

### Intermediate/Ingestion Phase Planning Guidance

#### **Ingestion Phase Planning**

All counties located within a 50-mile radius of a nuclear plant are considered ingestion counties. Federal mandates require ingestion counties to participate in a full-scale exercise, tabletop exercise or training every eight years. The mandates also include specific planning requirements to county emergency operations plans.



#### State of Minnesota

The state of Minnesota provides direction, control and coordination as outlined in Minnesota Statute Chapter 12 and the Minnesota Emergency Operations Plan (MEOP) for nuclear generating plant preparedness and actual emergencies.

Ingestion counties would be asked to support the response necessary to protect population from long-term exposure and the food supply from radiological contamination. Ingestion counties located closer to the plant may be asked to support relocation activities should they become necessary.

Areas outside the 10-mile Emergency Planning Zone (EPZ) should not need emergency

evacuations, but may be asked to implement actions aimed at protecting the population from long-term exposure to low levels of radioactive contamination.

#### **Ingestion Counties**

The Minnesota ingestion counties for the Monticello Nuclear Generating Plant are: Anoka, Benton, Carver, Chisago, Dakota, Hennepin, Isanti, Kanabec, Kandiyohi, McLeod, Meeker, Mille Lacs, Morrison, Pine, Ramsey, Renville, Scott, Sherburne, Sibley, Stearns, Washington and Wright.

The Minnesota ingestion counties for the Prairie Island Nuclear Generating Plant are: Anoka, Carver, Chisago, Dakota, Dodge, Goodhue, Hennepin, LeSueur, Olmsted, Ramsey, Rice, Scott, Steele, Wabasha, Waseca, Washington, and Winona.

# Ingestion County Expected Activities by Emergency Classification Level (ECL)

The following describes the activities most likely to occur at each ECL in an ingestion county during a nuclear generating plant emergency.

#### Notification of Unusual Event (NUE)

- No formal notification is made to the ingestion counties.
- No action is expected of the ingestion counties at this level.

#### Alert

- The ingestion county emergency manager will be notified of the Alert declaration by the State Emergency Operations Center (SEOC).
- The SEOC will maintain communications with ingestion county emergency managers.



- Ingestion counties are expected to:
  - Notify county elected officials and local jurisdictions of the event.
  - Log in to Web EOC and maintain situational awareness of the event.
  - Communicate concerns to the SEOC through the local communicator.
  - Provide support to any community reception centers in the county.
  - Communicate any special events (large public gatherings) that are occurring or scheduled in the county.
- Alert status is maintained until verbal termination, ECL reduction or escalation to a higher ECL takes place.

#### Site Area Emergency (SAE)

- The ingestion county emergency manager will be notified of the SAE declaration by the SEOC.
- The SEOC will maintain communications with ingestion county emergency managers.
- Ingestion Counties are expected to:
  - Notify county elected officials and the local jurisdictions of the current ECL.
  - Log in to WebEOC and maintain situational awareness of the event.
  - Communicate concerns to the SEOC through the local communicator.
  - Provide support to any community reception centers in the county.
  - Communicate any special events (large public gatherings) that are underway in the county.
- SAE status is maintained until verbal termination, ECL reduction or escalation to a higher ECL takes place.

#### General Emergency (GE)

 The ingestion county emergency manager will be notified of the GE declaration by the SEOC.

- The SEOC will maintain communications with ingestion county emergency managers.
- The ingestion county is expected to:
  - Open the county EOC and maintain at least minimal 24-7 staffing.
  - Notify the agricultural agencies in the county of the event.
  - Support implementation of protective actions needed to protect the population from a possible contaminated food supply. This would include agricultural control zone restrictions on food and livestock movement and hunting and fishing restrictions.
  - Participate in daily SEOC briefings.
  - Support the efforts of field sampling and monitoring teams.
  - Prepare to receive ingestion brochures and food protection information and distribute them to food producers in the county.
  - Provide support to any community reception centers in the county.
  - Coordinate any implementation of relocation areas, restricted areas, reentry, and return with the SEOC as requested.
- GE status is maintained until verbal termination, ECL reduction or escalation to a higher ECL takes place.

#### Intermediate/Ingestion Phase

When the release has ended and the situation is under control, attention shifts from the immediate actions of the plume phase to the longer term issues of the ingestion phase. These include the establishment of relocation areas, restricted zones, re-entry protocols, return protocols, recovery and additional food control measures.



### Support the establishment of Food Control Measures

- Food protections begin with the issuing of an embargo order when flyover data indicates contamination is detected outside the evacuation areas.
- Additional food protection controls may be put in place following the results of field sampling during the intermediate/ingestion phase.
- Additional food embargoes are mandated when lab analysis indicates radiation levels exceeding strict FDA guidelines for annual consumption.
- Food control decisions emphasize public protection and balance the long- and shortterm implications for economic damage to the state.
- The ingestion county is expected to:
  - Coordinate with the state on the agricultural control zone and protection of food products in the county.
  - Identify areas where trucks can be held when an embargo is issued.

## Support the establishment of Relocation Areas outside the EPZ counties

- The initial post-plume priority is to determine if there is contamination in areas outside of the initial evacuation areas that require additional measures (relocation) to protect the public from long-term exposure to low-level radioactive material.
- Relocation areas are where the removal or continued exclusion of people from contaminated areas is needed to avoid long-term radiation exposure.
- Relocation from an area is indicated when soil samples exceed EPA protective action guidelines. (First year: 2 rem total effective dose [TED] or higher; any subsequent year: 0.5 rem TED or higher.)

### Support the establishment of Restricted Zones

- Restricted zones are established to protect area residents from the potential effects of chronic exposure to low-level radiation.
- These are areas with controlled access from which the population has been evacuated or relocated.
- Re-entry into the restricted zone is initially limited to essential personnel only.
- All persons entering a restricted zone must be registered, briefed on radiation exposure and given dosimetry, and may need to be escorted.
- People leaving a restricted area will need to be monitored for radiological contamination and may need to be decontaminated.
- An area remains restricted until a combination of remediation efforts and the natural decay of radiation allow for safe long-term residency.

### Support the establishment of Re-Entry Protocols

- Protocols and procedures are implemented to authorize the temporary re-entry into a restricted zone for activities including:
  - Public safety services
  - o Family reunification
  - Livestock care
  - Critical infrastructure, industrial process and utility service
  - Pet retrieval/animal control

#### Support the establishment of Return Areas

- Facilitate the orderly return of people to areas where there was no contamination or long-term exposure health risk.
- Following verification and establishment of restricted zone boundaries and traffic



- control points, some areas can be cleared for return to unrestricted residence or use.
- The timing of the return is coordinated with state and local agencies.
- Although people can return, some of these areas may still have low-level contamination and may require some ingestion pathway food controls or restrictions.

#### Support the establishment of Recovery

- Recovery will involve continued and extensive field sampling, damage and impact assessments, and the coordination of federal assistance and nuclear insurance benefits.
- Coordinate remediation of contamination and restoration to pre-event conditions and activities.

## County Emergency Operations Plan Requirements

Ingestion county emergency operations plans will need to include the following information in a section on nuclear generating plant radiological emergency preparedness:

- A description of when the County EOC would be activated and staffed for a nuclear generating plant emergency.
- The title and position of the person(s) responsible for:
  - Coordinating with the agricultural industries in the county for

- implementation of food and agricultural product embargos.
- Coordinating traffic and access control points to restrict the movement of people, animals and agricultural products.
- Coordinating the implementation of restrictions on consumption of food products.
- Coordinating the relocation of people from a restricted zone should one be necessary in the county.
- Coordinating the release of information to the public in cooperation with the state Joint Information Center.
- A brief description of what the county will do for each Emergency Classification Level (NUE, Alert, SAE and GE).
- Describe how the county will support:
  - The implementation of food control measures.
  - The establishment of relocation areas if needed.
  - The establishment of restricted areas if needed.
  - The establishment of re-entry protocols if needed.
  - The establishment of return areas if needed.
  - o Recovery strategies if needed.

