**Lewis**

**County Animal Disaster**

**Plan**

**Lewis County Animal Disaster Plan**

I. Introduction

II. Purpose

III. Mission

IV. Scope

V. Agencies / Responsibilities

VI. Planning Assumptions

VII. Concept of Operations

 A. General

 B. Notification and Communication

 C. Public Information

 D. Response

 1. Search and Rescue Procedures

 a. Equine, cattle, and other livestock

 b. Domestic pets

 c. Steps for Search and Rescue Procedures

 d. Wildlife

 2. Evacuation and Sheltering of Animals

 a. Evacuation / sheltering of equine, cattle, and other livestock

 b. Steps for the evacuation / sheltering of equine, cattle, and other livestock

 c. Evacuation / sheltering of domestic pets

 d. Steps for the evacuation / sheltering of domestic pets

 3. Stray / Lost Animal Procedures

 a. Equine, Cattle, and Other Livestock

 b. Domestic Pets

 E. Additional Aid

 F. Incapacitation of Shelters

 G. Shelter Staff and Supplies

 H. Medical Assistance

 I. Bites and Disease Control

VIII. Recovery

Appendix A – Dog and Cat Owning Households in Lewis County; Livestock Populations in Lewis County

Appendix B – Public Education Messages

Appendix C – Animal Care Resources

Appendix D – Animal Holding or Confinement Areas for Lewis County

Appendix E – Hotels and Motels Accepting Animals

Appendix F – Animal Transportation Resources

Appendix G – Guidelines for Handling Equine and Cattle During Emergencies

Appendix H – Emergency Housing and Care for Dogs and Cats

Appendix I – Veterinary Resources

Appendix J – LCART Training Requirements, Code of Conduct, and Members List

Appendix K – Licensed NY Wildlife Rehabilitators

Appendix L – Glossary

 1. Glossary

 2. Acronyms

Appendix M – Natural Resources Conservation Service Conservation Practice Standard Animal Mortality Facility Code 316

Appendix N – County Radiological Ingestion Pathway Information Guide

Appendix O – New York State Radiological Emergency Information for the Agricultural Community

Appendix P – Dog Control Officers of Lewis County

Record of Change

Record of Distribution

**I. INTRODUCTION**

Lewis County has identified the necessity of a countywide plan to address the needs of animals during a disaster or other emergency. This plan shall organize all the contributions of the agencies, farms, businesses and individual citizens of the county to provide for the daily needs of owned, stray, companion or wild animals.

The plan shall endeavor to address the needs of both pets and livestock during a natural, technological, or human caused disaster. Many of the residents who will be affected by a disaster own pet that will also need shelter, food/water, and medical care in the event of an emergency (Appendix A). Disasters in other parts of the United States have taught us that many people will decline going to a shelter or fail to evacuate if adequate facilities or plans are not also available for their pets. Therefore, this plan is intended to complement the plans already in place for the evacuation and shelter of people such that pet-friendly shelters can be created when needed. A pet-friendly shelter is an emergency shelter for pets located within the same area or facility as an emergency shelter for people. Thus, allowing pets to remain with their owners and have owners, with assistance, continue to provide for their pets’ daily needs.

This plan shall also endeavor to provide resources for livestock (Appendix A) in the event of a disaster. While, in general, the agriculture community is excellent about helping each other in the event of an emergency, these lists of community resources shall help to expedite the process of relocating and/or caring for livestock in an emergency.

The plan will serve as a guide to provide pre-disaster public education and to determine the appropriate responses to a disaster. It will include short-term and long-term recovery processes that residents can take to keep their animals safe during a disaster, especially if they have to evacuate without their animals. If possible, all animals will be reunited with their owners. If the animals cannot be returned to their owners, they will be handled in accordance with established animal control regulations and procedures. This plan will also address the need to protect livestock, public health, public food supply and the environment.

A. Estimating Lewis County’s Owned Dog and Cat Population as well as Livestock

 Numbers. Determining the number and type of animals in Lewis County is an important component of planning for an emergency. Estimating the number of companion animals in the area, as well as ascertaining what livestock industries and how many animals those industries represent, is crucial for resource planning.

1. The formulas used in the accompanying documents are very rough estimates of dog and cat populations, as well as livestock numbers, for particular areas of the county. They are based on national averages and do not account for variables among regions, states, and communities. The Lewis County Animal Response Team must account for such variables and make the necessary adjustments in resource planning, etc.

a. Lewis County’s rural basis tends to lean toward multiple cat and dog households/environments (for example, barn cats, limited financial resources for spaying/neutering, etc). Therefore, it should be speculated that the percentage of dog and cat-owning households is higher than the national average, as well as that the number of dogs and

 cats owned per dog and cat-owning households are higher than estimated.

b. It has been the experience of national animal protection agencies and humane societies that many people care and look out for animals that they define as stray (not owned) so this variable could also increase the population numbers.

2. Information regarding the number of dogs licensed for a particular locality was not used to gauge the owned pet population because of poor compliance.

3. The formulas used in the accompanying documents do not reflect companion animals that have no guardian.

4. Local surveys were considered the most accurate way to gauge the owned pet population for a particular jurisdiction by the international City/County Management Association but may be prohibitively expensive.

Appendix A – Dog and Cat Owning Households in Lewis County; Livestock Populations in Lewis County

II. PURPOSE

The purpose of this plan is to serve as a guide for the preparation, response and recovery process regarding animals, including pets, livestock, and wild animals, in Lewis County in the event of a natural or man-made disaster. These guidelines are intended to streamline the process of providing assistance to animal owners and to access resources that can be used to provide for animal care. This plan will be comprehensive from a single farm emergency to a county level disaster. This plan will:

- Serve as a source for the development of a public education program to assist

 pet and farm owners in developing individual disaster contingencies for their

 animals and families.

- Serve as a written guide for providing individual animal care and minimizing

 animal suffering.

- Outline steps to ensure agency preparedness.

- Define a specific chain of command for operations during disasters.

- Identify how the plan will be implemented.

- Define how each agency will contribute to the overall mission of this plan.

- Identify a county-based County Animal Response Team (CART) using current

 available resources.

- Identify a strategy to train new response team members who volunteer from

 within our community.

- Address issues surrounding worker protection and response.

# III. MISSION

The mission of the Lewis County Animal Response Team (LCART) is to coordinate animal response and care agencies within Lewis County. These agencies may respond and provide immediate and accessible services to pet and livestock owners within Lewis County in the event of a disaster or other emergency.

**IV. Scope**

A disaster is a natural or man-made event of severity and magnitude that normally results in deaths, injuries and property damage that cannot be managed through the routine procedures and local resources. This plan is also intended to help emergency personnel providing assistance during smaller disasters, such as barn fires.

Disasters require an immediate, coordinated, and effective response by multiple government and private sector organizations. The logistical, medical, economic and emotional needs of county residents and responders must be met in order to speed the recovery effort.

For the purpose of this plan, it is assumed that a number of individuals that would require sheltering within Lewis County in the event of a disaster would be pet owners. National statistics show that about 20% of households refuse to evacuate during a disaster because of their pets. Some households will leave pets behind and then return to the disaster site to rescue them after a period of time. These situations constitute a potential problem for individuals who place themselves in additional danger during a disaster situation, as well as creating added stress on already taxed rescue services. The information found in Appendix A, shows the estimated population of dogs, cats, cattle, horses, sheep, swine, and poultry in Lewis County.

Should a significant natural or man-made disaster occur, it might quickly overwhelm local government resources and their capability to provide the necessary services, worsening the situation the populace of the county is already facing. It is also assumed that such an event would pose a potential public health threat. Therefore, it is critical to identify and address in a timely manner animal welfare issues such as injured or displaced animals, dead animals, and animals with rabies or other animal-related diseases. Recent disasters throughout the United States and even in New York have left behind disease and unpleasant clean-up situations when an animal plan has not been established. The lack of planning or belief that animals can fend for themselves during a disaster leads to serious problems when they are forced from their habitats due to abandonment, injury, and hunger.

By developing operating procedures to care for these animals prior to such an event, this plan will reduce health and safety risks, as well as support the resources of crucial response agencies.

**V. Agencies and Responsibilities**

**A. Primary Agencies - Responsibilities**

 1. Lewis County Emergency Management

 - This agency is responsible for the overall direction and the control of the emergency incident.

 - To coordinate support agencies for managing animal protection in emergency situations occurring in Lewis County.

 - To activate the Emergency Operations Center, if necessary, depending on the scope of the disaster.

 2. Lewis County Public Health Department

 - To provide services to address injuries/bites/diseases related to the protection of humans and animals.

 - To assist with the disposal of deceased animals that may impact public health to minimize zoonotic disease outbreaks during an emergency.

 3. Cornell Cooperative Extension of Lewis County

- To assist in identifying and procuring additional resources, expertise, volunteers, and equipment as required to care for livestock and large companion animals during an emergency.

 - To assist the LCART in identifying, surveying, and maintaining a list of large animal and equine sheltering facilities and transportation resources.

 4. Lewis County Soil and Water Conservation District

 - To provide support for mortality disposal and assist with water quality testing.

 - To coordinate the disposal of deceased animals that may impact public health to minimize environmental impact during an emergency.

 5. New York State Department of Agriculture and Market Veterinarians

 - To enforce state regulations concerning animal health and the movements of animals affected by those regulations.

 - To assist in providing information and direction with regard to the general animal health.

 - To assist in identifying and procuring additional resources, expertise, volunteers, and equipment as required to care for livestock and large companion animals during an emergency.

 - To assist with the disposition of diseased or injured animals and to assist with the disposal of deceased animals by identifying landfills or other

 mass carcass disposal resources.

 6. Lewis County Veterinary Clinics

 - To assist in providing information and direction regarding the general health of both companion and livestock animals.

 - To provide assistance in identifying the needs of animals in shelter situations.

- To provide, in accordance with clinic policy, trained personnel, equipment, and shelter as required to care for sick or injured pets from evacuated citizens and in cases when established animal shelters are filled or destroyed.

 - To provide medical care for both companion and livestock animals.

 7. Lewis County Humane Society

 - To provide volunteers to assist in the protection of animals during an emergency shelter situation.

 - To work with LCART personnel in the coordination of sheltering animals at the LCHS facility and to assist at other emergency shelters as needed.

 - To coordinate personnel, equipment, and the shelter facility, as required to shelter and care for companion animals.

**B. Support Agencies - Responsibilities**

 1. Empire State Animal Response Team (ESART)

 - To support the identification and coordination of all agencies (local,

 federal, other) and resources involved with the emergency.

 2. American Red Cross – Black River Valley Chapter

 - To coordinate with the LCART volunteers in organizing and maintaining a pet-friendly animal shelter in conjunction with a human shelter in the

 event of an emergency.

 3. New York State Department of Health

 - To provide services to address injuries/bites/diseases related to the protection of humans and animals.

 - To coordinate the disposal of deceased animals that may impact public health to minimize environmental impact during an emergency.

 4. Lewis County Dog Control Officers

 - To provide personnel and equipment to collect and rescue stray or aggressive companion animals.

 - To assist in identifying, surveying and maintaining a list of small animal shelter facilities and transportation as part of the LCART.

 - Appendix P – Dog Control Officers of Lewis County

 5. Lowville Farmers Cooperative

 - To provide volunteers, personnel, equipment, and shelter, as required, to assist in the care of livestock during an emergency.

 6. Private Farms, Kennels, and Stables

 - To provide shelter and supplies to care for companion animals and/or displaced livestock.

 - Appendix D – Animal Holding or Confinement Areas for Lewis County

 7. New York State Department of Environmental Conservation (NYSDEC)

 - To provide trained personnel and equipment, as required, to protect or address sick and/or injured wildlife.

 - To coordinate measures to minimize damage and danger to wildlife, as appropriate.

 - To coordinate the disposal of deceased animals that may impact public health to minimize zoonotic disease outbreaks during an emergency.

 - Provides guidance on water quality, Concentrated Animal Feeding

 Operations (CAFOs), and manure spills.

 8. Licensed Wild Animal Rehabilitators

 - To provide housing and care to sick and/or injured non-domestic animals in coordination with NYSDEC.

 - Appendix K – Licensed NY Wildlife Rehabilitators

**VI. Planning Assumptions**

A. Through effective animal protection planning and organization, all disaster relief efforts will be more expedient.

B. The owners of domestic pets (including exotics) or livestock, when notified of an impending emergency, will take reasonable steps to shelter and provide for animals under their care and/or control.

C. Owners of animals should make every effort to have all animals identified and to maintain records of this identification. Identification is key to returning displaced animals to their owners after a disaster.

D. Natural, technological, or manmade disasters could affect the wellbeing of domesticated and/or non-domesticated animals.

E. Lewis County should plan for animal-related emergency situations and to carry out response and recovery operations utilizing local resources. State, federal, and private organizations may provide animal care and rescue assistance in emergencies, when requested.

F. Animal protection planning should ensure the proper care and recovery of animals impacted during an emergency. These plans should include measures to identify housing and shelter for animals, establish methods of communicating information to the public, collect stray or lost animals, procure necessary supplies for the care of the animals, and plan for animal release and return to owners or to natural habitat for wildlife.

G. Public information statements will be issued through the various media outlets. This information will encourage pet owners to evacuate their animals with them to appropriate shelters that will also have facilities to shelter their pets (pet-friendly shelters), as well as provide the locations where animals may be accepted for sheltering without their owners. Information will be provided for livestock owners to provide assistance with keeping livestock in place or transportation and facility options.

H. A large-scale emergency in Lewis County may warrant an immediate response from state and local personnel, agencies, and organizations. However, emergency situations may become compounded due to the nature of the emergency and may also require activation of additional specialized agencies through mutual aid agreements.

**VII. Concept of Operations**

**A. General**

1. The primary and support agencies will manage and coordinate local animal protection activities. These agencies will use established animal protection and support organizations, processes, and procedures. Responsibility for situation assessment and determination of resource needs in the event of a large-scale emergency lies primarily with Lewis County Emergency Management and the local incident commander, in cooperation with Lewis County Public Health, Cornell Cooperative Extension of Lewis County, Lewis County Soil and Water Conservation District, and local incident coordinators.

2. When County resources and mutual aid agreements are insufficient, requests for animal protection assistance and resources such as food, medicine, shelter material, specialized personnel, and additional veterinary medical professionals, will be transmitted through the Lewis County Emergency Management Office to the New York State Emergency Management office. Should the need for State or Federal resources arise, the State Emergency Operations Center will coordinate the requests for assistance.

3. Animal protection operations will be managed under the Lewis County Incident Command Master Plan (ICS). Public health concerns will be managed in accordance with appropriate Lewis County plans and procedures.

4. Animals included under the plan:

 a. The sheltering, protection, and identification of companion animals

 and livestock are the responsibility of their owners.

 b. Companion animals that are lost, stray, incapable of being cared for by

 their owners, or a danger to themselves or the public will be the

responsibility of the Lewis County Animal Response Team. These animals will be sheltered, fed, and, if possible, returned to their owners.

 If the animals cannot be returned to their owners, their disposition will

 be handled in accordance with established animal control guidelines.

 The animal control guidelines regarding holding periods may need to be

 extended to provide time to locate owners during a time of disaster.

 c. Wildlife should be left to their own survival instincts. Wild animals out

 of their natural habitats that are a danger either to themselves or the

 public will be the responsibility of the NYS Department of

 Environmental Conservation, in cooperation with local veterinary

 medical personnel and wildlife rehabilitators. These animals will be

 returned to their natural habitat if possible.

 Appendix K – Licensed NY Wildlife Rehabilitators

**B. Notification and Communications**

This plan and its procedures will be activated in the event of an emergency that results in a significant need for animal protection. Lewis County Emergency Management will determine when these procedures will be implemented and notify the appropriate primary, support, and mutual aid agencies. Lewis County Emergency Management will maintain a call down notification system.

Communications among the emergency management coordinator, the County Animal Response Team, and support agencies will occur primarily through telephone, facsimile, and cellular telephone transmission. Amateur radio will be used as a backup system if other communication is impossible due to the nature of the emergency situation. Lewis County Emergency Management will maintain a list of radio and TV stations for the purpose of public notification when necessary.

Step 1 – Emergency Management Coordinator contacts the designated lead member of the Lewis County Animal Response Team (LCART), who will serve as part of the Lewis County Emergency Management Office structure.

Step 2 – The Lead Member of the CART initiates call-down procedure to members.

Step 3 – The Lead Member of CART or his/her designee from the CART membership will contact additional support agencies as needed.

**C. Public Information**

1. The Lewis County Public Information Officer (PIO) will be responsible for the coordination of all media activities and press releases associated with the protection of animals. Responsibilities may include:

 a. Notifying the public of appropriate shelters at which to leave lost/stray

 animals, animals that citizens cannot care for, or animals that need

 immediate medical assistance. (Appendix B)

 b. Delivering instructions to the public to prepare their pets or farm

 animals for an impending emergency. (Appendix B)

 c. Obtaining animal-related information from members of the CART

 and/or its support agencies.

 d. Promoting public awareness and instructing animal owners on how to

 prepare and react to all types of disasters through literature, community

 relations and/or seminars.

 e. Disseminating public messages for the purpose of recruiting of

 volunteers to assist where needed in the event of a disaster.

2. Steps:

 a. The Public Information Officer will work with the CART prior to an

 animal incident to develop press release templates for anticipated

 animal emergencies.

 b. During the response phase, the Lead Member of CART will provide

 continued updates to the PIO on the animal response effort. This will

 include general information on the response and special instruction for

 the general public, as well as for pet owners, local veterinarians,

 shelters, agricultural producers, etc. as applicable.

 c. The PIO will provide information to the media, public and key

 audiences as appropriate.

**D. Response**

Potential hazards, such as flash flooding, ice/snowstorms, and hazardous materials incidents, may require evacuation of selected areas. The actual emergency situation will determine the scope of the evacuation and the number of evacuees from a specific area. The owners of pets or livestock, when notified of an emergency, will take all reasonable steps to evacuate, shelter, and care for animals under their control.

 1. Search and Rescue Procedures

 a. Equine, cattle, and other livestock

Equine, cattle, and other livestock loose or in need of assistance due to the emergency will be the responsibility of the owner; or in the event of the death or evacuation of their owners, will become the responsibility of the Lewis County Animal Response Team (LCART), in so much as all reasonable steps will be taken to provide assistance. All reasonable steps will be taken involve the owner in this process. However, the LCART will identify key people who have animal handling training and understand the basic emergency management concepts (ICS training) to assist rescue efforts if needed.

 Appendix C– Animal Care Resources

 Appendix F – Animal Transportation Resources

 Appendix G – Guidelines for Handling Equine and Cattle During

 Emergencies

 Appendix J – LCART Training Requirements, Code of Conduct, and

 Members List

# b. Companion animals

Companion animals loose or in need of assistance due to the emergency will be the responsibility of the owner. In the event of the death or separation from their owners, pets will become the responsibility of the Lewis County Animal Response Team (LCART). All reasonable steps will be taken by LCART to provide assistance under these circumstances. Prior to an incident, LCART will identify key people who have animal handling training and understand the basic emergency management concepts (ICS training) to assist rescue efforts.

 Appendix C – Animal Care Resources

 Appendix D – Animal Holding or Confinement Areas for Lewis County

 Appendix F – Animal Transportation Resources

 Appendix H – Emergency Housing and Care for Dogs and Cats

 Appendix J – LCART Training Requirements, Code of Conduct, and

 Members List

 c. Steps for Search and Rescue Procedures

1. Identify trained individuals in animal search and rescue techniques prior to an incident. (Appendix J)

2. Incident commander identifies geographic areas requiring search and rescue efforts and activates team.

3. A representative of the LCART determines that the livestock or companion animal is able to be cared for by its owner. If the owner is incapacitated or cannot be found; the animal becomes the responsibility of the LCART.

4. Trained personnel assess and document medical condition and temperament of animal.

5. Apply triage on-site if necessary or move animal to treatment facility or shelter using pre-arranged methods of transportation.

6. Document all pertinent information and ensure that a tracking system is in place to return animals to owners.

 d. Wildlife

Non-domestic animals out of their natural habitat that are endangering either themselves or the human population will be handled in accordance with New York State Department of Environmental Conservation guidelines. If possible, non-domestic animals outside of their natural habitat will be transported back to their natural habitat. Licensed wildlife rehabilitators may be able to provide care and handling of wildlife that need to be relocated or are injured.

 Appendix K – Licensed NY Wildlife Rehabilitators

 2. Evacuation and Sheltering of Animals

 a. Evacuation / sheltering of equine, cattle, and other livestock

 In most cases, equine, cattle, and other livestock should be sheltered in place. If not feasible, animals will be transported to private or public facilities by the owner of the animals with assistance from the CART. Livestock owners should have evacuation plans, including multiple evacuation routes decided upon before the need to evacuate arises. Owners are expected to have official identification on all animals.

If needed, the Lewis County Animal Response Team will provide assistance or facilitation in the transportation of evacuated livestock to a shelter or a medical care facility. The owner of any equine, cattle, or other small livestock animals that must be sheltered at private or public facilities will be responsible for care costs. The LCART will ensure that a tracking system is in place to unite sheltered horses and livestock with their rightful owners. Cleaning and disinfection of transport vehicles will also be overseen by CART. Transportation will be provided by individuals licensed as livestock haulers when possible. Other private horse owners with trailers will also be available to assist with transport. The livestock owner is expected to reimburse transport personnel.

Every effort will be made to prevent the spread of communicable diseases during the shipping/sheltering period through prevention of co-mingling of animals and appropriate isolation, cleaning, and disinfecting protocols. If practical, vaccination of animals and measures to control internal and external parasites will be employed. These protocols should be established in consultation with a NY State Department of Ag and Markets Veterinarian.

If the need arises, the County Animal Response Team may provide an equine and/or livestock shelter. Animals will be evacuated and sheltered by the owner, or the owner may request assistance from the Lewis County Animal Response Team. Shelters or non-occupied facilities may be difficult to find and maintain for an emergency only basis. Evacuated livestock may need to have shelter at private boarding barns or with private individuals, pending the availability of liability insurance and biosecurity measures. A list of such facilities shall be kept but can and likely will change according to available space. The Lewis County Fairgrounds can be used as a large animal shelter, depending on the time of year and type of livestock.

 Appendix C – Animal Care Resources

 Appendix D – Animal Holding or Confinement Areas for Lewis County

 Appendix F – Animal Transportation Resources

 Appendix G – Guidelines for Handling Equine and Cattle During

 Emergencies

b. Steps for the evacuation / sheltering of equine, cattle, and other livestock

1. Attempt to shelter livestock in place. If the farm is threatened (e.g. rising flood waters), inform livestock owners of the need to evacuate their animals.

2. Determine if there is a need for CART to activate livestock shelters at pre-determined sites, i.e. with individual facilities or the Lewis County Fairgrounds.

3. Determine type and quantity of resources needed. Contact pre-arranged suppliers to have resources delivered to distribution location.

 4. Activate volunteer resources for care of animals in the CART shelters.

5. Provide information to livestock owners about the locations in which animals may be sheltered.

6. Provide information to owners on what items should be taken with the animals (tack, feed, water, medications, records, etc.).

7. Provide assistance in obtaining transport of livestock, if requested by the owner.

8. Ensure that livestock haulers contracted by the CART are using effective protocols for maintaining biosecurity when transporting animals.

9. Ensure that a tracking system is in place to reunite animals with their owners after the incident. For large livestock, this should include identification that can be easily seen from a distance.

10. Maintain strict biosecurity protocols at the livestock shelters to prevent transfer of communicable diseases between animals as well as between animals and the people caring for them.

 c. Evacuation / sheltering of companion animals

Companion animals from evacuated citizens will be sheltered as close as possible to the evacuated citizens. Shelters for pets include pet-friendly shelters (emergency shelter for pets located within the same area or facility as an emergency shelter for people) established by the Lewis County Animal Response Team, the Lewis County Humane Society (LCHS), private boarding kennels and veterinary clinics as close to the evacuation shelters as possible. If evacuated to a private facility or veterinary hospital occurs, it is at the owner’s expense.

Upon the activation of evacuation shelters for citizens, the Lead Member of the Lewis County Animal Response Team will be contacted by the emergency management office. The LCART Lead Member will initiate the opening of prearranged pet shelter locations at citizens’ evacuation shelters; notify the LCHS, and private boarding kennels and local veterinarians.

Pet-friendly shelters opened by the LCART at the human evacuation shelters will likely be at the local schools where prior arrangements have been to designate specific animal shelter space and protocols. This arrangement will allow the LCART to provide effective confinement and provision of basic animal care needs such as food, water, and bedding.

Additionally, arrangements have been made to provide local emergency responders with pet carriers to allow them, as public transportation in the event of an emergency, to allow companion animals to accompany their owners during an emergency evacuation. An area at the citizens’ evacuation center will be available to provide directions to the pet shelter.

Each of the pet-friendly shelters will have an in-charge member and group of volunteers of the Lewis County Animal Response Team on the premises to assist in the movement of evacuated pets into the designated animal shelter area, to ensure that a tracking system is in place to link sheltered animals with a specific owner designated as caretaker, and to evaluate the pets of evacuated citizens. Owners are encouraged to have a means of proving identification and ownership of pets. This may include microchips, photographs of the owner with the pet, licensing information, medical records, etc. The in-charge member of the LCART will be experienced in or otherwise qualified to evaluate the medical and temperament needs of animals brought to the facility. Recommendations will be made for treatment and/or sheltering provisions, possibly on a case-by-case basis. Pets with significant injuries or illnesses will be transported to a designated animal hospital or provided with medical treatment on-site by veterinary professionals.

Pet-friendly shelters located at citizens’ evacuation shelters will provide housing and care for common household pets, including dogs, cats, ferrets, rabbits, guinea pigs, etc. For exotic species which require specialized housing or care, if the owner is unable to provide the specialized equipment, the LCART may refer owners of these animals to the local veterinary clinic or state sponsored shelters that may be able to provide specialized care of these exotic species. Owners of exotic animals requiring specialized care should be encouraged to plan for evacuation and sheltering of their animals.

The Lewis County Animal Response Team and support organizations will provide assistance in the transportation of the evacuated pets to either other shelter facilities or veterinary hospitals and ensure that a tracking system is in place to reunite sheltered pets with their rightful owners. Every effort will be made to prevent the spread of communicable diseases during this transportation/sheltering period through prevention of co-mingling of animals and appropriate isolation, cleaning, and disinfecting protocols. If practical, vaccination of animals and measures to control internal and external parasites will be employed. These protocols should be established in consultation with local veterinarians. New York State Department of Agriculture and Markets Veterinarians will provide biosecurity guidance.

Citizens with special needs (individuals with mental or physical challenges who require evacuation assistance) may also require assistance in evacuating their pets. Therefore, in the interest of public safety, animal owners may be assisted with finding shelter and care for their animals during a public emergency. Upon arrival at the shelter, pets not trained specifically to assist the individual (e.g. seeing-eye dogs) will be transported to a private boarding facility or other animal evacuation facility so that trained volunteers may provide daily care.

 Appendix C – Animal Care Resources

 Appendix D – Animal Holding or Confinement Areas for Lewis County

 Appendix E – Hotels and Motels Accepting Animals

 Appendix F – Animal Transportation Resources

 Appendix H – Emergency Housing and Care for Dogs and Cats

 d. Steps for the evacuation / sheltering of companion animals

 1. Inform owners of the need to evacuate their animals.

 2. Determine if there is a need for LCART to activate pet-friendly

 shelters at citizens’ evacuation shelters or other sites.

 3. Determine type and quantity of resources needed. Contact

 pre-arranged suppliers to have resources delivered to

 distribution location.

 4. Activate volunteer resources for care of animals in the LCART

 shelters.

 5. Provide information to pet owners about the locations in which

 animals may be sheltered, including information on what items

 should be taken with the animals (food, water, medications,

 records, etc.).

 6. Set-up an information center at each of the pet-friendly citizens’

 evacuation shelters to direct pet owners to take their animal(s)

 into the designated animal shelter area.

 7. Provide assistance in obtaining transport of pets, if requested by

 owner.

 8. Ensure that a tracking system is in place to link sheltered

 animals with a specific owner designated as caretaker or, in

 cases where owners and pets must be at separate facilities, to

 reunite animals with their owners after the incident.

 9. Maintain strict biosecurity practices at the pet shelters to

 prevent, as much as possible, the transfer of communicable

 diseases between animals as well as from animals to people

 caring for them.

 3. Stray / Lost Animal Procedures

 a. Equine, Cattle, and Other Livestock

 Stray and lost animals will be returned to the owners and/or transported

 according to the plans outlined in:

 VIII. Concept of Operations

 D. Response

 1. Search and Rescue Procedures

 2. Evacuation and Sheltering of Animals

Due to the size of most livestock and the inability to transport large numbers of livestock, owners are expected to develop shelter and/or evacuation plans for their own animals. In the event of an emergency situation, the Lewis County Animal Response Team will contact prearranged facilities/farms and request their assistance in sheltering unclaimed animals. Once owners are located, they will be responsible for all expenses incurred in the sheltering of stray equine, cattle, or other livestock.

 Appendix C – Animal Care Resources

 Appendix D – Animal Holding or Confinement Areas for Lewis County

 Appendix F – Animal Transportation Resources

 Appendix G – Guidelines for Handling Equine and Cattle During

 Emergencies

 b. Companion Animals

 Stray and lost animals will be transported and sheltered according the

 plans outlined in:

 VIII. Concept of Operations

 D. Response

 1. Search and Rescue Procedures

 2. Evacuation and Sheltering of Animals

 All stray or lost companion animals recovered by Lewis County Dog Control Officers will be sheltered at the Lewis County Humane Society or temporary shelters set up for this purpose. Any pets whose owners cannot care for them, or companion animals found by citizens will also be sheltered at these locations. Private boarding kennels and veterinary clinics will serve as overflow shelters and will be requested to open through the Lewis County Animal Response Team Lead Member as necessary.

 Appendix C – Animal Care Resources

 Appendix D – Animal Holding or Confinement Areas for Lewis County

 Appendix F – Animal Transportation Resources

 Appendix H – Emergency Housing and Care for Dogs and Cats

**E. Additional Aid**

In the event that the Lewis County Animal Response Team’s resources are unable to meet the need for search and rescue personnel or evacuation and sheltering of animals, the Lead Member for the Lewis County Animal Response Team will request assistance from the Lewis County Emergency Management Office. The Lewis County Emergency Management office may request assistance from the State Emergency Management Office, Empire State Animal Response Team (ESART), New York State Department of Agriculture and Markets, and surrounding counties.

**F. Incapacitation of Shelters**

In the event that established shelters are destroyed or incapable of functioning due to the nature of the emergency situation, the Lewis County Emergency Management office may request assistance from the State Emergency Management Office, New York State Animal Response Team (NY SART), New York State Department of Agriculture and Markets, and surrounding counties. Additionally, assistance from private boarding kennels, veterinary hospitals, stables, or adjacent county facilities may be requested to open as boarding and/or medical facilities. In rare cases, during large-scale emergencies, animals may be moved outside of Lewis County for care and protection.

**G. Shelter Staff and Supplies**

1. Staff

The LCART will be responsible for prearranged staffing of both the large and small animal sheltering facilities they establish. Staff will consist of trained LCART members and volunteers, as well as personnel from associated agencies. The in-charge LCART member for individual animal shelter will be responsible for developing the work schedule for employees and volunteers. The staff will oversee organization and care of the shelter, ensure that each animal is being cared for by its specific owner designated as caretaker, and ensure that provisions for basic animal care needs such as food, water, and bedding are available.

Private boarding kennels and veterinary hospitals, if utilized, will be responsible for the staffing of their own boarding facilities and will be compensated by the citizens who use the animal shelter according to the established policies of the individual business.

Appendix I – Veterinary Resources

2. Supplies

For shelter facilities established by the LCART, the LCART will be responsible for pre-identifying sources for critical supplies, including potable water, food, medical, cleaning, and other shelter supplies.

Prearranged animal food companies, medical suppliers, water suppliers, and cleaning product suppliers will be contacted and requested to begin the shipment of supplies to an established delivery point. The delivery point will serve as a storage center and distribution center for the various shelters and hospitals.

Private boarding kennels, animal shelters and veterinary hospitals are encouraged to pre-identify sources for critical supplies.

If the need arises, resource agencies (e.g., humane groups, pet stores, pet food companies, etc.) may be asked to donate cages and other various shelter supplies.

 Appendix C – Animal Care Resources

 Appendix I – Veterinary Resources

 Appendix J – LCART Training Requirements, Code of Conduct, and

 Members List

**H. Medical Assistance**

# 1. Animal Treatment Facilities

The Lewis County Animal Response Team (LCART) will coordinate the resources to establish a medical facility for companion animals that cannot be accommodated by the various shelters due to illness or injury. This medical care area may be in the same location or near the animal shelter area for convenience. The LCART will identify private veterinary hospitals and other locations that may serve as alternate medical facilities and/or shelters as space permits.

# 2. Staff

Under the supervision of a licensed veterinarian, trained volunteers from the Lewis County Animal response Team and others may assist in providing care in these medical shelters. Depending upon the extent of the emergency situation, volunteer veterinarians and technicians from the Veterinary Medical Assistance Teams (VMAT) from the American Veterinary Medical Association and Empire State Animal Response Team (ESART) may be requested to assist in the treatment of companion and non-domestic animals. Additionally, the New York State Department of Agriculture and Markets may be requested to assist in identifying and coordinating private veterinarians to assist.

Appendix I – Veterinary Resources

 Appendix J – LCART Training Requirements, Code of Conduct, and Members

 List

 a. Steps

1. If animals that are the responsibility of the LCART are in need of medical care, they will be transported to participating private veterinary medical facilities. (Appendix I)
2. If these facilities resources have become overwhelmed, the LCART should establish a temporary animal medical treatment center.
3. Request assistance from veterinary professionals and trained volunteer resources to care for animals. (Appendix I and J)
4. Notify pre-identified suppliers of veterinary medical resources to request delivery.
5. Arrange for shelter of animals requiring treatment, giving consideration to separating animals that show symptoms of contagious disease.
6. Ensure that a tracking system is in place to reunite animals with their owners.

**I. Bites and Disease Control**

Rabies is a viral infection transmitted in the saliva or nervous tissue of infected mammals. The virus enters the central nervous system causing an encephalomyelitis that is almost always fatal if contracted by humans and animals.

In the event of an emergency, particularly those emergencies that involve the displacement of domestic and/or wild animals, adherence to the safety procedures designed to protect the health of Lewis County residents and their animals is critical. Non-compliance could result in the needless suffering and death of both animals and people.

Given the type, severity and extent of the emergency, protocols and procedures might need to be modified. The Director of Lewis County Public Health (LCPH) in cooperation with the Lewis County Rabies Control Officer will determine what modifications to the rabies protocol are acceptable upon review of the most current emergency situation report. Any modifications to the rabies protocol determined by the Director of LCPH, will be communicated to the Incident Commander (IC) at the Lewis County Emergency Operations Center (LCEOC) as soon as possible. The IC will distribute the modified rabies protocol to the section chiefs and other responders as necessary.

The following is a summary of the general rabies protocol, procedures, and information.

Any questions should be directed to:

 Director, Lewis County Public Health (315) 376-5453

 **1. Rabies Exposure**

 The Lewis County Rabies Control Program has as its goal the prevention of any

 human death due to exposure to the rabies virus from domestic or wild mammals.

 New York State Sanitary Code makes it the duty of all Health Care Providers and

 the parent or guardian of any child not taken to a health care provider, or any

 adult who is him/herself exposed, to report the name, address, and phone number

 of any person bitten or exposed to a potentially rabid mammal in Lewis County to

 the Lewis County Public Health Agency. Obtaining a complete report of every

 incident where a person is bitten or exposed to saliva or nerve tissue of any

 animal and/or having been exposed to a bat, provides critical information that

 greatly assists the Lewis County Public Health Agency in determining what

 action must be taken to prevent possible rabies infection.

 a. Human Exposure - Bite/Open Wound Exposure/Other cutaneous

 or mucous membrane exposure to a possibly rabid animal

1. Bite Exposure - Any penetration of the skin of a person by the

 teeth of a rabid or potentially rabid animal.

 2. Open Wound Exposure - Introduction of saliva or other

 potentially infectious material (cerebrospinal fluid, spinal cord,

 or brain tissue) from a rabid or potentially rabid animal into an

 open wound (e.g. broken skin that bled within the past

 24 hours).

 3. Mucous Membrane Exposure - Introduction of saliva or other

 potentially infectious material (cerebrospinal fluid, spinal cord,

 or brain tissue) from a rabid or potentially rabid animal onto any

 mucous membrane (eyes, nose, mouth).

4. Other Exposure – Any interaction with a rabid or potentially

 rabid animal where a bite, open wound, or mucous membrane

 exposure cannot be definitively ruled out.

 b. All wild animals are considered potentially rabid.

 c. All companion animals (dogs, cats, ferrets) are considered unvaccinated

 until proven otherwise, i.e. a current rabies vaccination certificate is

 available.

 **2. Information needed on all animal bite/exposure reports**

 *Immediately report all animal bites and exposures to Lewis County Public Health,*

 *24 hours/day, 7 days/week at (315) 376-5453.*

The official receiving a bite/contact report must obtain and record all the information necessary regarding the person bitten, the biting animal, the incident and the person reporting the bite. This information should be included on the Animal Bite/Animal Contact Rabies Report available from LCPH. It will be necessary to question the reporter in detail to obtain accurate information:

 a. Accurate spelling of names.

 b. Obtain age of person exposed.

 c. Family Physician

 d. The actual owner of the suspected animal if known.

 e. Phone number, work phone and address of the person bitten. Including

 the street/road name and nearest intersection.

 f. Phone number, work phone and address of the animal owner. Including

 the street/road name and nearest intersection.

 g. The site of wound on the body.

 h. The date and time and circumstances of the incident.

 i. The place of the occurrence.

 j. Type of and description, including name, of the animal and vaccination

 information of the animal if available.

 k. Directions to the home of the owner of the animal if known.

3**. Legal requirement to report possible rabies exposure to the local health department**

 NYCRR Title 10, Chapter 1, part 1, Paragraph 2.14 (b-d) requires every health

 care provider to report to Public Health any person who has been exposed to any

 animal suspected of having rabies. This includes any human exposure to wild

 animals, including bats and any human exposure to domestic animals. It is

 impossible to determine the health status of an animal without investigation.

If a health care provider is not in attendance and the person exposed is a child, it shall be the duty of the parent/guardian to make such report. If the person exposed is an adult, such person shall himself make the report.

 Post-exposure treatment may be delayed if a domestic animal, a cat, dog, or ferret

 only, is confined for 10 days to be observed for symptoms of rabies. Do not delay

 if the animal is unavailable for confinement (dog, cat, or ferret only). Some time

 (3 days) may be used to attempt to locate the animal. Post-exposure treatment

 may also be delayed until testing of a submitted specimen is completed. If the

 animal cannot be located, post-exposure treatment should be begun without

 further delay.

 **4. Definition of current vaccination for animals**

 Vaccination is defined as inoculation with a licensed vaccine (for that species)

under the supervision of a veterinarian. Current vaccination is defined as beginning 14 days following the primary vaccination and lasting for the period stated in the manufacturer’s instructions typically 12 months for primary vaccination and 3 years (36 months) for subsequent vaccinations. Subsequent vaccinations would be effective immediately.

 **5. Post-exposure advice should also include:**

 a. Washing the wounded area thoroughly with soap and water.

b. Refer to Hospital Emergency Department. Administration of Td (Tetanus) vaccination, if not within last 7 - 10 years.

c. Immediately confine a domestic animal. Confining of an unvaccinated animal is to be defined as confinement at an approved facility such as a veterinary clinic or other approved facility at the expense of the owner. Confinement at home of a currently vaccinated animal is to be defined as enclosing the animal in an area (e.g. garage) and restraining it so it has no contact with other animals or people. (On a leash outdoors is not confinement.)

d. Confining and restraining a wild animal if possible and arranging for humane euthanasia and submission of specimen for testing.

e. Refer the victim/parent or guardian to Lewis County Public Health to report the bite and to receive additional advice or information. If a wild animal is involved and it is able to be confined, a law enforcement official should then be contacted to destroy the animal, usually with a shot to the thoracic (chest or upper back) area of the animal. The animal can then be transported to Dr. O'Connor's animal hospital (Countryside Veterinary Clinic) where he or an associate veterinarian will prepare a specimen for shipment to the New York State Department of

Health (NYSDOH) Laboratory in Albany. Post-exposure treatment may be delayed for up to 72 hours after a wild animal bite to obtain the results of laboratory examination.

 **6. Consultation regarding the need for human post-exposure treatment**

The emergency department physician must consult with the Director of Public Health or designee and the patient’s private physician before initiating post-exposure treatment.

 *The New York State Department of Health (NYSDOH) Bureau of Communicable*

 *Disease Control (BCDC) can be contacted for guidance concerning exposure*

 *scenarios at (518) 473-4439 and after hours at (866) 881-2809.*

 **7. Responsibility for authorizing human post-exposure treatment**

 The responsibility for authorizing human post-exposure treatment is made by the

 patient's private physician, in cooperation with the emergency department

 physician if involved and the Director of Public Health. If Public Health Officials

 do not agree a contact situation warrants post-exposure treatment at public

 expense and it is still desired by the individual, or physician(s) involved, the cost

 of post-exposure treatment will be borne by the individual. If the Director of

 Public Health or designee is not contacted, the County will not be responsible for

 cost of post-exposure treatment.

 **8. Procedure for managing animal bites to humans when the biting animal is**

 **still at large**

 The Sheriff's Department and the Town Dog Control Officer will be notified if the

biting animal, whether domestic or wild, is still at large. The Sheriff's Department, with assistance as deemed appropriate by them, will attempt to restrain and confine the animal and will destroy the animal if necessary. In either case the animal will then be transported to the Countryside Veterinary Clinic for confinement or sampled for determination of rabies.

**VIII. Recovery**

**A. Recovery of Companion Animals with Owners**

Lewis County Dog Control Officers (Appendix P), Lewis County Animal Response Team, and the Lewis County Humane Society will support efforts to identify owners of stray or lost animals. If owners cannot be found, representatives will attempt to assess and if possible, adopt animals according to established procedures.

Animals for which no owners can be found, and which cannot be placed in adoptive care will be disposed of in accordance with established animal control procedures.

**B. Disposal of Animal Carcasses**

Disposal of deceased animals will be coordinated by the Lewis County Animal Response Team, in cooperation with the Lewis County Public Health Department, New York State Department of Health, New York State Department of Agriculture and Markets, and the New York State Department of Environmental Conservation. The LCART will arrange for disposal of euthanized animals and animals killed as a result of the emergency situation.

Appendix M – Natural Resources Conservation Service Conservation Practice Standard Animal Mortality Facility Code 316

1. Livestock or cattle farm planning

 Each livestock producer or owner should have a disaster plan that consists

 of the following:

 a. Identify an evacuation route and the equipment needed to move

 animals.

 b. Identify land on the farm that can be designated for burial.

c. Determine a contact person with Lewis County Emergency

 Management Office, Cornell Cooperative Extension, Soil and Water

 Conservation District, and USDA Farm Service Agency to report

 damages and request assistance and/or indemnity.

2. County-wide plan

 a. Identify all premises containing large populations of animals.

 b. Identify Lewis County Animal Response Team member for

 administering dead animal emergencies.

 c. Identify commercial clean out crews (people to remove dead animals

 and wet/destroyed bedding material).

 d. Identify equipment for handling/hauling dead animals.

e. Make arrangements with other counties or solid waste disposal facilities

 for resources and land space.

3. Carcass disposal methods (Subject to change during an infectious disease outbreak)

 a. Rendering

 b. Landfill

 c. On-site composting

 d. Burial

 e. Incineration

 Appendix M – Natural Resources Conservation Service Conservation

 Practice Standard Animal Mortality Facility Code 316

**Appendix B – Public Service Announcements (PSA)**

# A. Companion Animals

 1. If you evacuate your home, DO NOT LEAVE YOUR PETS BEHIND. Pets

 cannot survive on their own and you may not be able to find them when you

 return. Therefore, it is imperative to develop a plan to take your pet with you in

 the event of an emergency.

 2. For public health reasons, many emergency shelters cannot accept pets. Find

 out which motels and hotels in your area allow pets in an emergency. Include

 your local animal shelter, veterinarians, and boarding facility's numbers in your

 list of emergency numbers; they will be able to provide information concerning

 pets during a disaster.

 3. Make sure identification tags are current and securely fastened to your pet's

 collar. If possible, attach the address and/or phone number of your evacuation

 site or an out of area emergency contact. Microchipping is recommended as a

 permanent form of identification. Have a current photo of your pet or microchip

 information for identification purposes.

 4. For pets requiring licenses, have proof of a current license.

 5. Have a copy of your pet's medical records, including vaccination status,

 current medications, feeding schedule, and your veterinarian’s contact

 information, and place one in your vehicle. If you are unable to return to your

 home right away, you may need to board your pet. Most boarding kennels,

 veterinarians, and animal shelters require that your pet's vaccinations be current.

 6. If it is impossible to take your pet with you to a temporary shelter, contact

 friends, family, veterinarians, or boarding kennels to arrange for care. Make sure

 medical and feeding information, food, medicine and other supplies accompany

 your pet to its foster home.

 7. Suggested supplies for an animal emergency kit:

 a. a secure, portable pet carrier

 b. collar (with current identification tag) and leash or harness

 c. pet food (nonperishable) and a can opener if necessary

 d. bottled water

 e. pet waste clean-up supplies and a small litter box and litter for cats

 f. your pets updated medical records

 g. important phone numbers such as veterinarian, kennel, emergency

 clinic, hotels which accept pets

 h. medications your pets may require

 i. recent photo of you and your pet

 8. See also Appendix E – Hotels and Motels Accepting Pets

# B. Cattle, Equine, and Other Livestock

1. Keep fire-fighting equipment readily available, due to the highly combustible fuels and danger of fire associated with barns and other buildings. Ensure that you receive and provide your family and employees with proper training on the use of this equipment.

2. Each farm should purchase a generator and maintain an adequate fuel supply. A generator is an essential tool for short or long-term power outages. If you do not purchase, know where you can acquire a generator in an emergency and have an agreement in place for its use.

 3. Purchase transfer switches to ease the connection of generators to electrical equipment.

4. Keep a NOAA Weather radio receiver on hand to monitor severe weather watches and warnings.

5. All reasonable attempts to shelter equine, cattle, and other livestock in place will be made. If you live in an area which is prone to flooding, know where the highest spots are to move livestock when the water rises. Animals will be moved only if staying will endanger their lives. Trying to load panicked animals into trailers is risky and dangerous to all people involved.

6. If evacuation is not possible, a decision must be made whether to move large animals to available shelter or turn them outside. This decision should be determined based on the type of disaster and the soundness and location of the shelter. Food and water should be available for the animals whether they are left in a shelter or outdoors

 7. Maintain a list of local haulers to assist with evacuation should this become necessary.

 8. Have evacuation routes, including alternates, planned out and posted.

 9. Have a plan for water pumping, storage, and use.

10. Develop a “Community Plan” identifying local individuals who can handle your animals in the event of an emergency. Work cooperatively with neighbors and develop a telephone tree for notification during an emergency.

11. Establish through your network a series of evacuation centers within your neighborhood, town, or region. Evacuation sites should already have or be able to readily obtain food, water, veterinary care, handling equipment, and containment facilities.

12. Following a disaster or emergency, check the security of buildings and fences to eliminate escape of large animals.

13. All animals should have some form of identification that will help facilitate their return.

C. Wildlife

Never attempt to capture a non-domestic animal unless you have the training, protective clothing, restraint equipment and caging necessary to perform the job. Often, during natural disasters, mosquitoes and dead animal carcasses can be sources of disease and outbreaks of zoonotic diseases may occur. Contact your local emergency management office or Department of Natural Resources office for help.

Appendix K – Licensed NY Wildlife Rehabilitators

D. Further Assistance

If you see an injured or stranded animal in need of assistance, or if you have any other questions or concerns about animal protection during an emergency situation, contact the Lewis County Emergency Management or the Lewis County Public Health Department (include phone numbers/addresses).

**Appendix C – Animal Care Resources (Feed and Bedding)**

|  |  |  |
| --- | --- | --- |
| Name and Address | Manager orContact Person | Supplies Available |
| Lowville Farmers Co-op5500 Shady AvenueLowville, NY 13367 |  | - Feed supplies and bedding |
| Tractor Supply Company5710 Number Four RoadLowville, NY 13367 |  | - Feed, bedding, and other supplies |
| Widmeyer Farm and Home Supply 6017 Widmeyer Street Glenfield, NY 13343 |  | Feed, shavings, shovels, forks, scrapers, fencing supplies, hardware, neck chains |
| Bailey’s Feed Mill123 Mill StreetBoonville, NY 13309 |  | Feed |

**Appendix D – Animal Holding or Confinement Areas for Lewis County**

1. Livestock Care and Holding Facilities

|  |  |  |  |
| --- | --- | --- | --- |
| Name and Address | Contact Person | Species Suitable to Facilities | Capacity |
| Lewis County FairgroundsBostwick StreetLowville, NY 13367 |  | - Horses, Sheep, Goats, Pigs, Llamas/Alpacas,Beef Cattle, Dairy Heifers or Dry Cows- Not for Lactating Dairy Cattle due to lack of milking facilities  | Horse StallsRace Horse Building |
| Northern New York Farmer’s Market Sale Barn8204 State Route 26Lowville, NY 13367(315) 376-7441 |  | - Horses, Sheep, Goats, Pigs, Llamas/Alpacas,Beef Cattle, Dairy Heifers or Dry Cows- Not for Lactating Dairy Cattle due to lack of milking facilities | Large Group Pens |
| Maple Ridge Center7421 East RoadLowville, NY 13367(315) 376-4963 upstairs office (315) 376-4983 downstairs office |  | - Horses, Sheep, Goats, Pigs, Llamas/Alpacas | - 20 Horse Stalls in Horse Barn - 6 Horse Stalls in Draft Barn |

2. Equine Care and Holding Facilities

|  |  |
| --- | --- |
| Name and Address | Capacity |
|  |  |
|  |  |

3. Companion Animal Holding Facilities

|  |  |  |
| --- | --- | --- |
| Name and Address | Species Suitable For  | Capacity |
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**Appendix E – Hotels / Motels Accepting Animals**

|  |  |  |
| --- | --- | --- |
| Name and Address | Phone | Notes |
| Ridge View Lodge7491 State Route 12Lowville, NY 13367 | (315) 376-2252 | - Animals in crates only. |
| Headwaters Motor Lodge13524 State Route 12Boonville, NY 13309 | (315) 942-4493 |  |
| Towpath Inn4217 West RoadTurin, NY 13473 | (315) 348-8122 |  |
| Old Church Inn5560 State Route 26Turin, NY 13473 | (315) 376-8423 |  |
| The Edge Hotel3952 State Route 12Lyons Falls, NY 13368 | (315) 348- 4211 |  |

**Appendix F – Animal Transportation Resources**

1. Large Animal Transportation Resources

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| --- | --- | --- | --- | --- |
| Name | Location | Home Phone | Cell Phone | Notes |
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2. Equine Transportation Resources

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| --- | --- | --- | --- | --- |
| Name | Location | Phone | Cell Phone | Notes |
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**APPENDIX G - GUIDELINES FOR HANDLING HORSE AND CATTLE DURING EMERGENCIES**

## A. Guidelines for Horses During Emergencies

*Adapted from the American Veterinary Medicine Association Disaster Preparedness and Response Guide*

Free roaming horses will naturally group together and move as a group. Many horses will allow themselves to be caught, especially if they are encouraged with grain. Catching a horse can be done by first placing a rope loosely around its neck, and then fitting on a halter. If a large group of horses avoid capture, they should be rounded up in small groups and corralled into smaller confinements. If the horses cannot be rounded up and have not suffered any obvious injuries, they may be kept fenced in and fed without further human contact.

When moving horses into an unfamiliar environment, the handler should allow them time to investigate their new surroundings. Not all horses are familiar with being tied to a stationary object. If horses must be tied, use a quick release knot. Many horses have only been kept in wooden fenced paddocks. If wire fencing is all that is available, tie 2" x 24" cloth strips to the top wire every 6 to 10 feet.

##  1. Identification

 Many horses are permanently identified with a tattoo on the inside of their upper lip, freeze brands under the mane, and brands on the outsides of their hind limbs. These are helpful in recording the identification on a horse. Other methods for identification that can be used include neck banding, microchip injection, painting or etching the hooves, and describing all whorls of the horses' coats. Photographs of the right and left sides of the body, medial and lateral aspects of the lower legs, and the face of a horse are helpful in matching owners' descriptions when trying to locate misplaced animals.

##  2. Behavior

Most horses are familiar with people and are used to being handled. Horses will seek to establish hierarchy when first grouped together. If this occurs under confined conditions, horses may become violent resulting in serious injuries to each other and to people handling them. Horses show signs of aggression toward people by pinning their ears back, extending their necks to bite, or turning their rear quarters toward an approaching person. Special care should be taken to avoid standing between mares and their foals, and when handling stallions (adult un-castrated males).

Ideally, horses should be kept in small herds at pasture or in individual stalls. If this is not possible, allow horses plenty of room to reduce aggression. Never place two or more stallions together. If possible, observe horses for the first few hours after placing together in a herd.

##  3. Methods of restraint

Horses can be dangerous. Restraint and handling of horses should be done by people with equine experience. Most horses will cooperate once they have a halter and lead rope on. If sedation is required for restraint, authorized personnel will perform the sedation. Injured horses should not be worked on until they are fully sedated. This usually takes 5 to 10 minutes after intravenous injection. Sedated horses may still kick if abrupt movements or sounds startle them.

##  4. Health concerns

Dietary changes predispose horses to colic, laminitis, and hyperlipemia. Mixing of horses from various sources predisposes them to contagious respiratory disease. Vaccinating all horses against Equine Herpes Virus, Equine Influenza, Eastern and Western Equine Encephalitis, Tetanus, and West Nile Virus, can minimize the spread of contagious disease. Any horse that will be spending more than a few days grazing on shared pasture should be dewormed with a paste wormer. A fly spray or insect repellant approved for use on horses should be applied to them to decrease the spread of vector-borne diseases.

##  5. Typical weights and heights

Horses are measured in "hands," one hand being equal to 4 inches. Horse's heights are measured at the highest point of the shoulder (withers). Typical weights and sizes of horses are:

 Adult weight (#) Newborn weight (#) Approx. Height

 Giant Breeds 1,500 – 2,000 150 - 200 17+ hands

 Full Size 750 - 1,200 75 -100 15 -17 hands

 Pony 500 - 750 50 – 75 < 15 hands

 Miniature 200 - 400 20 - 40 < 40 inches

##  6. Typical feeding requirements of horses

Ideally, horses should be fed individually or in small groups. They should be fed twice a day at regular intervals. If horses are fed in groups, the most aggressive ones should be fed first. If that is not possible, observe horses at feeding time to ensure that all horses allow each other access to feed and water.

Under resting conditions and when ambient temperatures are above 40o F, horses should consume about 2% of their body weight per day in dry matter. About 75% of this should be derived from forages (hay) and 25% from grain. 12% protein horse pellets and sweet feed are the preferred grains. Total feed intake depends on body size. For example, a 1,000 lb horse will require 7.5 lb (approximately 1 /5 of a rectangular bale) of hay and 2.5 lb of grain at each feeding. This amount should be fed in the morning and in the evening. In addition, horses require about 2% of their body weight in fresh water per day, and 1 -2 oz of loose salt. All of the feeding requirements should be doubled for lactating mares and increased if ambient temperatures fall below 40° F.

To estimate the amount of feed required for a horse herd, calculate the biomass of the horses by estimating the approximate weight of all the horses and adding the weights together. Multiply this figure by the feed requirements listed above to calculate the amount of hay, grain, water, and salt needed for the herd.

##  7. Sheltering and housing

Ideally, horses should be kept in small herds at pasture or in individual stalls. The amount of bedding required depends on the type of flooring. Porous flooring with plenty of lime mixed into it requires the least additional bedding. Concrete flooring requires the most. The approximate amount of bedding that will be required is one bale of straw per 12 x 12 ft stall.

Straw is the preferred bedding under emergency conditions, as it is likely to be available, is space efficient, and is most degradable. Alternatively, 2 bales per stall of conifer wood shavings or shredded newspapers can be used. Black walnut and exotic wood shavings cannot be used.

Fencing materials that are free of projections should surround paddocks for horses. Barbed wire is not suitable for fencing horses. Electric wire fencing can be used, but it must be made visible to horses by 2" x 24" strips of cloth every 6 to 10 feet.

##  8. Sanitation

Horses will produce about 0.5% of their body weight of manure per day. Manure should be removed from stalls at least once a day. Manure from horses on pasture should be collected once per week if possible. Manure should be stacked in neat piles, with minimal surface area, to promote composting and reduce fly hatching. To further reduce fly burdens, the manure pile can be sprayed every 3 days with fly spray.

Horses void about 0.5% of their body weight as urine each day. Urine is a major attractant to stable flies. Completely remove the stall bedding at least every third day to reduce fly problems. The total amount of manure and bedding that will accumulate can be calculated from the number of horses, the average amount of manure produced, plus the number of straw bales used. Manure piles should be located at least 200 yards from the stabling facilities.

 **9. Zoonoses**

Zoonoses are diseases which can be transmitted from animals to people and from people to animals. Salmonella is endemic in many horse populations. Stressed horses, such as those surviving a major disaster, are most likely to suffer from clinical salmonellosis and develop fulminant diarrhea. Horses that develop diarrhea may have a guarded to poor prognosis and are a potential source of infection to other horses and personnel. For these reasons, serious consideration should be given to euthanasia, especially if the horse can only be maintained by compromising the level of care to other horses.

##  10. Euthanasia and disposal

Disposal must be considered prior to euthanasia. If possible, it is easiest to walk the horse to the site where the carcass will be buried, rather than transport dead horses to a disposal site. Euthanasia will be done under supervision of qualified personnel. Records will be kept of all dead horses.

## B. Guidelines for Cattle During Emergencies

Cattle are grazers and browsers by nature and are easily adaptable to new environments. They are gregarious animals that follow herd instincts, but may be excited and frightened by new persons, predators, and dogs in their midst. Because of their gregarious nature, individual cows become anxious in situations that lead to their isolation from the herd. They have keen eyesight and hearing and can detect something unusual at distances of several hundred yards.

##  1. Behavior during the disaster event

Cattle normally will move away from fire and flood, but in an excited state they may actually move in to such a disaster. Herding and driving cattle during a disaster is made more difficult because herding instinct is overridden by survival reaction. Injuries, especially to the younger animals, are much more probable during a disaster.

##  2. Behavior during the immediate aftermath

Most cattle, if given hay, water, and a space to stand or lie down, will acclimate well in their new surroundings. The more antisocial animals, especially bulls, may not become content as quickly and may attempt to escape. There is also a problem with establishment of social dominance within a group if new numbers are added. This is particularly true with bulls, and though cows usually settle down soon, the bulls may continue the struggle for dominance for a protracted period.

Bulls are dangerous. They should be penned separately and handled only by people with experience.

##  3. Capture, containment and restraint

Dairy cattle are used to caretakers, are socialized to human beings, and are easily penned. Beef cattle commonly are fed hay and grain in or around a barn or corral, which can aid in penning. If a preexisting structure is not in place, a temporary corral can be built with portable gate panels. Avoid barbed wire and woven wire fencing because of the danger of injury to Excited animals and animals unfamiliar with fences. Portable corrals may be used to make runways and chutes for restraint. To load cattle into a trailer, portable gate panels can be made progressively smaller from the corral into a narrow alley, which ends at the truck. Avoid creating tight turns and have a way of blocking the entrance of the alleyway so that animals cannot back up into the corral rather than go forward to the truck.

The most common and available method of restraint is the lariat and halter. This restraint is dependent on having something to which the animal can be secured. For particularly fractious animals, application of a nose lead in combination with a rope halter provides additional distractions and approved restraint.

The most desirable restraint device is the portable cattle chute with a head restraint. Diagnosis and treatment are much easier and safer with this equipment. Tranquilization or sedation of injured animals may be necessary. Tranquilization will be done under supervision of qualified personnel.

If evacuation from the home premise is necessary, bumper-pull or fifth wheel type stock trailers, 12' x 16' or larger and without compartments, should be used. The low bed with a low center of gravity allows easier loading and unloading and is more stable in winds and water.

##  4. Animal identification methods

Permanent identification of dairy cattle is usually numerical by means of an ear tag, ear tattoo, brand, microchip, or numbered neck chain. Animals may be temporarily identified through use of livestock marking crayons. All cattle are required to be officially identified prior to leaving a premise in New York. Contact the New York State Department of Agriculture and Markets with specific questions about official ID.

##  5. Typical weights

Dairy cattle – Holsteins are the largest and most common of the 5 major breeds of dairy cattle. Holsteins are black and white and cows weigh an average of 1,500 lbs., mature bulls can tip the scales at more than a ton. Jersey dairy cattle are the smallest, with mature cows weighing approximately 1,000 lb. and bulls near 1,500 lb. Weigh tapes for measuring heart girth provide a fairly accurate estimate of weight in dairy cattle.

Beef cattle – There are wide variations among and within beef breeds. Weights can range from an 850 lb. Hereford crossbred female to 2,500 lb. Charolais male. A weight tape for beef cattle, which measures heart girth, is fairly accurate.

##  6. Nutritional requirements

Cattle are grazing animals and can be maintained adequately on a variety of grasses on pasture. Care should be taken in selecting the site to pen cattle, because ornamental plants, which may be appealing to hungry ruminants, can be extremely toxic if consumed by cattle.

Beef cattle and yearling cattle require only grass hay and water for survival. Calves less than 3 months old require milk or milk replacer along with grass hay.

Lactating dairy cattle have different needs. Some important feeding recommendations for lactating dairy cows during an emergency situation are discussed here. The first priority is to provide feed to keep the cows healthy; providing feeds which support milk production is secondary. Hay is the best feed choice to keep the cows healthy.  Provide all the hay the cows will consume.  An individual mature dairy cow will consume about 30-40 pounds of hay. Younger dairy cattle (heifers) will consume about 15-20 pounds per day per animal. Hay quality is not highly important, although the hay should be clean and not moldy.  Small square bales or large round or square bales may be used and can be placed on the ground if feed bunks, or bale feeders are not available. Spread the hay around the paddock so that all cows have access to the hay. Hay silage can be fed if dry hay is not available. Corn silage should not be the first choice since it contains grain, which can make cows sick if they consume too much.

Water is very important and must be provided.  A dairy cow will need about 25-30 gallons of water per day.  Some type of large water trough will be needed for the cows to drink from.

Milk production in dairy cattle will increase or decrease according to nutrient intake. Grass hay can be fed to dairy cattle for several days and they will suffer only temporary milk production loss when put back on their full production level ration. By reducing the caloric intake, a cow will reduce its milk production. Decrease in milk production may not be rapid enough to prevent mastitis. If the disaster causes electric power outages or cattle are moved to a location without milking facilities, milking even a small number of cows becomes an unrewarding and difficult task. However, having portable milkers and generators or pre-determined evacuation sites with milking equipment available is an important planning consideration for dairy producers and emergency managers.

##  7. Health concerns

Emergency conditions that lead to the commingling of animals from various operations increase the risk of infectious disease. This can be caused by a multitude of enteric and respiratory pathogens. In light of the difficulty imposed by attempting individual treatment, mass medication may be considered for treatment and control of infection. Large ruminants are frequently affected with bloat, diarrhea, and pneumonia during prolonged unusual events.

Prevention of most bloat and diarrhea can be accomplished through nutritional management. Pneumonia can be partially prevented through vaccination against respiratory pathogens and providing rest and fresh air during the disaster. Even the best managed cattle will contract some stress-related pneumonia and a treatment center should be set up for care of sick cattle.

Severe traumatic injuries will require individual examination and treatment. Lacerations and fractured bones may be detected in cattle during the aftermath of a disaster. The lacerations can be treated but fractures are difficult to manage in cattle and euthanasia may be required. Qualified personnel will conduct drug administration and pain management.

 **8. Housing and sanitation**

Dairy cattle should be kept clean, dry and comfortable. If the disaster occurs during the hot and humid season, shade must be provided if it does not exist in the area of confinement. Avoid total enclosure, but shelter animals with shade cloth or plastic tarp from the extremes of heat or cold stress. Cattle should be moved with care if the ambient temperature exceeds 30° C (86° F) in order to avoid heat stress. The comfortable range in temperature for dairy cattle is between 41° and 78° F. Beef cattle requiring medical care might be housed in a confined area to expedite treatment, but healthy cattle do better in pastures or paddocks, and they tend to settle down quicker when put in an environment similar to where they had been maintained prior to the disaster. In addition, the open air will help disperse respiratory pathogens.

Provision for manure removal is important. Cattle excrete about 5% of their body weight in manure and urine daily. Straw should be used for bedding, when required, because it will be easier to obtain and dispose of during times of disaster.

##  9. Zoonoses concerns

Zoonoses are diseases which can be transmitted from animals to people and from people to animals. The greatest risks are from enteric pathogens such as salmonella, crypto sporidia, campylobacter, and giardia. Adult cattle maintained in questionable sanitary conditions can transfer these diseases without becoming clinically ill. Calves and yearlings will usually become sick and require treatment. Contaminated water can be a source of pathogens for the cattle; therefore caretakers should use caution when handling cattle with diarrhea and never consume water from an unapproved source.

##  10. Euthanasia and disposal

Disposal must be considered prior to euthanasia. If at all possible, it is easiest to herd the animals to the site where the carcass will be buried, rather than transport dead animals to a disposal site. The recommended method of euthanasia is with an appropriate chemical injection. Euthanasia will be performed under the supervision of qualified personnel. Records will be kept of all dead animals. Disposal of dead cattle can create a problem due to the potential health hazard and great volume of carcasses. Methods such as deep burial or burning can be done if local air and water quality regulations permit.

**C. Providing safe drinking water for animals**

Because contaminated water may contain pathogenic organisms, treat it with chlorine to make it safer. Ideally, the water should be tested, but during a disaster this may not be possible. Treating water with sodium hypochlorite (household bleach) will be beneficial. The following treatments should be followed when treating water:

 16 drops of bleach for 1 gallon of water

 1 Tablespoon of bleach for 15 gallons of water

 ½ cup of bleach for 120 gallons of water

When treating water, use unscented bleach. Allow the water to stand for 30 minutes after treatment to allow the bleach to mix thoroughly with the water.

## D. Guidelines for Other Livestock during Emergencies

 Information on handling, nutrition and transport of other livestock may be

 obtained from:

 Cornell University Department of Animal Science

 149 Morrison Hall, Cornell University

 Ithaca, NY 14853

 (607) 255-5497

 Cornell University Hospital for Animals

 Large Animal and Equine Hospital

 College of Veterinary Medicine, Cornell University

 930 Campus Road Box 20

 Ithaca, NY 14853

 (607) 253-3100

 New York State Department of Agriculture and Markets

 Division of Animal Industry

 10B Airline Drive

 Albany, NY 12235

 (518) 457-3502

 New York State Veterinary Medical Society

 9 Highland Avenue

 Albany, NY 12205

 (518) 437-0787

 (800) 876-9867

**APPENDIX H — Emergency Housing and Care for Dogs and Cats**

## A. Background

For purposes of public shelter, "domestic pets" are defined as dogs and cats, including service animals. Exotic pets are defined as small mammals, small reptiles and caged birds. Some exotic species require highly specialized care and housing; in this case, the CART may assist owners in finding alternative shelters for these animals. Many humane groups, animal shelters and rescue groups can provide trained care and housing for exotic species.

While the sheltering and protection of companion animals are the owners' responsibility, studies show that up to 60% of the population may refuse to evacuate without their animals. In addition, citizens with special needs (individuals with mental or physical challenges who require evacuation assistance) may require assistance in evacuating their pets. Therefore, in the interest of public safety, animal owners may be assisted in finding shelter and care for their animals during a public emergency.

Domestic pets of evacuated citizens may be sheltered at private boarding kennels and veterinary hospitals as close to the evacuation shelters as possible, or other facilities designated by the County Animal Response Team. Upon activation of evacuation shelters for citizens, the County Animal Response Team may initiate the opening of pet-friendly shelters at these locations or other temporary animal sheltering facilities. A representative of the County Animal Response Team will be assigned to evaluate the animal's health and condition, and assist in transporting pets to these shelters. They will also ensure that a tracking system is in place to identify the rightful owners of sheltered pets. All reasonable steps will be taken to prevent the spread of communicable and/or zoonotic diseases during this time.

Domestic animals that are lost, stray, incapable of being cared for by their owners, or a danger to themselves or the public will be the responsibility of the CART. These animals will be sheltered, fed and, if possible, returned to their owners. If the animals cannot be returned to their owners, their disposition will be handled in accordance with established animal control procedures.

## B. Behavior during the disaster event

Capturing pets during a disaster is made more difficult because the pet’s normal behavior may be overridden by survival instincts. Injuries, especially to young animals, are much more likely during a disaster. In the event that animals cannot be rescued due to the emergency, food and water may be delivered to the animals by the appropriate agency when possible.

## C. Behavior during the immediate aftermath

Most pets, if given food, water, and a cage in which they are able to stand or lie down, will acclimate well with their new surroundings. The more antisocial animals, especially cats, may be calmed by providing them with a box in which to hide inside the cage or by covering the cage with a towel or blanket.

## D. Capture, containment, and restraint

Human life will not be risked to capture loose animals. However, many pets are socialized to human beings, and are easily caught. Offering food may allow capture of loose, hungry dogs and cats. In many disasters, there is too much noise and commotion during the day, and displaced pets (especially cats) will stay hidden. Baited traps placed at night in the cat's home territory are very effective. Dogs are not trapped as frequently as cats, as they tend to move around whereas cats are often found in their home territory.

The most common and available method of restraint of dogs is the muzzle and leash. Cats that can be caught may be subdued by wrapping tightly in a large heavy towel with only the head extended. Slip nooses can be used with traumatized, aggressive animals.

Tranquilization or sedation of injured animals may be necessary. Tranquilization will be done under supervision of qualified personnel.

**E. Animal identification methods**

Pet identification methods consist of microchips (shown to be most effective animal ID/tracking method during an emergency), collar and tags, or tattoos on the inside of the ear, the lip, or the inside of the hind leg. Every animal should have some form of identification on it when it comes into a designated shelter. Animals without prior identification may be temporarily identified by affixing an identifier to the animal. A corresponding numbered animal description sheet will be filled out on all animals entering a designated shelter.

## F. Nutritional requirements

Qualified personnel will supervise dietary needs so that a nutritious and appropriate diet is provided for each species. Clean water should be provided daily at the rate of 1/2 gallon for average-sized dogs and 1 pint for cats. Because contaminated water may contain pathogenic organisms, chlorine may be used to make it safer. Sodium hypochlorite (household bleach) at the rate of 2 gallons per 100 gallons of water will be beneficial. Ideally, the water should be tested, but during a disaster, this may not be possible. Alternatively, bottled water may be used.

## G. Health concerns

Emergency conditions that lead to commingling of animals from different locations increases the potential for spread of infectious disease. Some of the greatest risks to dogs and cats are canine parvovirus, canine distemper, feline infectious peritonitis, feline leukemia virus, feline panleukopenia, and internal and external parasites. Unvaccinated puppies and kittens will often become sick and require treatment. Even the best managed facility will contract some stress-related respiratory disease and a treatment center or separate area should be set up to care for sick pets.

Severe traumatic injuries will require individual examination and treatment. Lacerations and fractured bones are some of the injuries that may occur in a disaster. Qualified veterinary personnel will supervise treatment and pain management.

## H. Housing and sanitation

Dogs and cats and other legal domestic companion animals will be housed at the animal shelter or other specialized shelters. Animals should be housed individually and separated by species and sex. Bedding should be provided when appropriate. Animal enclosures should be kept clean and dry. Portable cages may be used to provide temporary shelter. Temporary dog runs may be created using chain link panels obtained from construction companies or businesses that rent temporary fencing. The chain link panels should be 6 to 8 feet long with no gap along the bottom. Manure disposal will be in accordance with county and state regulations.

## I. Zoonoses concerns

Zoonoses are diseases which can be transmitted from animals to people and from people to animals. Some of the risks from domestic pets are internal and external parasites, leptospirosis (which can be shed in urine), enteric pathogens such as crypto sporidia and giardia, and rabies. Careful handling and disposal of animal wastes is important. Contaminated water can be a source of pathogens; therefore, caretakers should use caution in handling animals with diarrhea and never consume water from an unapproved source. Any animal bites should be reported and handled with the utmost of precaution by appropriate medical personnel.

## J. Euthanasia and disposal

The recommended method of euthanasia for dogs and cats is with an appropriate chemical injection or by other acceptable methods. Qualified personnel will perform euthanasia. Because of the mass injuries that can occur in a disaster, the volume of chemical euthanasia solution or other euthanasia compounds on hand may be exhausted early. Should this occur, acceptable alternate euthanasia methods will be used (see the American Veterinary Medical Association’s Panel on Euthanasia report). Records will be kept on all euthanized animals. Citizens who are missing an animal will have access to those records which may help identify their animal. Animal carcasses will be disposed of according to established Animal Control procedures (Appendix M).

**APPENDIX I – VETERINARY RESOURCES**

**State Veterinary Resources**

NYS Department of Agriculture and Markets Regional Veterinarian

5569 Shady Avenue

Lowville, NY 13367

Home (315) 377-3011

Cell (315) 408-5753

NYS Department of Agriculture and Markets

10B Airline Drive

Albany, NY 12235

Office (518) 457-3502

Cell (518) 429-1969

New York State Department of Agriculture and Markets

Division of Animal Industry Director
10B Airline Drive, Albany, New York 12235
518-457-3502

NYS Department of Agriculture and Markets Regional Supervisory Animal Health Technician for Lewis County

(518) 321-5001

NYS Department of Agriculture and Markets Animal Health Technician

Sandy Creek, NY

**Private Veterinary Resources – Lewis County**

Roberts Veterinary Clinic

Dr. Lucia Roberts

Small Animal Veterinary Service

9644 East Road

Lowville, NY 13367

Office (315) 376-3991

Countryside Veterinary Clinic – Lowville

Large and Small Animal Veterinary Service

7364 Utica Boulevard

Lowville, NY 13367

Office (315) 376-6563

Answering Service (315) 785-1806

Countryside Veterinary Clinic – Carthage

Small Animal Veterinary Service

21995 Cole Road

Carthage, NY 13367

Office (315) 493-7387

Answering Service (315) 785-1806

**Private Veterinary Resources – Neighboring Counties**

Foothills Veterinary Clinic

Dr. Terry Hauserman

Large and Small Animal Veterinary Service

12568 Potato Hill Road

Boonville, NY 13309

Office (315) 942-5320

North Country Animal Health Center

Small Animal Veterinary Service

16760 NY State Route 3

Watertown, NY 13601

Office (315) 785-9505

Watertown Animal Hospital

1445 Washington Street

Watertown, NY 13601

Office (315) 788-1711

Limerick Veterinary

Small Animal Veterinary Service

16253 NY State Route 12E

Dexter, NY 13634

Office (315) 639-4300

The Animal Doctors Veterinary Clinic

1631 State Street

Watertown, NY 13601

Office (315) 786-3340

**Appendix J – LCART** **Training Requirements, Code of Conduct, and Members List**

**1. Lewis Country Animal Response Team Standard Operating Procedures**

County Animal Response Teams (CARTs) are the most critical component of the Empire State Animal Response Team (ESART). Management of emergencies or disasters involving animals, like those involving humans, begins at the local level. Successful emergency management relies on pre-planning, identification of people, resources, and responses that will be needed when the time comes. The Empire State Animal Response Team program is an effort to provide direction and structure to the formation of standardized animal response teams at the county level within the framework of the National Incident Management System (NIMS).

**2. Lewis County Animal Response Team**

The LCART will serve as a specialized resource to assist local official emergency management personnel in all phases (preparedness, response, and recovery) of an emergency or disaster that impacts animals in Lewis County.

**3. LCART Membership**

 1. LCART has been approved and registered with the State Coordinator of New

 York State Department of Agriculture and Markets.

 2. Lewis Country CART primary contact will be the Emergency Services

 Coordinator.

Lewis Country Emergency Management Office

Robert A. MacKenzie III

5252 Outer Stowe Street

PO Box 233

Lowville, NY 13367

Office (315) 376-5305

Fax (315) 376-5293

Cell (315) 771-6196

robertmackenzie@lewiscounty.ny.gov

 3. Each member needs to submit an application.

 4. Each member of the LCART must read and sign the LCART Code of Conduct.

a. When the LCART is activated, each member will be required to read and sign a Code of Conduct for that incident.

 5. A database roster of LCART members will be maintained.

6. LCART must have at least one member that is a veterinarian licensed to practice in New York and the appropriate Emergency Management official from the local jurisdiction. In addition, it is highly recommended that representatives from the following groups be included:

 - Lewis Country Public Health Department

 - Cornell Cooperative Extension of Lewis County

 - Lewis Country Sheriff’s Office

 - Lowville Village Police and State Police Department

 - Lewis County Soil and Water Conservation District

 - New York State Department of Agriculture and Market Veterinarian(s)

 - Lewis County Veterinary Clinics

 - Lewis County Humane Society

 - American Red Cross – Black River Valley Chapter

 - Lewis County Dog Control Officers

 - Lowville Farmers Cooperative

 - New York State Department of Environmental Conservation

 7. Each member of the LCART is required to complete at a minimum the initial

 Basic Responder Training and an annual refresher training.

 - Please see LCART Member Training Requirements

 8. A Basic Responder may become an Advanced Responder by completing the

 Advance Responder Training.

 - Please see LCART Member Training Requirements

 9. If an advance responder has interest in a specialized operation, there will be

 opportunity to have access to the following training.

 - Please see LCART Member Training Requirements

10. LCART shall specify responsibilities for its members and develop and maintain an emergency communications plan. Sub-teams, based on expertise, experience, and number of people available, can be developed to respond to various emergency situations.

 11. LCART will keep up-to-date lists of local vendors or sources that can provide

 materials and services in the event of an emergency. These lists are included

 in the following appendixes of the Lewis Country Animal Disaster Plan:

 Appendix C – Animal Care Resources

 Appendix D – Animal Holding or Confinement Areas for Lewis County

 Appendix E – Hotels and Motels Accepting Animals

 Appendix F – Animal Transportation Resources

 Appendix I – Veterinary Resources

 Appendix K – Licensed NY Wildlife Rehabilitators

 Appendix P – Dog Control Officers of Lewis County

**4. LCART Member Training Requirements**

 A. Basic Responder Training

 - Each member of the LCART is required to complete at a minimum the

 initial Basic Responder Training and an annual refresher training.

 1. ESART Orientation

 a. <http://www.ualbanycphp.org/learning/default.cfm>

 b. County Animal Response Team – 1 hour

In this course, you will get an overview of why it is important to plan for animals; the types of disasters that affect animals, the purpose and roles of State Animal Response Teams (SARTs) and County Animal Response Teams (CARTs) in preparing, planning, and responding to emergencies affecting animals; and how these teams use the Incident Command System to coordinate response.

 2. IS 700B

a. <https://training.fema.gov/is/courseoverview.aspx?code=IS-700.b&lang=en>

 b. IS 700B – NIMS: An Introduction – 3 hours

This course introduces and overviews the National Incident Management System (NIMS).  NIMS provides a consistent nationwide template to enable all government, private-sector, and nongovernmental organizations to work together during domestic incidents.

 3. IS 100C

a. <https://training.fema.gov/is/courseoverview.aspx?code=IS-100.c&lang=en>

 b. IS 100C – Introduction to the Incident Command System – 3 hours

This course describes the history, features and principles, and organizational structure of the Incident Command System. It also explains the relationship between ICS and the National Incident Management System (NIMS).

 4. Hazmat Awareness

a. <https://www.saferesponse.com/courses/hazardous-materials-response-awareness-level/>

 b. Hazardous Materials Response – Awareness Level – 3 hours

Participants will learn how to recognize a hazardous materials release and the risks involved. They will also learn how to identify the released material; how to use available resources, including the Emergency Response Guidebook; and how to notify the proper authorities in the event of a hazardous material emergency.

 5. Human First Aid and CPR

 6. Animal First Aid (non-veterinary personnel)

 B. Advanced Responder Training

 - A Basic Responder may become an Advanced Responder by completing

 the Advance Responder Training.

 1. IS 200C

 a. <https://training.fema.gov/is/coursematerials.aspx?code=IS-200.c>

 b. IS 200C – ICS for Single Resources and Initial Action Incidents – 3 hours

This course is designed to enable personnel to operate efficiently during an incident or event within the Incident Command System (ICS). ICS-200 provides training on and resources for personnel who are likely to assume a supervisory position within the ICS.

 C. Specialized Training

 - If an advance responder has interest in a specialized operation, there will

 be opportunity to have access to the following training.

 1. ESART Emergency Animal Sheltering

 a. <http://www.ualbanycphp.org/learning/default.cfm>

 b. Emergency Animal Sheltering 1 ½ - 2 hours

This course is the second in a series of introductory courses designed for those interested in assisting animals during emergencies. The main purpose of this course is to educate course participants on the purpose and types of emergency animal shelters, as well as the management and administration of such shelters.

 2. IS 10a

 a. <http://www.training.fema.gov/EMIWeb/IS/is10a.asp>

 b. IS 10a – Animals in Disasters: Awareness and Preparedness – 3.5 hours

 This course is intended to help animal owners, care providers, and industries to understand incident management.

 3. IS 11a

 a. <http://training.fema.gov/EMIWeb/IS/IS11a.asp>

 b. IS 11a – Animals in Disasters: Community Planning

This course provides information for groups to meet and develop meaningful and effective plans that improve the care of animals, their owners, and the animal-care industries in disasters.

 4. IS 111a

 a. <http://training.fema.gov/EMIWeb/IS/is111a.asp>

 b. IS 111a – Livestock in Disasters

This course combines the knowledge of livestock producers and emergency managers to present a unified approach to mitigate the impact of disasters on animal agriculture.

**5. Lewis Country Animal Response Team Code of Conduct**

Individuals volunteering for the Lewis Country Animal Response Team (LCART) shall adhere to the following policies. All LCART members will sign this document to indicate that they understand and agree to abide by the codes identified within this document. Incident Commanders will have authority to deactivate any activated CART representative for behavior(s) that is contrary to the code of conduct based on their discretion.

1. Individuals shall project a professional manner and appearance while participating in any LCART related activities. The following will not be tolerated while on site at a disaster, training event, exercise or other Country, State or CART sponsored activity:

 a. Consumption of alcoholic beverages while on duty or any display of public

 drunkenness

 b. Possession, use or selling of any illegal drugs

 c. Violation of any laws

 d. Public outbursts, public derogatory remarks about other organizations or

 individuals

 e. Illegal use or display of a firearm

2. Individuals shall identify operations that are beyond their capabilities based on their experience, training and knowledge, and will provide and carry professional credentials during activation. Individuals shall observe all safety rules and regulations and be familiar with proper usage and operation of all equipment.

3. Individuals shall be expected to accept assignments and/or orders as directed by the appropriate supervising authority (ICS Incident Commander or LCART Team Leader), or if required, make discretionary decisions based on appropriate intent and good judgment.

4. Individuals while representing LCART will not participate otherwise in operations that serve to promote personal gain, ideologies, or individual organizations.

5. Individuals shall not enter private properties to perform CART duties without permission from the owner, supervising authority, or without law enforcement escort.

6. Individuals shall remain in contact with the appropriate ICS authority and confine their activities to the stated mission and directives of the Incident Action Plan.

7. All individuals shall wear current identification, preferably LCART badge, as required by the Incident Commander and local emergency management protocols while on site at a disaster.

8. Individuals will be required to document or participate in documentation for each emergency activity or action in a timely manner and submit documentation to the incident commander through the appropriate ICS channels.

9. Individuals shall not transport animals to facilities other than the ones that have been assigned by the supervising authority without permission from the supervising authority.

10. Individuals shall refrain from taking photographs out of respect for the privacy of the owner unless you are directed to take such photos by the Incident Commander and any photos taken may not be used for personal purposes or used for display to the public without the expressed written permission of the owner.

11. In situations in which an animal(s) is rescued and transported from a property without prior permission, individuals participating in such rescue must leave notification of the removal of the animal or disturbance of the property on the property in the most visible area possible. The Incident Commander will dictate the form of notification.

12. Individuals shall not accept personal gratuities. All personal donations shall be directed to the CART and/or emergency management officials.

13. Volunteers serving as part of an official CART activation will direct all questions and requests for interviews to the Public Information Officer indicated in the ICS organizational structure.

14. Each time the CART is activated you will be required to read and sign a Code of Conduct for that incident.

Sign and Date below:

Signed Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Printed Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**6. LCART Members**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Address | Home Phone | Cell Phone | Work Phone | Completed Membership Requirements |
|  |  |  |  |  |  |

**Appendix K – Licensed New York State Wildlife Rehabilitators**

|  |  |  |
| --- | --- | --- |
| Name and Address | County | Species Suitable For |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Appendix L – Glossary**

**Agricultural Animal -** Refers to one or more livestock animals raised in a farm setting to produce [commodities](http://en.wikipedia.org/wiki/Commodity) such as [food](http://en.wikipedia.org/wiki/Food), [fiber,](http://en.wikipedia.org/wiki/Fiber) or [labor](http://en.wikipedia.org/wiki/Labour_%28economics%29)

**Companion Animal** – For the purposes of this document, refers to a dog or cat only. A pet that is kept for [companionship](http://en.wikipedia.org/wiki/Companionship) and a person's enjoyment, as opposed to [exotic, pocket pet, stray, or wild animals](http://en.wikipedia.org/wiki/Wild_animal) or to [livestock](http://en.wikipedia.org/wiki/Livestock).

**Disaster** – Occurrence or imminent threat of widespread or severe damage, injury, or loss of life or property resulting from any natural or man-made causes, including, but not limited to, fire, flood, earthquake, hurricane, tornado, high water, landslide, mudslide, wind, storm, wave action, volcanic activity, epidemic, air contamination, blight, drought, infestation, explosion, radiological accident, water contamination, bridge failure, ore bridge collapse.

**Domestic Owned Animal** - For the purposes of this document, refers to a dog or cat only that has an identifiable owner.

**Domestic Pets** – For the purposes of this document, refers to a dog or cat only. A pet that is kept for [companionship](http://en.wikipedia.org/wiki/Companionship) and a person's enjoyment, as opposed to [exotic, pocket pet, stray, or wild animals](http://en.wikipedia.org/wiki/Wild_animal) or to [livestock](http://en.wikipedia.org/wiki/Livestock).

**Domestic Stray Animal** – For the purposes of this document, refers to a dog or cat only that does NOT have an identifiable owner. Stray cats that are being fed by a member of the community are considered DOMESTIC OWNED ANIMALS.

**Emergency** – A serious situation or occurrence that demands immediate action to prevent loss of life and property; poses a risk to public health and safety; and/or results in economic impact to the stakeholder, community, state, and beyond. An official state of emergency or disaster declaration does not need to be made for an emergency manager to activate a CART team or member

**Evacuation** - The removal of the public from an area.

**Exotic Animal** – For the purposes of this document, refers to any animal other than a dog or cat. Exotic pets are domesticated animals that are kept for companionship and a person’s enjoyment such as rabbits, gerbils, guinea pigs, hamsters, rats, mice, ferrets, birds, snakes.

**Incident Command System (ICS) -** A standardized on-scene emergency management concept specifically designed to allow its user(s) to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries.

**Joint Information Center** - The facility used as the central point for dissemination of information by county, State, and licensee representatives to the news media. This facility is located offsite and is the only location which allows media access to authorized spokespersons during an emergency.

**Lewis County Emergency Management Office** -This agency is responsible for the overall direction and the control of the emergency incident.

**Livestock Animals** – For the purposes of this document, refers to dairy cattle, beef cattle, horses, donkeys, mules, sheep, goats, pigs, poultry (layers, pullets, broilers, ducks, geese, and other poultry species kept for economic or productive reasons), llamas, and alpacas. Animals raised in a farm setting to produce commodities such as food, fiber, or labor.

**Pet-Friendly Shelter** – An emergency shelter for pets located within the same area or facility as an emergency shelter for people. Thus, allowing pets to remain with their owners and have owners, with assistance, continue to provide for their pets’ daily needs.

A pet-friendly shelter is an emergency shelter for pets located within the same area or facility as an emergency shelter for people. Thus, allowing pets to remain with their owners and have owners, with assistance, continue to provide for their pets’ daily needs.

**Pocket pets** – For the purposes of this document, refers to gerbils, guinea pigs, hamsters, rats, and mice. A pocket pet refers to any small mammal commonly kept as a household pet. The six general criteria which qualify an animal to be considered a pocket pet are:

 1. its commonality as a domestic house pet

 2. no potential danger to humans or other animals

 3. non-exotic

 4. overall ease of care and feeding

 5. amicable disposition making it suitable as a “companion” pet

 6. relatively small stature

**Poultry** – Bird populations includes layers, pullets, broilers, ducks, geese, and other poultry species that are kept for economic or productive reasons versus pet birds.

**Recovery** -

 a. The process of returning people and animals to their homes after an evacuation and of re-uniting, adopting, or disposing (in accordance with established animal control procedures) stray or lost animals taken to shelters.

 b. The process of reducing radiation exposure rates and concentrations of radioactive materials in the environment to levels acceptable for unconditional occupancy or use.

**Re-entry -** Temporary entry of individuals into a restricted zone under controlled conditions.

**Response** - The emergency phase in which public protective actions are carried out.

**Return** - Reoccupation of areas cleared for unrestricted residence or use by previously evacuated or relocated populations.

**Service Animals** - Service animals are animals that have been trained to perform tasks that assist people with disabilities. In the [United States](http://en.wikipedia.org/wiki/United_States), the [Americans with Disabilities Act](http://en.wikipedia.org/wiki/Americans_with_Disabilities_Act_of_1990) (ADA) defines a service animal as "any [guide dog](http://en.wikipedia.org/wiki/Guide_dog), [signal dog](http://en.wikipedia.org/wiki/Signal_dog), or other animal individually trained to provide assistance to an individual with a disability." As of September 2010, the [Civil Rights Division](http://en.wikipedia.org/wiki/United_States_Department_of_Justice_Civil_Rights_Division) of the [U.S. Department of Justice](http://en.wikipedia.org/wiki/United_States_Department_of_Justice) has redefined a "service animal" for the purposes of the Americans with Disabilities Act as “any dog that is individually trained to do work or perform tasks for the benefit of an individual with a disability, including a physical, sensory, psychiatric, intellectual, or other mental disability. Other species of animals, whether wild or domestic, trained or untrained, are not service animals for the purposes of this definition." This revised definition excludes all [comfort animals](http://en.wikipedia.org/wiki/Comfort_animal), which are pets that owners keep with them for emotional reasons. (For example, the owner may feel calmer when he or she is near the pet.) Unlike a service animal, a comfort animal is not trained to perform specific, measurable tasks directly related to the person's disability. Common tasks for service animals include flipping light switches, picking up dropped objects, alerting the person to an alarm, or similar disability-related tasks

The international assistance animal community has categorized three types of assistance animals:

1. Guide animal - to guide the blind
2. Hearing animal - to signal the hearing impaired
3. Service animal - to do work for persons with disabilities other than blindness or deafness.

**Shelter in Place** - Keeping animals in place during an emergency situation to minimize exposure to radiation or inclement weather, travel complications, or other dangers and providing adequate food, water, and shelter.

**Stray Animals** – For the purposes of this document, refers to a dog or cat only that does NOT have an identifiable owner. Stray cats that are being fed by a member of the community are considered DOMESTIC OWNED ANIMALS.

**Traffic Control -** All activities accomplished for the purpose of facilitating the

evacuation of the general public in vehicles along specific routes.

**Wild Animals** – Includes all non-domesticated animals, as well as those domesticated animals (dogs and cats) that have not been properly socialized with people.

**Glossary - Acronyms**

**BCDC** – Bureau of Communicable Disease Control

**CAFOs** – Concentrated Animal Feeding Operations

**CART** – Country Animal Response Team

**DOE** - Department of Energy

**ESART** - Empire State Animal Response Team

**IC**- Incident Commander

**ICS** - Incident Command System

**LCART** - Lewis County Animal Response Team

**LCEOC** - Lewis County Emergency Operations Center

**LCHS** - Lewis County Humane Society

**LCPH** – Lewis Country Public Health

**NIMS** - National Incident Management System

**NYSDAM** – New York State Department of Agriculture and Markets

**NYSDEC** - New York State Department of Environmental Conservation

**NYSDOH** - New York State Department of Health (NYSDOH)

**PIO** - Public Information Officer; Assigned by the Lewis Country Emergency

 Management office

**SWCD** - Soil and Water Conservation District

**Appendix M – Natural Resources Conservation Service Conservation Practice Standard Animal Mortality Facility Code 316**

# A. Definition

An on-farm facility for the treatment or disposal of livestock and poultry carcasses for routine and catastrophic mortality events.

# B. Purpose

 This practice supports one or more of the following purposes:

 - Reduce impacts to surface and groundwater resources

 - Reduce the impact of odors

 - Decrease the spread of pathogens

# C. Conditions where practice applies

 This practice applies to livestock and poultry operations where animal carcass

 treatment or disposal is needed.

 This practice includes disposal of both routine and catastrophic animal mortality;

 however, it may not apply to catastrophic mortality resulting from disease. In

 cases of disease related catastrophic mortality, this standard is applicable only

 when directed by the appropriate state or federal authority (typically the state

 veterinarian or USDA APHIS) to use the methods in this standard.

D. Criteria

 1. General Criteria Applicable to All Purposes

 - Design animal mortality facilities to handle routine mortality and/or

 catastrophic mortality.

 - The planning and design of animal mortality facilities or processes must

 conform to all federal, State and local laws, rules and regulations. This

 includes provisions for closing and/or removing the facility where

 required.

 - Design of all structural components integral to the animal mortality

 facility shall meet the structural loads and design criteria as described in

 NRCS conservation practice standard Waste Storage Facility (313), and

 conservation practice standard Roofs and Covers (367), unless otherwise

 designated.

 - Divert all runoff away from the animal mortality facility.

 - Use safety devices such as fencing, warning signs, and refrigeration unit

 locks where necessary.

 - Address bio-security concerns in all aspects of planning, installation, and

 operation and maintenance of an Animal Mortality Facility.

 **-** Location

 - Locate the facility where movement of odors toward neighbors

 will be minimized.

 - Locate the facility down gradient from springs or wells where

 possible or take steps necessary to prevent contamination.

 - Locate animal mortality facilities above the 100-year floodplain

 elevation unless site restrictions require location within the

 floodplain. If located in the floodplain, protect the facility from \

 inundation or damage from a 25-year flood event.

 - Ensure that the location of the animal mortality facility is

 consistent with the overall site plan for the livestock or poultry

 operation. Locate the facility for acceptable ingress and egress

 and where it will not interfere with other travel patterns on the

 farm.

 **-** Seepage Control

 - Where seepage will create a potential water quality problem,

 provide a liner which meets the requirements of the Agricultural

 Waste Management Field Handbook (AWMFH), Appendix 10D

 for clay liner design criteria or other acceptable liner technology.

E. Criteria Applicable to Routine Mortality

 - Locate the facility as close to the source of mortality as practical,

 considering bio-security issues and the need to keep the facility out of

 sight of the general public.

 1. Composters

 - General

 -Design facilities for composting animal mortality to conform to

 NRCS conservation practice standard Composting Facility (317).

 - Size animal mortality composting facilities according to the

 methods provided in the NEH Part 637, Chapter 2 – Composting

 (NEH 637.0210 and NEH 637.0211) and NEH Part 651,

 Chapter 10 – Composting (NEH 651.1004(f)). or comparable

 extension publication or state rules.

 2. Refrigeration Units

 - General

 - Use refrigeration units with a construction compatible with the

 mechanism to be used to empty the refrigeration unit. Provide

 for protecting the refrigeration unit from precipitation and direct

 sun as deemed appropriate.

 - The refrigeration unit design, construction, power source, and

 unit installation shall be in accordance with manufacturer's

 recommendations. Refrigeration units shall be constructed of

 durable material, be leak proof, and have a life expectancy

 compatible with other aspects of the waste management system.

 - Place refrigeration units on a pad of suitable strength to withstand

 loads imposed by vehicular traffic used to load or remove the

 box or tray.

 - Temperature

 - The refrigeration units shall be self-contained units designed to

 freeze animal carcasses before decomposition occurs. For best

 results, the temperature of the carcasses to be rendered shall be

 maintained between 22° and 26° F. Carcasses that will be

 incinerated or gasified should be stored at a few degrees above

 freezing in order to facilitate burning and to reduce the amount of

 fuel needed to incinerate or gasify the carcasses.

 - Capacity

 - Size the refrigeration units to accommodate the normal maximum

 volume of mortality to be expected in the interval between

 emptying. When calculating the volume required, include the

 expected mortality rate of the animal, the period of time between

 emptying where mortality is given on a per day basis, the

 average weight of the animal, and a conversion factor for weight

 to volume. For broiler operations use a weight to volume

 conversion of 45 pounds per cubic foot unless a local volume

 conversion factor has been documented.

 - Power Source

 - An alternative source of power, where available, shall be used to

 maintain the integrity of the freezing process during power

 outages. Where an alternative power source is not available,

 provide contingencies for disposal of the animal carcasses in the

 operation and maintenance plan.

 3. Incinerators and Gasifiers

 - General

 -Use Type 4 (human and animal remains) incinerators that have

 been approved for use within the state. Gasification, which is a

 high temperature method of vaporizing the biomass with no direct

 flame with oxidation of the fumes in an after-burning chamber,

 will meet all applicable state air quality/emissions requirements.

 - Capacity

- Base the minimum incinerator capacity on the average daily

weight of animal mortality and the length of time the incinerator will be operated each day. Size gasifiers to handle the average maximum daily animal mortality during a growing cycle. Refrigeration units can be used in conjunction with gasifiers to improve the loading cycle and fuel use efficiency of the gasification unit.

 - Ashes

 - Remove ashes daily or according to manufacturer

 recommendations. Spread ash according to NRCS conservation

 practice standard Nutrient Management (590) or provide for

 other acceptable means of disposal.

 - Location

 - Locate the incinerator/gasifier a minimum of 20 feet from any

 structure. Place the unit on a concrete pad with the fuel source as

 distant as practical. If the incinerator is covered with a roof, at

 least six inches of air space is required between the chimney and

 any combustible roof parts.

F. Criteria Applicable to Catastrophic Mortality

1. General

 - Burial and composting are the only processes addressed by this standard. - Collect and treat catastrophic mortality as soon as practical.

 2. Location

 - Locate the animal mortality facility site as far away from neighboring

 dwellings and the poultry or livestock operation as site conditions permit.

 - Locate on sites with restricted percolation and a minimum of two feet

between the bottom of the facility and the seasonal high-water table

unless special design features are incorporated that address seepage. Use

AWMFH Appendix 10D for selection of sites where seepage will be

restricted with normal construction techniques.

 3. Burial Pit

 - General

- Bury catastrophic mortality on-site or as otherwise directed by

 state and local regulatory agencies. Time the burial of

 catastrophic mortality to minimize the effects of mortality

 expansion during the early stages of the decay process. Where

 possible and permitted by state law, leave large mortality

 uncovered or lightly covered until bloating has occurred, or use

 methods to reduce or eliminate bloating. Retain topsoil to re-

 grade the disposal site after the ground has settled as the decay

 process is completed. Place stockpiled soil no closer than 20 feet

 from the edge of the burial pit.

 - Remove or render inoperable all field tile (subsurface drains)

 within the operational area of the burial pit.

 - Soil Suitability

 - Perform onsite soils investigation to determine the suitability of

 the site for a burial pit. Locate burial pits on soils which do not

flood and which do not have a water table within two feet of the

bottom of the burial pit. Avoid areas which have the presence of

hard bedrock, bedrock crevices, or highly permeable strata at or

directly below the proposed trench bottom. These sites are

undesirable because of the difficulty in excavation and the

potential pollution of underground water.

 - Size and Capacity

 - Size pits to accommodate catastrophic mortality using

 appropriate weight to volume conversions. Dig the pit bottoms to

 be relatively level. Lengths may be limited by soil suitability and

 slope. If more than one pit is required, separate the pits by a

 minimum of three feet of undisturbed or compacted soil. Place a

 minimum of 2 feet of cover over the mortality. Provide a finished

 grade for the burial site that is slightly above natural ground

 elevation to accommodate settling and reduce ponding from

 precipitation events. Vegetate all disturbed areas according to

 NRCS Conservation Practice Standard Critical Area Planting

 (342).

 - Structural Loading and Design

 **-** Use barriers to keep vehicular traffic at least four feet from the pit

edge.

 - Use pit excavation techniques which are OSHA compliant. For

pits that are four to five feet deep, provide a step or bench 18

inches wide and one foot deep dug around the perimeter of the

main pit so that the remaining vertical wall will not exceed four

feet. For pits greater than five feet deep, provide earthen walls

that are sloped back at 2 horizontal and 1 vertical or flatter.

 4. Composting

 - General

 -Use composting as described in NEH Part 637, Chapter 2 –

 Composting (NEH 637.0210 and NEH 637.0211) ) and NEH Part

 651, Chapter 10 – Composting (NEH 651.1004(f)).

 - Protect composting mortality from precipitation as necessary, or

provide an appropriate filter area or means for collecting

contaminated runoff. Cover dead animals in static piles or

windrows with a minimum of 1 foot of sawdust, finished

compost, or other carbonaceous material to discourage

scavenging animals and minimize odors.

G. Considerations

 - Major considerations in planning animal mortality management are:

 - Available equipment and land application area at the operation

 - The management capabilities of the operator

 - The degree of pollution control required by state and local agencies

 - Effect on wildlife and domestic animals

 - The economics of the available alternatives

 - Effect on neighbors

 - Initial planning of site suitability should include referring to the web Soil

 Surveys’ soil interpretations for “disaster recovery planning”

 <http://websoilsurvey.nrcs.usda.gov/>.

 - Establish traffic patterns to avoid crossing livestock pathways and feed lanes

 with mortality transport

 - Consider taking measures to maintain appropriate visual resources, reduce odor,

 and provide dust control. Vegetative screens and topography should be used to

 shield the animal mortality facility from public view, to reduce odors, and to

 minimize visual impact.

 - Composting of any mortality will be hindered if the carcasses are allowed to

 freeze. Dead animals or birds should be placed in the compost mix as quickly as

 practical or kept in a dry, non-freezing environment until added to the compost

 mix. Composting frozen carcasses will lengthen the amount of time needed for

 composting to occur and will likely require added management to ensure that

 proper composting temperatures are reached.

 - Facility sizes for composting large animal carcasses should reflect the longer

 compost periods required.

 - Poultry operations often experience higher rates of mortality as the birds reach

 maturity.

 - An alternative to prevent bloating of catastrophic mortality could include

 opening animal thoracic and abdominal cavities and viscera prior to placing

 required cover.

 - State requirements for record keeping vary. Items such as burial site location,

 type and quantity of mortality, burial date, and other pertinent details may be

 required by state or local regulations.

H. Plans and Specifications

Plans and specifications shall describe the requirements for applying this practice. At a minimum, include the following:

 - A plan view showing the location and extent of the practice.

 - Pertinent elevations of the facility.

 - Location of electrical lines, gas lines, and requirements for burial and

 quality of materials.

 - Structural details of all components.

 - Number, capacity, and quality of facility(ies).

 - Where a roof structure is used to protect the facility, include design data

 and building dimensions.

 - Vegetative requirements.

 - Odor management or minimization requirement.

I. Operations and Maintenance

 An operation and maintenance (O&M) plan containing the items listed below will

be developed with the operator, and will become a part of the overall waste

management system plan. Safety considerations shall be prominently displayed

in the plan. As a minimum, include the following information in the O&M plan:

 - Method and procedures of mortality disposal for normal losses

 - Method and procedures of mortality disposal for catastrophic losses

 - Biosecurity concerns

 - Contact(s) and phone numbers of person(s) to contact in case of

 catastrophic losses.

 - Records of date, average weight, and number of deaths

 - Periodic inspections

 - Prompt repair or replacement of damaged components

 - Site references and/or manufacturer or installer for trouble shooting.

1. Additional Operations and Maintenance for Incinerators and Gasifiers

 - Use incinerators and gasifiers only for the disposal of animal carcasses.

 - Operate units properly to maximize equipment life and minimize emission

 problems.

 - Load the units according to the manufacturer’s recommendations.

 - Remove ashes frequently to maximize combustion and prevent damage to

 equipment. Include methods for collecting and disposing of the ash material

 remaining after incineration.

 - Inspect the units periodically to ensure that all components are operating as

 planned and in accordance with the manufacturer’s recommendations.

2. Additional Operations and Maintenance for Refrigeration Units

 - Operate refrigeration units properly to maximize equipment life and minimize

 potential problems.

 - Load the refrigeration unit according to manufacturer’s recommendations and do

 not exceed the design capacity.

 - Use refrigeration units only for the dead animals associated with the planned

 operation.

 - Inspect the refrigeration unit periodically for leaks, structural integrity and

 temperature.

3. Additional Operations and Maintenance for Composters

 - Include a recipe of ingredients which gives the layering/mixing sequence.

 - Provide maximum and minimum temperatures for operation, land application

 rates, moisture level, management of odors, testing, etc.

 - Inspect the compost facility regularly when the facility is empty.

 - Replace or repair any damaged structural components.

 - Closely monitor temperatures above 165°F. Take action immediately to cool

 piles that have reached temperatures above 185°F.

 - Include the method, procedure, and record keeping requirements for proper

 utilization of compost.

 4. Additional Operations and Maintenance for Catastrophic Mortality

 - Identify locations for catastrophic animal mortality disposal. Maintain

 recordkeeping of number, average weight, cause, and date of animal deaths.

 Provide the landowner with contact information for state authorities since they

 may have specific requirements dependent upon cause of death, livestock

 species and housing.

 - Where composting is used for catastrophic mortality disposal, identify in the

 O&M plan the most likely compost medium, possible compost recipes,

 operational information, and equipment that will need to be readily available.

J. References

 1. Nutsch, A., J. McClaskey, and J. Kastner, Eds., 2004. Carcass disposal: a

 comprehensive review, National Agricultural Biosecurity Center, Kansas State

 University, Manhattan, Kansas.

 2. USDA, NRCS. 1992. National Engineering Handbook, Part 651, Agricultural

 Waste Management Field Handbook. Washington, D.C.

 3. USDA, NRCS. 2000. National Engineering Handbook, Part 637, Chapter 2,

 Composting, Washington, D.C.

**Appendix N – County Radiological Ingestion Pathway Information Guide**

**New York State Office of Emergency**

**Management**

**County Radiological**

**Ingestion Pathway**

**Information Guide**

**2011**

**Andrew M. Cuomo Governor**

**Andrew X. Feeney Director**

**COUNTY RADIOLOGICAL INGESTION PATHWAY**

**INFORMATION GUIDE**

**TABLE OF CONTENTS**

**A. INTRODUCTION**

**B. RESPONSE**

 1. Alert and Notification

 2. Command and Control

 3. Sampling and Analysis

 4. Assessment and Evaluation (PAGs

 5. Choosing and Implementing Protective Actions

 6. Public Information - Joint Information Center

**C. ORGANIZATIONAL RESPONSIBILITIES**

 1. State Role

 2. County Role

 3. Federal Role

 4. Facility/Transporter Role

**D. GLOSSARY**

**E. DIAGRAM – Pathways for Ingestion**

**COUNTY RADIOLOGICAL INGESTION PATHWAY INFORMATION GUIDE**

**A. INTRODUCTION:**

Radiation occurs naturally and is a normal part of our environment. Although it is not possible to eliminate all human exposure to radiation, our goal is to limit exposure from accidental releases of radioactive materials. The purpose of this guide is to provide information in an attempt to prevent the ingestion of radioactive material following an accident at a nuclear power plant, other fixed facility, or a transportation incident involving radioactive material.

An Emergency Planning Zone (EPZ) is a pre-determined area surrounding an electricity generating commercial nuclear power plant where planning is undertaken to assure that prompt and effective actions can be taken to protect the public in the event of an accident. EPZs are already pre-established for the three nuclear power sites in New York State: Ginna Nuclear Station, the Nine Mile Point site and the Indian Point Energy Center. However, during an accident at a transportation incident or an accident occurring at a fixed facility, an Emergency Planning Zone may need to be established on an ad hoc basis.

The **Plume Exposure EPZ** is approximately a 10-mile radius around the nuclear plant. When radioactive material is released as a result of an accident or incident, it may move through the air as a **plume** (cloud) of gas or particles or be **deposited** on the ground or other surfaces. People and animals may be exposed to radiation though inhalation or submersion in a radioactive **plume**, or by being near radioactive material **deposited** by the plume on the ground or other surfaces. These are examples of the plume exposure pathway.

The **Ingestion Pathway EPZ** is approximately a 50-mile radius around the nuclear plant and includes the Plume Exposure EPZ. When radioactive material from a plume, or a liquid or solid spill, falls on crops or produce, or on surface water supplies, the potential exists for this radiation to be taken into the body through **eating** or **drinking** these radiologically contaminated foodstuffs and drinking water. These are examples of the ingestion exposure pathway.

We can limit or prevent **plume exposure** by moving people away from or out of the plume through the process of evacuation. **Ingestion pathway exposure** is best avoided or limited by preventing the ingestion of radiologically contaminated material from occurring; and this is the primary idea behind this Information Guide, because once radioactive material is ingested it may be very difficult to expel from the body. The data collection, analysis and decision-making processes for avoiding or limiting radioactive

exposure from the ingestion pathway should be understood at all levels of government to ensure a coordinated and effective response.

The immediate concern in a radiation accident is to prevent or limit people from direct exposure to high levels of radiation in the plume. Ingestion exposure protection can wait until more hazardous emergency or radiation conditions are abated. Since response activities to limit or reduce plume or direct radiation exposure may involve complicated or multi-faceted response actions such as public evacuation, taking Potassium Iodide (KI), and /or instructing the public to shelter-in-place, most ingestion pathway response activities are usually not considered until after the release of radiation has been terminated. The only exception to this concept is the public instruction advising farmers to bring livestock in from pasture to a covered location and provide them with protected feed and water.

Some protective actions that are undertaken during the actual plume or release phase of the emergency are effective in dealing with both plume exposure issues and ingestion pathway issues. For example, the evacuation of people from an Emergency Planning Zone because of plume or deposition concerns will also obviously limit that population from drinking contaminated water or eating contaminated garden produce in those areas. Although this guide only addresses the ingestion pathway, decision makers must consider the overall response activities that are or have been undertaken when planning and implementing ingestion pathway protective actions.

Following the termination of a release of radioactive materials to the environment, the State initially will determine whether deposited materials are at levels which could necessitate the temporary relocation of the public in certain areas, or the determination may be to allow evacuees from certain areas to return home and resume normal activities. Concurrently, the State will identify those geographic areas where protective actions for food and water would have to be implemented.

Many of the radiological determinations can be analyzed simultaneously through the use of sampling teams taking air and ground radiological surveys, but in a large-scale event, such as a release from a nuclear power plant, the resources of the federal government would be required to provide deposition mapping. The use of the Federal Aerial Measuring System (AMS) overflight capability utilizes fixed and rotary wing aircraft with sophisticated detection and mapping capabilities. These aircraft surveys would then be followed by ground surveys and sampling in very specific locations.

Some ingestion pathway protective actions can be taken before the analysis is performed, and perhaps even before a release occurs. An example is the previously cited action of placing milk animals and other livestock on stored feed, providing a protected water supply and shelter or putting restrictions on consumption of surface water supplies.

The steps to prevent ingestion of radioactive material are:

 - Identify the land area possibly contaminated.

 - Develop and implement a radiological monitoring and sampling plan. Perform

 laboratory analysis of the samples.

 - Calculate exposures from the various pathways (milk, water, food).

 - Compare exposures with Protective Action Guides (PAGs). Select and

 implement appropriate protective actions. Verify the effectiveness of the

 protective actions.

The State takes the lead role in planning and implementing the ingestion pathway program in order to maintain consistent sampling and laboratory standards.

**B. RESPONSE:**

**1. Alert and Notification**

When a radioactive incident occurs, local, county, and state officials will be alerted by the facility or emergency responders about the situation. Local officials who become aware of an incident will notify the State through the State Warning Point (518-292-2200). If the State becomes aware of an incident, it will ensure that the county(s) has been notified, as well as the federal government if appropriate. State Health Department radiological experts will be notified by the State Warning Point or other source and their assistance should be requested. The State Health Department will coordinate with the existing County Health Departments. The State will analyze the circumstances of the event and advise appropriate officials of needed protective actions. The State radiological experts will determine if an ingestion pathway hazard exists.

**2. Command and Control**

Section 201 of the Public Health Law designates the State Health Department as the agency responsible for protecting the public from radioactive materials. A few localities or counties may have health departments with radiological expertise. In most areas, only the State Health Department, Bureau or Environmental Radiation Protection, is qualified to deal with radiation accidents or ingestion exposure issues. Where local health departments are qualified, they may participate in the response with the State Health Department as appropriate.

All affected government jurisdictions in involved areas will be consulted regarding the situation and needed actions. When large areas are involved, it may be appropriate to activate local, county or state Emergency Operations Centers to enhance coordination of the operation. The Incident Command System (ICS) developed by the National Incident Management System (NIMS) will be used for the State command and control in accordance with the Governor's Executive Order No. 26 of 1996, *Establishing a Management System for Emergency Response.*

Under the Incident Command System, if the scene of an incident is localized and a local Incident Commander is present, state responders must coordinate all on-scene activities in advance with the Incident Commander. The local Incident Commander may choose to appoint a Liaison Officer to interface with state responders. For a large-scale event, the State will interface with local response efforts in accordance with the Incident Command System and will provide a liaison to the affected jurisdiction(s). The State will also coordinate with the federal government for any federal assets deployed in the affected area.

**3. Sampling and Analysis**

The State will determine the need for radiological monitoring and ingestion pathway sampling and, if needed, will select, organize, and equip sampling teams. Sampling teams will include at least three people, a local representative, such as from the Cooperative Extension Office or Farm Services Agency and a radiological specialist from the Department of Health or the Department of Environmental Conservation. The third member of this team will be a trained individual on milk sampling techniques from the Department of Agriculture and Markets. Specific types of samples will be collected and documented in accordance with the sampling plan and standard procedures and methods.

Samples will include water, vegetation, crops, milk, soil etc.

The State will make arrangements for transportation of the samples to the State Department of Health Laboratories in Albany or other facilities identified by the State for radiological analysis. Samples will be analyzed by the designated laboratories and the results provided to the State Department of Health, Bureau of Environmental Radiation Protection for assessment and evaluation.

**4. Assessment and Evaluation**

Health Department radiological experts will calculate projected ingestion doses based on laboratory sample results. These results will be compared with the limits established by the Environmental Protection Agency and the Food & Drug Administration. These limits are called Protective Action Guides (PAGs).

PAGs are decision tools for public officials. They are projected radiation doses at which protective actions to reduce or avoid those doses are warranted. The projected radiation dose is the dose estimated to be received in a specified time in the absence of protective actions. PAG levels have been set to avoid acute effects on health and to limit the risk of delayed effects.

The risk to health from the protective actions themselves should not exceed the health risk from the dose that would be avoided. Professional judgment is required in implementing response plans as local conditions during the emergency cannot be anticipated.

**5. Choosing and Implementing Protective Actions:**

Once the ingestion pathways are identified, local, state, and federal officials will consider various protective actions that may be taken to prevent or reduce ingestion. The ingestion pathway includes the milk pathway, water pathway, or other food pathways.

Factors considered prior to protective action decision making include:

 - Protective actions that are feasible and their consequences

 - Relative proportion and importance of any suspected contaminated food in the diet

 - Availability of substitute foods or stored feed

 - Relative contribution of other foods to the total dose

 - Time and effort required to implement the protective action

Protective Actions that might be taken, depending on circumstances, include:

 - Placing milk animals and other livestock on stored feed, protected water

 and placing them under shelter

 - Quarantining or disposing of contaminated produce and food

 - Restrict drinking contaminated water

 - Prevent contaminated food from coming to market

 - Prevent consumption of game food or fish

**6. Public Information - Joint Information Center**

A critical element for successful ingestion exposure operations is public information. For a nuclear power plant accident, a Joint Information Center will likely already have been established as described in the State Radiological Emergency Preparedness Plan. For other types of incidents, if the affected area is large enough, a Joint Information Center will be established by the State to coordinate release of information through local, State, industry and federal news releases and media briefings.

**C. ORGANIZATIONAL RESPONSIBILITIES:**

**1. State Role**

 - Provide appropriate alert and notification to county/local, state and federal agencies.

 - Maintain ongoing monitoring programs (i.e., public water supply).

 - Determine the need for monitoring and ingestion pathway sampling.

 - Provide sampling personnel from the Department of Health, Department of

 Environmental Conservation, Department of Labor, and the Department of

 Agriculture and Markets.

 - State Assessment and Evaluation (A&E) personnel develop a monitoring and

 sampling plan in coordination with local and federal counterparts.

 - Develop appropriate Protective Actions.

- State A&E personnel estimate the plume footprint and develop a sampling plan. Provide advance training for radiological monitors to serve on sampling teams. Assemble, organize, and provide procedures for sampling teams.

- Collect and transport samples to the DOH Laboratory in Albany or other suitable facilities. Arrange for analysis of samples by DOH Laboratory or other laboratories.

 - Analyze laboratory data to refine plume deposition area, and projected doses.

 - Implement protective actions in coordination with local and federal government.

 - Develop public advisories in coordination with local and federal government.

 - Participate in Joint Information Center operations.

 - Implement market level monitoring to ensure effectiveness of protective actions.

 - Provide guidance on remedies for those who have suffered economic losses.

**2. County Role**

 **-** Provide appropriate alert and notification to county agencies.

 - Contact appropriate local organizations, i.e.: County Cooperative Extension, etc.

 - Provide information to State A&E needed for the sampling plan.

 - Types of crops in the potentially affected area.

 - Farms, processors, water supplies in the potentially impacted area.

 - Other agricultural activities.

 - Personnel for sampling teams, if available.

 - Assist in gathering and transporting samples, if requested.

 - Assist the state in selecting and implementing appropriate protective actions.

 - Participate in Joint Information Center operations.

**3. Federal Role**

 **-** Provide appropriate alert and notification to federal agencies.

 - Activate U.S. Department of Energy's Radiological Assistance Plan (RAP).

 - Assist in developing a monitoring and sampling plan in coordination with

 state and local counterparts.

 - Assist in radiation monitoring and assessment.

 - Develop public advisories in coordination with local and State government.

 - Provide other technical or laboratory assistance and personnel.

 - Participate in Joint Information Center operations.

 - Provide assistance on reentry, recovery and relocation activities.

**4. Facility/Transporter Role**

 - Notify local and State government of any radioactive incident and/or release.

 - Provide other appropriate alert and notification.

 - Stop or limit the release as soon as possible.

 - Provide information on type and duration of release.

 - Perform radiological monitoring, if possible.

 - Participate in Joint Information Center operations.

**D. GLOSSARY**

NOTE: Although some of these terms do not appear in this information guide, many may be referred to during the conference calls conducted during the drills/exercises or events.

**Access Control**: All activities accomplished for the purpose of controlling entry or re-entry into a restricted zone to minimize the radiation exposure of individuals. This function is needed to prevent the general public from entering the restricted zone and permitting only emergency workers with essential missions and limited members of the general public to enter a restricted zone.

**Aerial Measuring System (AMS)**: Department of Energy (DOE) operated aerial radiation surveillance program which may be used for plume verification and ground deposition monitoring.

**Airborne Radioactive Material**: Any radioactive material dispersed in the air in the form of dusts, fumes, mists, vapors or gases.

**Assessment**: The compilation and analysis of all available accident data and information in order to determine actual and projected radiation doses to the affected population that may result from the accident.

**Background Radiation**: Radiation arising from man's natural environment including cosmic rays and radiation occurring from the natural radioactive elements.

**Buffer Zone**: An area adjacent to a restricted zone, to which residents may return, but for which protective measures are recommended to minimize exposure to radiation.

**Chief Elected Official**: A County Executive, the Chairman or other presiding Officer of the county legislative body, the mayor of a city or village, or the Supervisor of a town.

**Contaminated, injured, or exposed individuals**: individuals who are; contaminated, contaminated and otherwise physically injured, or exposed to radiation.

**Contamination (Radioactive)**: Deposition of unwanted radioactive material on the surfaces of structures, areas, objects, or personnel.

**Decontamination**: The reduction or removal of unwanted radioactive material from a structure, area, object, or person.

**Dose**: A generic term that means absorbed dose, dose equivalent, effective dose equivalent, committed dose equivalent, committed effective dose equivalent, or total effective dose equivalent.

**Dose Rate**: The radiation dose delivered per unit of time. The dose rate is measured, for example, in Roentgen per hour (R/hr).

**Dosimeter**: A personal monitoring instrument that measures radiation exposure to gamma or X-Ray Radiation. (Direct-Reading-Dosimeter DRD or Electronic Dosimetry )

**Embargo**: A legal order which restricts the movement, distribution, and/or sale of food stuffs.

**Emergency Coordination Center (ECC):** The State ECC in Albany is a secure area with a wide range of communications capability that provides an operating area for those agencies involved in emergency response to man-made or natural disasters.

**Emergency Operations Center (EOC)**: A secure facility with a wide range of communications capability that provides an operations/coordination center for those agencies involved in emergency response to man-made or natural disasters.

**Emergency Planning Zone (EPZ)**: The area surrounding a nuclear power plant site for which offsite planning is required. For nuclear power plants, the EPZ is defined as an area with a radius of about ten (10) miles for the plume exposure pathway and a radius of about fifty (50) miles for the ingestion exposure pathway.

**Emergency Response Planning Area (ERPA)**: A subdivision of the plume exposure (10-mile) emergency planning zone.

**Evacuation**: The removal of the public from an area.

**Exposure**: A measure of the ionization produced in air by X-ray or gamma radiation. The Roentgen (R) is the unit of exposure. The term "dose," sometimes used interchangeably with exposure, actually refers to absorbed radiation.

**Exposure Rate**: The amount of gamma radiation that an individual would receive in one hour as measured in air (typically expressed in units of milliroentgens per hour or Roentgens per hour).

**Federal Radiological Monitoring Assessment Center (FRMAC)**: An operating center, usually located at an airport or other large facility near the scene of a radiological emergency from which the Federal field monitoring and assessment assistance is directed and coordinated. This center need not be located near the onsite or Federal-State centers as long as its operations can be coordinated with them.

**General Emergency**: Indicates that events are in process or have occurred that involve actual or imminent substantial core degradation or melting, with potential for loss of containment integrity. Releases can reasonably be expected to exceed EPA PAG exposure levels offsite, beyond the immediate site area.

**Incident Command System (ICS):** A standardized on-scene emergency management concept specifically designed to allow its user(s) to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries.

**Ingestion Emergency Planning Zone (IPZ)**: For planning purposes, the area surrounding a site, where the principal exposure from an accident would be from the ingestion of contaminated water or foods. For nuclear power plants the ingestion EPZ is an area of about a fifty (50) mile radius around a nuclear plant.

**Ionizing Radiation**: Any radiation capable of displacing electrons from atoms or molecules, thereby producing ions. (For example, radiation produced by x-ray equipment.)

**Joint Information Center**: The facility used as the central point for dissemination of information by county, State and licensee representatives to the news media. This facility is located offsite and is the only location which allows media access to authorized spokespersons during an emergency.

**KI (potassium iodide)**: A prophylactic drug that can be used effectively to block the uptake of radioiodine by the thyroid gland.

**Monitoring**: The measurement of radiation levels, usually with a portable survey instrument.

**National Atmospheric Release Advisory Center (NARAC)**: Provides tools and services to the Federal Government that map the probable spread of hazardous material accidentally or intentionally released into the atmosphere. NARAC provides atmospheric plume predictions in time for an emergency manager to decide if taking protective actions is necessary to protect the health and safety of people in affected areas.

**National Response Framework (NRF):** presents the guiding principles that enable all response partners to prepare for and provide a unified national response to disasters and emergencies - from the smallest incident to the largest catastrophe. The ***Framework*** establishes a comprehensive, national, all-hazards approach to domestic incident response.

**Noble Gases**: The chemically inert radioactive gases that are released during an accident at a nuclear power plant.

**Nuclear Reactor**: A facility in which nuclear fission may be sustained and controlled in a self-supporting nuclear reaction.

**Personnel Monitoring Center (PMC)**: Those facilities or locations where individuals and equipment will be monitored for radioactive contamination and decontaminated if necessary.

**Plume Exposure Pathway**: For planning purposes, the area surrounding a site where the principal exposure sources are: (a) whole body exposure to gamma radiation from the plume and from deposited material, and (b) inhalation exposure from the passing radioactive plume. For nuclear power plants the plume EPZ is defined as an area with a radius of about ten (10) miles.

**Projected Dose**: The estimated or calculated amount of radiation dose to an individual from exposure to the plume and/or deposited materials, over a period of time, in the absence of protective action.

**Protective Action**: Any action taken to protect the public health in response to a radiological emergency.

**Protective Action Guide (PAG)**: Projected dose to an individual in the general population that warrants the implementation of protective action. Specific PAGs have been recommended in terms of the level of projected dose that warrants the implementation of evacuation/shelter-in-place, relocation, and limiting the use of contaminated food, water, or animal feed.

**Radiation Badge:** A permanent record dosimeter used to measure an individual’s exposure to ionizing radiation.

**Radioactive Materials**: Material containing atoms having excess energy. It contains excited, unstable atoms that are disintegrating, emitting radiation.

**Recovery**: The process of reducing radiation exposure rates and concentrations of radioactive materials in the environment to levels acceptable for unconditional occupancy or use.

**Re-entry**: Temporary entry of individuals into a restricted zone under controlled conditions.

**Release**: Escape of radioactive materials into the environment.

**Relocation**: A protective action, taken in the pose-emergency phase, through which individuals not evacuated during the emergency phase are asked to vacate a contaminated area to avoid chronic radiation exposure from deposited radioactive material or for those previously evacuated their continued exclusion from those contaminated areas.

**REM**: The unit of dose equivalent in body tissue. It is a measure of radiation exposure that indicates the potential impact on human cells.

**Response**: The emergency phase in which public protective actions are carried out.

**Restricted Zone**: An area of controlled access from which the population has been evacuated or relocated or is being asked to shelter-in-place.

**Return**: Reoccupation of areas cleared for unrestricted residence or use by previously evacuated or relocated populations.

**Sampling**: Collecting specimens of materials (e.g. soil, vegetation, or radioiodine in the air) at field locations.

**Shelter-In-Place**: An action taken to minimize exposure to radiologically contaminated air by going indoors or staying inside, turn off heating or air conditioning systems, close windows, and doors, monitor the Emergency Alert System (EAS) and prepare to evacuate. The intent is for members of the public to remain where they are, or seek shelter close by, but NOT TO return home to shelter.

**Site Area Emergency**: Indicates that events are in process or have occurred that involve actual or likely major failures in the plant functions needed for protecting the public. Releases are not expected to exceed EPA PAG exposure levels, except near the site boundary.

**State Warning Point (SWP)** A location designated during an emergency by an offsite government agency for the purposes of receiving and promulgating warning information 24 hours a day, 7 days a week. This location is typically referred to at the County level as the Warning Point (WP).

**Survey Meter**: A portable instrument used to detect and measure ionizing radiation.

**Traffic Control**: All activities accomplished for the purpose of facilitating the

evacuation of the general public in vehicles along specific routes.

**Appendix O – New York State Radiological Preparedness Program**

**Radiological Emergency Information for the Agricultural Community**

This booklet was prepared for you as a member of the agricultural community to answer questions you might have in the event of a radiological emergency at the nuclear power plant near you.

Comprehensive emergency plans have been prepared cooperatively by county and state emergency management officials to advise you should the need arise. For the public, this includes the 10-mile area around the nuclear power plant. For the agricultural community (farmers, food processors, and distributors) plans have been made to include a 50-mile zone, with the emphasis on protecting dairy products and crops. Teams of trained personnel have been organized to implement emergency procedures and assist all residents during an emergency.

If you live within 10 miles of a nuclear power plant, you should have received an informational booklet or calendar from your local Emergency Management Office. Please read the material so you and your family will know about the emergency plans in place to protect them.

You should also make plans in advance on what you, your family and employees should do in case of a radiological emergency.

For further information, contact your local Cooperative Extension Office, your local Emergency Management Office or the New York State Department of Agriculture and Markets.

1. What is a radiological emergency?

 A radiological emergency is an accidental release of radiation from a nuclear

 power plant that has the potential to affect livestock or the quality or marketability

 of farm products. In the unlikely event of such an accident, farmers may be asked

 to take certain precautionary measures:

1. - Provide dairy animals with shelter and protected feed and water.
2. - Place other livestock on stored feed and protected water and shelter, if
3. possible.
4. - Cover feed that is outdoors or bring feed inside a building.
5. - Store as much water as possible for livestock and cover wells, rain
6. barrels and tanks.
7. - Thoroughly wash crops brought in from a contaminated area. Green
8. vegetables exposed to contamination should have outer leaves removed.
9. - Temporarily wear protective clothing (such as that worn for pesticide
10. applications) when working outdoors.
11. Farms in the affected areas will be notified of any additional precautions needed.

2. What is radiation?

 Radiation is a form of energy and comes from both natural and man-made

 sources. Natural radiation comes from the sun, the soil, building materials and

 food. Some man-made sources are X-ray equipment, color televisions, smoke

 detectors and nuclear power plants. The effects of radiation are the same

 regardless of the source. Exposure to too much radiation can be harmful.

3. What is contamination?

 Contamination is the presence of radioactive materials in unwanted locations. The

 principal concern for the agricultural community is the possible contamination of

 food and water supplies. Additionally, direct expo-sure to radioactive materials

 could pose potential health problems for people and animals.

4. How will I know if there is an emergency**?**

 If there is an emergency and you are within 50 miles of a nuclear power plant,

 you may be notified by one or more of the following methods:

1. - Emergency Alert System (EAS) message
2. - Telephone call
3. - Door-to-door notification
4. - Mobile public address message
5. - News broadcasts

 In addition, sirens and tone-alert radios are located within 10 miles of each plant.

 The sirens produce a steady, loud, high-pitched tone. If you hear the sirens sound \ for three minutes, or if you hear a message on your tone alert radio, it means one thing: TURN ON YOUR RADIO TO AN EMERGENCY ALERT SYSTEM STATION.

 While EAS messages may be carried on a number of local stations, the primary

 EAS stations for each nuclear power site are:

 Indian Point ………………….WHUD-FM (100.7 MHz)

 Nine Mile Point/J.A. FitzPatrick ....WSYR-AM (570 kHz)

 R.E. Ginna ………………..….WHAM-AM (1180 kHz)

5. What should I do**?**

 Once notified, turn on your radio and listen for instructions via the Emergency

 Alert System (EAS). If you live within 10 miles of the plant, EAS messages will

 recommend actions you should take to protect yourself and your family.

 Depending on your location and the type of emergency, you may be advised to

 shelter – stay inside – or to evacuate – leave the area – and take KI (potassium

 iodide).

 Continue to listen to news broadcasts covering the emergency. Protective actions

 for animals will be issued through the news media. Safeguard animals by placing

 them under shelter and supplying them with protected food and water. If your

 farm is within 10 miles of the plant, and you are advised to evacuate, arrangements can be made for you to return to the area to care for your animals.

6. What would be the best way to protect animals during a radiological emergency?

 Putting animals under shelter and providing protected feed and water would be

 the best protection against contamination. Lactating animals should be taken care

 of first to avoid contamination of their milk.

7. Why must water and feed be protected?

 If livestock or dairy animals consume contaminated feed or water, some of that

 contamination will be absorbed into their bodies. This contamination could enter

 the human food supply through meat or dairy products.

8. What is protected feed and water?

 Protected feed is grain stored in a permanent bin, hay in a barn, or ensilage in a

 silo that is completely covered (top and open silo faces). Water that is considered

 “protected” includes well water or water stored in tanks or cisterns prior to release

 of radiation.

9. Should dairy animals receive special treatment?

 Yes. Give dairy animals priority in sheltering and receiving protected feed and

 water. It may be necessary to provide dairy animals with protected feed for longer

 periods than other animals.

10. What measures should be taken to protect poultry?

 Measures for protecting poultry are the same as those recommended for other

 farm animals: keep poultry under shelter and give them stored feed and water.

11. Will I be permitted to return to care for my animals?

 Yes. You would be considered an emergency worker. The Cooperative Extension

 agricultural educator in your county can assist you in making arrangements with

 the county Emergency Management Office for you and your employees to return

 to care for your animals.

12. How do I know if meat and dairy products are safe to market?

 Your local Emergency Management Office, Cooperative Extension educators

 and New York State Department of Agriculture and Markets representatives will

 work with farmers and farm organizations to deter-mine if the products are safe

 and tell you whether or not to market them.

13. What would be the effect of contamination on fruits and vegetables?

 Suspected contamination would mean that the produce must be checked before it

 is marketed. If fruit and vegetable crops are contaminated, they may be able to be

 washed. Rinsing with water is the most effective method of cleaning garden

 foods. Roots and tubers are not affected by surface contamination. The normal

 cleaning or peeling of vegetables such as potatoes and carrots should be adequate

 for removing contamination.

14. Should the soil be treated to reduce contamination of the land?

 Probably not – however, state and county officials will evaluate the situation and

 advise you if any actions are necessary.

15. What happens after the emergency?

 Certain precautions should be taken after the emergency. In the event of an

 extensive radiological emergency, food, water and feed should be thoroughly

 tested before use.

 Keep in contact with your local Cooperative Extension Office and listen to the

 news for additional instructions and information.

 If you would like additional information, please contact your county Emergency

 Management Office, your local Cooperative Extension, or the New York State

 Department of Agriculture and Markets.

For more information, contact the NYS Department of Agriculture & Markets:

1-800-554-4501

For those living within 10-mile Emergency Planning Zones:

 1. Indian Point

 a. Westchester County

 Office of Emergency Management 800-942-1452

 Cornell Cooperative Extension (914) 285-4620

 b. Rockland County

 Office of Fire & Emergency Services 800-942-1450

 Cornell Cooperative Extension (845) 429-7085

 c. Putnam County

 Bureau of Emergency Services 800-942-1457

 Cornell Cooperative Extension (845) 278-6738

 d. Orange County

 Department of Emergency Services 800-942-7136

 Cornell Cooperative Extension (845) 344-1234

 2. Nine Mile Point / J.A. FitzPatrick

 a. Oswego County

 Office of Emergency Management (315) 591-9150

 Cornell Cooperative Extension (315) 963-7286

 3. R.E. Ginna

 a. Wayne County

 Emergency Management Office (315) 946-5663

 Cornell Cooperative Extension (315) 331-8415

 b. Monroe County

 Office of Emergency Management (585) 753-3803

 Agriculture & Life Sciences Institute (585) 292-2065

**Appendix P – Dog Control Officers of Lewis County**

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Towns of  | Home Phone | Cell Phone |
| Heath Ash | LowvilleMartinsburg |  |  |
| Roger and Lindsey Burris | CroghanDianaDenmarkGreigLeydenLyonsdaleNew BremanMontaguePickneyTurin WatsonWest Turin |  |  |
| Dave Dorchester | Harrisburg |  |  |
| James Nellenback | Lewis |  |  |
| John Vincella | Osceola |  |  |

**Record of Change**

A. Changes made on 4/22/12 to create Version 1.1

1. All references to New York State Animal Response Team (NYSART) changed

 to Empire State Animal Response Team (ESART)

 a. **V. Agencies and Responsibilities**

 **B. Support Agencies - Responsibilities**

 b. **VII. Concept of Operations**

 **E. Additional Aid**

 **H. Medical Assistance**

 **2. Staff**

2. Disposal of deceased animals is the primary responsibility of the New York State

 Department of Environmental Conservation (NYSDEC). Guidance and support is also

 available from the New York State Department of Health, Lewis Country Public

 Health, Lewis County Soil and Water Conservation District, and New York State

 Department of Agriculture and Market Veterinarians.

 a. **V. Agencies and Responsibilities**

 **A. Primary Agencies - Responsibilities**

 **B. Support Agencies - Responsibilities**

3. Change the responsibility of ESART.

 a. **V. Agencies and Responsibilities**

 **B. Support Agencies – Responsibilities**

4. Change the responsibility of New York State Department of Environmental

 Conservation (NYSDEC)

 a. **V. Agencies and Responsibilities**

 **B. Support Agencies – Responsibilities**

5. Change that vaccination protocols should be established in consultation with local

 veterinarians. New York State Department of Agriculture and Markets Veterinarians

 will provide biosecurity guidance.

 a. **VII. Concept of Operations**

 **D. Response**

 **2. Evacuation and Sheltering of Animals**

 **c. Evacuation / sheltering of companion animals**

6. Change the responsibility of the New York State Department of Agriculture and

 Markets to that they may be requested to assist in identifying and coordinating private

 veterinarians to assist with medical treatment.

 a. **VII. Concept of Operations**

 **H. Medical Assistance**

#  2. Staff

7. Added USDA Farm Service Agency to the list of agencies to be contacted about

 damages and to request assistance and/or indemnity.

 a. **VIII. Recovery**

 **B. Disposal of Animal Carcasses**

 **1. Livestock or cattle farm planning**

8. Remove Dr. from in front of Annette Holowka and Lorraine Lautenbacher

 a. **Appendix I – Veterinary Resources**

9. Correct spelling of Leyden

 a. **Appendix P – Dog Control Officers of Lewis County**

10. Creation of Glossary and Acronyms list

 a. **Appendix L – Glossary**

 **1. Glossary**

 **2. Acronyms**

11. Added

 a. **Record of Change**

 b. **Record of Distribution**

12. Changed Appendix J – LCART Members and Volunteers to Appendix J – LCART

 Training Requirements, Code of Conduct, and Members List by adding to the

 Appendix.

 a. **Appendix J – LCART Training Requirements, Code of Conduct, and**

 **Members List**

 b. **Table Of Contents**

 c. **VII. Concept of Operations**

 **D. Response**

 **1. Search and Rescue Procedures**

 a. Equine, cattle, and other livestock

 d. **VII. Concept of Operations**

 **D. Response**

 **1. Search and Rescue Procedures**

 **b. Companion animals**

 e. **VII. Concept of Operations**

 **G. Shelter Staff and Supplies**

 **2. Supplies**

 f. **VII. Concept of Operations**

 **H. Medical Assistance**

 **2. Staff**

**Record of Distribution**

A. Version 1.0

 1. Full Version

 a. Jim Martin – Lewis County Office of Emergency Management

 b. Dr. David Chico - NYS Department of Agriculture and Markets

 c. Kelly Nilsson - NYS Department of Agriculture and Markets

 d. Lisa Corbett – State Office of Emergency Management

B. Version 1.1

 1. Full Version

 2. Public Version