Radiological Emergency Information for the Agricultural Community in Monroe County

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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:

- Provide dairy animals with shelter and protected feed and water.
- Place other livestock on stored feed and protected water and shelter, if possible.
- Cover feed that is outdoors, or bring feed inside a building.
- Store as much water as possible for livestock and cover wells, rain barrels and tanks.
- Thoroughly wash crops brought in from a contaminated area. Green vegetables exposed to contamination should have outer leaves removed.
- Temporarily wear protective clothing (such as that worn for pesticide applications) when working outdoors.

Farms in the affected areas will be notified of any additional precautions needed.

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.

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 exposure to radioactive materials could pose potential health problems for people and animals.

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:

- Emergency Alert System (EAS) message
- Telephone call
- Door-to-door notification
- Mobile public address message

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 the R.E Ginna nuclear power site is WHAM-AM (1180 kHz)

What should I do?

Once notified, turn on your radio and listen for instructions over the Emergency Alert System (EAS). If you live within 10 miles of the plant, the EAS messages will recommend the 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 and stay inside or to evacuate and leave the area and take KI (potassium iodide).

Continue to listen to the news broadcasts covering the emergency. Protective actions for animals will be issued through the news media. You can safeguard your 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.

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.

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.

What is protected feed and water?

It is grain stored in a permanent bin, hay in a barn or ensilage in a covered silo. Water should be stored in a covered well, tank or cistern to be considered protected.

Should dairy animals receive special treatment?

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.

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.

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

Yes. You would be considered an emergency worker.

You can make arrangements with the county Emergency Management Office for you and your employees to return to care for your animals.

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

Your local Emergency Management Office, New York State Department of Agriculture and Markets, and United States Department of Agriculture representatives will work with farmers and farm organizations to determine if the products are safe and tell you whether or not to market them.

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.

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

Federal, state, and county officials will evaluate the situation and advise you if any actions are necessary.

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.

If you would like additional information, please contact

Monroe County Office of Emergency Management 585-753-3803

Agriculture & Life Sciences Institute 585-292-2065

Source: New York State Radiological Preparedness Program, Radiological Information for the Agricultural Community