

Milk

The most critical food product within the 50- mile zone is milk because of rapid distribution from the cow to the consumer, the short period of time it takes for contamination to appear, and the potential effects on children. Protective actions that can be taken are:

1. Shelter dairy cows first.
2. Remove lactating dairy animals from contaminated pasture and provide a substitute of uncontaminated stored feed.

Protecting Farm Land and Crops

Most farm land that is contaminated by a radiological emergency can be used productively within several days of the emergency. The actual length of time the land should remain fallow depends on the amount and types of radioactive material that settled on the land.

Emergency officials will:

1. Take samples to determine the type and levels of contamination; and
2. Recommend treatment procedures such as idling the land, deep plowing of the soil, or alternatives uses of the land.

DO NOT TAKE ACTIONS TO USE OR DESTROY CROPS UNLESS ADVISED TO DO SO BY EMERGENCY OFFICIALS

Emergency officials will issue special emergency bulletins on proper use and disposition of crops.

For information on harvesting, storing and decontaminating your crops and land, you may contact your Extension Agent.



50-mile IPZ Counties in Alabama

Prepared by the State of Alabama in cooperation with Tennessee Valley Authority and Southern Nuclear



Agriculture & Nuclear Power in Alabama



This brochure has been prepared by the State of Alabama in cooperation with Tennessee Valley Authority and Southern Nuclear to provide guidance to the agricultural community in the event of a radiological emergency at a nuclear power plant within 50- miles of your farm. It explains those actions which may be necessary for you to take in order to protect yourself, your family, your crops and your farm animals.

Introduction

Nuclear power plants are designed to operate safely. However, it is possible that an accident could be serious enough to result in a release of radioactive materials.

We cannot hear, see, feel, taste or smell radiation but are constantly exposed to radiation from both natural and man-made sources. Natural radiation comes from sunlight, water, soil and the materials we use to build our homes. Man-made radiation comes from sources such as medical and dental x-rays, color television sets and smoke detectors. This natural and man-made radiation is called background radiation. The radiation dose a person gets is measured in millirems. The average American receives about 620 millirems per year from natural and man-made sources.

Federal authorities have established two emergency planning zones as the basis for planning to protect the public. Residents living within a 10- mile radius of a nuclear plant must be protected from direct exposure in the event of a radioactive release. People within a 50- mile radius must be protected from eating contaminated foods or drinking contaminated milk and water. This 50- mile zone is called the "Ingestion Pathway Zone (IPZ)".

An accidental release of radiation into the atmosphere has the potential to affect you, your family, your livestock and the quality and marketability of your farm products. The information in this guide and instructions you will receive from radio and television stations will help you minimize the effects a radiological emergency could have on your farm.

If an Emergency Occurs

In the event of a radiological emergency at a nuclear power plant, several methods will be used to warn the public. Within the 10-mile area residents will be warned by sirens, radio and television. Outside the 10-mile area the residents will be warned primarily by radio and television stations. State and county response organizations will determine protective actions to be taken, and you will be kept informed.

During the period of the emergency, state and county officials will release information to the media on a regular basis. This information will contain the latest status on the emergency and actions that are being taken to protect you, your family and your farm. Also, the local agricultural extension agent will be kept advised on the status of the emergency and can provide information to you on the protective actions that are being taken. You will also be advised of telephone numbers you may call if you need additional information.



Protecting Yourself and Your Farm

The principal cause of exposure to radiation for persons 10 to 50 miles from a nuclear power plant radiological emergency is the consumption of contaminated foods such as milk, fresh fruits, vegetables, locally processed products and water.

If a radiological emergency occurs in your area, do not eat or sell food products or drink from open water sources until emergency officials have declared it safe to do so.

In the event of a radiological emergency that involves the release of radioactivity into the environment, you will be advised of actions needed to prevent the contamination of milk, water and food products. Additionally, state and local governments will take actions to prevent the consumption of contaminated products.



Protecting Your Farm Animals

Farm animals will not be evacuated during a radiological emergency, so sheltering is the most effective way to limit contamination.

Protecting your animals can be done in several ways:

1. Place the animals in an enclosed shelter; close doors and windows, if possible. Limit entry of rain water into the structure. Provide for adequate air supply to prevent overheating and suffocation.
2. If the animals must remain outside, to the extent possible, prevent contact with radioactive contamination. For example, pack the animals closely in an outdoor pen or herd them into a road underpass, cave or wooded area.
3. Do not allow animals to graze unless directed to by Emergency Officials.