**Attachment B: Messages for Re-entry Messaging Following a Radiation Emergency**

**Message 1: How do we know it is safe to go back home?**

* Teams of federal, state and local radiation experts have gone through the area to measure radiation levels to make sure that it’s safe for you and your family to return.
  + The teams collected air, water, and soil samples to check for radioactive contamination.
  + The teams collected food products and drinking water to make sure that they are safe to consume.
  + The teams use specialized instruments to look for radioactive contamination.

These instruments are very sensitive and can detect contamination in the environment and in the food and water supply.

* + The teams also used airplanes and helicopters to fly over the area and measure radiation levels on the ground.
* People can return to their homes if the additional radiation dose they will receive is below the Environmental Protection Agency’s (EPA) recommended level of 5 millisieverts (5 mSv) per year.
* The measurements taken in the area show that levels are below the 5 mSv per year limit set by EPA.
  + To put this into perspective:
    - The average dose of radiation people receive from natural background sources, such as rocks, soil, air and space, is 3.6 mSv per year.
    - In comparison, you would get a dose of 10mSv from a CT (medical imaging) scan of your abdomen.

**Message 2: What are the possible health effects from living in this area?**

* Living in an area with higher radiation levels may increase your risk of developing cancer.
  + However, the additional cancer risk from the radiation in this area is very small compared with the average cancer risk for people in the U.S.
* People living in the U.S. have about a 40% chance of developing cancer.
  + A person’s lifestyle and environment can affect this rate, making it higher or lower than 40%.
    - Examples of lifestyle factors that can influence cancer risks include smoking, diet and exercise.
    - Examples of environmental factors that can influence cancer risks include exposure to chemicals and other pollutants.
* People who decide to move back to this area will receive an additional radiation dose of 5 mSv per year.
  + After five years, the cancer risk for people living in this area will go up about 1%.
  + So, instead of having a 40% chance of developing cancer, people in this area will have a 41% chance of developing cancer.
* Even though the increased cancer risk is small, health officials will continue to monitor people’s health in this area.

**Message 3: What precautions can I take to protect the health of my family?**

* When returning home, health officials recommend taking some additional precautions to protect your health.
  + These precautions will decrease your chances of getting radioactive contamination inside your body.
    - Always wash your hands with soap and water before eating.
    - Wear a dust mask when mowing grass or doing other types of yard work that creates dust.
    - Shower after doing outdoor activities such as exercising or working outside.
    - Clean and bandage any cuts and scrapes.

**How long will I have to take precautions to protect my family?**

* You may not need to take these precautions forever.
  + As time passes, contamination in the environment will “weather.”
    - This means it will get washed away, soak into the soil, or be absorbed by plants.
  + Radioactive contamination will also “decay.”
    - This means it loses energy over time and becomes less radioactive.
  + Radiation experts will continue to monitor the area and will let you know if there are any updates regarding these precautions.

**Message 4: What precautions can I take to clean up the radioactive contamination in my house?**

* Some contamination from outside may have gotten into your house during the incident.
  + When you first return to your home, there are some simple ways to clean up the radioactive contamination in your house.
    - Start by vacuuming carpeting and furniture.
      * Wear a dust mask, because vacuum cleaners may not catch all the contamination.
      * If your vacuum cleaner has a bag, throw the bag away when you are done.
      * If your vacuum cleaner does not have a bag, take the vacuum outside to empty the canister into a garbage bag, throw the garbage bag away, and rinse out the vacuum cleaner canister.
      * Be sure to wear a mask while performing these steps.
    - Next, use a disposable mop to clean your floors, and wipe down countertops, tables, and other surfaces that dust may have settled on with damp paper towels.
      * Throw away the mop and paper towels when you are done.
    - Wash bedding and linens.
    - Finally, replace your air conditioning/heater filter, and dispose of the filter in the trash.
    - Be sure to wear a mask while performing this activity.
  + Your health department can test your home for contamination after you clean it.

**Message 5: How do we know the food and water supply is safe?**

* Radiation experts are analyzing and monitoring food and drinking water samples to make sure they are safe for you and your family to consume.
  + These experts are also checking crops, livestock, wild game and fish to make sure these are safe to eat.
  + They are also checking milk and drinking water to make sure these are safe to drink.
* Check with local agricultural authorities before:
  + Planting food crops or disturbing soil by plowing, tilling, or digging.
  + Eating any food grown in your own personal garden.
* When you return home, food in sealed containers, such as cans, bottles, bags, or boxes, is safe to consume.
  + Check the expiration date to make sure the food has not gone bad.
  + Clean the outside of the packaging with a damp paper towel before opening.
  + Throw the paper towel away and wash your hands before eating.
* Wash cookware and dishes prior to cooking or serving food with them.
* Wash all fruits and vegetables before eating them.