Animal Carcass Disposal

"What must I do to be Prepared?"

- 1. <u>Decide</u> if I want a plan for:
 - ❖ A routine disposal situation
 - ❖ A catastrophic disposal situation
 - Both routine and catastrophic disposals
- 2. Choose an appropriate disposal option(s)
- 3. <u>Identify</u> appropriate disposal sites
- 4. Prepare a written plan
- 5. Be ready to <u>implement</u> the plan by having disposal resources available on-site, or by knowing where to obtain them quickly.

The key to efficient, environmentally-sound carcass disposal is to have a plan developed and ready to go before a disaster strikes!!

Animal carcass disposal is an issue that confronts all livestock producers at one time or another. Farm animal mortalities can create emotional stress and economic hardship on producers, who must develop and implement an appropriate disposal plan for the carcasses. The specific carcass disposal method may vary depending on whether the situation involves expected, daily mortalities (routine mortalities), or if a large number of animals die simultaneously resulting

from accidents, a natural disaster or infectious disease (catastrophic mortalities that constitute an emergency situation).

When developing a plan and choosing a site for routine mortality disposal, or especially if a catastrophic loss has occurred, guidance may be obtained from a professional soil scientist, the Department of Agriculture, the University of Maine Cooperative Extension, the Natural Resources Conservation Service, or a local Soil & Water Conservation District.

Why is Proper Carcass Disposal Important?

There are many factors that should encourage us to achieve prompt, efficient carcass disposal:

- Odor and insect management concerns
- Potential ground or surface water contamination
- Prevention of disease dissemination within and beyond the farm site
- Aesthetic effects on neighbors or the general public
- Future uses planned for the disposal site
- ❖ Avoidance of nuisance complaints

The key for achieving these goals is preparation of a practical, aesthetically and environmentally sound plan in advance of the need for routine disposals, and before a catastrophic situation develops.

How can I Prepare for Proper Carcass Disposal?

Most farming operations have developed an acceptable method for disposal of routine animal mortalities. In the event of a catastrophic loss, however, routine disposal methods will not suffice. Similarly, if a contagious disease situation exists, <u>immediate action</u> is required and disease containment procedures must be in place. Therefore, in addition to having a plan for routine mortalities, farm owners or managers must develop a catastrophic carcass disposal plan that will guide themselves, as well as provide specific details about the farm to emergency response team members from state or federal agencies, if a disaster strikes.

What Information Should be Included in my Routine or Catastrophic Carcass Disposal Plan?

- Maps depicting property boundaries, water bodies, roads, fences, buildings, wells, fields, woods and similar features
- Soil maps depicting soil types on the farm, slopes, or other site conditions that could be useful information for locating on-site disposal areas. Aerial photos will be helpful, if available
- Several potential disposal sites that are located on maps, based on the suitability of soil types, slopes, soil drainage criteria and depth to bedrock
- Specific site setbacks from wells, roads, buildings, water bodies and property lines
- An assessment of ease of accessibility to the disposal site. Generally, "higher ground" works better than other areas. Weather conditions such as snow or wet fields in the spring or fall may impede access to the site and complicate the disposal process, and...
- Consideration of your future need for the site. Farming practices in the disposal area may be restricted indefinitely

What Options do I have for Carcass Disposal?

There are a number of options utilized across the country for carcass disposal. Some of these options work very well, while others may present challenges. If an infectious agent is involved, carcass disposal should be done quickly and on-site to minimize the spread of disease. Regardless of the disposal system that is selected for use, appropriate "best management practices" should be implemented during all phases of the process. Although other options may be utilized, the most common practices for disposal have included:

- ❖ Burial
- Incineration
- Composting

Burial

- ✓ A common practice for many years
- ✓ May be an effective practice for small numbers of carcasses
- ✓ Large numbers of carcasses:
 - ■If buried deeply, do not decompose readily
 - May remain intact for many years
- ✓ May threaten ground water quality
- ✓ Will minimize options for future uses of the site
- ✓ Problematic if disease organisms are present

Incineration

- ✓ Has been an effective disposal method for routine mortalities on poultry farm
- ✓ May result in air pollution, odors, and the spread of disease organisms
- ✓ No longer is a viable option for most routine or catastrophic carcass disposal operations

Composting

- ✓A growing, preferred method for carcass disposal
- ✓ Used on many large and small livestock farms for routine disposals
- ✓ An efficient, cost-effective alternative to other methods of disposal for catastrophic losses
- ✓ Most pathogens are inactivated within several days if the process is conducted properly
- ✓ May not tie up the site for a long period of time
- ✓ Results in a stable, environmentally-beneficial product that can be used on farm fields and potentially can be sold

Regardless of the disposal method, if a large number of mortalities have occurred, a soil scientist or other specialist should be enlisted for appropriate site selection and for developing procedures that will minimize environmental impacts.

Will I be Able to Develop a Carcass Disposal Plan Myself?

Yes, for most routine disposals if appropriate procedures are selected and implemented. The Department of Agriculture has established requirements for carcass disposal that recognize the potential environmental impacts of varying volumes of carcasses that must be discarded. Other requirements recognize that disposal procedures must be modified if infectious disease organisms are present. If infectious disease organisms are present, Department of Agriculture and other officials must be notified and technical assistance and guidance will be provided during the disposal operation.

What Factors Should a Farmer Consider When Selecting a Carcass Disposal Site?

- Potential numbers and species of animals required for disposal
- * Routine mortalities must be expected, but catastrophic losses may occur and require an emergency disposal operation
- How much land do I have immediately available on-site, and is it suitable for the volume of carcasses I must discard?
- Season of the year -will it happen on a hot summer day in August or on a cold day in January when the ground is frozen and snow-covered? Several acceptable sites should be selected
- Whether special precautions must be taken to minimize the spread of disease within my own operation or to other farms
- Site topography, drainage, slopes, depth to bedrock and soil depth to the seasonal ground water table, and...
- Site setbacks from water bodies, wells, property lines, and neighbors' homes

Are Technical Resources Available to Assist Me with Carcass Disposal?

Yes. Technical resources and guidance are available for site selection and plan development to help you prepare for either a routine or a catastrophic loss. This information is available from Maine Department of Agriculture staff and from other agencies. If a catastrophic loss has

occurred, The Department of Agriculture may request support from the Department of Environmental Protection, the University of Maine Cooperative Extension, or the Natural Resources Conservation Service, and from federal agencies.

The Department of Agriculture's "Chapter 211 Rules for the Disposal of Animal Carcasses", and booklet "Animal Carcass Disposal - Site Selection and Methods" also are available and provide the reader with detailed information for carcass disposal.

Disposal of animal carcasses, particularly large numbers of mortalities resulting from a catastrophic event, can be stressful, but the impact can be minimized if proper carcass management techniques are adopted and a detailed plan is developed **before** a disaster strikes.

For more information, contact the Nutrient Management Coordinator at 207-287-7608 or e-mail: mark.hedrich@maine.gov.

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" What must I do to be prepared?"



YOU should read this if you own, raise, or board animals

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