Energy Justice Network

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Comments before Senate Committee on Energy and Environment

In Support of

Senate Bill 488

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Energy Justice Network is a national organization that, for two decades, has supported communities throughout Oregon to address dirty energy and waste facilities.

Our extensive research on waste incineration has documented that burning trash is the most expensive and polluting way to manage waste or to make energy. This is documented at www.energyjustice.net/incineration.

This legislation would currently affect only one facility: Covanta Marion in Brooks, Oregon. They are the only trash incinerator in Oregon and the only commercial medical waste incinerator remaining in the western half of the United States. Covanta burns around 14,000 tons of medical waste each year, mostly from out-of-state, turning it into dangerous air pollution and toxic ash that is then buried in Oregon's landfills.

Incineration of trash and of medical waste are both going out of style. There were nearly 200 trash incinerators in 1991 and just 68 left now, with more closing each year and no new community accepting one since 1995. With medical waste incineration, the trend is far more powerful. In 1988, there were over 6,200 medical waste incinerators in the U.S. Today, about 30 remain. In that time, hospitals did not fail for lack of waste handling. The industry moved to clean, non-burn alternatives, primarily autoclaving which steam sterilizes biological hazards without creating more dangerous chemical hazards by burning.

Medical waste is more dangerous to burn than municipal waste, which is why there are more stringent federal standards when burning medical waste. Medical waste can still contain mercury in some cases. It has more plastics, by Covanta's own admission, than normal trash, and much of that is polyvinyl chloride (PVC). PVC is the most toxic plastic to burn, as it contains chlorine and produces hydrochloric acid as well as dioxins and furans. Dioxins/furans are the most toxic chemicals known to science and are produced by accident, primarily by burning materials that contain chlorine. Medical waste can also be contaminated with radioactive materials, whether via adult diapers or mishandling of radioactive sources. Radioactive elements cannot be destroyed by incineration and will end up in some combination of the air and ash.

Waiting for Cleaner Air Oregon does not make sense. Cleaner Air Oregon is a slow process that is not designed to lead to the more protective standards that are already in federal law for modern medical waste incinerators. Cleaner Air Oregon is based on modeling and risk assessment, which are flawed processes aimed to minimize public health impacts. It is not based on actual data like soil and plant tests, and the air testing is not based on continuous emissions monitoring.

One study out of Europe found that using continuous sampling for dioxins at incinerators found the actual emissions to be 32-52 times higher than we think they are in the U.S. when requiring incinerators to test each

unit just once every one to four years under ideal operating conditions.[1,2] A more recent study found that our failure to use continuous sampling technology is underestimating dioxin emissions by 460 to 1,290 times.[3] Considering the lack of continuous monitoring for the most toxic chemicals known to science (dioxins/furans), we cannot expect Cleaner Air Oregon to bring us higher standards when their process is based on undercounting the impacts of incinerator pollution.

In Connecticut, where Covanta is aiming to start burning medical waste at one of their other small trash incinerators, they claimed that all but a handful of states require medical waste to be incinerated. After researching each state, we found that not a single state has such a requirement to burn medical waste in general, and just a handful require tiny subsets of medical waste to be burned – either pathological waste (body parts) or chemotherapeutic waste. Oregon is one of the handful of states that requires burning of pathological waste, but only if an incinerator is available in the region. Pathological waste is only about 1% of a hospital's waste stream, and about 5-7% of their medical waste stream. If Covanta were to burn just pathological waste from Oregon in addition to the trash and liquid industrial wastes they burn, they would fall under the threshold for this bill, and could continue to operate without having to meet more protective standards. There is no need for Covanta to burn standard red-bag medical waste, or anything imported from other states.

However, Covanta's business model is to either monetize their smaller plants or close or sell them off. Among their smallest ten trash incinerators, four have been sold or closed in recent years, Covanta Marion is one of three that currently burn medical waste, and they're working to start burning medical waste at yet another small incinerator (in Connecticut). Covanta makes about $500 more per ton they burn when taking medical waste instead of trash, which is the primary reason why this burning is taking place. This has nothing to do with a need to burn medical waste. It's about a need for Covanta to cut corners and pump money out of small, unprofitable incinerators that otherwise are closing.

This is not fair, however. It's not fair to expose Oregon residents to more pollution than would be allowed if they were subject to the more protective federal standards. Covanta's competitors in the eastern half of the country that burn only medical waste have to comply with this stricter standard. While Covanta burns more medical waste than most of its competitors, its less-regulated cash cow gets to profit at the expense of public health for Oregonians. In fact, with the amount of medical waste Covanta Marion burns, that incinerator is more than six times over the limit of what qualifies as a "large" medical waste incinerator. If Covanta wants to be a medical waste incinerator, let them meet modern medical waste incinerator standards like their competitors do.

Standards for new medical waste incinerators are far stricter than the standards for how much pollution a trash incinerator can put into the air. Because of this loophole for burning medical waste at a trash incinerator, Covanta gets away with spewing more cadmium, lead, mercury, carbon monoxide, nitrogen oxides, sulfur dioxide and hydrochloric acid into the air than would be legal if it were regulated as a medical waste incinerator.

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[1] Annual stack testing is required to be done under optimal operating conditions, and are thus designed not to catch the excessive emissions that occur during startup, shutdown, and malfunction conditions. Also, for dioxins and furans, annual dioxin testing is often allowed to be conducted on just one boiler unit each year, on a rotating basis. This means many units are being tested for dioxins – the most toxic chemicals known to science – just once every two to four years (all but three trash incinerators have two to four units).

[2] De Fré R, Wevers M. "Underestimation in dioxin emission inventories," Organohalogen Compounds, 36: 17–20. www.ejnet.org/toxics/cems/1998_DeFre_OrgComp98_Underest_Dioxin_Em_Inv_Amesa.pdf

[3] Arkenbout, A, Olie K, Esbensen, KH. "Emission regimes of POPs of a Dutch incinerator: regulated, measured and hidden issues." docs.wixstatic.com/ugd/8b2c54_8842250015574805aeb13a18479226fc.pdf