

# UNITED STATES ANIMAL HEALTH ASSOCIATION - 2009 RESOLUTION

OCTOBER 14, 2009, SAN DIEGO, CA

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**RESOLUTION NUMBER:** 2 APPROVED

**SOURCE:** COMMITTEE ON ANIMAL EMERGENCY MANAGEMENT

**SUBJECT MATTER:** KNOWLEDGE AND CAPABILITY GAPS RELATED TO MASS ANIMAL MORTALITY MANAGEMENT

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## **BACKGROUND INFORMATION:**

Recent natural disasters and animal disease events requiring disposal of mass animal mortality illustrate the need to be prepared for incident-dependant disposal challenges of large-scale poultry and livestock losses. Advantages and disadvantages of existing carcass disposal technologies and environmental health consequences of burial have not been adequately studied, thus the long term impacts of burial remain unknown. Better information on the impact of leachate and gasses produced by burial or composting methods and the impact of end-products of emerging disposal methods is in demand.

Other disposal issues, such as safe and legal disposal of animals possibly affected by prion diseases, reduced capacity of the rendering industry, and the additional disposal restrictions imposed on animal industries as a result of the 2008 Food and Drug Administration (FDA) Bovine Spongiform Encephalopathy (BSE) Ban rule entitled "Substances Prohibited from Use in Animal Food or Feed" require further evaluation of current and emerging disposal methods. Recent livestock industry and American Veterinary Medical Association (AVMA) memos and policy statements also support research to develop appropriate animal disposal mechanisms subsequent to the FDA rule and for disaster response.

## **RESOLUTION:**

The United States Animal Health Association (USAHA) requests that the United States Department of Agriculture (USDA), Agricultural Research Service (ARS) and Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS) work with and encourage the United States Environmental Protection Agency (EPA), United States Department of Health and Human Services (DHHS), United States Department of Homeland Security (DHS), and appropriate research entities to support:

- Expanded research to assess short and long-term impacts on animal, public and environmental health of existing and emerging carcass disposal methods and the development of environmentally-friendly best management practices.
- Animal agriculture emergency management funding streams to enable state and local agriculture or animal health agencies to address gaps in capacity to rapidly handle carcass surges in case of mass animal casualties, such as expanding landfill areas, establishing composting sites, and expanding rendering capacity. Equipment and systems for carcass disposal should be added to the Homeland Security Approved Equipment List to enable states to more readily respond to emergency animal carcass disposal needs.

## **RESPONSE:**

### **USDA-ARS**

ARS stands ready to assist the Animal and Plant Health Inspection Service (APHIS) in developing a better understanding of the impact of carcass disposal methods. We will work with APHIS to understand their research needs in this area.

### **US Environmental Protection Agency**

Let me assure you that EPA shares the goal of your resolution and is jointly involved with the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (USDA/APHIS) in many activities that are designed to support this important capability gap. As you may know, USDA/APHIS is the lead federal agency for animal and plant health issues including carcass disposal during foreign animal disease outbreaks and also supports other causes of animal mortalities, such as natural or man-made disasters. EPA provides technical and research support to USDA and other federal agencies on disposal issues for these events. As a result, EPA is currently working with the agencies named in your resolution on these issues in the following efforts:

- EPA and USDA/APHIS are co-chairs of the White House Foreign Animal Disease Threats Subcommittee Decontamination and Disposal working group which provides input into the US Government's planning activities for research and development to address foreign animal disease responses;
- EPA participates with USDA/APHIS and other federal agencies on the Agricultural Governmental Coordinating Council which has been actively involved in supporting exercises designed to test the government's capability to respond to emergencies involving these issues;
- EPA's National Homeland Security Research Center, working with USDA/APHIS and the Department of Defense, is jointly developing a transportable gasifier for on-farm disposal of large animal mortalities;

- EPA, working with USDA/APHIS, is developing a web-based decision support tool for responders, regulators, and other decision makers to provide information needed for determining appropriate disposal pathways for animal mortalities generated during a foreign animal disease event;
- EPA, working with USDA/APHIS and the National Renderers Association, recently initiated a project to assess fugitive emissions of biological agents from the rendering process and to develop operating procedures to return a rendering plant back to normal operation after it is used for disposal rendering in response to a foreign animal disease event;
- EPA participates with the Department of Homeland Security's (DHS) Food and Agriculture Sector Committee which is also involved in addressing these issues. This DHS committee is made up of all of the federal agencies mentioned in your resolution as well as representatives from the private sector; and,
- EPA is conducting a research project to assess the persistence of H5N1 avian influenza in environmental media and is investigating the use of low-cost, environmentally benign disinfectants and the effectiveness of low tech cleanup methods such as pressure washing and detergents for use in foreign animal disease responses involving the poultry industry.

As your resolution states, there are numerous research gaps related to carcass disposal. As you can see, EPA is very involved in addressing this gap and will continue to work with USDA/APHIS and other federal and state partners in supporting efforts to improve this important capability. Thank you for your associations work in bringing recognition to this important need. I am sure our joint efforts in this area will help improve this capability.

#### **INTERIM RESPONSE**

The U.S. Department of Agriculture, Animal and Plant Health Inspection Service (APHIS), Veterinary Services appreciates the United States Animal Health Association's interest in mass animal mortality management.

APHIS supports this resolution and has initiated several projects in collaboration with the Agricultural Research Service (ARS), the Department of Homeland Security (DHS), and the Environmental Protection Agency (EPA) to address some of the concerns mentioned in the first part of the resolution. APHIS is participating in a project funded by EPA and conducted by ARS at the Plum Island Animal Disease Center in New York. The project investigates the efficacy of generic disinfectants on animal pathogens on various types of surfaces. The goal of the research is to improve APHIS' biocontainment capabilities. Another Plum Island project was planned to investigate the ability of composting to inactivate foot-and-mouth disease virus. However, Canadian collaborators had conducted the same study and gave APHIS their data. Therefore, APHIS canceled the research project.

APHIS also recently funded an EPA project investigating the fugitive biological emissions (if any) from the rendering process to quantify the risk of disease transmission during rendering of diseased animals. If significant risk is found, the work will evaluate potential risk mitigation measures. APHIS and EPA are also collaborating on the development of an online agricultural biomass decision support tool that provides critical information to responders regarding the location of possible carcass disposal facilities in the United States.

In addition, APHIS often collaborates with States and universities on research projects that are funded by other agencies such as the National Institute of Food and Agriculture and DHS.

However, these projects are a small fraction of the work that is needed to ensure adequate animal emergency response capabilities. Based on work performed by the White House Subcommittee on Foreign Animal Disease Threats, the research gaps related to carcass disposal are numerous, and the projects that have been funded represent a small percentage of the total need. Therefore, APHIS concurs with the resolution and will continue to investigate resources for addressing critical capability gaps.