



HYDRILLA

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# Guide for Accidental Faecal Release in Public Swimming Pools & Aquatic Facilities



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## REFERENCES

Sahealth.sa.gov.au. n.d. Faecal Release Incidents – Public Pool Response Strategies. [online] Available at: <[https://www.sahealth.sa.gov.au/wps/wcm/connect/65cb390045e8a16e9184d9574adac1f8/FACTSHEET603\\_FAECAL+RELEASE+INCIDENTS\\_JUNE2013.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-65cb390045e8a16e9184d9574adac1f8-n5hDAp8](https://www.sahealth.sa.gov.au/wps/wcm/connect/65cb390045e8a16e9184d9574adac1f8/FACTSHEET603_FAECAL+RELEASE+INCIDENTS_JUNE2013.pdf?MOD=AJPERES&CACHEID=ROOTWORKSPACE-65cb390045e8a16e9184d9574adac1f8-n5hDAp8)> [Accessed 18 August 2020]. (SA Health n.d.)

## Introduction

The fun of a day at the pool can quickly turn sour for bathers and facility managers alike with the appearance of human faeces or vomit. In this guide we give you a brief rundown on what to do should this situation happen at your swimming pool.

**Accidental Faeces Release (AFR)** occurs quite frequently and can go undetected. AFR in swimming pool waters can lead to outbreaks of some unpleasant viruses and bacteria. Human vomit will have a similar effect on pool water safety. It is important that bathers and pool operators know the steps to take to ensure the safety of the facility and pool users.

“Some faecal microorganisms are resistant to chlorine so special care must be taken when responding to faecal release incidents”

**Government of South Australia, SA Health**  
Public Health Fact Sheet #603: Faecal release incidents  
public pool response strategies. July 31, 2019

Each Australian State and Territory has its own Standards and Guidelines for how pool operators should deal with this tricky situation. We have written our *“Guide to Accidental Faecal Release in Public Swimming Pools”*, following the South Australian Governments Standards, due to the location of our Head Office. We recommend you check and comply with the regulations in your area.

STATE/TERRITORY	RESOURCE
ACT	Swimming & spa pools Part A: General guidelines Swimming & spa pools Part B: Cryptosporidium & Giardia
NSW	Public swimming pools and spa pools
NT	Public Health Guidelines for Aquatic Facilities
QLD	Water quality guidelines for public aquatic facilities
SA	Standard for the Operation of Swimming Pools and Spa Pools
TAS	Recreational Water Quality Guidelines 2007
VIC	Water quality guidelines for public aquatic facilities
WA	Health (Aquatic Facilities) Regulations 2007

Table 1.0: Australian State & Territory Pool Operators Resources

## Dealing with AFR in Aquatic Facilities

The first and most crucial step in dealing with this situation is for a quick response. If a member of the public becomes aware of an AFR or Vomiting incident they should alert the pool operator straight away. For the operator, reacting immediately can reduce the contamination to pool water limiting does not cause health issues for the pool users.

Depending on the type of incident, (yes, we are about to get into too much detail territory) there are different steps to take. A solid floating stool requires a different approach to something with a more liquid structure.

For solid faecal matter, quick retrieval, and disposal of the offending object in a toilet should be done as soon as possible. The device used to scoop the poop should be disinfected straight away, to avoid unintentional re-use and possible re-contamination of the pool water. All bathers should be asked to leave the pool immediately and any other pool or aquatic facility which shares the same filtration system. It is not ideal to have to evacuate bathers from the pool, but it is necessary, training pool staff to calmly cope with this situation is a great idea.

After the pool is free from bathers the pool operator must follow the steps outlined in Table 2.0 Solid Incident. The pool can be reopened after the completion of the disinfection process.

The most hazardous type of human waste in a pool is liquid stools, such as diarrhoea, and vomit. These types of incidents contain many bacterial and viral agents and possibly protozoal parasites such as Cryptosporidium, which has a high resistance to chlorine, and therefore harder to destroy.

When this is the case Pool operators should immediately evacuate the pool and other pools/facilities that share the same filtration system. Physically remove as much of the offending material as possible and remember to dispose of it in the toilet and disinfect all tools used. Carefully follow the steps outlined in Table 2.0 for Semi-Solid/Liquid incidents, you can re-open the pool at the end of the disinfection process when the free chlorine is at an acceptable operational level.

While it's not always possible to know who/what caused the incident, or even when an incident has occurred, training pool staff to be vigilant and educating pool users on the dangers of human faecal matter and vomit in a pool environment can go a long way to ensuring your facility is as clean and healthy as possible.

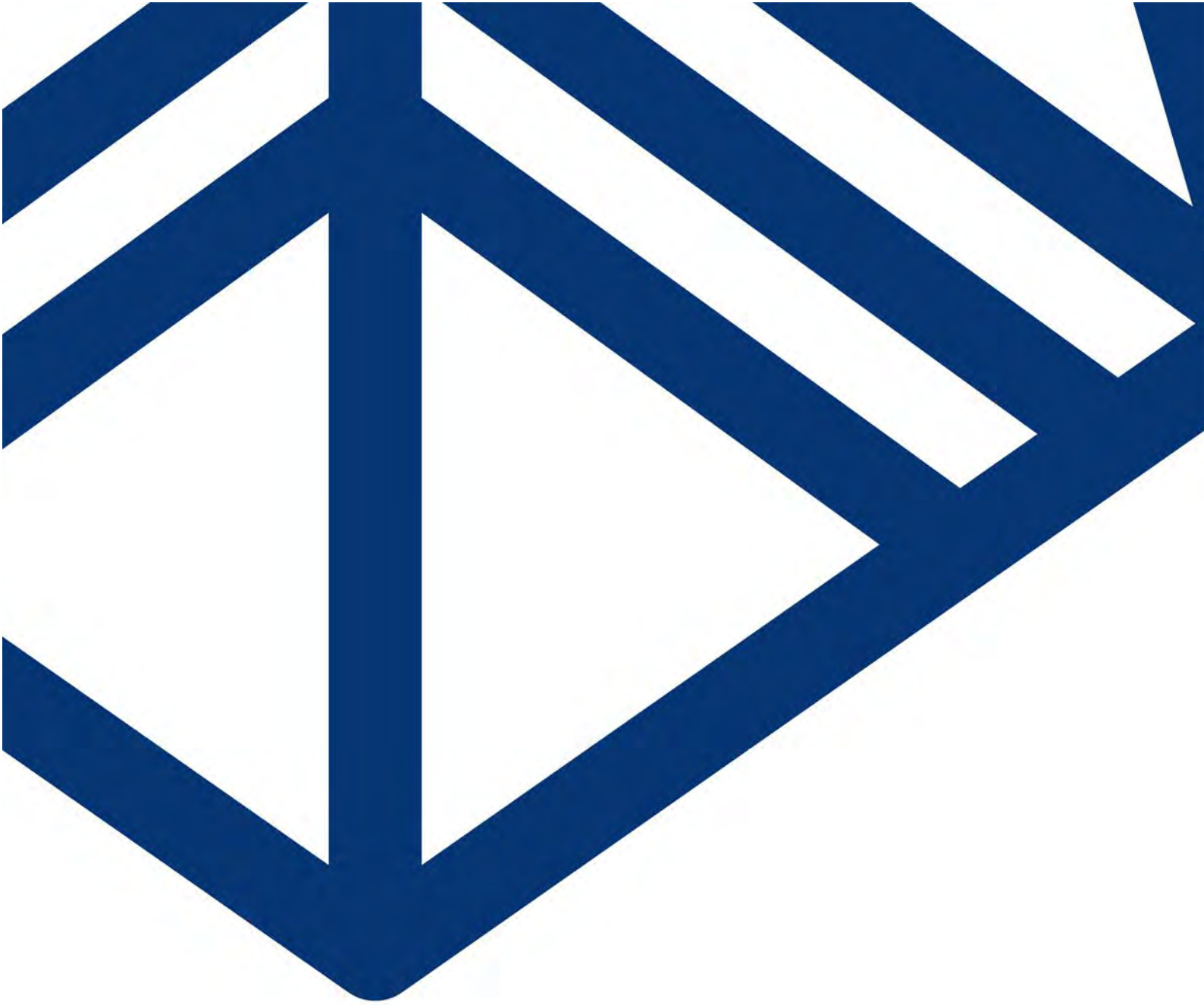


# Faecal Response Guide

SOLID INCIDENT	SEMI-SOLID/LIQUID INCIDENT
1. Ask all patrons to exit the pool and any other pools/facilities that share the same filtration system	1. Ask all patrons to exit the pool and any other pools/facilities that share the same filtration system
2. Remove the object and dispose of it in the toilet. Thoroughly disinfect any tool used in the removal process	2. Remove as much of the matter from the pool as possible and dispose of it in the toilet. Thoroughly disinfect any tool used in the removal process.
3. Based on the free chlorine level of the pool, determine the time necessary to kill Giardia*	3. Determine the target free chlorine level and time combination to achieve the CT value required to kill Cryptosporidium*
4. Test water to confirm that the free chlorine level is being reached, make any corrections as needed	4. Raise the free chlorine concentration to achieve the CT value and maintain the pH at 7.5 or less
5. Allow patrons to return to the pool only after the determined time period has elapsed	5. Continue to operate the pumps & filtration process to disinfect the entire system
6. Record the incident, action taken and test results in the pool logbooks	6. Manually Check and record free chlorine and pH at regular intervals, (ideally 30min) to ensure the minimum CT value is achieved and the accuracy of automatic dosing equipment
7. Allow Patrons to return to the pool(s)	7. After reaching the CT inactivation value, Backwash the filter – ensure effluent is discharged directly to the sewer. Do not return backwash through the filter. Replace Filter media as appropriate
	8. Test water to ensure the total concentration of chlorine in the pool is below 10mg/L (ideally below 5mg/L)
	9. Record the incident, action taken and test results in the pool logbooks
	10. Allow Patrons to return to the pool(s)

Table 2.0 Faecal Response Guide

*\*Refer to SA Health Public Fact Sheet #603 – Appendix A – Concentration x time (CT) reference tables*



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