

Your Safety Is Important To Us

This brochure gives basic information on radiation and instructions on what to do if there is an emergency at the Brunswick Plant near Southport. State and county officials and Carolina Power & Light (CP&L) want you to be prepared so that you and your family would know what to do in an emergency.

The Brunswick Plant has multiple back-up safety systems, so a serious emergency is unlikely to occur. Plant operations are conducted under strict safety rules and are monitored by the Nuclear Regulatory Commission (NRC), a federal agency that regulates the nuclear industry in the United States. As part of regulatory requirements, emergency exercises are conducted every other year with plant personnel and state and county officials participating. This brochure and the safety information calendar are part of the comprehensive emergency plans developed by the State of North Carolina, Brunswick and New Hanover counties and CP&L.

Be sure you understand the information in this brochure so you and your family will be prepared in the unlikely event of an emergency. Discuss this material with family members and friends.

If you know someone who cannot read or is visually impaired, please read this information to them and make sure they understand it.

Classification of Emergencies

There are four different classifications of emergencies that could occur at a nuclear power plant. These classifications help state and county officials and plant personnel determine how they will respond to each kind of problem.

Unusual Event - This is the least serious of the four emergency classifications. It means there is an event at the plant, but it would not affect the public.

Alert - This is an event that could reduce the level of safety at the plant. There is still no danger to the public. State and county officials and CP&L might decide to activate their emergency centers, just in case the situation gets worse.

Site Area Emergency - This event could lower the safety of the plant, but probably not enough to pose a danger to the public. The sirens will be sounded to alert the public to listen to local radio and television stations for information and instructions.

General Emergency - This is the most serious event that could occur at the plant. State and county officials would take action to protect the public. Sirens will be sounded and local radio and television stations will give instructions to the public living in affected areas. They would be told to stay indoors or to evacuate from the area.

The Warning System

In the unlikely event of an emergency at the plant, 35 pole-mounted sirens located in the 10-mile emergency planning zone (EPZ) around the plant would be activated to alert the public. **Hearing the sirens does not mean you should evacuate.**

If you hear the sirens and are not sure if it is a test of the system or an emergency, tune to one of the radio stations listed on this page. If there is an emergency, these stations should stop regular programming to give information and instructions to the public. **The sirens will sound several times for 3-minute intervals if there is an emergency that could affect the public.** Keep the radio tuned for more information. You might be advised to shelter in place or to evacuate from the area.

The sirens are activated by state and county officials and are tested often to make sure they work properly. The sounding of the sirens is probably just a test, but there could be an emergency at the plant.

Sirens are the primary warning system used to alert the public in the event of an emergency. Officials might also travel along selected county and state roads in the 10-mile EPZ in emergency vehicles equipped with loudspeakers and sirens. They might also go door-to-door in selected areas. The Coast Guard would assist in alerting boaters on coastal waterways.

Some residents in the 10-mile EPZ have been identified as needing special assistance in the event of an emergency. These people should fill out the **Request For Special Assistance card**, which is located on the bottom of the letter which arrived with the safety information calendar.

Siren Tests

There are three ways the sirens are tested:

Silent test - A silent signal is sent to each siren every two weeks. The sirens do not sound during this test.

Low-volume "growl" test - A very low sound like a growl will occur for a few seconds. Low-volume tests are conducted every three months. Only people very close to a siren will hear this test. CP&L will provide information about the test through the local news media.

Full-volume test - All the sirens will sound at the same time for 3-minute intervals. A full-volume test is conducted once a year. CP&L will provide information about the test through the local news media and will mail postcards to residents living within the 10-mile EPZ.

Radio Stations

These radio stations will participate in Emergency Alert System (EAS) announcements in the event of an emergency.

If you hear several 3-minute-long siren blasts, tune to one of the following stations for information:

97.3 FM	WMNX
98.7 FM	WKOO

Other radio and television stations may also broadcast information and instructions in an emergency.

If an evacuation of coastal waters is ordered, the U.S. Coast Guard will broadcast information and instructions on the following frequencies:

U.S. Coast Guard Radio

BAND	CHANNEL	FREQUENCY
VHF-FM	16	156.8 MHz
HF		2182.0 kHz

Taking Shelter In Place

If there is an emergency at the plant, radio or television stations might instruct you to shelter in place as a precaution. **Sheltering in place is the best thing to do if air containing radioactive materials were to pass over your area. By remaining indoors, you reduce exposure to the radioactive materials.**

You should follow these steps when told to shelter in place:

- DO NOT go to your child's school.** Children will be sheltered and protected by school officials.
- Shelter livestock and give them STORED feed and water, not fresh. Keep pets indoors.
- Go indoors and close all windows and doors. Turn off fans, heating and air conditioning that require outside air. Close any other air intakes.**
- Do not use the telephone unless absolutely necessary.
- Cover all open food containers. The food, water and milk supplies in your home are safe to eat and drink.
- Go to a room or basement with few or no windows.
- Stay tuned to a local radio or television station for more emergency information.
- Stay indoors until a local radio or television station reports it is safe to go outside.**
- If you must go outside, place a cloth over your nose and mouth.

Evacuation Procedures

If there is an emergency at the plant, people in some zones might be asked to evacuate as a precautionary measure. Stay calm. You will only be asked to evacuate if it is necessary. Evacuation routes and evacuation shelters for each zone are listed on the back of this brochure.

WHAT YOU SHOULD DO

- Pack necessary items to take with you such as the following:

- this brochure or the safety information calendar
- two sets of clothing, two blankets or a sleeping bag for each person planning to stay at the evacuation shelter
- toilet articles, bath towels
- necessary medication, baby needs
- identification, car registration
- credit cards, checkbook, cash
- portable radio, flashlight, batteries

- Do not take pets with you if you plan to stay at the reception center. All pets and livestock should be sheltered. Leave them a three-day supply of stored food and water.

- Do not use the telephone unless absolutely necessary.

- Plan ahead! It is a good idea to drive your evacuation route now so that you are familiar with it. Call your local county emergency management office if you have questions. The telephone numbers for state and county emergency management agencies are listed below.

AS YOU EVACUATE

- If your child attends a school in the 10-mile EPZ, **do not go to the school.** Children in these schools will be taken by bus to relocation schools (listed on the back page).

School children who live in the 10-mile EPZ and attend a school outside the EPZ will be kept at their schools by school officials until they are picked up by their parents.

- Close car windows and vents. Do not turn on the car air conditioner or heater.

- As you drive, stay tuned to a local radio station for more information.**

- Follow the evacuation route to the designated evacuation shelter for the area where you live or the relocation school for your child's school. You may stay at the evacuation shelter or another location at least 10 miles away from the plant. It is very important that you sign in at the evacuation shelter even if you do not plan to stay there.

Special Assistance

Special plans have been made for people identified as needing special assistance. The **Request For Special Assistance card**, located on the bottom of the letter which arrived with the safety information calendar, helps county officials know if you need assistance. Even if you have previously submitted a request card, the information must be updated every year, so please fill out this card and mail it as soon as possible. This information will be handled by county emergency management officials in a confidential manner.

You should fill out the special assistance card if:

- You are disabled or hearing impaired.** Your county officials will keep this information on file and will be able to assist you if needed.

- You do not have a car, or cannot ride with someone else.** County officials can make arrangements for your transportation. These plans will be broadcast on local radio and television stations.

Fill out this card, or have someone else complete it for you and mail it in.

If you are responsible for someone in a nursing home, rest home or hospital, do not pick them up. Officials will care for these people and take those needing medical care to hospitals and special care facilities outside the 10-mile area surrounding the plant.

If you have neighbors with special needs, you may want to help them shelter in place in their home or to evacuate.

Radiation

We are constantly exposed to radiation from our natural environment. This is called background radiation. Sources of background radiation include the sun, the air we breathe, soil, plants, building materials and even the human body. We are also exposed to man-made sources of radiation like medical and dental X-rays, smoke detectors and television sets.

There are three types of radiation:

Alpha - the least penetrating, it can be stopped by a piece of paper.

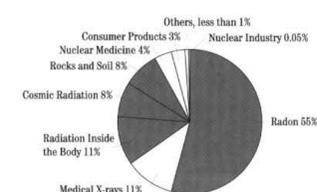
Beta - can be stopped by a thin piece of aluminum.

Gamma - can be stopped by lead, water or concrete.

You could be exposed to radioactive materials in three ways:

- Radioactive material in the air and on the ground. You can prevent exposure by going to a place with no radioactive material.
- Radioactive material on hair, skin and clothing. Exposure will stop if you wash off the radioactive material.
- Breathing or swallowing radioactive material. Exposure will stop when the material stops giving off radiation or when your body eliminates it.

Sources of Radiation Exposure



Note: Unshaded portion indicates man-made radiation
Source: National Council of Radiation Protection and Measurements

Measured in millirem (mR) per year

SOURCES AND AMOUNTS OF NATURAL BACKGROUND RADIATION

Radon	200 mR
Cosmic radiation	27 mR
Internal radiation from human body	40 mR
Rocks and soil	28 mR

SOURCES AND AMOUNTS OF MAN-MADE RADIATION

Medical X-rays	39 mR
Nuclear medicine	14 mR
Consumer products (TVs, smoke detectors, etc.)	10 mR
Other (including nuclear power)	2 mR
Total	360 mR

Agricultural Information

If you are warned that a radiological emergency exists, make arrangements for the safety of your family and farm.

For the farm:

- Shelter all farm animals, particularly dairy cattle and dairy goats.
- Livestock should only be fed stored feed and protected water.
- Bring feed into buildings or cover outdoor feed supplies.
- Store as much water as possible for livestock. Cover wells, rain barrels and tanks.

For the family:

- Place food and water inside a closed area in your house where it cannot be contaminated. Uncovered food brought in from a contaminated area should be cleaned.

- Eggs, potatoes and melons that are cleaned may be eaten.
- Green leafy vegetables should be carefully washed. Remove the outer layers if they were exposed to contamination.
- Peas and beans require normal cleaning.
- Wash hands thoroughly before eating.

For farm work:

- Wear protective clothing (similar to that used for pesticide application) when working outdoors for the first few days following the emergency. Remove outer clothing before entering your home or any other clean area. Shower thoroughly as soon as you finish work.
- Wear a dust filter over your nose and mouth when cultivating dry earth or if harvesting corn or feed grains.

For More Information

If you have questions about any of the safety information you have read in this brochure, you can call or write one of the following offices:

Brunswick County Emergency Management Agency (910) 253-2565 (910) 253-4376
3325 Old Ocean Highway or 1-800-522-2366 (NC only)
P.O. Box 9
Bolivia, NC 28422

New Hanover County Department of Emergency Management or Disaster Information Recording (910) 341-4300 (910) 341-4123
20 N. 4th St.
P.O. Box 1525
Wilmington, NC 28402-1525

NC Emergency Management State Emergency Operations Center (919) 733-3867 1-800-858-0368
4713 Mail Service Center
Raleigh, NC 27699-4713

Brunswick Plant Visitors Center (910) 457-6041
P.O. Box 10488
Southport, NC 28461-0488
Hours: Tuesday through Thursday, 9 a.m. to 4 p.m.

U.S. Coast Guard Group (919) 247-4570
P.O. Box 237
Atlantic Beach, NC 28512-0237

Emergency Numbers

If you need help during an evacuation, call the number for the county you live in:

Brunswick County (910) 253-2565 or (910) 253-4376
New Hanover County (910) 762-5228

Brunswick Plant Visitors Center

Come explore the world of energy at the Brunswick Plant Visitors Center, located two miles north of Southport. Interactive exhibits, graphic displays and videos will enlighten and entertain people of all ages. You and your family will have a better understanding of nuclear power and other energy sources used in our world today.

- Learn more about nuclear fuel by examining a model of a fuel bundle. You can also learn about the Brunswick Plant's unique construction through graphics and a cutaway section of a containment wall like the one surrounding the reactor vessel.

- View the scale model of the plant to learn how electricity is generated at a nuclear plant.

- Try our electronic "quizzes" to see how much you know about the world of energy.

- Ride our energy bikes and use your own muscle power to operate various household appliances.

- Learn about natural and man-made sources of radiation and use a Geiger counter to measure amounts of radioactivity in various objects.

- Step inside a model of the Brunswick Plant control room.

- Discover the many environmental wonders to be found in coastal Brunswick County.

Groups are welcome and should make advance reservations as early as possible. Come visit and have fun while learning. A picnic area is adjacent to the Center and is available to the public. For further information, call (910) 457-6041.

Hours:
Tuesday through Thursday
9 a.m. to 4 p.m.
Closed on holidays and weekends.
Admission is free.

Directions:

From US 17, take the Southport/Oak Island exit. Follow NC 133 beyond where NC 133 merges with NC 87. Follow NC 87 approximately three miles to the Visitors Center on the left.

From US 211, go to the stoplight at the intersection of NC 87 in Southport. Turn left and go approximately 2/10 mile. The Visitors Center is on the right.

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