

Hi this is McKenna Morgan. I am with Cascadia Consulting Group, here on behalf of the King County LinkUp Market Development Initiative. And LinkUp is working to advance recycling and support market development for three-tab asphalt shingles through the use in asphalt paving mix. This is an effort that has been ongoing since, for, more than a decade, and has included financial funding through DOE's CPG program, so we know that this is an area of great interest for the State. As you may know asphalt shingles and pavement production not only keep this recyclable material out of the landfill; it also develops/delivers substantial environmental benefits.

Using recycled asphalt shingles in place of virgin petroleum based asphalt binder and paving mix, at the levels authorized by the State Department of Transportation can reduce greenhouse gas emissions impacts of asphalt mix by 7%. In a study by the U.S. EPA in 2013, found that using asphalt shingles reduced the greenhouse gas emissions of asphalt paving mix production by a much more substantial amount than the use of warm-mix production technology, which is the other major strategy for reducing emissions associated with asphalt paving mix production. Recycling asphalt shingles into pavement is a win-win. It conserves resources, reduces pollution, and decreases the flow of a valuable material into landfills.

The LinkUp program is cognizant of the issues that have arisen in the past due to stockpiles of asphalt shingles by misguided or bad actors, but we have also have direct experience seeing successful asphalt shingle recycling that can occur when this material is managed as an integrated element of asphalt production by asphalt producers. And that is where we see great potential for increased recycling of asphalt shingles in Washington State.

The proposed changes to 173-350 standards have the potential to significantly affect the recycling of three tab asphalt shingles in Washington. And we have concerns that they may have a negative effect on asphalt shingles recycling if they have permitting implications for asphalt producers. And so I am here on behalf of LinkUp to seek some clarity about how the proposed changes will apply to the handling and the recycling of three-tab asphalt shingles.

We encourage the Department of Ecology to adopt language that protects the land and waters of our beautiful state, while also ensuring that the climate benefits of recycling asphalt shingles can be realized through responsible handling and increased recycling of this material in coming years.

I specifically have a question about section 21 and the determination of solid waste. Our interpretation of this section is that three tab asphalt shingles possessed by asphalt producers, once ground and ready for use in asphalt mix production would not be considered a solid waste, so long as the material is stored and managed to preserve its value. And stored in a manner that presents little or no risk to human health and the environment. Asphalt producers already operate under sand and gravel permits, so the ground asphalt shingle material onsite at these facilities would be subject to these existing permit requirements, which involve stormwater discharge monitoring and management. We assume in our interpretation that operations that meet those sand and gravel requirements, would be considered to be in compliance with the requirements of section 21 part 3, and we're hoping that Ecology can confirm that our interpretation of this section as it pertains to recycled asphalt shingles is correct.

And then secondly, in section 320 for piles used for storage and treatment, Table 320(a) provides the possibility of exemption from solid waste permits for holders of sand and gravel permits with asphaltic material onsite but does not currently extend the same exemption for asphalt roofing

shingles that would be used in asphalt mix production in a similar manner as asphaltic material. Again, because asphalt plants already operate under sand and gravel general permits but the explicit requirements for stormwater discharge monitoring and management. Our review of those sand and gravel permits related to stormwater management and dust control, our interpretation of that is that those requirements are equal to or more stringent than requirements that would be laid out for outdoor piles under the solid waste handling regulations. So our question is because asphalt plants are already required to be permitted, already subject to local health department oversight, and already responsible for regular monitoring and reporting related to stormwater management, for these permitted facilities that have three-tab asphalt roofing shingles onsite for processing and use in asphalt mix production, we would strongly encourage the Department of Ecology to include an allowance in Table 320 for the sand and gravel general permit to apply to asphalt shingles as well in lieu of the solid waste handling permit in line with the allowance that is made for asphaltic materials. And that's it.