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## *The Ingestion Pathway Comments and Issues*

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The Ingestion Pathway and its recent emphasis on planning for nuclear power plant emergencies has created activity at all levels of government. Federal Emergency Management Agency (FEMA) guidelines have been developed and there has been an urgency placed on implementing these guides and planning standards at all levels of government. This global approach has led to confusion and in some cases rapid development of public brochures at the state level. These brochures are meant to educate the public in the need for protective action in the ingestion pathway. Some forethought on the planning process and the integration of the protective action guidelines seems in order. Some issues that should be addressed are listed below:

Suggested consideration of issues to facilitate the planning process:

- \* Review existing technical specifications of nuclear power plants requiring environmental monitoring. This should provide at least the baseline sampling of food products for site specific plants.
- \* Review state monitoring/analysis of sampling programs and NRC contracts to states for radiological monitoring of nuclear power facilities.
- \* Encourage each state to involve food producers at an early date in the planning development. Such producer associations as the Dairy Associations, Marketing Boards, and Cooperatives are valuable resources in implementing plans because they represent the affected economic impacted parties.
- \* Involve and educate the agricultural extension agencies in the planning process so they can inform the public through their usual points of contact.
- \* Set up principle agency responsibilities in existing state specific framework. For example, the farm or food producers normally are familiar with their extension agents. Use this relationship to help the affected producers understand the protective actions that will be implemented in case of severe nuclear power plant accidents.
- \* Recognize that the disaster services agencies are lead agencies for implementing evacuation procedures but may have no experience in relating to food production or farming practices

in the area. Agriculture extension agents and their communication networks may be the primary notification and implementation method used in protecting the food pathways.

- \* Integrate planning activities so that conflicts and confusion can be avoided. For instance, the requirements for monitoring the population in the EPZ require that 20% of the evacuated population require monitoring for contamination at reception centers located about 15 miles from the plant. Existing Food and Drug Administration (FDA) guides for protection of dairy products to 50 miles would indicate contamination of microcurie amounts of iodine and cesium at a reception center located 15 miles from the plant. This dilemma has been ignored in the planning process and makes one question the approach of the issuance of stand alone guides by the federal agencies.
- \* Emergency workers should be considered the same as the general public. If samples are gathered by emergency workers at locations (50-100 miles) from the affected area, it does not seem sensible to imply by protective dress that the population in those areas may be contaminated. The protective measures for these workers should be comparable to the risk that is involved.
- \* Standard Procedures and Analysis: One of the most difficult problems in assessing the radiological impacts for real events such as Three Mile Island has been interpreting the data. Often, the data is either incorrect or the errors are unknown. This leads to difficulty in taking correct protective action and loss of confidence in the entire emergency response system.
- \* The total emergency response program must include the federal resources at the outset. It is unreasonable to assume that the state should duplicate the federal resources in meeting the federal guidelines.