

Copies of your pool operator certificate as well the operating permit must be posted at the pool. The operator's certificate is your certificate that you will receive after completing this course. The operating permit is sent to the agent responsible for the pool; usually either the owner or a property manager. Both need to be posted where the inspector can see them. If they are posted in an office instead of the equipment room be sure to let your inspector know; if we can't find them we will have to write a violation.



The required safety equipment for every pool is a shephard's hook and a life ring. The hook must be attached to a pole not less than 16 feet in length. The life ring must have an 18" diameter and have a rope attached that is long enough to reach all parts of the pool from the pool deck. The safety equipment must by in a conspicuous place and be easily accessible. Pools that are greater than 50 feet in length must have safety equipment on both of the long sides of the pool. Missing safety equipment will result in a pool closure.



Slope break safety lines are required on pools with a transition. The safety line must be in place at all times. The safety line must have floats at a maximum of seven foot intervals.



The purpose of the safety line is to warn swimmers of a change in the pool floor slope, when there is a sudden change in depth. The rope must be placed 2 feet before the tile markers, toward the shallow end.



The pool wet deck refers to the 4 requirement; there must be at least 4 feet of clear deck from the pool. This includes pool furniture; it must be kept at least 4 feet from the pool.



The pool deck needs to be kept clean of mold and mildew. In this situation there is a slip-hazard as well as the potential for exposure to fungus. Walking through this mold would also result in it being brought into the pool on a swimmer's feet.



Glass is not allowed within the fenced in pool area or within 50 feet if there is no fence. Broken glass poses a serious risk for injury and infection to people in the pool area.

## **Required Pool Rules Sign**



A Pool Rules sign is required for every pool and spa. Rules must be in 1" lettering and be visible from the pool deck. Pools without an approved dive bowl must have "No Diving" written on the sign in 4" letters. The rules that must be included are No food or beverages in pool or on pool wet deck; no glass or animals in the fenced pool area; the bathing load; pool hours, which must be Dawn to Dusk unless night swimming has been approved; and shower before entering. Any new or modified pools must also have a rule stating "Do not swallow the pool water."



Spa rules have a few more requirements. Spa pool signs must include the following:

- (a) Maximum water temperature 104° F.
- (b) Children under twelve must have adult supervision.

(c) Pregnant women, small children, people with health problems and people using alcohol, narcotics or other drugs that cause drowsiness should not use spa pools without first consulting a doctor.

(d) Maximum use 15 minutes.

There is also a requirement that a clock be visible from the spa to help people with meeting the 15 minute requirement.



Spas that are equipped with an emergency shut-off switch should also have an alarm that will sound when the switch is used. In this case, a sign must be posted that reads ""ALARM INDICATES SPA PUMPS OFF. DO NOT USE SPA WHEN ALARM SOUNDS UNTIL ADVISED OTHERWISE."



Home owner associations can add their own rules to the sign. Usually they add rules such as "No floats allowed, no running or horseplay, no diapered children, etc.". These types of rules are optional and not required by the Health Department.



Pool waste water is supposed to be discharged through an air gap and off to sanitary sewer, storm sewer, or a drainfield.



This ladder is unsafe and would be written up as a violation. The cups are missing and the ladder is not snug against the pool wall.



When an old ladder is replaced, it must be replaced with a cross-braced ladder like this one. The ladder must have a 3-6 inch clearance from the pool wall. The height of the ladder from the pool deck must be at least 28 inches and it must be anchored securely into the deck. The bottom braces of the ladder must have end caps or bumpers that rest snugly against the pool wall.



Water level is very important to ensure that a pool can properly skim. This picture shows a perfect water level and you can see the water is skimming very well. Water level that is too low or too high will result in a violation.



A floating light in a pool is considered an electrical hazard and will result in the pool being posted closed. Please be sure that pool light are always kept flush against the pool wall.



This is an image of an improperly installed main drain grate. It is important that main drain covers be installed as the manufacturer instructs. A main drain like this, or a broken main drain cover, would result in the pool being posted closed.



Trichlor tablets are not allowed to be left in a skimmer basket. This poses a hazard to children who are apt to look inside skimmer baskets. Chemical feeders must be used for the addition of chlorine into the pool.





Not only can you not use tablets in the skimmer baskets, you may not place them in the collector tank either. There is no way to control the amount of chemical being fed into the pool this way.



The only approved way to use tablets is through the use of an erosion feeder.



Ducks, as talked about before, can be a nuisance and can cause a serious health hazard. When ducks leave a mess like this one, the pool will be posted closed until the pool and the deck has been properly sanitized.



It states in the code that chemicals must be inaccessible to the public. Sometimes there isn't enough room in the equipment room for the barrels. This is one way to keep the chemicals locked up when there isn't anywhere else to put them.



Chemicals are supposed to be fed into the return line, but sometimes they are fed into the collector tank. In the image, the chemicals were allowed to drip down the sides of the tank and has begun to destroy the tank.

## IF YOU MUST DRIP FEED INTO THE TANK, SUSPEND THE TUBING OVER THE MIDDLE OF THE TANK.



If your chemicals must be fed into the collector tank, find a way to suspend the tubes father over the tank so the chemicals do not drip down the side of the tank.

## AUTOFILL DISCHARGE SHOULD NEVER BE UNDERWATER.



The autofill discharge in the collector tank should never be underwater, this is a cross connection violation. An air gap must be present between the collector tank and the discharge.



One way to correct the problem is to use a pvc gooseneck in order to provide the necessary air gap.



During an inspection, if the chlorine feeder is missing or not working, the pool will be posted closed. A missing or broken pH feeder will result in a violation with a reinspection date.



This is what a supplemental UV light sanitizer looks like; they are usually used as supplemental disinfection on water fountains as a way to destroy crypto.



This is an ORP system; they are required on newer spas. During an inspection we will check to make sure it is between 700 - 850 mv.



Keeping equipment in good repair includes the electric components.

## **DANGEROUS BREAKER PANEL**



Another picture of dangerous electrical components. This is not safe for the pool operator or the inspector.



UNSAFE LADDER RESTING AGAINST EXPOSED WIRES IN A PIT WITH STANDING WATER

Sometimes a little common sense can go a long way. In this case we had an unsafe ladder that was resting against exposed electrical wiring in an equipment room with standing water. This is a very dangerous situation that would be written as a violation. Pool operators must be able to safely work in the equipment room and inspectors need to be able to safely access the equipment in order to complete the inspection.



Sometimes pool owners want to try to save some money on electricity by putting the pump on a timer. This is allowed, but there is a requirement that the pump be set to turn off 3 hours after the pool closes and 3 hours before the pool opens. Three plus three gives the pump six hours, which is one turnover. So if your pool hours are listed as dawn to dusk, the pump can be set to shut off 3 hours after dusk and must turn back on three hours before dawn.



It is important to be aware of the environment around your pool. If landscaping companies are fertilizing the grass near the pool, it is possible that those chemicals can end up in your pool and cause stains such as these.



Keeping a proper pH in your pool is important to the health of your equipment and pool surface. A pool with a constant pH problem and any corroding metal can result in metal staining of the pool surface.



A pool that is cloudy, where the main drain is not visible, will result in the pool being posted closed. If the water is becoming cloudy, clean the filters immediately.




Vak pak lids need to have secure bracing on both sides so that you can safely work on the equipment and the inspector can safely conduct his or her inspection.



KEEP YOUR EQUIPMENT AREA CLEAN AND SAFE. ELIMINATE TRIP HAZARDS AND REMOVE SPILLED DE POWDER.

Please remember to keep the equipment area clear of clutter. This kind of clutter can create a trip hazard.



Here is a picture of DE Vacuum system.



This picture shows the difference between clean and dirty DE filter elements.



After a certain point, DE filter elements need to be replaced with new ones.



Here is what the filter elements inside of a DE pressure filter housing look like.



And here is a cartridge vacuum system.



Here is the famous diatom. The DE you use is actually made of fossilized diatoms. Diatoms are a hard shelled algae. The fossilized forms are crumbled into the fine white powder that is used to coat DE filters.



DE Separator tanks must be used, and for good reason. Sending the DE to a drainfield could result in destroying the drainfield. Waste DE must be collected from the DE separators and properly disposed.



After cleaning the filters it is important to make sure the filter housing is properly reassembled, or you could end up with leaking water. Of course sometimes the filter housing can become worn or cracked and at that point it would need to be replaced.



Just like De elements, you can only clean a cartridge pressure element so many times before it's time to get new elements. An element in this condition will not be doing much filtering at all!



A valve on the top of the flowmeter makes it easy to flush out when it gets stuck!

Stuck flowmeters is a constant issue; this is an easy way to be able to flush the flowmeter out to get it working again.



Pool tiles do tend to get dirty, because of the sediments and oils that float on top of the pool water surface. Pool tiles should not be allowed to become this dirty; this would be written as a violation.



A green pool will definitely result in a Pool Closed.



Keeping your chemicals labeled and properly covered is extremely important. In this case, a pool operator had his chemicals in the back of his truck with no lids. After it began to rain, the chemicals mixed together and the result was the truck being set on fire. You must respect the chemicals you are using, because negligence can lead to serious harm to yourself and others.



If you have any questions about anything that was discussed, please give us a call at the number given here.