

## MILK

The most critical food product within 50 miles is milk because of the 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:

- ◆ Shelter dairy cows first.
- ◆ Remove lactating dairy animals from contaminated pasture and provide a substitute of uncontaminated stored feed.
- ◆ Store or relocate contaminated milk to facilities that will process the milk and store it to allow the radiation to deteriorate.

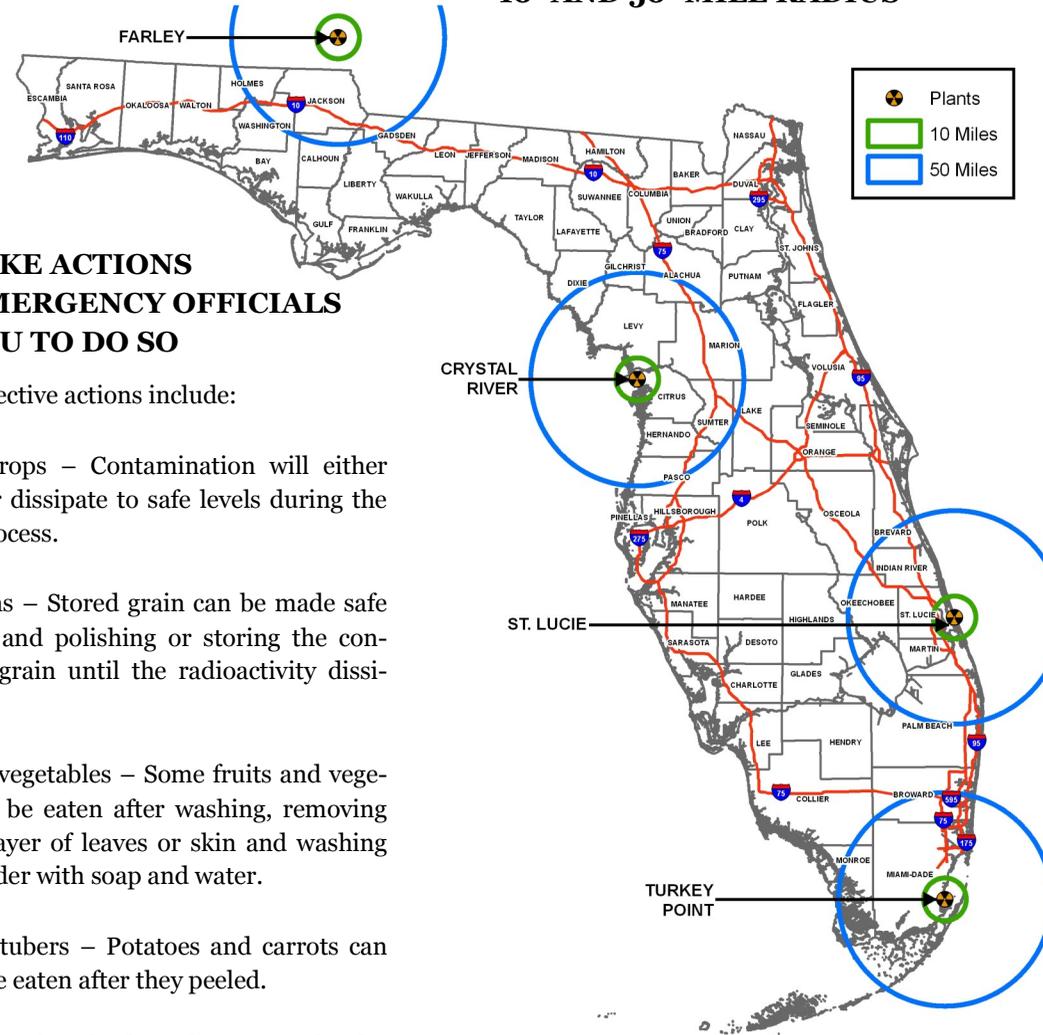
## PROTECTING FARMLAND AND CROPS

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 uncultivated depends upon the amount and types of radioactive material that settled on the land.

Emergency officials will:

- ◆ Take samples to determine the type and levels of contaminations.
- ◆ Recommend treatment procedures, such as idling the land, deep plowing the soil or recommending alternative uses of the land.

## NUCLEAR POWER PLANT SITES 10- AND 50- MILE RADIUS



### DO NOT TAKE ACTIONS UNLESS EMERGENCY OFFICIALS ADVISE YOU TO DO SO

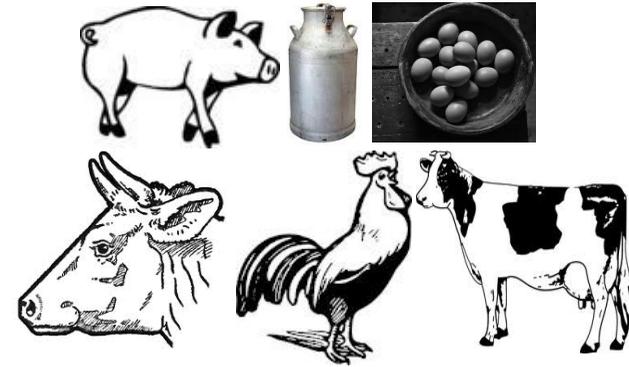
Additional protective actions include:

- ◆ Standing crops – Contamination will either wash off or dissipate to safe levels during the growing process.
- ◆ Small grains – Stored grain can be made safe by milling and polishing or storing the contaminated grain until the radioactivity dissipates.
- ◆ Fruits and vegetables – Some fruits and vegetables may be eaten after washing, removing the outer layer of leaves or skin and washing the remainder with soap and water.
- ◆ Roots and tubers – Potatoes and carrots can generally be eaten after they are peeled.

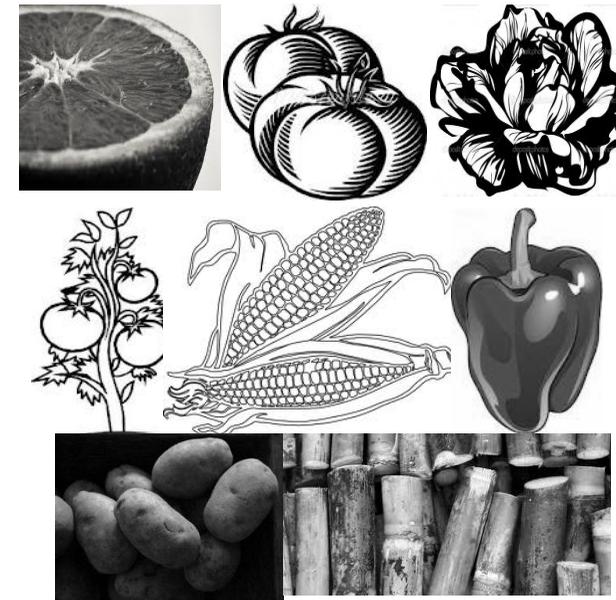
If food crops or other food products must be destroyed, they will be collected and treated as radioactive waste and transported to specific storage facilities.

For information on harvesting, storing and decontaminating your crops and land contact your local agriculture extension agent at <http://solutionsforyourlife.ufl.edu/map/index.html>

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## AGRICULTURE & NUCLEAR POWER IN FLORIDA



Prepared by the Florida Division of Emergency Management in cooperation with the Florida Department of Agriculture and Consumer Services, Florida Power and Light, Progress Energy Florida, Inc. and Southern Company.

For more information visit [www.floridadisaster.org](http://www.floridadisaster.org)

## PURPOSE

The State of Florida in cooperation with Florida Power & Light, Progress Energy Florida, Inc. and Southern Company are providing this pamphlet to the agriculture community in the event of a radiological emergency at a nuclear power plant within 50 miles of your facility. It explains actions that may be necessary for you to take to protect yourself, your family, your crops, and your farm animals.

## INTRODUCTION

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

Radiation is invisible, tasteless and odorless. We are constantly exposed to natural or man-made sources of radiation. Natural radiation comes from sunlight, water, soil and the materials we use to build our homes. Manmade radiation comes from sources such as dental x-rays, medical imaging and tests including CT scans and nuclear cardiac stress tests and industrial products including smoke detectors. This natural and manmade radiation is called background radiation. In Florida we receive about 620 millirems of background radiation yearly. As a reference, this amount is equivalent to about 62 chest x-rays.

Federal authorities have established two emergency zones as the basis for planning to protect the public. Residents living within a 10-mile radius of the 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." An accidental release of radiation into the atmosphere has the potential to impact you, your family, your livestock and the quality and marketability of your farm products. This information and the instructions you will receive from radio and television stations will help 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, sirens, radio and television outlets, and emergency vehicles' loudspeakers provide warning to area residents. Outside the 10-mile area, radio and television outlets, and in some cases door-to-door notification, serve as primary warning to area residents.

State and county emergency response organizations will determine protective actions to be taken, and you will be kept informed.

During the emergency, state and county officials will release information to the media on a regular basis. This information will include 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 will inform you of the protective actions.

Additionally, a Citizens Information Center will be activated. There will be a toll free number that citizens can call and receive official information on the status of the emergency. The toll-free number is (800) 342-3557.



## PROTECTING YOURSELF AND YOUR FARM

The main cause for exposure to radiation for individuals 10 to 50 miles from a nuclear power plant radiological emergency is the consumption of contaminated foods, such as milk, fresh fruits, vegetables, 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 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 normally 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:

- ◆ Place the animals in an enclosed shelter and close doors and windows, if possible. Limit entry of rain water into the structure. Provide for adequate air supply to prevent overheating and suffocation.
- ◆ Prevent contact with radioactive contamination if the animals must remain outside, as much as possible. For example, pack the animals closely in an outdoor pen or herd them into a ravine, road underpass, cave, culvert or wooded area.
- ◆ Avoid surface water. Well and spring water should be safe.
- ◆ Avoid allowing animals to graze unless directed to by your extension agent or other state or local officials.

