Testimony of Michele Frank Executive Director – Pawsible Angels SB 113—Fireworks Legalization and Regulation June 23, 2021

Chairman Stein, Vice Chair Johnson, Ranking Member Lepore-Hagan, and Members of the House Commerce and Labor Committee, thank you for the opportunity to offer testimony regarding Substitute SB 113. My name is Michele Frank and I stand before you as the widow of a Marine and the Executive Director of a nonprofit I founded based out of Findlay Ohio named Pawsible Angels whose mission it is to increase the mental health of communities through the human animal bond.

Fireworks and other explosive materials, whose reactions can produce sparks, flames, and fumes, cause various harms to people living with PTSD, including many veterans, structures, such as people's homes, as well as nonhuman animals. Affected animals are often human companions, and whose reactions we can easily see. Fireworks also harm the other animals who are around us, both in urban environments and outside them, as well as those who are on farms or confined in other spaces.

First I'd like to share with you why and how fireworks harm animals. The hearing of many animals is much more sensitive than it is in humans, so the explosions of fireworks are not only more disturbing to them, but they can damage their hearing more severely. Fireworks can emit sounds of up to 190 decibels (110 to 115 decibels above the range of 75 to 80 decibels where the damage to the human ear begins). Fireworks generate a higher noise level than firecrackers, gunshots (140 decibels), and some jet planes (100 decibels).

Noises caused by fireworks and firecrackers can lead to loss of hearing and tinnitus. Dogs are known to suffer irreversible hearing loss caused by proximity to the noise of gunfire. Dogs are able to hear up to 60,000hz, while humans can't hear anything above 20,000hz, which is only a third of the capacity of dogs. This auditory acuity of dogs is one of the reasons the sound of fireworks can be so harmful to them. They show signs of overwhelming anxiety as they are unable to escape from the sound.

Dogs aren't the only animals negatively impacted by the sound of fireworks. In fact, it is estimated that 79% of horses experience anxiety because of fireworks, and 26% suffer injuries from them. Sometimes they react to fireworks by trying to jump fences and flee to dangerous areas where they can be run over by cars.

In addition to these harms, the noises caused by fireworks harm animals by causing fear. In fact, repeated exposure to unexpected, unpredictable loud noises can cause phobias in many animals, increasing panic reactions to loud noises in the future. 40% of all dogs in the United States suffer from noise phobias. It is estimated that one-fifth of disappearances of animals who are companions to humans are due to very loud sounds, mainly fireworks and storms.

The effects of fireworks on animals can be observed very clearly in zoos. It has been shown that the noise of fireworks makes animals such as rhinos and cheetahs very nervous, also visibly affecting others such as elephants, while rodents continue running minutes after the noises cease.

In addition, firecrackers and other backyard fireworks are poisonous, and their explosion releases harmful particles such as fine dust (PM10) that is toxic to inhale. It can worsen existing diseases and cause others. The chemicals are dangerous for cats and dogs, just as they are for humans with respiratory diseases such as asthma. Careless use of fireworks can also cause mutilations and fatal accidents in animals near the event, as well as causing fires that harm animals.

Next, I ask you to consider how passing this bill would be detrimental to many of our veterans, our veterans who suffer from PTSD. Did you know that rates of post-traumatic stress range from 12% of Persian Gulf veterans to 15% of Vietnam veterans to as high as 20% among post-9/11 veterans, according to the U.S. Department of Veterans Affairs? 100,000 veterans in Ohio are living every day with post-traumatic stress. A recent Virginia Tech study noted: "Fireworks on nights other than the Fourth of July or New Year's Eve might be nothing more than inconsiderate neighbors, but for veterans with PTSD, the shock of noise and light may trigger a deeply-learned expectation of danger." For them, "unexpected surprising events — noise or otherwise — could be a matter of life or death." I ask you why would we want to enact a law that will only cause harm and distress to our veterans.

Finally, I want to share a story with you, a story of a family and I'll introduce the players. The first player is a mom, a mom with PTSD herself, a mom with bipolar disorder, a mom who has to have routine in her life in order to keep her bipolar disorder in check, to stay healthy herself.

The next player is her 13-year-old autistic daughter. Her daughter is very high functioning but still must have routine, needs her sleep, does not do well with things that scare her, does not do well with things that she does not understand and does not do well with things that a normal person would comprehend as a danger, but she gets curious about and it becomes a special interest to her. This includes fireworks.

The last remaining four characters are rescue dogs. These dogs have lived traumatic lives before they came to the mom's house. They didn't come from nice houses. They came from shattered houses, shattered backgrounds with broken hearts.

They were made whole again when they came to the mom's house and their mom worked hard with them to repair their hearts. But that didn't fix their fear. They are still afraid and that fear comes out when fireworks come out. One runs down to the basement to hide and tries to pant himself to death. One gets destructive and destroys property. One tries to bite anything that gets in its way and one paces everywhere. He can't settle.

Mom has medication for these dogs. New Year's Eve and the days that surround it, Fourth of July and the days that surround it, are the predictable days for fireworks. Mom knows this and can provide medicine for these dogs to help just the same as she can provide medicine for her daughter to help with the fear. These medicines are so very helpful, they keep routine and predictability in her house. But, those medicines take 30 minutes to work. So by the time they

start working, the fireworks could be well over, meanwhile everyone is panicked and her 13-year-old daughter has probably tried to leave to go investigate where those fireworks are coming from and how they work.

Talk about a dangerous situation. You have an autistic child who doesn't think like the rest of us going to explore what a firework is and how it works.

This is my house. This is my life. I am a single mom. There is only one of me. I have to be able to control this. I can't just decide my daughter takes priority over my dogs and I can't just decide my dogs take priority over my daughter. I can't crate my dogs; they will bust through the crates. I can't lock my daughter in her bedroom, that's not fair and we don't do that to human beings.

But why should I have to medicate my child or my dogs so that a neighbor can ignite explosives in their backyard in the first place?

Substitute Senate Bill 113 allows discharge of fireworks on the day of and several surrounding days of eight holidays spanning over 10 months, 24 hours/day. The amended version of this bill passed in the Senate is an improvement over allowing discharge 365 days per year, but again I ask you, why should a mom have to medicate her child or her dogs so a neighbor can ignite explosives in their backyard, 20 feet away from the home of a family with special needs?

So I ask of you, what would you propose that I do as a parent in light of this bill. If you pass this, what is my solution. Chairman Stein, Vice Chair Johnson, Ranking Member Lepore-Hagan, I appreciate you allowing me this time. Thank you very much.

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