The Virginia Graeme Baker Pool and Spa Safety Act:

What Every Commercial or Public Pool Operator Should Know

A Guide to VGBA Compliance

Prepared by Pentair Water Commercial Pool and Aquatics™



The Virginia Graeme Baker Pool and Spa Safety Act (VGBA),

which went into effect in December of 2008, remains an important source of concern for hospitality establishments, health and fitness clubs, multi family residential developments, public recreation authorities and other commercial and public pool operators that have not yet brought their pools into compliance. According to estimates from the nonprofit National Swimming Pool Foundation, as of early 2009, a majority of the nation's public pool operators – some 70 percent – had not yet invested in the equipment mandated by the new law (Associated Press, March 20, 2009*).

But, with a proper understanding of the law's requirements, operators who have not yet taken action will find that compliance is not as difficult as it might initially appear. For some, the compliance solution can even deliver energy savings that can repay the investment and deliver ongoing operating cost savings over time.

Making swimmers safe is good for business

The Virginia Graeme Baker Pool and Spa Safety Act deals with suction entrapment, which is by definition an accident that traps a swimmer underneath the water. This can occur if hair is pulled into a drain that is not compliant with the act, or if the drain cover is too small for the pump.

Drain covers that are cracked, loose or missing pose a serious hazard to curious swimmers who insert a limb into an open drain and evisceration may occur if an individual sits on an open drain. Full-body entrapment can occur if a body makes a vacuum seal against a flat or missing drain cover: Mechanical, non-suction entrapment can occur if fingers or a bathing suit is hooked by a broken or improperly installed drain.

These are real threats to swimmers that can be drastically reduced by some relatively simple but critically important equipment upgrades and proper maintenance. If that is not incentive enough, operators that do not address an entrapment hazard may risk pool closure, fines, higher insurance premiums and/or potential criminal liability, even if an accident does not occur.

How to Comply

Install new drain covers: To comply with the law, operators should first replace all submerged drain covers and safety drain covers with new compliant covers certified to the ASME A112.19.8-2007 standard. These new "domed" covers are the first line of defense against entrapment including mechanical, hair, evisceration or limb entrapment. The compliant drain covers should be installed on all submerged suction outlets, even those where no suction is used.

Compliant drain covers should display the "VGB 2008" or "ASME AI I2. I 9.8-2007" marks. All covers must be securely attached. If a cover becomes loose, cracked or damaged in any way, shut down the pool until the cover can be secured or replaced.

Additional SVRS protection may also be required: Commercial or public pools and spas with a single main drain system (other than an unblockable drain) must be equipped with one or more additional devices designed to prevent suction entrapment and meet the requirements of the ASME/ANSI ATI2.19.17 SVRS standard or applicable consumer product safety rule. If the pool or spa has multiple drains and they are at

least three-feet apart, a high vacuum breaking system is not necessary for VGBA compliance.

If the pool or spa has a single main drain, options include installing a safety vacuum release system (SVRS), a suction limiting vent system, a gravity drainage system, an automatic pump shutoff system, a drain disablement or other systems determined by the U.S. Consumer Product Safety Commission to be equally effective in preventing suction entrapment. These types of systems are required in addition to a compliant drain cover whenever a pool or spa has a single main drain system.

Choose equipment that cannot be manually disabled[†]

Although there are multiple vacuum relief options, a swimming pool pump with a built-in safety vacuum release system (SVRS), such as the IntelliFlo® VS+SVRS pump from Pentair Water Pool and Spa®, provides an additional safeguard. The SVRS is integrated within the pump and the protection it provides cannot be manually disabled without turning off the pump itself.

[†] During priming mode, the SVRS function is disabled.

Variable Speed Pumps featuring SVRS protection also save energy

The IntelliFlo® vs+svRs pump uses programmable variable speed technology recommended by the Natural Resources Defense Council and electric utilities nationwide. It offers energy-saving technology that may reduce pump-related energy costs by 50% or more, offsetting the cost of the pump and providing ongoing operating cost reduction over time. In some communities operators who install an energy efficient variable speed pump may be eligible for a power bill rebate from municipalities or utilities.

Other steps you can take to ensure pool safety

Although not covered by the entrapment regulations, operators should optimize the pool or spa water circulation system to create the safest possible pool environment. For example, all equipment should be specified to meet the flow rates of each individual pump.

For further information on safety, energy efficiency and other pool concerns, visit www.svrspump.com. Or call Pentair Water Commercial Pool and Aquatics™ at I-888-711-7487.

*Karnowski, Steve. Associated Press: Minneapolis. March 20, 2009.

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