

40 Scotts Road, #13-00 Environment Building Singapore 228231 www.nea.gov.sg

Reference No.: NEA-SCD-OM-CIR-ENVHYG-001

11 August 2021

Dear Sir/Madam

# AQUATIC FACILITIES (AF)

All premises with water playgrounds (including interactive water fountains) and multi-use spa pools will require an AF licence to operate in addition to the currently licensed swimming pools, under the Environmental Public Health (Licensable Aquatic Facilities) Regulations.

2 Owners/occupiers with water playgrounds (including interactive water fountains) and multi-use spa pools are required to apply and obtain the licence **between the period from 6 September 2021 to 1 March 2022**.

3 Upon obtaining the licence, the licensee will be required to submit water quality test results to NEA at the frequency stipulated in the Regulations. The list of the water quality parameters to be tested and submitted can be found in the list of Frequently Asked Questions (FAQ) in **Annex A**.

4 The licence application and the submission of water quality test results for the licensed AF are to be submitted online via GoBusiness (<u>https://licence1.business.gov.sg/web/frontier/home</u>).

5 A step-by-step user guide for the licence application and the submission of water quality test results is available in GoBusiness (<u>https://stg.frontier.gov.sg/web/frontier/help/introduction</u>).

6 For more information, you can refer to the list of FAQs in **Annex A**.

7 Should you require further clarification for AF licensing matters, please email to <u>nea af licences@nea.gov.sg</u>. For other AF matters, please let us know through the feedback form available on the NEA website at <u>https://www.nea.gov.sg/feedback</u>, myENV (<u>https://www.nea.gov.sg/myenv</u>) or OneService mobile applications.

8 Thank you.

VANESSA LEE ASSISTANT MANAGER for DIRECTOR SANITATION AND COMPLIANCE DIVISION ENVIRONMENTAL PUBLIC HEALTH OPERATIONS GROUP NATIONAL ENVIRONMENT AGENCY

THIS IS A COMPUTER-GENERATED LETTER. NO SIGNATURE IS REQUIRED.

# <u>General</u>

## 1. What are the new types of Aquatic Facilities (AF) to be licensed?

Presently, swimming pools are already licensed. Water playgrounds (including interactive water fountains) and multi-use spa pools are the new type of AF to be licensed.

# 2. Do I need to get a licence for a home spa pool (e.g. Jacuzzi, hydrotherapy pools, hot tubs), swimming pool or water playground?

A licence is not required for AF in a residential house.

## 3. How much will the licence cost?

The licence fee will be \$200 annually per AF system. One or more AF sharing the same recirculated water via a common filtration system, constitute one AF system.

## 4. What is the validity period of the licence?

The validity period of the licence is one year and renewed annually upon payment of licence fee.

# 5. What supporting documents do I need to submit?

Please refer to the list of licensing requirements at <u>https://www-nea-gov-sg-admin.cwp.sg/docs/default-source/e-services-forms-docs/aquaticfacilitylicensingrequirements.pdf</u> for the required supporting documents.

## 6. How soon will my licence application be processed?

An email notification will be sent within 5 working days of receipt of the application. If the application is incomplete, you will be informed to furnish the pending documents/information.

## 7. If my existing swimming pool has aerosol-generating (AG) features, what do I need to do?

If your existing swimming pool has aerosol-generating (AG) features, before your existing licence expires, you are required to update in GoBusiness by filing for an "Amend" application to update the "Type of Aquatic Facility" you have.

# 8. Who is responsible to ensure that the AF is licensed and water quality results are submitted on time?

Owners/occupiers of the premises where the AF is installed, are responsible to apply a licence and submitting the water quality results, even if they are outsourced to a contractor.

## 9. Can I request to print hard copy of licence? Any charge incurred?

In line with the move by the public service sector towards digitalisation, NEA is only issuing the licence by electronic means, i.e. PDF format. You are advised to ensure that your email contact details are updated in GoBusiness.

## 10. Do I need to display my licence?

There is no requirement to display your licence. However, please ensure that the licence is readily available for our officers' inspection upon request.

# 11. What are the penalties for the owner/occupier for failing to obtain a licence prior to the use or operation of the AF?

The owner/occupier may be subjected to a fine not exceeding \$5,000 for a first offence, and for a second or subsequent offence, to a fine not exceeding \$10,000 or to imprisonment for a term not exceeding 3 months or to both, under the Environmental Public Health Act (EPHA).

#### Application of AF Licences

#### 12. Whose CorpPass account should be used to apply for licences?

The CorpPass accounts of owners/occupiers are to be used to apply for licences.

#### 13. What are the requirements for applying a licence?

These information will be given online when you apply for the licence in GoBusiness. Please ensure that the right 'Type of AF' is selected when completing your application in GoBusiness. More information is available within the GoBusiness website on which "Type of AF" to choose for your application.

Please refer to the list of licensing requirements at <u>https://www-nea-gov-sg-admin.cwp.sg/docs/default-source/e-services-forms-docs/aquaticfacilitylicensingrequirements.pdf</u>.

For further enquiries, please email us at <u>nea\_af\_licences@nea.gov.sq</u>.

#### Submission of Water Quality Test Results for AF

#### 14. What are the water quality parameters required for the various types of AF?

Please see the tables below for the water quality parameters required to be tested at the stipulated frequency for respective type of AF. For all AF, the licensee also shall carry out tests on the pH value and the residual disinfectant of AF water at least once a day.

## Swimming Pool without Aerosol Generating (AG) features

Monthly	Turbidity (NTU)	≤ 0.5
-	pH – if Chlorine is used	7.2-7.8
	pH – if Bromine is used (indoor only) 7	
	Free Residual Chlorine – if Chlorine is used (ppm)	
Total Bromine (indoor only) – if Bromine is used (ppm) 2-4		2-4
	Heterotrophic Plate Count (cfu/ml)	≤ 200
	Escherichia coli Count (cfu/100 ml)	< 1

#### **Swimming Pool with AG features**

Monthly	Turbidity (NTU)	≤ 0.5	
	pH – if Chlorine is used	7.2-7.8	
	pH – if Bromine is used (indoor only)	7.2-8.0	
	Free Residual Chlorine – if Chlorine is used (ppm)	1-3	
	Total Bromine (indoor only) – if Bromine is used (ppm)	2-4	
	Heterotrophic Plate Count (cfu/ml)	≤ 200	
	Escherichia coli Count (cfu/100 ml)	< 1	
Quarterly	Legionella Bacteria Count (cfu/100 ml)	< 1	

Spa Pool

Monthly	onthly pH – if Chlorine is used 7.2-7	
	pH – if Bromine is used (indoor only)	7.2-8.0
Free Residual Chlorine – if Chlorine is used (ppm)		3-5
	Total Bromine (indoor only) – if Bromine is used (ppm)	4-6
	Heterotrophic Plate Count (cfu/ml)	≤ 200
	Escherichia coli Count (cfu/100 ml)	< 1
Quarterly	Legionella Bacteria Count (cfu/100 ml)	< 1

Pseudomonas aeruginosa Count (cfu/100 ml)	< 10
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#### Water Playground/Interactive Water Fountain

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ly Turbidity (NTU) $\leq 0.5$		
pH – if Chlorine is used	7.2-7.8	
pH – if Bromine is used (indoor only)	7.2-8.0	
Free Residual Chlorine – if Chlorine is used (ppm)	1-3	
Total Bromine (indoor only) – if Bromine is used (ppm)	2-4	
Heterotrophic Plate Count (cfu/ml)	≤ 200	
Escherichia coli Count (cfu/100 ml)	< 1	
Legionella Bacteria Count (cfu/100 ml)	< 1	
Pseudomonas aeruginosa Count (cfu/100 ml)	< 10	
	Turbidity (NTU) pH – if Chlorine is used pH – if Bromine is used (indoor only) Free Residual Chlorine – if Chlorine is used (ppm) Total Bromine (indoor only) – if Bromine is used (ppm) Heterotrophic Plate Count (cfu/ml) <i>Escherichia coli</i> Count (cfu/100 ml) <i>Legionella</i> Bacteria Count (cfu/100 ml)	

# 15. Whose CorpPass account should be used to submit the water quality test results for AF?

The CorpPass accounts of either owners/occupiers or SAC accredited laboratories engaged by the owners/occupiers, are to be used for test result submissions. The list of SAC accredited laboratories can be found at <a href="https://www.sac-accreditations.gov.sg/Pages/Homepage.aspx">https://www.sac-accreditations.gov.sg/Pages/Homepage.aspx</a>.

# 16. Will there be a fee for the submission of water quality test results for AF?

There is no fee for the submission of water quality test results for AF through GoBusiness.

# 17. Who is responsible for ensuring that water quality results are submitted on time?

AF licensees are responsible for submitting the water quality test results even if they are outsourced to a SAC-accredited laboratory. The CorpPass accounts of either licensees or SAC-accredited laboratory engaged by the licensees, are to be used for test result submissions.

# 18. When is the deadline to submit water quality test results?

The aquatic facility lab results, for samples collected and tested in a particular month shall be submitted no later than 14<sup>th</sup> of the subsequent month.

## 19. If my aquatic facility is closed for repairs/renovation, what do I need to do?

You can inform NEA at <u>nea af licences@nea.gov.sg</u> when your AF is closed for repairs/renovation. Please provide the licence number and supporting document(s) pertaining to the maintenance work, e.g. work schedule, receipts, or invoices, etc.

## 20. Do I need to display my aquatic facility's lab results?

Please ensure that the water quality lab results for your aquatic facility is displayed at all times within the licensed premises.

## 21. What happen if failed water quality test results are submitted?

If the AF does not comply with the requirement limits for water quality, the licensees may take the following steps:

- a. Disinfect AF as soon as practicable within 3 days after date of failed test result report;
- b. Do another round of water quality sampling within 24 hours after disinfection and ensure that the water quality complies with the regulated limits; and
- c. Submit the test results to NEA via GoBusiness within 7 days after completion of test (date of test results).

# 22. Will NEA take enforcement actions for late submission of water quality test results?

NEA will take enforcement actions for results submitted after 14<sup>th</sup> of the following month.



40 Scotts Road, #13-00 Environment Building Singapore 228231 www.nea.gov.sg

Reference No.: NEA-SCD-OM-CIR-ENVHYG-002

Date: 11 August 2021

Dear Sir/Madam

# AEROSOL-GENERATING SYSTEMS (AGS)

## Cooling Towers

All premises with cooling towers (CT), will be required to be registered, under the Environmental Public Health (Registrable Aerosol-Generating Systems) Regulations.

2 Owners/occupiers with CT are required to register their CT between the period from 6 September 2021 to 1 March 2022.

3 Upon successful registration, owners/occupiers will be required to submit water quality test results to NEA at the frequency stipulated in the Regulations. The list of the water quality parameters to be tested and submitted can be found in the list of Frequently Asked Questions (FAQ) in **Annex A**.

4 The registration and the submission of water quality test results are to be submitted electronically via NEA ePortal (<u>https://www.eportal.nea.gov.sg/category/Public%20Health</u>). A step-by-step user guide for the registration and the submission of water quality test results of CT will be available in NEA ePortal.

# FAQ and Further Enquiries

5 For more information, please refer to **Annex A** for the FAQ. For further enquiries, please let us know through the feedback form available on the NEA website at <u>https://www.nea.gov.sg/feedback</u>, myENV (<u>https://www.nea.gov.sg/myenv</u>) or OneService mobile applications.

6 Thank you.

KELVIN LIM EXECUTIVE MANAGER for DIRECTOR SANITATION AND COMPLIANCE DIVISION ENVIRONMENTAL PUBLIC HEALTH OPERATIONS GROUP NATIONAL ENVIRONMENT AGENCY

THIS IS A COMPUTER-GENERATED LETTER. NO SIGNATURE IS REQUIRED.

# <u>General</u>

# 1. What are the types of Aerosol Generating Systems (AGS) to be registered?

Cooling towers (CT) are required to be registered. The registration of these CT will facilitate traceability in the event of a water-borne disease outbreak.

# Registration of Cooling Towers

# 2. Can owners/occupiers register more than one cooling towers in a single application?

In a single application, up to 5 cooling towers located within the same premises using the same postal code can be registered.

# 3. Whose CorpPass account should be used for registration?

CorpPass accounts of owners/occupiers are to be used for registration.

# 4. Will there be a fee for registration of AGS?

There will be a one-time registration fees of \$70 per cooling tower system. One cooling tower system consists of **one or more cells sharing one common basin**.

# 5. What is the validity period of a registration?

The registration of any cooling tower shall remain valid unless under the following scenarios in the table below:

S/N	Scenario	What do owners/occupiers need to do?	
1	Change of ownership of the premises where cooling towers are installed	• The outgoing owners/occupiers are required to de- register their cooling towers in NEA ePortal.	
		• The new owners/occupiers are required to register these cooling towers in NEA ePortal.	
2	Change of location (postal code) of the premises where cooling towers are installed	• The existing owners/occupiers are required to de- register their cooling towers in NEA ePortal.	
		• The existing owners/occupiers are required to register these cooling towers, using the new postal code, in NEA ePortal.	
3	Replacement of cooling tower	• The existing owners/occupiers are required to de- register their cooling towers in NEA ePortal.	
		• The existing owners/occupiers are required to register these cooling towers in NEA ePortal.	

For **de-registration** in ePortal, owners/occupiers will not be able to de-register individual cooling tower if more than one cooling towers are registered under the same submission ID. Owners/occupiers are advised to approach NEA to de-register one or some of the cooling towers registered previously under the same submission ID.

# 6. Who is responsible to ensure that the cooling towers are registered and water quality results are submitted on time?

Owners/occupiers of the premises where the cooling towers are installed, are responsible for the registration and submission of the water quality results, even if they are outsourced to a contractor.

# 7. If owners/occupiers have previously registered their cooling tower(s) through submission of a manual form in Appendix A of Code of Practice for the Control of *Legionella* Bacteria in Cooling Towers, do they still need to register these cooling towers again in e-Portal and pay the registration fee when registration becomes mandatory?

Owners/occupiers who have previously registered manually are still required to re-register through the NEA ePortal and the registration fees will apply.

# 8. What do owners/occupiers need to do if their registered cooling tower is permanently shut down or demolished?

The owners/occupiers are required to de-register the cooling tower in NEA ePortal.

For **de-registration** in ePortal, owners/occupiers will not be able to de-register individual cooling tower if more than one cooling towers are registered under the same submission ID. Owners/occupiers are advised to approach NEA to de-register one or some of the cooling towers registered previously under the same submission ID.

## 9. Can owners/occupiers amend their registration details in ePortal?

Owners/occupiers can amend all fields, except for "postal code" of cooling tower. For this field, the owners/occupiers are required to de-register the cooling tower in NEA ePortal and register the cooling tower in NEA ePortal, using the updated "postal code".

## Submission of Water Quality Test Results for Cooling Towers

# 10. When will owners/occupiers be required to start submitting the water quality test results, after registering their cooling towers?

Owners/occupiers are required to start submitting the water quality test results via NEA ePortal, for the following month, after registering their cooling towers.

- a. Heterotrophic Plate Count for the following month, after registering their cooling towers; and
- b. Legionella Bacteria Count within the following 3 months, after registering their cooling towers

# 11. Whose CorpPass account should be used to submit the water quality test results for cooling towers?

The CorpPass accounts of either owners/occupiers or SAC accredited laboratories engaged by the owners/occupiers, are to be used for test result submissions. The list of SAC accredited laboratories can be found at <a href="https://www.sac-accreditations.gov.sg/Pages/Homepage.aspx">https://www.sac-accreditations.gov.sg/Pages/Homepage.aspx</a>.

## 12. Will there be a fee for submission of water quality test results for cooling towers?

The is no fee for submission of water quality test results for cooling towers.

#### 13. When is the deadline to submit water quality test results?

The water quality lab results for cooling towers, for samples collected and tested in a particular month shall be submitted no later than 14<sup>th</sup> of the subsequent month.

# 14. Can more than one test results be submitted in a single submission?

A standard excel template through bulk upload function in the NEA ePortal can be used to submit more than one test results.

# 15. What happen if failed water quality test results are submitted?

If the CT does not comply with the requirement limits for water quality, the owners/occupiers may take the following steps:

- i. Disinfect CT as soon as practicable within 3 days after date of failed test result report;
- ii. Do another round of water quality sampling within 24 hours after disinfection and ensure that the water quality complies with the regulated limits; and
- iii. Submit the test results to NEA via NEA ePortal within 7 days after completion of test (date of test results).

## 16. If my registered CT is shut down for more than 5 consecutive days, what should I do?

If your registered CT is shut down for more than 5 consecutive days, you will need to log in to ePortal to notify NEA on the period of this shut down.

## 17. Will NEA take enforcement actions for late submission of water quality test results?

NEA will take enforcement actions for results submitted after 14<sup>th</sup> of the following month.