

VGB effect on the residential pool market

By Eric Herman

To date, VGB hasn't meant all that much to the residential pool builder: When you build a new pool or update an existing one, use an approved drain cover with proper flow rating, sump and fasteners. That's about it. It's hard to mess that up.

While the Act has certainly caused great swells in the commercial pool market — closing down entire facilities, wrecking urban aquatic budgets and serving as the subject of countless seminars, media dispatches and even prime-time exposés, for the backyard people, the effect has been more like a small pebble dropped in a kiddie pool.

So far.

But just as a small undulation in the open sea grows to a huge breaker as it reaches the shore, what began as a minor adjustment in drain covers will one day lead to big changes in the way backyard pools are built.

By itself, the Act has raised the overall level of safety awareness and put the pool and spa industry on the regulatory radar screen. Far more substantial pool building code changes will be coming right behind it.

A flow chart for this change reads as follows: Safe design requirements are written into standards, standards become codes, codes are adopted by local authorities, and eventually, these new rules will turn up in the pool builder's world in the form of a trained inspector.

The Tides Of Change

Just to review, while residential VGB is limited to approved drain covers, commercial VGB demands that pools abandon their single, blockable drains or close. They can remedy their drains in a variety of ways, such as installing a compliant safety vacuum release system (SVRS), a suction-limiting vent system, a gravity drainage system or other approved remedy.

Why are these commercial requirements important to backyard builders? Because they will very likely become residential code in the near future.

Thus far, the spillover to residential builders has been incidental. As these commercial measures have been implemented, awareness of the issue has prompted some builders to alter their approach on the residential side, even though the law does not mandate it, according to Steve Barnes, the safety and compliance manager for Pentair and the chairman of the APSP Technical Committee. From that position, Barnes has a good view of the broad standard-writing and regulatory landscape.

At least on an anecdotal level, Barnes says, "We're seeing the guys that were so busy doing the public pool stuff, as they start doing residential pools — perhaps a new plaster job or a Pebble Tec job — they are at least talking to the homeowners about doing it, and in a lot of cases I've heard about, pool service companies and plaster companies won't touch a project unless they're allowed to bring it up to code. They just don't want the liability — that's just my perception.

"In that regard, at the macro level, I believe there's a lot of evidence that VGB is spilling into backyards on a voluntary basis because builders are being proactive about it."

These efforts are voluntary, as Barnes says, but only for the moment — at this point in time, residential pools (outside of Florida) do not have to meet the public pool level of drain safety. But those public-pool strictures have been written into the ANSI-7 standards and were adopted by the ICC building code last year.

With ANSI-7 and its drain requirements pulled into the ICC code in 2009, these stepped-up drain requirements are in the process of becoming local building code for all new pools, commercial and residential, says Carvin DiGiovanni, senior technical director, APSP.

“A lot of states are in the middle of their legislative cycles,” he says, “which is where that occurs. So it’s happening administratively, through their building code cycle. The states are automatically implementing this due to the fact that the ANSI-7 standard is in their ICC code.

“It will become mandatory when the states start applying the public pool language from VGB to residential pools. Indirectly, that is probably going to happen once the local authorities start adopting the ICC-2009 code. It all goes to whether local jurisdictions are going to require and mandate residential pools to have upgrades.

“I anticipate that if, for instance, the 2009 ICC code is adopted, and then a code official goes out to inspect a new installation for a residential pool, and he looks at the IRC code, he’ll say, ‘Where are all the new safety devices called for in the new ANSI-7 standard?’

“It’s going to take some time for that to happen. The groundwork has been laid, but it takes time. Eventually, it is our desire to get residential pools up to the same level of safety requirements that VGB demands of public pools. A vessel of water is a vessel of water, public or private, and you want to protect people in both environments.”

One Code, United

Beyond these echoes of VGB, a much broader legislative effort is gearing up which could have a much more profound effect on pool building in the long run.

According to Barnes, the APSP and the ICC are in the final stages of putting together a committee to develop a model pool code for both residential and public pools.

This code will take in all the technical requirements from APSP standards, ICC standards, VGB, national electric code and other documents and put it all together into one unified model building code for pools.

“That would be a huge deal,” Barnes says, “because right now, all the APSP/NSPI pool standards are voluntary and referenced here and there, but in very few states and jurisdictions are they referenced into the building code.

“And there are portable spa codes, there are aboveground, inground and water quality standards and electrical codes, there are a variety of books that the pool industry relies on — all separate documents — and this will combine all of those into a single document, one model code, and eliminate all the overlap and duplication and provide all the definitions you need. And it will reduce the overall size of it and make it simpler — here’s your plumbing, here’s your concrete, etc.”

This unified code would be an ICC code, backed by the power and respect that accompanies that organization — ICC building codes are usually adopted verbatim by states and localities. The ICC has published an aggressive delivery date of 2012, a tight schedule for such a comprehensive effort.

“I think ultimately this has the potential of affecting pool construction as much as VGB, because once the

ICC gets on top of this, inspectors will be looking at swimming pools as carefully as they do homes.

“From my perspective, it’s great that the ICC is involved with this as a partner, because they know how to do this — how to find a workable balance between the different groups involved that all want different things.

“And they’ll be involved with all of the training and support that goes with it. That’s the foundation of real change.”

Going Drainless

Of course, if there’s no pool drain at all, you don’t have to decide whether it’s blockable or unblockable. The technology exists to build perfectly sound, well-circulated swimming pools without them, says Carvin DiGiovanni, senior technical director, APSP.

“It can be done,” he says. “It is being done. There are public pools that have what is called ‘perimeter suction.’ The only openings you see on the bottom are returns carrying water back to the pool.”

According to APSP research, there is no practical basis for the traditional single main drain system; it simply grew out of the 19th-century practice of draining a pool entirely on a regular basis. Pools were already equipped with a drain plug and pipe at the bottom, so the natural step was to simply run a pipe back into the side of the pool and splice a filter and pump into it.

In pools built today without drains, water is simply sucked in by skimmers placed along the coping with returns aimed at the bottom.

“This technology is advancing,” DiGiovanni says, “even in residential pools, and that’s where it’s causing something of a cultural shock — among the old guard of the residential pool builders. They’re saying, ‘Well, you’ve got to have a drain.’

“But that’s not so anymore. I mean, if you look at an aboveground pool — and there are millions of them out there — do they have a main drain? No, they don’t, and they operate very safely and cleanly.

“The technology is there, but a lot of folks think it’s heresy, or that building pools without main drains will hurt their market share. It’s not and it won’t. We’ve got to get over that.”

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