

## STEP 5 CLEAN AND FILL THE POOL

Taking into consideration the questions posed and advice offered, if you follow the suggestions in this section, you will be able to

- Properly remove and store the pool cover.
- Properly clean the pool basin, filter equipment, locker room and office.
- Order the proper supplies for the season
- Properly clean the filter room and filters.
- Properly fill the pool

### OVERVIEW

By definition, seasonal pools are open only part of the year which means that someone will have to get them ready for the coming season. Perhaps the job will be delegated to a local pool service. If this is the case, it is imperative to schedule your pool's time at least one month before opening, as it is common for competent persons or firms to have 15-20 pools to open.

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### Pool Sales & Services



Even if a pool service is employed for some tasks, you and your staff will have certain tasks to perform before the pool is open.

### COVER REMOVAL AND STORAGE

If the pool was covered, the logical first step is to remove the cover. Locate the tool used to unhook the springs that hold the cover in place. When the springs are loose, the cover should be pulled off and spread out to dry. NOTE: At this point, it is wise to be sure that at least one corner of the cover is marked (paint, or rope pigtail) to indicate where this corner goes when the cover is replaced at the end of the season.

When dry, the cover is folded into small sections. Ideally, it is moved to a proper storage area. Hanging the cover in a large sling is an acceptable procedure, as long as the cover is out of the weather. It should not be stored in a small airless room.

### CLEANING THE POOL BASIN

Initial cleaning of the pool basin itself depends upon whether or not water was left in the pool in the off-season.

If the pool was drained at the end of last season the obvious first step in cleaning the pool basin is to remove as much debris as possible by hand. Buckets can be filled with the

leaves, sticks, bottles, dead animals, etc. that are found.

Once all of these objects are removed, the main drain may be opened and cleaned with a hose and brush. The object is to remove dirt and stains from the sides and bottom. Use of a degreaser is recommended, followed by an acid wash. At this point, it is wise to flush some water through the inlets in order to remove any rust or debris that might have accumulated. Finally, even though the basin might look clean, it is wise to scrub the walls and bottom with a disinfectant (9:1 solution of water to disinfectant). This solution will remove any possible algae growth and serve as a degreaser. If the solution is used to prepare the walls for painting, be sure that the walls are cleaned according to the paint recommendations.



Regardless of the cleaning agents used, be sure that personal safety precautions (i.e. gloves, prompt removal of any substance from the body, etc.) are taken, and that all surfaces are hosed down after using any cleaning agents.

### **CLEANING THE OFFICE, LOCKER ROOMS AND DECK**

Office. The office presents another site for storage of items not necessarily related to the office. A general cleaning, using a broom or hose, and then a disinfectant on the floor and writing surfaces, is appropriate.

Locker rooms. In some instances, the locker room serves as the storage area for swim team equipment, diving boards, lane lines, etc. After removing all items, locker rooms need to be aired and swept. If the surfaces permit, a good hosing down will begin the cleaning process. Using some form of weak disinfectant on the floors, benches, washbasins, shower walls and floors will remove any musty smell.

Deck. In most cases, the deck has been exposed to the elements. This means that leaves, small limbs and other debris has accumulated. Sweeping such items away from the pool basin is the first order of business, and then hosing will remove the remaining material. A final hosing the day before opening is recommended.

### **PLACING EQUIPMENT**

The diving boards, starting blocks, lane lines, benches, lifeguard chairs, etc. need to be placed in their proper spots.

### **INVENTORYING FOR NEEDED SUPPLIES AND EQUIPMENT**

Toilet paper, paper towels, soap, shower curtains, office supplies, telephones, first aid supplies, etc. are items that might be found on the premises—or they might not! Checking now will save last minute scrambling on opening day.

Table 5.1 indicates pool chemical supplies that will probably be needed.

TABLE 5.1  
USUAL SUPPLIES AND EQUIPMENT

<u>CHEMICAL</u>	<u>PURPOSE</u>
Alum	Aid the filter media (rapid sand filters only).
Algaecide (various names)	Kill algae.
Calcium Chloride	Raise the calcium hardness level.
Granular Chlorine	Superchlorination, supplement low chlorine.
Chlorine tablets/pucks	Sanitizer for the pool.
Carbon Dioxide (CO <sub>2</sub> )	Lower the Ph, substitute for Muriatic acid.
Diatomaceous Earth (DE)	Filter media for DE filters. <i>IMPORTANT: Check local codes for disposal.</i>
Muriatic Acid	Lower Ph of the water and, reduces alkalinity.
Non-Chlorine oxidizer	Reduce chloramine levels.
Silicon gel	Seal leaks on joints and O-rings.
Soda Ash (caustic soda)	Raise the Ph level. NOTE: very dangerous.
Sodium Bicarbonate	Raise alkalinity as well as Ph.
Sodium Thiosulfate	Bring chlorine level down quickly. Lowers pH & alkalinity levels.
Test Kit Reagents	Needed for water testing.

**SPECIALTY CLEANERS:**

"Dawn" dishwashing liquid	Disinfecting and cleaning chemical probes on the automated chemical systems.
Clean connections on competitive timing systems.	
Trisodium Phosphate (TSP)	Degreasing surfaces before an acid wash.
CLR (Calcium, Lime and Rust Remover).	Removing rust stains off tile and grout. Used for a variety of other cleaning tasks.

**EQUIPMENT**

Rescue tubes	Hats	Whistles	Sun Screen
Hats	Suits	Tee Shirts	

**CLEANING THE FILTER ROOM**

Unless there is an adequate storage room elsewhere, in all likelihood the filter room has been used as a multi-purpose storage room. The obvious procedure is to carry out all items that can be removed, and then the room is swept (and hosed if appropriate). Hosing, especially in the far corners of the room, is especially effective. Those items that will be used in the filter room (i.e. buckets of left-over chemicals, brooms, hoses, etc.) should be replaced in an orderly arrangement.

## CLEANING THE FILTERS

In theory, the filters and their elements were cleaned at the end of last season. However, to make certain they are ready to be used now, you (or the pool service) will clean either by backwashing (sealed tanks) or hosing or scrubbing (open tanks).

For filters that have open tanks, it is desirable to wash the elements with a degreaser, and then finish the cleaning with a 10% acid wash.

For those filters that use fiber cartridges, it would be prudent to begin with new cartridges. Any clean cartridge remaining from last season should be kept as a backup.

## FILLING THE POOL

If a pool service has been employed, they will fill the pool. However, if the job falls to you, remember to close the main drain (which was opened during the cleaning process) before starting the water.

In some cases, the filling is done through a standpipe which opens directly into the pool. Or, running one or two hoses from a water tap will do the job, albeit very slowly. The preferred way in most situations is to enlist the city's help by running a fire hose from a water hydrant.

Regardless of how the pool is being filled, it is wise to notify the city water department when the filling process is started. If their gauges show a larger than normal amount of water being used in a particular section of the city, they might think there is a leak someplace.

Filling most pools takes several hours. Once water covers the entire bottom, you can estimate how long it will take to fill by making a small pencil mark about three inches above the present water level. Note how many hours it takes to reach the pencil mark. Using that information, you can estimate how many more hours before the pool is filled.

If city drinking water is used to fill the pool, about 24 hours of filtering (depending on turnover rate) will make the water clear enough to swim in.

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\*Material related to this chapter is based on R. Clayton and D. Thomas, *Professional Aquatic Management*; D. Thomas, *Innovative Pool Design* (unpublished).

## RESOURCE 5.1

### CHECKLIST: PRE-SEASON CLEANING

#### TO BE COMPLETED TWO-THREE WEEKS BEFORE OPENING

- \_\_\_\_\_ 1. Ensure that all utilities have been connected (water, light, phone).
- \_\_\_\_\_ 2. Inspect the recirculation system. All connections must be tight, no gaskets are worn, no air locks exist, and no rust or corrosion has caused a dangerous condition. Needed repairs are ordered.
- \_\_\_\_\_ 3. Examine the filter (top of each sand-and-gravel/high-rate sand filter, OR the cartridges of a cartridge filter, OR the plastic cloths of the diatomaceous earth filter) for defects. Order replacement or repairs.
- \_\_\_\_\_ 4. Bathroom fixtures work: toilets \_\_\_\_\_ showers \_\_\_\_\_ wash basins \_\_\_\_\_
- \_\_\_\_\_ 5. Drinking fountains are operational.
- \_\_\_\_\_ 6. The pool cover has been removed, dried and properly stored.
- \_\_\_\_\_ 7. All dirt and sediment has been removed from the pool basin.
- \_\_\_\_\_ 8. All mold and algae growth from any surface has been removed from pool basin.
- \_\_\_\_\_ 9. Rescue tubes and other safety equipment have been inspected. Replacements have been ordered.

#### TO BE COMPLETED ONE-TWO WEEKS BEFORE OPENING

- \_\_\_\_\_ 1. The filter room has been cleaned.
  - \_\_\_\_\_ 2. The deck has been cleaned, and all mold and algae growth has been removed.
  - \_\_\_\_\_ 3. Locker room supplies are on hand:  
soap \_\_\_\_\_ toilet tissue, \_\_\_\_\_ paper towels \_\_\_\_\_ shower curtains \_\_\_\_\_.
  - \_\_\_\_\_ 4. Properly operating: toilet \_\_\_\_\_ showers \_\_\_\_\_ drinking fountain \_\_\_\_\_, sinks \_\_\_\_\_.
  - \_\_\_\_\_ 5. First aid supplies are on hand: latex gloves \_\_\_\_\_ pocket masks \_\_\_\_\_ bag valve masks \_\_\_\_\_ backboard with head immobilizer \_\_\_\_\_
  - \_\_\_\_\_ 6. Bathroom fixtures have been cleaned with disinfectant.
  - \_\_\_\_\_ 7. The locker rooms have been cleaned (swept \_\_\_\_\_, hosed \_\_\_\_\_, disinfected \_\_\_\_\_).
  - \_\_\_\_\_ 8. The office has been cleaned (swept \_\_\_\_\_, disinfected \_\_\_\_\_).
  - \_\_\_\_\_ 9. An adequate supply of report forms \_\_\_\_\_, bottles for water samples \_\_\_\_\_, and **NEW** chemicals for the water-testing kit are on hand \_\_\_\_\_.
- NOTE: all old reagents should be discarded.**
- \_\_\_\_\_ 10. On hand: ample supply of mops \_\_\_\_\_, buckets \_\_\_\_\_, hoses \_\_\_\_\_, and disinfectant \_\_\_\_\_.
  - \_\_\_\_\_ 11. Equipment has been properly checked and/or replaced:  
\_\_\_\_\_ fuses \_\_\_\_\_ light bulbs and globes \_\_\_\_\_ reflectors \_\_\_\_\_ clocks \_\_\_\_\_.
  - \_\_\_\_\_ 12. Pool fixtures have been checked for safety before and after installation:  
ladders \_\_\_\_\_ diving boards \_\_\_\_\_ lifeguard stands \_\_\_\_\_.
  - \_\_\_\_\_ 13. Lifeguard supplies are adequate:  
hats \_\_\_\_\_ tee shirts \_\_\_\_\_ jackets \_\_\_\_\_ rescue tubes, \_\_\_\_\_ whistles \_\_\_\_\_.
  - \_\_\_\_\_ 14. Office supplies are adequate: pool rules \_\_\_\_\_, phone book \_\_\_\_\_, member forms \_\_\_\_\_.
  - \_\_\_\_\_ 15. Pool maintenance forms are adequate.
  - \_\_\_\_\_ 16. Post warning signs \_\_\_\_\_, information posters \_\_\_\_\_, and regulations \_\_\_\_\_.
  - \_\_\_\_\_ 17. Post duty assignments and schedules for all staff \_\_\_\_\_.

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\*Adapted from Clayton and Thomas, *Professional Aquatic Management*, pp. 173-174.

## RESOURCE 5.2

### CHECKLIST: FILLING THE POOL

#### Examine and make ready the filters and recirculation systems.

- \_\_\_ 1. Examine the filter. Be certain that sand filters are full of fresh sand or rinsed clean from the previous season.
- \_\_\_ 2. Repack all seals and O-rings; replace them if cracked or torn.
- \_\_\_ 3. Make sure all connections are tight.
- \_\_\_ 4. Observe that there is no rust or corrosion that might be dangerous.

#### Preparing and filling the pool

- \_\_\_ 1. Clean the pool.
- \_\_\_ 2. Review the manufacturer's instructions for operation of the filtration and recirculation equipment.
- \_\_\_ 3. Fill chlorinators and check to verify pH control systems are ready to be turned on.
- \_\_\_ 4. Test incoming water source to help determine how much chemical adjustment will be needed when the pool is full.

#### Turn on the Water

- \_\_\_ 1. Notify the Water Department that you will be filling your pool.
- \_\_\_ 2. Turn valves or multiports to "filter" mode. As you fill the pool, you will be filling the pipes, pumps and filters with water.
- \_\_\_ 3. Turn the water on slowly at first to minimize the amount of rust and sediment loosened by the flow.
- \_\_\_ 4. Note the water level in one hour and estimate the time that the pool will be filled.
- \_\_\_ 5. Once the water has reached the level of the return jets, you can start your pumps. (If you have just put new sand in the filters, you will want to wait until the pool is filled to normal capacity before start up. This way you can backwash the filters on startup and get rid of any sediment that comes with your new sand).

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\*Adapted from Clayton and Thomas, *Professional Aquatic Management*, pp. 173-174.