



## ***North Valley Animal Disaster Group Standard Operating Guidelines***

Title: DECONTAMINATION

Objective: Provide guidelines for working with contaminated animals

Description:

There is limited scientific investigation into non-petroleum animal decontamination operations. Additional research is needed into optimal methods of decontamination. Information here is extrapolated from published experiences and will likely be updated as the knowledge base progresses. This document gives an overview of possible contamination issues.

Any emergency situation that involves hazardous materials will fall under the authority of a specific local, state, or federal agency. Operations for animal decontamination will fall most commonly to local jurisdictional Incident Management Teams or, where foreign animal disease agents or wildlife are involved, State and Federal agencies may work in cooperation with local jurisdictions. Agencies that are potentially involved with decontamination procedures include law enforcement, HazMat teams, veterinary teams, EMS, public works, environmental departments, and animal control agencies. If a responsible party is found for the contamination incident, they may be financially responsible for funding agencies to help in the decontamination event.

Specific methods of decontamination – beyond simple bathing - will depend of the nature of the contamination and will likely require a HAZMAT team for more dangerous contaminants. Our job is to recognize the issues involved in decontamination processes in which the animals we evacuate might need.

Potential types of contamination hazards include:

- Biological- viruses, bacteria, fungi, protozoa, or biological toxins.
- Chemical- any substance that can cause physical injury or result in an acute or chronic health hazard. Examples include pesticides and herbicides. Petroleum is a subset of chemical hazards for which there has been the most experience in decontamination.

- Floodwater and debris- there are chemical and biological hazards associated with floodwaters. Material and debris can enter an animal's body through wounds, be inhaled or ingested.
- Radiological- accidental release of ionizing radiation. Examples could include radiation from a nuclear power plant release or transportation accident.

#### Operations:

- Decontamination operations may involve just a few animals coming to a shelter to potentially thousands at the site of a mass contamination event. Decontamination techniques for people typically work for animals, with slight modifications, but are very different for livestock. Horse decontamination processes fall somewhere in between. Food animals may be treated differently from companion pets and different agencies will monitor the decontamination process.
- Operations must be scalable to fit the situation. FEMA has qualifications levels (Type 1-4) for decontamination teams and lists the minimum number and types of personnel per team depending on the type of contamination. (See: FEMA Resource Typing Definition for Response Environmental Response/Health and Safety- 1/2018 Draft).
- Service animals under the ADA are considered an extension of the person they serve and must be managed with the person. Working animals are treated as responders. Other species may have agencies that need to be involved.

Decontamination processes need to consider animal handling issues. Frightened, ill, injured animals or aggressive animals will require special handling that may include physical restraint by experienced personnel or chemical restraint by veterinary personnel. Sedated animals lose much of their ability to regulate body temperature and supportive measures must be available.

Pets and service animal decontamination operational objectives should consider the following:

- Decontamination facilities need to be in areas outside of the potential disaster zone. Equipment considerations include: water delivery systems, water heaters, tents pools pumps, radiation monitoring equipment, PPE, and containment facilities. A "hot zone" where active contamination exists and can only be accessed by HazMat trained personnel. A "warm zone" is a transitional area between the hot zone and the general support areas and is where decontamination operations will take place. The support zone "cold zone") will be an area that is free of contamination
- The HAZMAT team, safety officer or incident commander may determine the appropriate level of PPE
- Safety of the responders, animal owners and animals require that individuals be trained in animal handling and decontamination procedures
- If washing is the decontamination method of choice for the particular agent, enough water and surfactant has to be applied to the animal to ensure penetration of the animal's haircoat to remove the agent from its skin

- After decontamination, animals must be checked to ensure that contaminants have been removed before returning them to their owners (including monitoring for radiological contaminants.)

Critical steps:

- Triage:
  - Identify animals that pose a risk to owner and responder such as bite or attack
  - Assess if veterinary care is needed immediately
  - Euthanasia may be necessary if resources are not adequate to treat and decontaminate appropriately
- Pets and Service Animals:
  - Decontaminate after animal stable
  - Internal contamination will likely require transferring to an appropriate veterinary medical facility
  - Re-monitoring/assessment
  - Reunion with owner or transfer to emergency animal sheltering operations
- Livestock and Horse Decontamination:
  - The processes or techniques that livestock are already used to such as hosing down for horses and going through chutes for cattle, pigs, sheep and goats may be useful for decontamination procedures.
  - Even if decontaminated, some livestock may not be allowed to enter the food supply.

Decontamination of animals is a developing issue and science. If you suspect an animal is contaminated, contact your supervisor for appropriate authorities to be notified. HazMat training is available for people that wish to be more involved in potential decontamination events.

Adapted from:

NASAAEP: Emergency Animal Decontamination Best Practices 2014

FEMA Resource Typing Definition for Response Environmental Response/Health and Safety- 1/2018 Draft

Course Materials: Hazardous Waste Site Worker-24 hours. Dept. Fish and Game/OSPER/OES California

Related Documents Attached: n/a

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