



DISPOSAL OF ANIMAL CARCASSES WITH CHRONIC WASTING DISEASE (CWD)

Diseased animals affected by Chronic Wasting Disease are approved for disposal in Iowa MSW landfills only, provided the Special Waste Acceptance Criteria (SWAC) below is followed.

WHAT IS CHRONIC WASTING DISEASE (CWD)?

Chronic Wasting Disease belongs to a family of diseases known as Transmissible Spongiform Encephalopathy (TSE) or prion diseases, that attack the central nervous system of white-tailed deer, mule deer and Rocky Mountain Elk. Other TSEs include bovine spongiform encephalopathy (BSE) in cattle and scrapie in sheep. While CWD is similar to BSE ("mad cow disease"), there is no evidence that CWD can be transmitted to people. CWD is believed to be transmitted through prions, or misfolded proteins that attack the nervous system of the host, and can be a problem in Iowa's deer herd or game farms. These prions accumulate in the brain, spinal cord, eyes, spleen and lymph nodes of infected animals, but are found ubiquitously throughout the animal.

HOW IS IT SPREAD?

CWD can be spread among deer (or other animals) by both direct and indirect contact between animals and exposure to environments contaminated with CWD prions. Because of this risk, it is important that the carcasses of animals possibly infected with CWD be handled and disposed of in a way that protects uninfected animals from exposure.

DISPOSAL – SPECIAL WASTE ACCEPTANCE CRITERIA (SWAC)

While there are some disposal methods that destroy prions, such as incineration at 1800° F or digestion in sodium hydroxide, these methods are cost-prohibitive. Landfilling in modern, engineered sites is a low-risk and cost-effective strategy for deer carcass disposal. Due to the hydrophobic regions of the CWD molecule, the infectious prions in the environment can be expected to adsorb to organic material in the soil. The landfill liner acts as a protective barrier and should prevent the movement of 'free' prions to subsurface soils or to groundwater. In a mass CWD "event", often time the animal is buried before testing results have verified how many of the herd was infected, thus precautionary measures should be taken. Therefore, the following handling options for landfill disposal shall be followed:

- For single animal burial, the MSW landfill may use the normal practice of disposal at the working face of the fill area, with the addition of six inches of daily cover. The animal should be transported in a container or covering that restricts any release of animal waste during delivery. The landfill shall be contacted prior to delivery and limited worker exposure shall be enforced.
- For large quantities of carcasses delivered for landfill disposal, the following guidelines shall be implemented:
 - The landfill shall be contacted to prearrange delivery for disposal.

- For transportation, the load shall be covered and contained to prevent any escape of animal waste or liquids.
- The carcasses must not be mixed with any other waste and arrive as a separate load. In the transport vehicle, a layer of wood/absorbent chips or some type of absorbent material is recommended to be initially placed down to allow for carcass absorption and compaction.
- A burial pit with significant depth, (deep enough to accommodate the loose soil, animals and cover), shall be pre-prepared and utilized for accepting the carcasses. Loose (uncompacted) soil may be placed in the pit to allow for additional absorption, and immediate covering shall be used with four feet of fill to prevent scavenging, human contact, and odor issues.
- Although there is a consensus among state health and environmental officials that handling and disposal of animal carcasses at MSW landfills poses little threat to landfill workers or the environment, handling should be minimized to limit risks.

***The waste cannot be recycled, reused, reprocessed or relocated back into the environment.** Care should be taken to avoid human contact and should be buried/covered as soon as possible.

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