

3.9 Preventing the Spread of Germs and Diseases from the Landfill

Disease vectors must be controlled so that the public health, safety, or welfare are not endangered, and so that they do not create a nuisance. (18 AAC 60.230, 18 AAC 60.233)

What is a vector?

A vector is a carrier of a disease-causing agent. Potential vectors at landfills can be people, dogs, birds, bears, foxes, rodents, insects, four wheelers, flies, etc. At a landfill, anything that comes into contact with waste and leaves the landfill has the potential to be a vector.

It is important to control vectors at the landfill since they can transport germs and contaminants back into the community. Once tracked back to the community, those germs and contaminants can pass to people or food sources. For example, if someone enters the landfill with their four-wheeler and then takes the same four-wheeler to go berry picking, they will transport germs and contaminants from the landfill to the berry patch. If someone drops their trash off at the landfill and walks through soiled baby diapers, and then they don't remove their shoes at the door when returning home, germs will be tracked onto the floor of their home. This particularly endangers small children because they spend so much time on the floor.

How to control vectors:

With so many options for potential vectors, from people to animals to insects to vehicles, it may seem like controlling them is impossible. However, by following a few basic practices at the landfill, it is possible to effectively manage potential vectors and prevent the spread of germs and contaminants.

- Access control: Using a gate to keep the public out and only allowing the operator into the landfill is one of the best methods for controlling the spread of germs and contaminants. Fewer people, vehicles, and animals in the landfill means fewer germs and contaminants leaving the landfill. (For more information, see the section on Access Control.)
- Consolidation: Keeping the waste contained to the working face minimizes the amount of exposed waste at the landfill. Compared to a landfill with waste distributed across the whole site, visitors to a landfill with a consolidated waste pile are much less likely to pick up germs from the waste.



Locked landfill gate with open hours listed.

SOLID WASTE MANAGEMENT IN RURAL ALASKA

- **Burning:** Burning food waste in a burn unit is another good way to reduce the number of germs for vectors to encounter. Burning food waste means the waste isn't decomposing in the landfill attracting flies, and breeding bacteria. (For more information see the section on Burning.) However, while burning reduces the vector attraction at the landfill it also increases the potential health risks to people through exposure to smoke and ash if not handled properly.



People wearing shoe covers at the landfill to avoid tracking germs and contaminants back to the community.

- **Cover material:** Covering the waste with at least 6 inches of compacted cover material prevents many different types of vectors from coming into contact with the waste. The 6-inch depth prevents flies from laying eggs in the waste, birds from scattering trash, and keeps foxes and bears from getting into the waste. Covering the waste is an important part of proper waste management. To control vectors, cover should be added regularly to household trash, animal carcass pits, ash from the burn unit, and septage trenches.
- **Proper management of animal carcass pits and septage trenches** can also reduce the potential for vectors to encounter germs and contaminants. (See the Animal Carcass and Septage sections.)
- **Operator PPE (Personal Protective Equipment):** Operators can also become vectors in the landfill if they do not have separate clothes, boots, gloves, etc. for landfill use. Employers must provide the operator with appropriate PPE.



Operating wearing PPE to protect their clothing from germs and contaminants.

Wearing landfill clothes home is like bringing the landfill into the kitchen. It is a good idea to have a storage shed at the landfill where the operator or trash haulers can change into and out of their dedicated landfill gear when working at the landfill. If a community does not have water and sewer or a dedicated washing machine for dirty overalls and PPE, disposable coveralls and PPE are recommended.