Purpose of this Fact Sheet
Farmers, food processors and distributors located within 50 miles of the Seabrook Station Nuclear Power Plant have special considerations if there were an incident that caused a release of radiation. This fact sheet gives information about actions for the protection of your family, animals, and crops in the event of such an incident. It is designed to augment planning for food control measures. It does not supersede any plans, procedures or guidelines currently in use.

The Ingestion Exposure Pathway EPZ:
This is the Emergency Planning Zone (EPZ) within a 50-mile radius around a commercial nuclear power plant, where planning is required and in place to deal with the potential of indirect exposure to radiation due to eating contaminated food or drinking contaminated water, milk or other liquids.

The main cause for exposure to radiation for individuals 10 to 50 miles from a nuclear power plant after radiological incident is the consumption of contaminated foods, such as milk, fresh fruits, vegetables, and water.

The safety of the food supply within the 50-mile Ingestion Pathway EPZ could be a concern for the agricultural community if a radiological release into the atmosphere occurred. During such a release, both water and land could become contaminated. Eating contaminated foods and drinking contaminated milk and water could have a harmful, long-term effect on your health.

Preventive Protective Actions:
Preventive protective actions are those which prevent or minimize contamination of milk and food products. Examples are:

- Placing dairy animals on stored feed and protected water.
- Washing, scrubbing, peeling, or shelling fruits and vegetables to remove surface contamination.

Other preventive protective actions are those which isolate or contain food, prevent its introduction into commerce and determine whether condemnation or other action is appropriate. An example would be to restrict or withhold agricultural and dairy products from the marketplace or to prohibit transportation from the affected areas.
**Emergency Protective Actions:**

The following are examples of protective actions that may be recommended if a release of radioactive material occurs and contamination of agricultural products is verified by appropriate officials.

- When outside, wear clothing that covers all portions of the body, similar to what you would wear when applying pesticides; for example: coveralls or long-sleeved shirt, long pants, boots, gloves and a hat. Remove outer clothing before going indoors.
- Wear a respirator or mask, or place a folded (preferably dampened) cloth over your mouth and nose when working outside to prevent inhalation of radioactive materials.
- Wash hands thoroughly with safe/uncontaminated water before preparing or eating food.
- Remove animals from pastures, shelter them if possible, and provide them with protected feed and water.
- Protect feed and water. See pages 3 and 4 for specific guidance.
- If you eat fresh fruit and vegetables, wash, scrub, peel, or shell them before eating.
- Do not engage in dust-producing activities such as cultivating, disking, baling, or harvesting.
- Do not transport or market food products until advised it is safe to do so by appropriate health officials. Follow the advice of officials in emergency alert messages regarding the area within the Ingestion Exposure Pathway.
- Avoid handling and consumption of fish and wildlife until further notice. Fishing and hunting activities may be subject to emergency season closures by the NH Fish and Game Department.

**How You Would Learn About an Emergency:**

The Emergency Alert System Station for the Seabrook Station area is **WOKQ FM 97.5**

**Be Prepared:**

Here are some things you can do now to prepare for an emergency:

1. Read this information and keep it in a convenient place.
2. Plan where you would shelter your animals. Decide which animals would require immediate shelter. If you do not have enough shelter for all, determine priorities.
3. Decide how you would provide your livestock and poultry with stored feed and water.
4. In an emergency, listen to **WOKQ 97.5** for New Hampshire Emergency Alert System broadcasts for up-to-date information.

**Insurance:**

If you suffered proven economic loss due to a nuclear power plant incident, you would be paid for that loss. Nuclear power plants carry insurance. This insurance covers personal injury and damage to property, including animals and crops.
Sheltering Animals:
In some emergencies, you may be advised to shelter all animals, including cows, swine, sheep and poultry. The covering keeps dust – or radioactive particles – from falling on them. Masonry or concrete buildings usually protect animals best.

Farm Products:
Unless directed to do so by your appropriate regulatory authority, do not destroy any food products.

Water:
Store as much water as possible for animals. Put covers on wells, rain barrels, tanks and other containers. Water from enclosed containers and underground sources, such as covered deep wells, will be safe for livestock. If you use tanks, use all the water in the tanks first. Do not refill unless the water comes from a protected well or spring. Filler pipes should be disconnected from containers supplied by runoff from roofs and surface drain fields. This will help prevent contaminants from entering the containers. Intake valves should be closed when you suspect contamination to prevent distribution or irrigation until the water is tested and found to be safe. Water in a pond may be contaminated and should not be used until you are told it is safe to do so. Boiling will not remove the radioactive materials from the water.

Milk:
Milk from animals that have been sheltered and fed protected feed and water should be safe. If milk is contaminated, food processors could be told to hold it for a period of time to allow radiation to decay. Milk could be frozen, concentrated, made into cheese, or dehydrated.

Meat:
Livestock exposed to external contamination could be used for food if washed and checked by officials. Radioactive materials could be washed off animals’ skin with soap and water. Meat animals with internal contamination should not be slaughtered until you are told by officials that it is safe to do so.

Poultry:
If poultry products and eggs are found to be contaminated, they should not be consumed or sold until you are told by officials that it is safe to do so. Poultry raised indoors and given protected feed and water are less likely to be contaminated.

Grain:
It is usually several months from the time grains are harvested until they are eaten. This time lapse would likely make the grain safe. Milling and polishing may also remove the contamination.

Fruits and vegetables:
The time between harvest and market helps make commercially grown vegetables and fruits safe. Skins and outer leaves of vegetables could be removed and the rest washed in uncontaminated water.

Aquaculture:
Aquaculture should be sampled and analyzed by officials if radioactive contamination is detected in the area. Officials will inform you how to handle the aquaculture.
Honey:
Honey and beehives should be sampled and analyzed by officials if radioactive contamination is detected in the area. Officials will inform you how to handle the hives and honey.

Maple Syrup:
Maple sap and syrup should be sampled and analyzed by officials if radioactive contamination is detected in the area.

Buildings and Equipment:
Monitoring by officials would determine whether farm, food processing, or distributing buildings or equipment were contaminated. If so, you would be told what to do.

Soil:
Officials would take soil samples to see if any precautions were appropriate and advise you of the recommendations.

Food and Milk Processors, Warehouses and Commodity Terminals:
Windows and vents to the outdoors should be closed. Vacuum systems should be shut down as should compressed air systems. Any system that draws air from outdoors to the inside should be shut down. Plan for storing or processing milk if marketing must be delayed for a few days. Samples will be collected and officials will notify you which products can be released for sale.

Protection of Packaged Food Products:
Food in finished packaging should not be harmful to eat as long as the outer wrappings are discarded. Radioactivity will travel as fine particles that may coat the outside of the food product container.

General Information on Radiation:
Radiation is a natural part of our environment. It is in the air we breathe, the food we eat, the soil, our homes, sunshine, and even our bodies. The radiation naturally occurring or existing in our environment is called background radiation. The amount of background radiation varies from one location to another.
People are also exposed to radiation through medical and dental x-rays, and appliances such as color television sets. Commercial nuclear power stations and other facilities such as hospitals and universities are permitted to release controlled non-harmful amounts of radioactivity to the environment during routine operations.

For more information contact:
NH Homeland Security and Emergency Management: 603-271-2231
NH Department of Agriculture, Markets and Food: 603-271-3551
NH Department of Environmental Services: 603-271-3503
NH Division of Public Health Services:
  - Food Protection Section: 603-271-4589
  - Radiological Health Section: 603-271-4588