Important Information Regarding the insert the Name of the Proposed or Existing Mandatory Animal Microchipping Legislation here.

Write a simple introductory paragraph regarding the proposed or existing legislation that pertains to mandatory microchipping of animals in your region or country.

Although those who promote microchips claim the implants are safe, research shows that serious health problems are associated with microchip implants. For example:

1. Cancer: Published scientific studies show a causal link between microchip implants and cancer in laboratory mice and rats. Researchers noted that the tumours arose at the site of the microchips and often grew around the implanted devices. Sometimes the cancer even spread to other parts of the body. In the scientific document entitled *Tumors in long-term rat studies associated with microchip animal identification devices*, the researchers state:

"Electronic microchip technology as a means of animal identification may affect animal moribundity and mortality, due to the large size and rapid growth rate of microchip induced tumors as well as the occurrence of metastases."

Scientific documents also reveal that dogs and cats have developed cancerous growths at or adjacent to the site of their microchip implants. Damaraland mole-rats, small zoo animals, an Egyptian fruit bat and a house musk shrew have also developed microchip-associated cancerous growths.

- 2. Neurological damage: Dogs and other animals have experienced severe neurological damage because of microchip implants.
- 3. Death: Animals have died due to the microchip implant procedure. For example, a microchip was accidentally inserted into the brainstem of a kitten and into the spinal cord of an alpaca. In both cases the animals died. Also, a little dog bled to death because of the microchip implant procedure.

In addition to the aforementioned health risks associated with microchip implants, the U.S. Food and Drug Administration (FDA) lists the following as risks – adverse tissue reaction, migration of implanted microchip, failure of microchip implant, failure of electronic scanner and magnetic resonance imaging (MRI) incompatibility. These risks are explained in more detail below:

- 1. Adverse tissue reaction: Microchip implants have caused animals to develop infections, abscesses and lumps. Animals have also experienced itchiness and hair loss at the implant site.
- 2. Migration of implanted microchip: The microchip can move from the original site of implantation. According to the *Microchip Report 2003* by the British Small Animal Veterinary Association (BSAVA), the elbow and shoulder are "the favourite locations of wayward microchips." Movement of the device can cause health problems for the animal. It also makes it difficult to locate and read the implant.

Although some microchip brands have an anti-migrational sheath on part of the chip that is supposed to prevent the device from moving around the body, researchers who examined microchip-induced tumours in rodents observed that the growths often started at the end of the microchip that had the anti-migrational sheath.

- 3. Failure of microchip implant: The implanted chip can fail for a variety of reasons. For example, scientific documents show that the device can be "lost" within the body and also expelled from the body. Researchers also state that microchips have failed to work "due to microscopic cracks in the weld of the antenna leads to the microchips" and "leakage of the glass capsule resulting in fluid accumulation around the microchip."
- 4. Failure of electronic scanner: According to a published report, none of the microchip scanners tested had 100% sensitivity for any of the microchip brands. Also, according to the same study, one of the "universal" scanners failed to detect or read microchips 25% to 33.6% of the time. Failure of scanners to detect microchips has resulted in the death of microchipped pets. The Journal of the American Veterinary Medical Association (JAVMA) reports on an American Pit Bull Terrier named Hadden who was euthanized at a shelter in Virginia because the scanner could not detect his chip.

One of the reasons that a scanner may not be able to read a chip is because of the "intentional incompatibility" of competing microchip-scanner technologies. Selling microchips and scanners that are not compatible with competing brands is a clear indicator that chipping companies are more interested in protecting their patents and market share than accurately identifying animals via microchip implants.

5. Magnetic resonance imaging (MRI) incompatibility: One of the problems of using microchip implants with MRI machines is that the implant can impede MRI diagnostics. The authors of a Japanese study state:

"There was significant signal loss and image distortion over a wide range around the area where the microchip was implanted. This change was consistent with susceptibility artifacts, which rendered the affected area including the spinal cord undiagnostic."

The FDA also lists failure of insertion device, electromagnetic interference, compromised information security, electrical hazards and needle stick as other risks associated with microchip implant technology.

In addition to the risks associated with implantable microchips, there are other reasons that no one should ever be forced or coerced to have a microchip implanted in their animal. These reasons include, but are not limited to:

- 1. Scientific data and common sense tell us that a foreign object should not be implanted in the body, particularly when other options such as a properly fitted collar with current identification or a tattoo done humanely and professionally are available.
- 2. The cost of the microchip implant, vet fees and registration fees are an additional financial burden on pet owners. Also, if an animal experiences an adverse reaction due to the microchip implant, the medical treatment will result in additional expenses (thousands of dollars if the animal develops cancer). There will also be a physical and emotional toll on the animal and owner if the animal experiences an adverse microchip reaction.
- 3. Many people believe that the microchip implant is the "Mark of the Beast." These people do not want to microchip themselves, their children, or even their animals. As such, forcing people to microchip their animals may infringe upon religious beliefs.

Still, other important questions arise. Some of them are:

- 1. How will mandatory chipping be enforced? Will the attending veterinarian be required to scan the pet for a chip and report clients to the authorities if an animal is not chipped? If so, people opposed to chipping will be reluctant to take their pet to the vet when the animal needs medical care.
- 2. What happens if a person will not or cannot pay the fine for having a non-chipped animal? Will the person be imprisoned? Will the animal(s) be confiscated? Also, if the person is imprisoned or the animal is confiscated, will the animal be re-homed or even euthanized?

- 3. If an animal experiences an adverse reaction to a microchip, who is financially responsible for the medical costs? The manufacturer of the chip, the distributor of the chip, the person who implanted the chip, the veterinary clinic or animal shelter where the chipping procedure took place, the governing body that mandated chipping, or the owner of the animal?
- 4. What legal recourse does a pet owner have if the animal experiences an adverse reaction to the microchip implant?
- 5. Why is mandatory microchipping of animals being implemented around the world, yet it is not mandatory to report an adverse reaction to a microchip implant?
- 6. What guarantee do pet owners have that their pet's chip is legitimate? For example, a letter from Virbac Ltd UK that was published in March 2010 says there are microchips on the market that appear to be Virbac's chips. However, they do not belong to Virbac and the company says it is not liable for any problems caused by these implants.
 - Also, microchipping kits are being sold via the internet. So, how are pet owners supposed to know if the microchip numbers of these chips are valid, or if the insertion devices and microchips are sterile?
- 7. Why are temperature-sensing microchip implants being marketed for use in dogs, cats, horses, alpacas and llamas when company literature says the temperature-sensing devices are not accurate? For example, written in extra fine print in Destron Fearing's Bio-Thermo literature it says:

"The study horse's actual temperature will be 3° higher than Bio-Thermo readings. Knowing this, the horse's manager or veterinarian will be able to quickly and easily identify if the horse's temperature is abnormal by adding 3° to the Bio-Thermo reading."

Destron Fearing's literature for alpacas and llamas says, "A consistent, variation of -1° to -2° is indicated by the Bio-Thermo readings." In order to compensate for the inaccurate temperature reading, Destron Fearing advises the manager or veterinarian of the alpaca or llama to add 1° to 2° to the Bio-Thermo reading.

Manufacturing, selling, promoting or implanting temperature-sensing microchip implants that cannot even read an animal's temperature accurately is simply illogical and unethical, particularly when an inexpensive thermometer can provide an accurate reading. False temperature readings produced by temperature-sensing microchip implants can have disastrous consequences for

animals. Why, therefore, should consumers trust anyone involved with such an unreliable and faulty product?

8. What is the lifespan of an implantable microchip? Pet promotional literature advertises that the microchip implant lasts the lifetime of the pet. However, it is a vague answer to a specific and important question. Human data also fails to provide a precise answer. In 2004, Angela Fulcher, vice-president for marketing and sales of VeriChip Corporation (now known as Positive ID), said, "We believe the tag [microchip implant] can last for 20 years." Other reports, however, indicate that the average lifespan of a microchip implant is 10 to 15 years.

Why, therefore, would anyone consider implanting microchips in animals – particularly animals such as horses who can live into their 30's – when the lifespan of the implant is uncertain? Also, if the microchip stops working, are pet owners supposed to have it surgically removed from their animal? Or are they expected to leave it in and implant a new one? Also, who pays for the replacement and/or removal of the implant?

- 9. What is the purpose of chipping a "dangerous dog?" Will the device make the dog less dangerous? Will the device protect people from being attacked? Wouldn't it be wiser to understand why some dogs become dangerous and solve the root problem rather than inject a foreign object into the animal's body?
- 10. How will the microchip database be run and what measures will be taken to ensure client confidentiality?
- 11. Are those individuals or groups who are trying to implement mandatory chipping aware of the fact that microchips can be cloned, and even infected with computer viruses and worms?

Conclusion:

- 1. No one should ever be coerced or forced to have a microchip implanted in their animal.
- 2. All clauses regarding mandatory microchipping of animals should be immediately withdrawn from the legislation.
- 3. Legislation that bans mandatory microchipping of any animal should be enacted.

- 4. The medical community and those who review or enact animal legislation must examine the health risks associated with microchip implants and warn pet owners of the risks associated with the implants. Veterinarians should also be reminded of their commitment to "First Do No Harm."
- 5. Pet owners should be reminded, through an ongoing public awareness campaign, to put a properly fitted collar with current identification on their pets. Animals could also be tattooed, provided that the procedure is done humanely, professionally and on a voluntary basis. Pet owners should also ensure that their fencing and gates are safe and intact so that animals do not stray from home.
- 6. The public should be educated about providing a calm, safe, loving environment for animals.

An in-depth review of health risks and other problems associated with microchip implants is available in the document entitled *Microchip Implants: Technological Solution or 21st Century Nightmare?* The document, and other valuable animal health information, can be found at the website www.noble-leon.com.

References:

Microchip Implants: Technological Solution or 21st Century Nightmare? This document examines the health risks of microchip implants, the unethical behavior of the microchip industry and the goal to chip all animals and humans - http://noble-leon.com/letters/microchip-implants-technological-solution-or-21st-century-nightmare.html

Reference section for the document entitled *Microchip Implants: Technological Solution* or 21st Century Nightmare? - http://noble-leon.com/letters/microchip-implants-technological-solution-or-21st-century-nightmare-references.html

Scientific documents regarding health risks and other problems associated with microchip implant technology - http://noble-leon.com/resourcesAdvanced/microchips.html

Articles, websites and other helpful information regarding microchip implants - http://noble-leon.com/resourcesLayman/microchips.html