## March 2011 Radiation Event Talking Points

March 16, 2011

Although we are far away from Japan, some people in North Carolina are worried about the consequences of radiation releases from nuclear power plants damaged by the tremendous earthquake and tsunami on March 11.

State and federal experts in radiological health, emergency response and nuclear power operations are watching this situation closely.

## Harmful amounts of radiation are not expected to reach the United States, and no health risks are expected for people in this country.

At this time, there are no indications that North Carolina residents need to take any special action.

This assessment is based on an understanding of events in Japan so far, and on experience with the very significant release at Chernobyl in 1986 and above-ground nuclear weapons testing in Nevada for decades after World War II.

As a precaution, EPA stations on the west coast and across the states – including North Carolina – are monitoring for radiation in air and water.

## **Radiation Monitoring in North Carolina**

In North Carolina, the state Radiation Protection Section has been tracking radiation levels in the environment since 1964. During that time, radiological survey instruments have been used to measure all forms of radioactivity in samples of the air, milk, water, soil, and vegetation around North Carolina's nuclear power plants and elsewhere in the state.

From this, we know that soil, sediment and fungi sample results have shown concentrations of radioactive fallout, particularly radioactive cesium from weapons testing. These concentrations decreased over time.

After the 1986 Chernobyl reactor accident in the former Soviet Union, radioactive cesium levels increased as fallout drifted around the world and settled to the ground. Although measurable above background at that time, the quantities of radioactivity were very small. These concentrations have been declining since 1986 as well.

## **Radiological Emergency Preparedness in North Carolina**

North Carolina has radiological emergency plans and dedicated response resources, both for nuclear power plants and for radiological or nuclear incidents not associated with nuclear power plants. These response plans, responders and resources are well practiced and are ready should they ever be needed.

The potassium iodide (KI) distribution program for people living within Emergency Planning Zones around North Carolina's nuclear power plants is part of the state's preparedness planning efforts.