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Thank you Senator Stedman, Vice Chair Senator Micciche, and Members of the Senate Health and Social Services Committee for the opportunity to provide testimony in support of SB 151, an Act relating to chemicals of high concern for children. My name is Susan Walsh and I have served the community of Ketchikan as a nurse for 36 years. I've had the opportunity to assist in the delivery of hundreds of babies and teach childbirth education classes. I am also a recent past president and current board member of the Alaska Nurses Association.

As a health care provider, I wholeheartedly support SB 151 because it phases out a class of chemicals known as chlorinated tris (TDCPP, TCPP, and TCEP) that are known to be particularly harmful to developing children. We now have strong evidence that industrial chemicals that are widely distributed in the environment are significant contributors to a "global, silent pandemic of neurodevelopmental toxicity." A very recently published study informs us that: "The developing human brain is uniquely vulnerable to toxic chemical exposures, and major windows of developmental vulnerability occur in utero and during infancy and early childhood. During these sensitive life stages, chemicals can cause permanent brain injury at low levels of exposure that may have little or no adverse effect in an adult."

In 2012, the Alaska Nurses Association passed a resolution in support of a bill, SB 27, that would have phased out another class of flame retardant chemicals, PBDES, now among the chemicals identified as developmental neurotoxins. Although PBDEs are still in use, some are now banned internationally through the Stockholm Convention on Persistent Pollutants and phased out in the United States. PBDEs are being replaced by the chlorinated tris chemicals that have many of the same properties and health effects. SB 151 would require the Departments of Environmental Conservation and Health to develop a list of chemicals of high concern for children and would thus prevent this type of unfortunate substitution of chemicals that are known to be persistent, toxic, carcinogenic, endocrine disruptors, reproductive or developmental toxins. When there are a variety of safe and economic alternatives that make the use of these toxic flame retardant chemicals unnecessary, we should take that path.

Chlorinated tris chemicals are added as flame retardant chemicals to children's products, yet these chemicals do not confer proven fire safety and are highly hazardous. TDCPP, one of the tris chemicals, was phased out for use in children's sleepwear in the 1970s because it was found to be mutagenic. Both TDCPP and TCEP are known to be cancer-causing, yet still added to children's products including nursing pillows, crib mattresses, nap mats, sleep positioners, play tents and tunnels, car seats—these and other products are ones that children come in intimate contact with. The chemicals are not bonded to the plastic or foam and thus leach out into the indoor environment. Infants, toddlers, and

young children who are often in close contact with the floor and products in the home can be exposed through inhalation and also ingestion of contaminated dust from their hands, toys, and food. Another recent study demonstrated that TDCPP was the most frequently detected flame retardant chemical in a survey of 101 products intended for use by infants and young children. In addition to being carcinogenic, TDCPP is a potent neurotoxicant and mutagenic, and is associated with reproductive harm (damage to the hormone system that decreases thyroid function and fertility in men). TCEP is also carcinogenic and a reproductive toxicant. Although there is little research on TDCPP, laboratory studies show that it is a possible cancer-causing chemical as well, and linked with genetic damage in human cells.

In October 2013, the Alaska Nurses Association passed a resolution calling for meaningful chemicals policy reform on the state level that reduces the use of toxic chemicals and requires that less harmful chemicals be substituted whenever possible and ensures adequate information on the health effect of chemicals is available to the public before these chemicals are introduced on the market. SB 151 is a critical bill for the protection of our children, fire fighters, and other vulnerable populations, and I urge your strong support for passage.

Thank you for your consideration.