

SECTION II - FUNCTIONS

PART I - Accident Assessment

1. Purpose

This part describes the accident assessment and radiological monitoring activities in the 10-mile Emergency Planning Zone (EPZ).

2. Radiological Monitoring - Accident Assessment

- a. Accident assessment activities are accomplished by the Utility and the State independently.

The Massachusetts Department of Public Health (MDPH) has the primary responsibility for assessing an accident from a public health perspective. The action arm for MDPH is the Nuclear Incident Advisory Team (NIAT). NIAT consists of members who are MDPH employees trained in monitoring and sampling procedures. In addition, NIAT draws upon the expertise of a battery of identified specialists in various fields and disciplines associated with nuclear materials. NIAT has prepared a handbook, in conjunction with the Radiological Emergency Response Plan, which in turn is part of the Massachusetts Comprehensive Emergency Response Plan.

- b. The NIAT Handbook specifies Massachusetts State monitoring team operations and equipment including:

(1) Notification and Team Activation

Upon receipt of the notification call from the State Police, MDPH will contact the PNPS Control Room to verify the emergency situation and obtain additional information. If the emergency classification is at the "ALERT" or higher level, MDPH will activate NIAT, using an established call-down procedure.

(2) Vehicles and Communications Equipment

Radio-equipped sedans are available for use by team members. The radios allow communications between the field teams, MEMA SEOC (Framingham), MEMA Region II EOC (Bridgewater), MDPH Headquarters (Boston), and PNPS EOF (Plymouth).

(3) Radiological Monitoring Kits

All NIAT members have survey instruments capable of measuring alpha, beta and gamma radiation. In addition, they have a portable air sampler with battery clips and kits containing materials necessary for isolation of contaminated materials.

The capability exists to detect and measure radiodine concentrations as low as $10\text{E-}07$ uCi/cc (microcuries per cubic centimeters) under field conditions. The teams are also supplied with ingestion pathway sampling kits which contain equipment necessary for the collection of environmental samples (soil, water, vegetation, etc.).

(4) Deployment Times

Travel times for the initial NIAT responders from the point of origin to the staging area at the PNPS EOF is dependent upon the time of day due to traffic congestion. An estimation of deployment time is between one to three hours.

In the event of poor road conditions at the time of an emergency, transportation by air may be available through the Massachusetts State Police and the Civil Air Patrol.

- c. Teams will proceed to the Utility's EOF and report to the MDPH/NIAT Environmental Emergency Team Coordinator for a situation briefing. Teams will be dispatched to preselected field monitoring locations from the EOF to gather air, water, soil, and vegetation samples and dose rate information. All field radiological data will be evaluated at the EOF by MDPH personnel and translated to actual and projected doses from which integrated dose estimates will be made. Equipment and personnel are available at the EOF to perform

initial analysis of air sample filters and swipes. All field samples will be delivered to MDPH personnel at the EOF for transport to the laboratory for analysis. Primary location for laboratory analysis is the MDPH Jamaica Plain laboratories and those laboratories listed in the New England Interstate Radiation Assistance Plan.

- d. Aerial support for tracking the centerline of the plume will be provided by the Federal Government, upon request by MDPH.
- e. Protective action recommendations are made independently by Utility and MDPH/NIAT personnel at the EOF. Upon agreement between MDPH and MEMA, a recommendation will be relayed to MEMA Headquarters, Framingham, for a protective action decision. Once a protective action is ordered by the Governor through the MEMA Director, it is the responsibility of local jurisdictions to implement it.