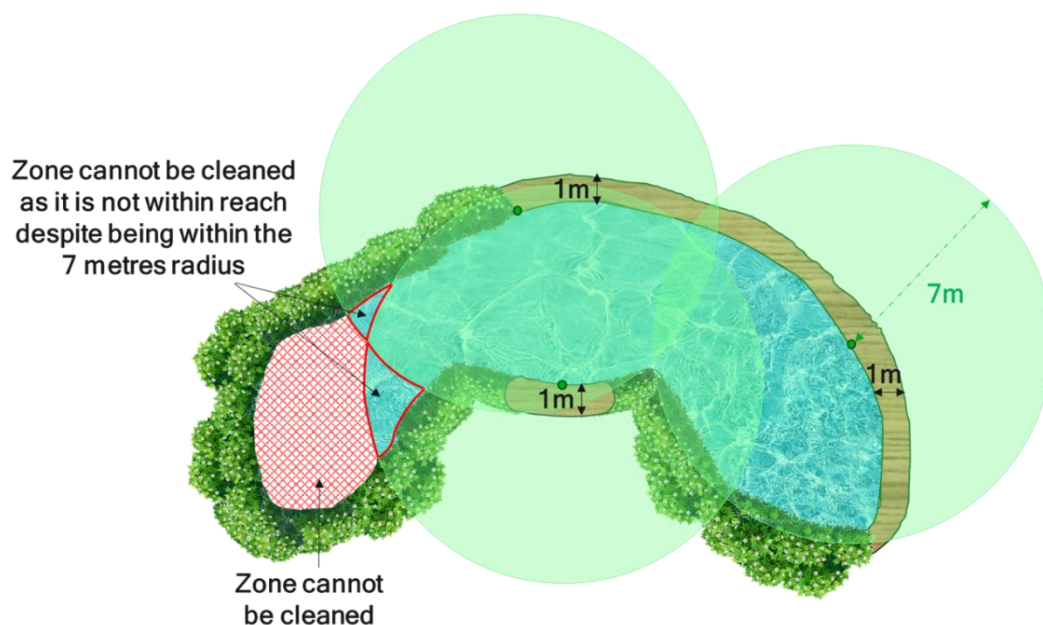


Figure 3b: Insufficient 1-Metre Maintenance Buffer Space for Cleaning and Unreachable Zones that Cannot be Cleaned despite being within 7-Metres Radius



2. Alternate Method to Demonstrate Pool Maintainability with 1-Metre Maintenance Buffer Space
(Using the Pythagorean theorem)

Figure 4: For Raised Buffer Floor

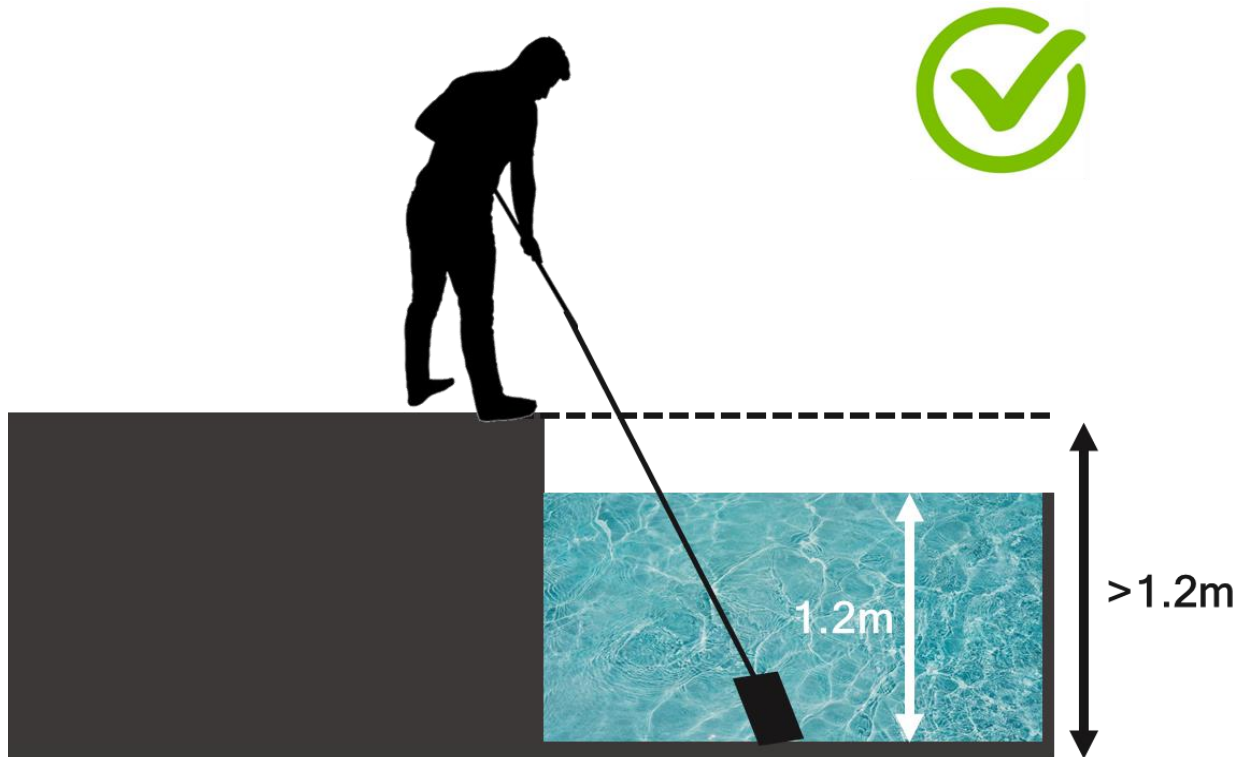
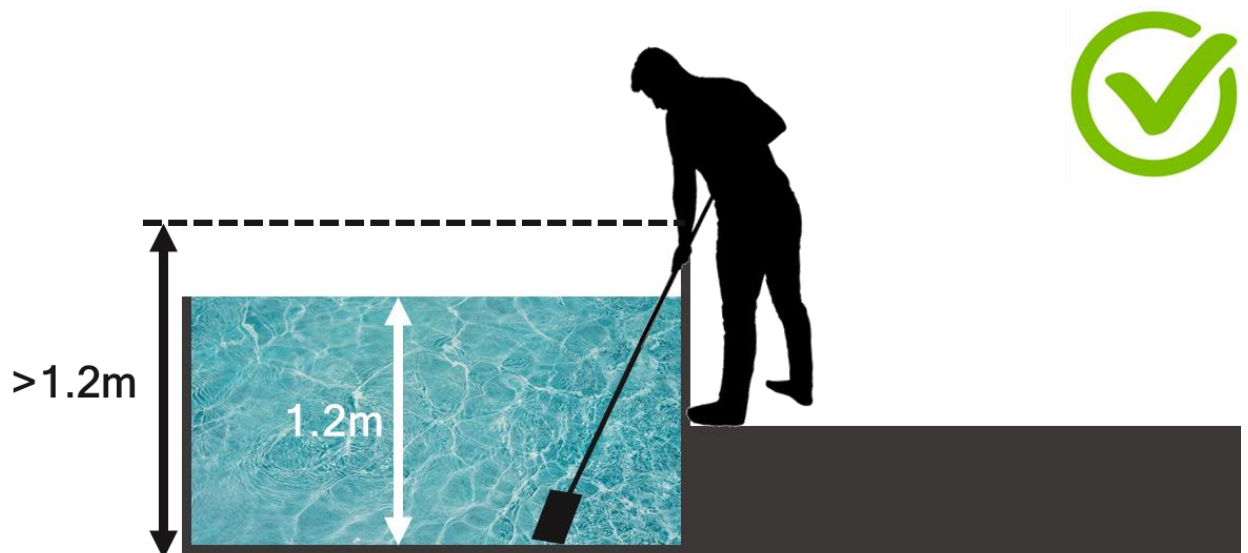


Figure 5: For Lowered Buffer Floor



3. Maximum Allowable Barrier Height for Lowered Buffer Floor for Effective Cleaning

Figure 6: Maximum Allowable Barrier Height for Lowered Buffer Floor for Effective Cleaning



Figure 7: Additional Barrier which Hinders Effective Cleaning for Lowered Buffer Floor even though it Meets the Maximum Allowable Barrier Height

