To Whom It May Concern,

It has come to my attention that you may be using water beads in your facility. I am sending this letter to alert you to the dangers of water beads and the serious risks of injury and death they pose to children. These water beads are often marketed and sold under various brand names such as Orbeez, Marvel Beads, Chuckle and Roar, Water Marbles, and more. Although water beads are currently marketed and sold as children’s toys and sensory aids, they were originally designed for agricultural purposes and as decorative vase fillers. Water beads are not safe for children or older individuals who are nonverbal or may have cognitive disabilities.

The gel beads themselves are made of super-absorbent polymers, which expand to hundreds of times their original size when they come into contact with fluids such as water. Many, if not most, of the beads are marketed as “non-toxic,” “biodegradable,” and “eco-friendly.” These labels are essentially unregulated and can be misleading. Some, if not all, of the beads can be contaminated with potentially dangerous and toxic materials, such as acrylamide and BPA (1). Acrylamide has been found to cause cancer in animals and can result in muscle weakness, numbness, and other neurological injuries or abnormalities when exposed to humans. According to the International Agency for Research on Cancer (IARC), acrylamide is “probably carcinogenic to humans”.

The American Academy of Pediatrics (AAP) and the Canadian Paediatric Society have issued warnings about the dangers posed by water beads, which resemble candy and present a significant ingestion risk to children (2, 3). These beads can expand inside the body upon ingestion, leading to life-threatening blockages that are hard to diagnose due to difficulties visualizing the beads on X-rays, which can result in delayed diagnosis and treatment (4). Apart from the risk of ingestion, there have been cases where children inserted water beads into their ears or nasal passages, leading to hearing loss and infections. Surgical intervention is often required to remove these beads. Furthermore, children have also inhaled water beads into their lungs, resulting in lung damage (5). These hazards exist despite careful adult supervision and exclusive use of the beads with older children. The ability of water beads to roll, bounce, and hide in carpets, baseboards, and under furniture means that injuries can manifest long after the beads were last used, with delays ranging from days to months, and sometimes years.

In addition to bowel obstruction, the ingestion, inhalation, and insertion of water beads have been associated with numerous injury incidents. The Consumer Product Safety Commission (CPSC) estimates that over 7,800 children have been treated in emergency rooms between 2016 and 2022 (6). Despite the risks of bowel obstruction, death, and other health hazards, the warning labels on many, if not most, water bead toy products do not adequately warn consumers about these dangers (7).

For all the above reasons, I do not consent to water beads being used with my child. I am formally requesting you to immediately stop using water beads with my child. Additionally, I kindly request that you consider implementing a policy discontinuing their use in your facility as a whole.

Sincerely,

---