

CRPPH-75 ROOM DOC 4a

Framework for Post-Accident Food Management

Supporting CRPPH-75 agenda item 7.1

Framework for Post-Accident Food Management

An NEA member-country survey of government decisions and criteria for accepting food trade from Japan following the Fukushima accident, and experience since the accident, have demonstrated two things. First, the large variety in governmental survey responses demonstrated that there is no common understanding of existing international post-accident food trade guidance, and that existing international guidance only partially addresses the entire context of post-accident management of food. Second, experience since the accident has demonstrated the need to improve domestic and international confidence and trust in post-accident governmental food safety decisions (e.g. food-marketing criteria, food certification processes).

To address the first issue, the NEA's Committee on Radiological Protection and Public Health (CRPPH) has developed a comprehensive post-accident food-management framework that is included in annex to this note. This inclusively describes the management of: food production in accident-affected agricultural lands; consumption of locally-produced food by residents of accident-affected areas; marketing of locally-produced food in accident-affected areas; domestic marketing of food produced in accident-affected areas; export of food from accident-affected countries; and import of food from accident-affected countries. To help assure broad international coherence, the technical aspects of this framework are being discussed with the UN Food and Agriculture Organisation (FAO) Codex Alimentarius Committee on Contaminants in Food (CCCF). The framework is also being included in new ICRP recommendations currently being drafted for the Protection of People in the Event of a Nuclear Accident. Beyond these technical aspects, broad international engagement will be needed to have the framework internationally recognised, and thus useful.

To help improve domestic and international confidence and trust in governmental food-safety decisions, often a neutral and international opinion is of value. To offer this, the proposed post-accident food-management framework includes a two-team validation process. One international team, of experts in calculating dose from eating contaminated food, would review and scientifically validate, as appropriate, the science and assumptions used by the accident country to establish numerical criteria for food consumption and marketing. This would not involve questioning the resulting numerical criteria, but rather the science behind it. A second international team, of experts in radiological measurement, would review, and scientifically and technically validate, as appropriate, the science and technology used by the accident country to measure contamination in food products and certify, as appropriate, food as meeting government criteria.

Discussions with emergency and recovery management experts support this framework and twofold international validation process as positive steps to increase confidence, both domestically and internationally, that the accident country's consumption criteria are scientifically well based, and that the process of certifying all marketed food as meeting these criteria are scientifically and technically state-of-the-art. To achieve broad discussion, technical agreement and political recognition of this framework will require an extended effort to develop some level of formal, governmental agreement. Collaboration with relevant international organisations (e.g. FAO, WHO, IAEA, etc.) on this issue is essential to improving the current situation.

Annex

Food Management Framework

The CRPPH post-accident food management framework: recognises the responsibility of the accident country to develop an accident-specific approach to food criteria and management; acknowledges the political, social and ethical rationale for a consistent approach and single criteria for domestic consumption and exportation of food; and proposes that importing countries accept the accident country's export criteria for allowing importation.

Framework Assumptions

- Accidents are rare and are unique
- Affected food products will be accident specific
- There are a limited number of export food products from any affected area
- Consumption and export criteria are a matter of national choice and will evolve with circumstances

Emergency Food Actions

- Food consumption in areas modelled to be affected will be banned / restricted rapidly
- Food distribution and export from areas modelled to be affected, will be banned / restricted rapidly
- Food consumption, distribution and export will be resumed only after:
 - the accident is under control
 - affected areas have been radiologically characterised
 - national criteria have been established, and
 - a measurement / certification process has been established

Framework National Consumption Criteria Assumptions

- National criteria should be based on pre-determined risk assessments
- National criteria will need to be refined to address actual prevailing circumstances:
 - What food products are affected
 - What radionuclides have been released
- Criteria refinement can take place during the time that the accident is being brought under control and affected areas are being characterised
- Criteria will be developed to protect the most exposed group – those living in the affected area

Post-Accident Food-Management Framework

- For affected food, national consumption criteria will be developed in easily measurable quantities:
 - Activity concentration (Bq/kg)
 - Based on an assumed annual food consumption (kg/a)
 - Such that eating affected food will not cause a radiation exposure over a specified level (mSv/a)
- Codex Alimentarius levels should be used as a ceiling for national consumption criteria
- It will be socially, politically and perhaps ethically difficult for a country to use different criteria for those living in the affected area and those living in unaffected areas
- Similarly, criteria for national consumption will most likely be used as export criteria
- Importing countries should use the accident country's export criteria as their import criteria
- The Framework thus uses the same consumption criteria for the local, national and international management of food from post-accident affected areas