NUCLEAR TERRORIST RESPONSE PLAN

FOR THE STATE OF KENTUCKY

KENTUCKY

NUCLEAR TERRORIST RESPONSE PLAN

KENTUCKY DISASTER AND EMERGENCY SERVICES

KENTUCKY STATE POLICE

1978

RECORD OF CHANGES

CHANGE NO.	DATE OF CHANGE	DATE ENTERED	CHANGES MADE BY (SIGNATURE)
1	7 July 1978	11 July 78	JR Ledford

PREFACE

Acts of extortion, blackmail, and deliberate threats of violence involving radioactive materials pose a myriad of complex problems and require a coordinated response from many different federal, state, and local agencies.

The response actions associated with such acts fall logically into two phases:

1. Those dealing with the threat aspects of such acts, i.e. assessing its credibility, searching for the device, its deactivation and disposal, taking preventative actions to protect the public against blast and the release radioactive materials, and;
2. Those following the carrying out of the act (the detonation or disposal of radioactive materials), i.e., large scale evacuation, decontamination and clean-up procedures, fiscal implications, etc.

This plan was developed to help governmental agencies fulfill their legal, official, and moral responsibilities associated with these actions. It is designed to utilize the capabilities of various agencies to cope with nuclear hazards and to minimize loss of life and property.

During the development of this plan, the "Federal Response Plan for Peacetime Nuclear Emergency" (FRPPNE) was developed. Whereas the FRPPNE addresses the entire range of peactime nuclear contingencies

and emergencies, this plan for Kentucky concerns only nuclear blackmail. The two plans are compatible since those agenices involved in the Federal planning effort provided a summary of their current responsibilities and authorities as input to this plan.

To reiterate, this plan summarizes the responsibilities of the various organizations involved and the actions each would take, within its jurisdiction and authority as established by existing laws, statutes, codes of regulation, in response to a nuclear threat.

KENTUCKY NUCLEAR EXTORTION

RESPONSE PLAN

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I. General

A. Purpose

To summarize federal, state, and local responsibilities in the event of blackmail, attempt at blackmail, threats, or attacks involving radioactive materials, nuclear weapons, explosives or dispersal devices.

To provide planning assumptions and guidelines for local agencies, to develop operational plans for responding to a nuclear threat and for the protection of the public health and safety in the event a nuclear threat is carried out.

B. Objectives

1. Describe necessary pre-emergency preparations, concept of operations, organizations, protective actions, and supporting systems required to implement this plan. This will included:

   a. Delineation of responsibilities and tasks for each participating agency.

   b. Establishment of lines of authority and coordination when the plan is in effect.

   c. Selection of those protective actions most effective in ensuring the safety of the public.

C. Authorities

1. Federal

   a. Atomic Energy Act of 1954, as amended.

   b. National Security Act of 1974, as amended.

   c. Energy Reorganization Act of 1974.

d. Disaster Relief Act of 1974.

e. DOE-60 Radiological Assistance Plan, July 1975.

f. DOE-10, Interagency Radiological Assistance Plan (IRAP), April 1975.

g. Fifth U.S. Army Nuclear Chemical and Incident Control Plan (USASIX NCAICP).

h. Executive Orders 11051, 11490, 11725, 11795 and others.

i. Numerous provisions in the United States Code.

j. Interagency agreements between DOE and DOD and and DOE and U.S. FBI, and DOE and NRC.

2. State

a. Agreement between the State of Kentucky and the Nuclear Regulatory Commission (NRC), pursuant to Section 274 of the Atmoic Energy Act of 1954, as amended.

b. KRS 39.400 Kentucky Disaster Service Statute.

c. Kentucky Statute pertaining to explosive devices KRS 237.040.

II. Situation

A. Type of Threats

1. Dispersal of radioactive material other than plutonium;

2. Detonation of a conventional bomb salted with radiactive material (plutonium, strontium or other known radiactive isotope);

3. Detonation of an improvised nuclear explosive device; and

4. Detonation of a nuclear weapon.

B. Hazards

1. Plutonium (Pn) Department of Resources

Plutonium is a fissile nuclear material used in nuclear weapons. It is a radioactive metallic element with a very long half life and is highly toxic and may cause death permanent injury after internal exposure to small quantities. Entry into the body is by ingestion, inhalation, or through a break in the skin.

2. Other Radioactive Isotopes

Some of the more common radioactive isotopes other than plutonium which may be used in a threat are:

a. P-32 (phosphorus)

b. Co-60 (cobalt)

c. Sr-90 (strontium)

d. I-131 (iodine)

e. Cs-137 (cesium)

f. Ir-192 (iridium)

g. Au-198 (gold)

h. Ra-226 (radium)

i. H-3 (tritium)

j. Ca-45 (calcium)

k. Zn-65 (zinc)

All of these and many other radioisotopes could be used in a dispersal device; however, there is a wide variation in toxicity among the radioisotopes depending upon their chemical and physical properties. Thus identification of the isotope and its chemical form is necessary to determine the proper response.

3. Fissile Materials

Only certain isotopes of uranium and plutonium (special nuclear material) are capable of sustaining a chain reaction and are suitable for use in constructing a nuclear explosive. Other elements cannot be used to make a nuclear explosive.

4. High Explosives (HE)

A high explosive (HE) is an essential element in a nuclear explosive. When a radioactive disperal device is involved in the threat, HE may or may not be present. HE in the form of TNT, dynamite, and others are danagerous to handle at any time. In a bomb, they are especially dangerous since they may be used with crude and/or sensitive detonating devices. Therefore, no one except an expert familiar with such devices should attempt to disarm them.

5. Nuclear Detonation

In the event of a nuclear detonation, the initial, thermal, residual radiation and blast are added hazards in the immediate area. In addition there is the potential for air-borne residual radiation spreading downwind and being deposited as fallout.

III. PLANNING

A. Nuclear threat (see Glossary) can be a very complicated matter requiring rapid and effective investigation and response from many diverse groups to protect life and property. Only through effective planning whereby each organization is assigned its role, prepares SOPs and conducts training, can there be any assurance that they will respond effectively to a real threat.

B. Plans, operating procedures, agreements regarding the establishment of operating centers, operational and support responsibilities, management of resources, and other requirements must be provided for in advance. Plans should provide for obtaining such speacial and highly specialized functions as explosive ordnance disposal, decontamination and disposal of radioactive debris. Plans for evacuation and other protective actions must be formulated, written and tested beforehand.

C. Consequently responsible governmental officials must consider the potential emergency environment that may result from the executing of a nuclear threat and organize and plan accordingly to:

1. Protect life and property;
2. Investigate the threat;
3. Provide medical services;
4. Institute a coordinated response;
5. Maintain order;
6. Inform the public;

7. Provide financial assistance;
8. Provide recovery assistance;
9. Provide resources for all phases of operation;
10. Plan for the special requirements of explosive ordnance disposal (EOD), evacuation, decontamination and monitoring.
11. Consider long range medical problems.

IV. CONCEPT OF OPERATIONS

The possibility of nuclear threats as well as other nuclear incidents occurring in the civil sector during peacetime has been increasing due to the increase of the use of special nuclear materials in power plants, medical isotopes in the medical services and other nuclear materials utilized both by the military service and private industries.

Judgement and document would dictate, therefore, that a concept of operations be formalized to place response action meeting such a threat in a logical order of sequence. See Attachment 1.

Federal, state and local government will need to address such incidents and any response must be well coordinated to effectively cope with such threats.

Although this concept of operations is addressed primarily to nuclear extortion, the scope of this guideline should not be limited exclusively to this act.

Under this concept, a coordinating unit, functionally a task force, is formed of personnel of the U.S. FBI, Department of Engery (DOE) KyDES, local law enforcement and military personnel.

In order to maintain continuity of the investigation, the FBI will chair the task force. However, this does not mean the chairman of the task force will assume command across organizational lines.

It is not intended that this document supersede any DOC directive currently in effect regarding handling of DOD special devices.

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It is required that local plans addressing nuclear threats, specify that on receipt of any such threats, telephone contact be immediately made to the nearest FBI Office. Local agencies should have also prepared a telephone alerting list to notify appropriate persons according to their plan or SOP. See Attachment 2.

A. Response

Should a nuclear threat occur which requires meeting demands or making concessions during a very short time interval, the local agency receiving the threat may, by necessity, have to respond using only those skills and resources immediately available. However, the nearest FBI field division should be immediately advised of the threat. The FBI will alert additional resources and skills and have them available as expeditiously as possible.

Consultation with FBI, DOE and other pertinent agencies, may provide assessment of the background data on any terrorist or group conncected with the threat, the technical accuracy of the threat, and the kind and extent of damages expected in the event of nuclear detonation and/or radiological dispersion.

Some threats may provide time to meet the threat demand; time for more deliberate, orderly, and effective response to prevent and mitigate effects of the threat. The following guidelines provide basis for response action:

1. The Threat

   Receipt of a nuclear threat can be received in many different forms, such as telephone calls, tape recorder notes and letters. Regardless of the threat, it is imperative that the individual or the agency receiving the threat acquire and preserve all possible material (drawings, nuclear material or samples).

   These and all other information regarding the threat, must be immediately forwarded to the FBI at the time of notification. In as much as the exact wording and tone of a threat message can be of invaluable assistance in determining the credibility and the potential hazard associated with the threat, it is imperative that the exact wording and tone of threat be conveyed accurately. See Attachment 3 and 5.

Attachment 3 is an example of the type information the receiver of a telephone threat would attempt to acquire during initial coversation with the caller.

Everything associated with the threat should be handled carefully and preserved as evidence for possible future examination and evaluation by experts.

2. Notification

The FBI and KyDES should be contacted immediately upon receipt of a nuclear threat. The telephone number for the FBI is (502) 583-3941 and for KyDES (502) 564-7800 or 564-7815.

3. Threat Credibility Assessment

The FBI, with ERDA support and local law enforcement will provide for assessment of the threat to determine the credibility and implications of the threat. Credibility must be continously reviewed and assessed as investigative and search intelligence is acquired.

4. Task Force

The nucleus of the task force will as a minimum be the FBI, KyDES, State Police, Bureau for Health Servies, Fire Marshall, DOE, local law and military. The FBI as the lead investigative agency will chair the task force in order to maintain continuity and cohesiveness of the task force. Command decisions will be made by respective members of the task force with regard for the discharge of their responsibilities as the situation develops (See Attachment 4).

It is necessary that an emergency coordination center be established where the Task Force can meet and evaluate information, make operational decisions based on information collected, and solve the technical problems involved in the search, identification and removal of any device.

5. Investigation

Investigation of the threat is the basic responsibility of the FBI. However, to mount an effective investigation the cooperation of local, state and federal agencies, coordinated by the FBI, is necessary.

6. Search

Once it has been determined that the nuclear threat is credible and protective actions commensurate with the situation have been taken, search for the device should begin. If the response time is very short the search may begin by the local response agency and the information in Attachment 7 shall be considered.

When the demands are to be met in a longer time period, search for a nuclear device will be conducted by the ERDA, as requested by the FBI with assistance of appropriate local, state and federal agencies as needed and coordinated with the Task Force.

Prior to the arrival of ERDA, a visual search by persons familiar with the area should be conducted. Concurrent with the search, law enforcement agencies in concert with the FBI will endeavor to provide additional information about the threat and its source.

If radiation detection equipment is used in the initial search, it should be remembered that commonly available survey meters (including all civil defense meters) are incapable or at best unreliable for the detection of alpha, beta, or low energy gamma emitters.

7. Device Located

If a suspected nuclear device is found during a search prior to the arrival of ERDA, the area should be evacuated and other protective actions taken appropriate to the situation. Prior to arrival of trained EOD personnel, NO ATTEMPT should be made to neutralize, deactivate, or move the device.

When a military nuclear weapon is involved a military explosive ordnance disposal (EOC) team will be involved in deactivation and disposal of the weapon.

If an improvised (homemade) device is involved designated persons familiar with design characteristics of nuclear weapons or improvised explosive devices should determine the appropriate action to be taken.

If a nuclear weapon is involved only DOE nuclear weapons experts and/or military EOD teams shall be involved.

8. Device Not Located

If the device cannot be located and the threat deadline is approaching, the situation must be reassessed. If the information available indicates that the threat is still credible then appropriate protective action will be initiated. See IV. B below.

9. Threat is Carried Out

If the threat is carried out and either a detonation or dispersal of radioactive material occurs, local government in coordination with the task force assumes the lead operational role and implements emergency recovery operations. Since the total area affected may vary greatly, planning should include a wide range of possible scenarios. Operations may be considered in two phases: emergency and recovery.

a. Emergency Operations includes fire fighting, rescue, first aid, medical, radiation monitoring, decontamination and evacuation.

b. Recovery Operations includes financial aid, decontamination long range medical effects, re-entry, and radiation monitoring and countermeasures.

Many of the functions performed in emergency and recovery operations are the same or are similar to those in other types of emergencies. Current local plans or procedures may be adapted or used as the basis for developing nuclear

threat emergency plans if radiation hazards are taken into account. Attachment 8 discusses hazards and exposure criteria that should be taken into account.

B. Protective Action

Protective actions are nonsequential because it may be necessary to institute them at any time or reapply then at a later time. They should be considered in two phases:

1. Those actions (preventive) taken to prevent loss of life, injury or destruction of property; and
2. Those actions (restorative) that would be taken if the threat should be carried out. If evacuation is ordered Kentucky's Natural Disaster Plan will be activated.

C. Medical

In the event of nuclear detonation or the dispersal of radioactive materials, special medical care may be required for irradiated and/or contaminated patients. Most hospitals are equipped with adequate facilities and trained personnel for required treatment, however, cases of severe exposure should be directed to University of Kentucky Medical Center or Louisville General.

1. Local

Local Government is responsible for planning and coordinating medical services during the emergency. The medical plan shall provide for:

a. Identification, coordination and control of local medical emergency response forces.

b. Medical planning including designation, training, and exercising medical facilities and personnel.

c. Special medical treatment and services required for treating radiation exposed and/or contaminated patients.

d. Coordination of assistance provided by private hospitals, clinics, medical associations, health and other societies and quasi-governmental groups.

2. State

Department of Human Resources, Bureau for Health Services, is responsible for emergency medical care in support of local government and will provide.

a. Technical advice;

b. Procurement of special equipment and services, such as whole body counters, laboratory service, decontamination facilities radioactive waste disposal, etc.

c. Emergency procurement, storage, distribution, and handling of supplemental medical supplies;

d. Liaison with the Office of Disaster and Emergency Services; and

e. Procedures for procurring medical assistance from other state departments.

3. Federal

Federal agencies can provide technical advice, equipment and supplementary resources in support of medical operations.

D. Health

After the spread of radioactive materials special health problems result from radioactive contamination. Therefore, plans for health services must address this problem as well as normal sanitation and other health problems.

1. Local

Local government is responsible for providing health sanitation services and emergency health plans should provide;

a. Health and sanitary services and personnel decontamination;

b. Health and sanitation in reception centers in the events of evacuation;

c. Supervision of food and drug supplies including detection and decontamination of radioactively contaminated food and drugs.

d. Potable water;

e. Decontamination and restoration of replacement of food preparation facilities; and

f. Protection of agricultural food products from radioactive contamination.

2. State

a. Disaster and Emergency Services will coordinate the efforts of State agencies to support local emergency operations.

b. The Bureau for Health Services will have the primary responsibility for the administration, and application of health services support and will provide resources, personnel and technical advice.

3. Federal

Appropriate agencies can provide supplementary emergency equipment, supplies and technical advice to local health authorities.

E. Public Information

Two types of information may be required to be provided to the public: (1) new releases and (2) directions and information on self protection.

1. News Releases: All news releases will be issued by the Department of Justice.

2. Directions to the Public: Directions requiring public action must be accurate, comprehensive, and expressed in terms understandable to the general public to be sure that they react quickly and effectively. These directives will be provided by the responsible local government and will be coordinated through the Department of Justice.

3. Coordination of Releases: In coordination with the Department of Justice, local, state, and federal agencies will be responsible for preparing releases pertaining to their activities.

F. Restoration

The problems to be solved and the work required during restoration are extensive and complicated by the presence of radioactive contamination. The combined effort of many resources and disciplines is required and local government may require state and federal support.

1. Local

Local government is responsible for the evacuation of and re-entry into affected areas. Tasks required during this period include:

a. Decontamination of people, property and food;

b. Continue the security of evacuated areas to prevent unauthorized entry and vandalism;

c. Mass care and welfare;

d. Monitoring of people and property for radiation contamination;

e. Transportation;

f. Disposal of radioactive of radioactively contaminated

g. Engineering support;

h. Long-term radiation monitoring;

i. Control of radiation exposure to the public and workers;

j. In concert with state and federal assistance, establish a program for dealing with long term medical problem;

k. Identify and dispose contaminated food and potable water supplies;

l. Prevent further contamination of people, food or water during restoration period by carefully containing radioactive debris, preventing cattle from grazing on contaminated pastures, monitoring rainwater run-off into streams, etc.".

2. State

Kentucky Disaster and Emergency Services will coordinate state support during the emergency and restoration.

3. Federal

The Defense Civil Preparedness Agency (DCPA) will provide assistance to the local and state government upon request.

V. AGENCY TASKS AND RESPONSIBILITIES

The following outline of agency tasks and responsibilities are provided for guidance and should be the basis for providing supporting plans and operating procedures.

A. Federal

1. Federal Bureau of Investigation (FBI)

Although local government is responsible for the protection of the public health and safety from nuclear hazards, the FBI by Federal statute is the lead investigative agency in all cases where threats are made involving radioactive material. As the lead investigative agency, the FBI is responsible for the investigative functions; however, the nuclear aspects of assessment and search will be delegated until Energy Research and Development Administration, or the state, or other agency as appropriate. In addition the FBI will:

a. Alert FBI headquarters and appropriate local, state and federal agencies;

b. Coordinate all investigative efforts with appropriate military of civilian law enforcement agencies;

c. Assist in the assessment of the threat;

d. Coordinate through the Task Force, new release regarding all aspects of the threat and operations; and

e. Provide a representative to chair the Task Force.

2. Energy Research and Development Administration (ERDA) Threats Involving Special Nuclear Material (SNM)

The DOE will accept from the FBI the responsibility for control and coordination of the nuclear aspects of the assessment and search operations in all cases where the threat involves special nuclear material (SNM) and, when requested, cases involving other radioactive materials. In addition the DOE will provide radiological assistance to the state or local agencies having the regularly constituted authority for the protection of the general public health of safety in accordance with the Interagency Radiological Assistance Plan. Representatives from DOE in Washington will serve on the Task Force. DOE actions will include, but not be limited to:

1. alert state and federal agencies as appropriate;
2. assist in assessment of the threat and;
3. assist in the search for and analysis of the nuclear device in accordance with current DOE Plans; and
4. prepare input regarding nuclear and radiological aspects of the threat and operations for new releases.

3. Department of Defense (DOD)

a. Military Weapons

In threats involving military nuclear weapons, the military service responsible for weapons security has jurisdiction. However, when control of the nuclear weapon is lost in the civil sector, the FBI assumes jurisdictional responsibility for recovery and control of the weapon.

b. Other Threats

The DOD will provide technical support when requested through the FBI. Such support will include those functions within the perview of the department and to the extent that the principal military mission is not compromised. These functions will include but are not limited to the following:

(1) assist in providing security;

(2) assist in locating the device; and

(3) assist in deactivating and removing the device.

Ft. Knox will provide EOD service for Kentucky.

4. Bureau of Alcohol, Tobacco and Firearm (ATF)

ATF will, when requested by the FBI, provide assistance.

5. General Services Administration, Federal Preparedness Agency (GSA, FPA)

The GSA, FPA has the responsibility for coordinating the emergency planning effort of all Federal non-military and non-defense agencies.

B. State

1. Disaster and Emergency Services (DES)

DES will:

a. alert appropriate federal, state, and local agencies;

b. assist in assessment of the threat;

c. assist in locating the device;

d. provide monitoring and technical support equipment in event of nuclear detonation;

e. coordinate state assistance;

f. provide communications if requested; and

g. provide protective action support to the Task Force. (See attachment 4).

2. Bureau for Health Services, Radiological Control Branch (RCB)

Threats Involving Radioactive Material and Radioactive Materials Not Contolled by a Federal Agency

The RCB, if requested, will assist the FBI by providing for control and coordination of the nuclear aspects of assessment and search operations in all cases where the threat involves radioactive material not controlled by a federal agency. This assistance may include, but is not limited to:

a. provide a technical response team;

b. assist in assessment of the threat;

c. assist in locating the device; and

d. provide protective action support to local government and technical advice on radiological hazards through the Task Force.

3. Kentucky State Police

The State Police are responsible for the enforcement of the Kentucky Revised Statutes in the Commonwealth.

a. act as lead agency if FBI does not assume this position. KyDES would remain coordinating agency;

b. assist in isolating the area and provide security;

c. assist in locating the device;

d. provide traffic control and evacuation assistance as required;

e. assist in the investigative function;

4. Fire Marshall's Office

The Fire Marshall's Office is responsible for regulating the handling of hazardous materials and the suppression of fires. They will:

a. assist in assessment of threat;

b. provide technical assistance to local government in fire suppression;

5. Other State Agencies and Cabinets

All state agencies not addressed in particular in this plan will provide support in carrying out this plan in accordance to their mission assignments in the Natural Disaster Plan and the Nuclear Civil Protection Plan.

C. Local

1. Head of Government

The County Judge/Mayor is legally and morally responsible for the health and safety of the citizens in his jurisdiction. They must be privy to necessary operational information so that the best possible countermeasures may be considered and

initiated for the protection of the public. Accordingly, the head of government representative for emergency operations should be a member of the Task Force and Local Government should. This representatives responsibilities allow him to:

a. develop local plans and SOP's coping with emergency situation associated with nuclear threats;

b. coordinate with the Task Force in all public information releases;

c. provide other assistance as requested;

2. Local Disaster and Emergency Services (DES)

The local Civil Defense Coordinator will act as the coordinator of local resources and serve as the originator of requests for state and federal aid at the direction of the County Judge, Executive or Mayor.

3. City/County

Within the scope of its defined operational jurisdiction and capabilities the police should:

a. coordinate with appropriate local, state and federal agencies;

b. assist in assessing the threat;

c. assist in locating the device;

d. provide traffic control, evacuation and other protective action support as necessary;

e. provide and/or support investigative operations; and

f. assist in EOD if possible, and requested;

4. Sheriff

The capabilities of Sheriff's Offices varies throughout the state. Within the scope of his defined operational jurisdiction and capabilities the Sheriff should:

a. coordinate with appropriate local, state and federal agencies;

b. assist in assessing the threat;

c. assist in locating the device;

d. provide traffic control, evacuation and other protective action support as necessary;

e. provide and/or support investigative operations; and

f. assist in EOD if possible, and requested;

5. Fire Services

The Chief of the fire service involved in an incident involving radioactive material will be the sole authority in the decision to fight involving such material. The fire service involved will:

a. assist in search when requested;

b. provide equipment and personnel for monitoring; and

c. provide protective action support when requested, and/or the fire Marshall's Office;

d. coordinate with DOE, Health Department regarding fire fighting problems;

D. Supporting Systems

In addition to the federal, state, and local assignments listed above additional support from other public and private (American Red Cross, Salvation Army, etc.) agencies may be required.

VI. GLOSSARY

ALPHA PARTICLE OR RADIATION - positively charged particles identical with the nuclei of helium atoms.

BETA PARTICLE OR RADIATION - negatively charged high-speed electron of nuclear origin.

CHAIN REACTION - any chemical or nuclear process in which some of the products of the process or engergy released by the process are instrumental in the continuation or magnification of the process.

DISPERSAL DEVICE - a bomb or device designed to release and spread radioactive materials.

FISSILE MATERIAL - any material fissionable by neutrons of all energies.

FISSION PRODUCTS - radioisotopes produced by a nuclear chain reaction such as in a nuclear detonation or nuclear reactor.

GAMMA RAY OR RADIATION - short wavelength electromagnetic radiation like x-ray emitted from the nucleus of a radioisotope.

HALF-LIFE (PHYSICAL) - time required for a radioactive isotope to lose 50% of its activity by process of radioactive decay.

INTERNAL RADIATION - radiation (including alpha, beta, and gamma radiation) resulting from radioactive substances within the body.

INTITIAL RADIATION - nuclear radiation (essentially neutrons and gamma rays) emitted from the fireball and the cloud during the first minute after a nuclear detonation.

ISOTOPES - forms of the same element having identical chemical properties but differing in their atomic masses. Radioisotope is the unstable isotope of an element that decays or disintegrates spontaneously, emitting radiation.

NUCLEAR - technically, an adjective referring to the atom's nucleus. Commonly, refers to radioactive processes that involve the disintegration of the nucleus, as in "nuclear radiation', "nuclear particles", and "nuclear energy".

NUCLEAR DETONATION - an energy release through a nuclear process, during a period of time on the order of one miscrosecond, in an amount equivalent to the energy release by the detonation of four or more pounds of TNT.

NUCLEAR EXPLOSIVE DEVICE - any assembly or subassembly containing fissionable of fussionable materials and high explosive of propellant capable of producing a nuclear detonation.

NUCLEAR THREAT - for the purposes of this plan "nuclear threat" shall include all criminal acts such as blackmail, extortion, threat of attack, etc., in which any nuclear material or radioactive substance is deliberately used or such use in threatened.

NUCLEAR WEAPON - a general name given to any military weapon capable of producing a nuclear detonation. Thus the A (atomic) bomb, and the H (hydrogen) bomb are both nuclear weapons.

ORDNANCE - weapons and ammunition used in warfare.

RADIATION - means gamma rays and x-rays, alpha and beta particles, neutrons, protons, high-speed electrons; and other nuclear particles; but not sound or radio waves, or visible, infrared, or ultraviolet light.

RADIOACTIVE - exhibiting radioactivity.

RADIOACTIVE MATERIAL - means any material which omits radiation spontaneously.

RADIOACTIVITY - the spontaneous emission of radiation, generally alpha or beta particles, often accompanied by gamma rays, from the nuclei of an (unstable) isotope.

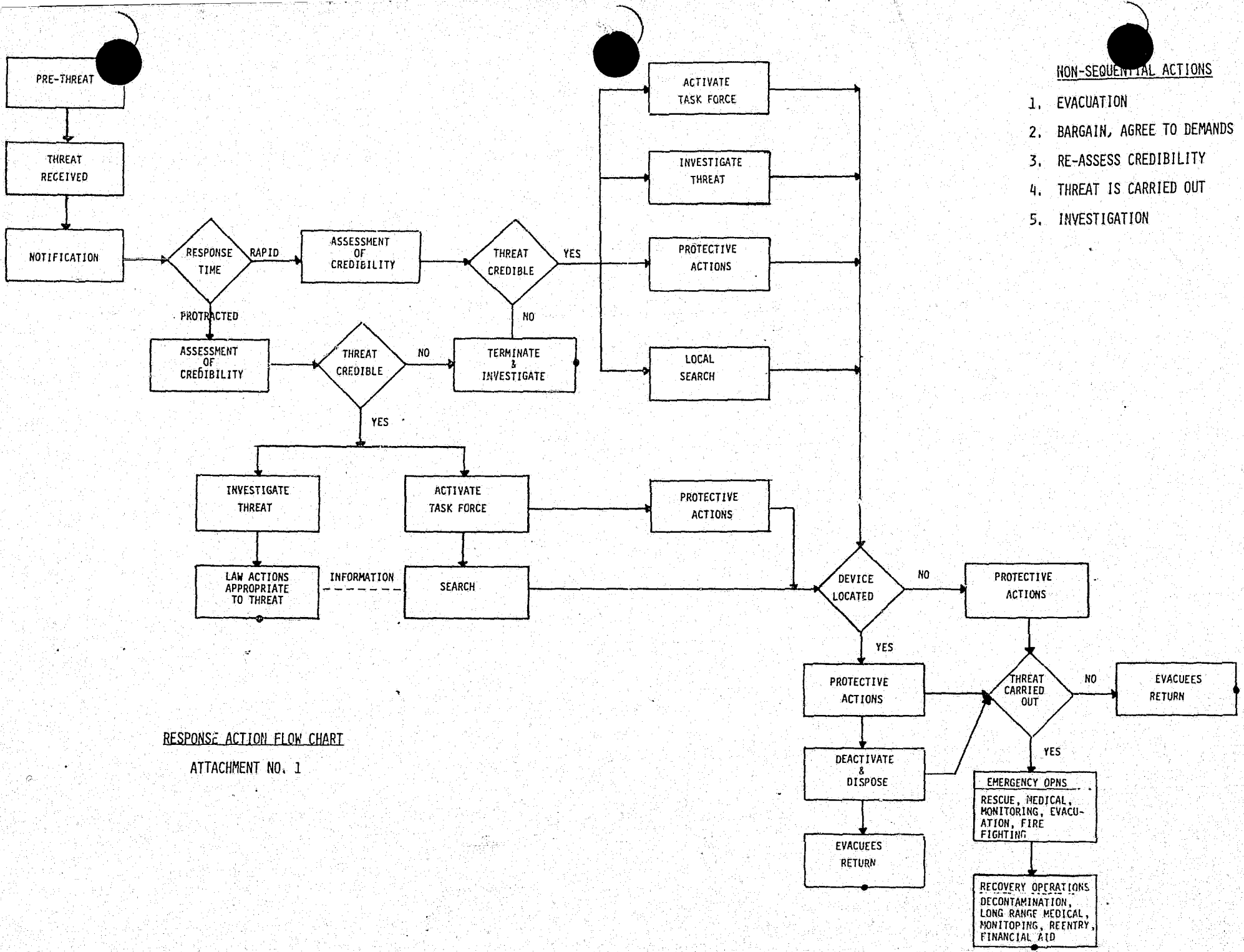
RADIOLOGICAL - a general term referring to processes that involve nuclear radiation.

RESIDUAL RADIATION - nuclear radiation, chiefly beta particles and gamma rays, which persists for sometime following a nuclear detonation.

SOURCE MATERIAL - "source material" means uranium of thorium, or any combination thereof, in any physical or chemical form, execpt special nuclear material and ores which contain by weight less than one-twentieth of one percent (0.05 percent) of uranium, thorium or any combination.

SPECIAL NUCLEAR MATERIAL (SNM) - "special nuclear material" means (1) plutonium, uranium 233, uranium enriched in the isotope 233 or in the isotope 235, or (2) any material artificially enriched by any of the foregoing; but does not include source material.

THERMAL RADIATION - electromagnetic radiation emitted from the fireball as a consequence of its very high temperature; it consists of ultraviolet, visible, and infrared radiations.



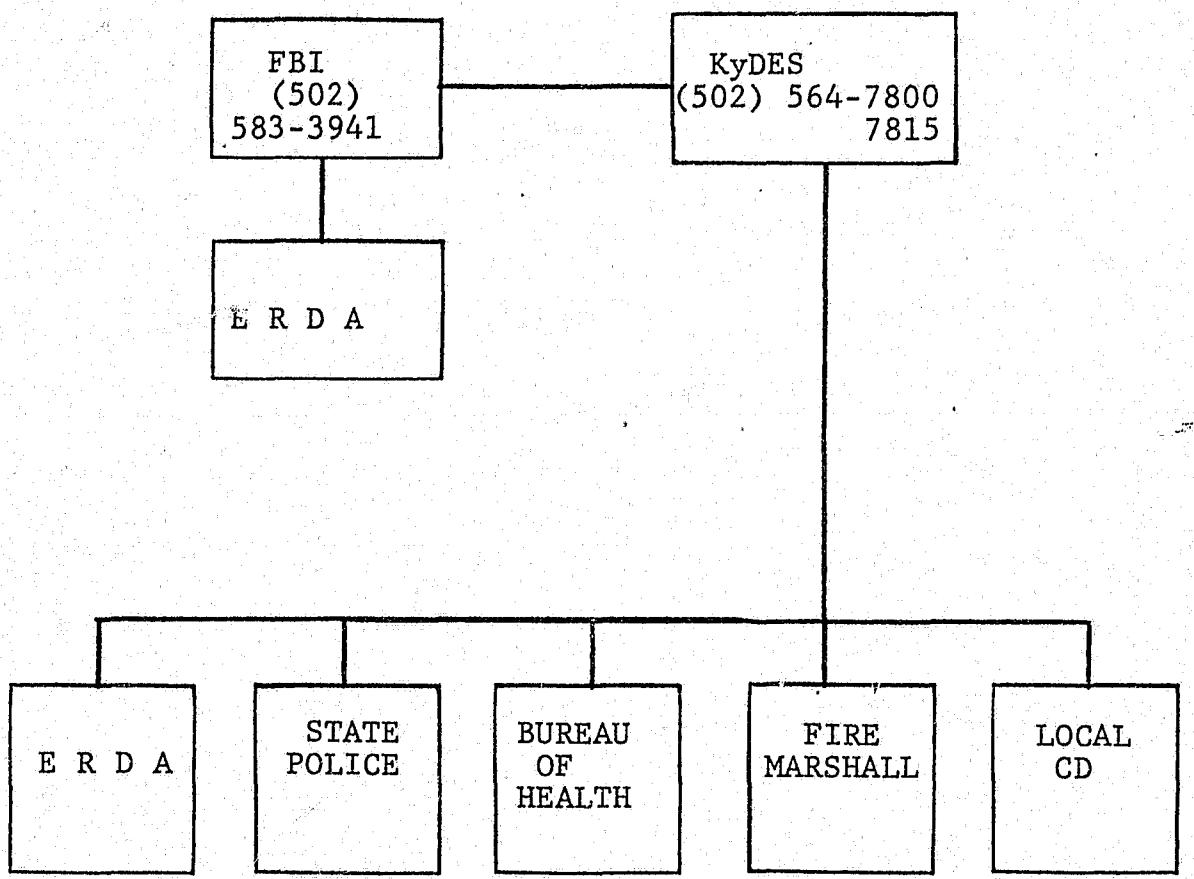
NON-SEQUENTIAL ACTIONS

1. EVACUATION
2. BARGAIN, AGREE TO DEMANDS
3. RE-ASSESS CREDIBILITY
4. THREAT IS CARRIED OUT
5. INVESTIGATION

RESPONSE ACTION FLOW CHART

ATTACHMENT NO. 1

NUCLEAR EXTORTION ALERTING



ATTACHMENT #2

NUCLEAR BLACKMAIL THREAT

THREATENING PHONE CALL FORM

Time call received _____ Time caller hung up _____

Try to get another person on the line and record the conversation

Exact words of person placing call: _____

_____

_____

Questions to ask if not already covered by the caller's statement:

1. What is you name? (He many inadvertantly give it) _____
2. What are you going to do? _____

   _____
3. What will prevent you from doing this? _____

   _____
4. Why are you going to do this? _____

   _____
5. When are you going to do this? _____

   _____
6. Where is the material right now? (Use the exact words used by the caller)

   _____

   _____
7. In what form or what type of device is it? _____

   _____
8. What does it look like? _____

   _____

   Person (receiving) (monitoring) call _____

   Department _____ Telephone No. _____

   Home Address _____

   Home Telephone No. _____

   Date _____

DESCRIPTION OF CALLER'S VOICE

Male _____ Female _____

Young _____ Middle Age _____ Old _____

Tone of Voice _____

Accent _____

Background Noise _____

Is voice familiar? _____

If so, what did it sound like? _____

Remarks: _____

TASK FORCE

The Task Force should be made up of representatives from the following agencies and expanded as appropriate:

1. FBI
2. DOE
3. DES
4. State Police
5. Health Department (State and/or Local)
6. Fire Marshall
7. Local Law Enforcement
8. Local Head of Government
9. Others as Required

The Task Force should:

1. Establish an Emergency Command Center (ECC) and assist in establishing a Search Coordinating Center (SCC) for DOE and Field Operating Centers (FOC) if required.
2. Direct the application of protective actions.
3. Coordinate news releases.
4. Provide instructions to the public.
5. Coordinate communications.
6. Assist in assessing the threat, search and disposal of the device
7. Coordinate law enforcement assistance.
8. Coordinate all recovery operations.

ATTACHMENT NO. 4

COPIES OF DOCUMENTS

When copies are submitted in place of original documents, important characteristic necessary for a complete analysis may be lost. Therefore, the following should be included:

1. A clear, readable copy of the original letter and envelope
2. A separate report describing:
   A. Color of ink and type of writing instrument used
   B. Paper size, color and characteristics such as:

Typing	Transparent	Telegraph
Lined	Graph	Punch holes
Butcher	Note pad	Carbon marks
Drawing	Tissue	Paper clip marks
Legal	Cardboard	Folds
Glossary	Stationary	Watermark

TELEPHONE THREATS

When a telephone threat is reported, collect the following information for submission to the threat analyst. (See Attachment #3).

1. Date and time of threatening call
2. Exact words of person making call
3. Name (if given, request exact spelling)
4. Sex
5. Accent
6. Speech pattern (stuttering, lisp, slurred, etc.)
7. Tone of voice (irate, calm, frightened, nervous, etc.)
8. Is the voice familiar?
9. Background noises
10. Local or long distance call

11. If a tape has been made of the message submit it to the State Police for a voice print analysis.

SEARCH TECHNIQUE

NOTE: THE SEARCH SHOULD BE CONDUCTED BY OR IN THE PRESENCE OF TRAINED PERSONNEL EQUIPPED WITH INSTRUMENTS CAPABLE OF OF DETECTING PLUTONIUM OR OTHER RADIOACTIVE MATERIALS.

1. The search can be expedited if personnel who are familiar with the building and its contents are used.
2. Areas housing critical equipment/machinery should be searched by personnel most familiar with the area and the equipment.
3. Alert medical personnel to standby during the search. This provides immediate medical attention in the event of accident or premature release.
4. If a suspected nuclear or dispersal device is found:
   a. Do NOT touch or attempt to move the object.
   b. The danager area should be identified, and blocked off with a clear zone.
   c. Call for local and/or military EOD assistance.
5. Since plutonium is an alpha emitter, it may be carried into a building in any type of package. Alpha radiation, since it is easily shielded, will not be detected through the package. However, there is associated with plutonium a low energy gamma ray which can be detected by sophisticated detection instruments available through DOE.
6. The more common isotopes (except tritium) cited in II.B.2 of the Plan are capable of being detected by the civil defense CD V-700 Geiger counter. Neverthless, only compртent, trained personnel should be involved in the search for these materials.

NOTE: THE CIVIL DEFENCE CD C-700 GEIGER COUNTER OR ANY OTHER CD INSTRUMENT CANNOT DETECT ALPHA RADIATION OR THE LOW ENERGY GAMMA RAY ASSOCIATED WITH PLUTONIUM.

THEREFORE, IT IS IMPROTANT TO REMEMBER THAT NO READING ON THE GEIGER COUNTER DOES NOT NECRSSARILY MEANS THAT NO RADIO ACTIVE MATERIAL IS PRESENT. DANGEROUS QUANTITIES CAN BE "HIDDEN" FROM DETECTION INSTRUMENT, IF SUFFICIENT SHIELDING HAS BEEN PLACED AROUND THE MATERIAL TO ABSORB THE RADIATION.

RADIATION HAZARDS AND EXPOSURE CRITERIA

A. Hazards and Exposure Criteria

Exposure to large quantities of nuclear radiation over a relatively short period of time can cause disabling sickness and death. Exposure to lesser quantities, either externally or through inhalation and ingestion, may result in chronic impairment to health.

Radiation exposure may also damage the genetic material in the body of individuals, resulting in health impairment in future generations. Therefore, stringent limits have been established as follows:

1. General Population

   Bureau for Health Service Regulation, 902 KAR 100:010 Through 165 limits permissible levels of radiation to the general population in an uncontrolled area. For accidents all practicable measures must be taken to limit whole body exposure dose to any individual of the general population to the recommended 0.5 rem in any one year.

2. Emergency Workers

   Any person engaged in operations required to mitigate the effects of an accident is an emergency workers for the purpose of this Plan.

   a. Emergency Operations

      When an accidents occurs, emergency operations will be necessary to save lives and reduce escalation of the radiological problem. Emergency workers who are involved could conceivably become exposed to radiation and contaminated while carrying out their duties.

b. Life Saving Actions

If as a result of a release, entry into a radiation area is necessary to search for and remove injured or trapped persons exposure limits described in 2.a, may be exceeded by workers involved. In such a case, the following guidance extracted from National Council on Radiation Protection (NCRP) Report 39 should be considered.

1. Rescue personnel should be volunteers or professional rescue personnel (e.g. firemen who "volunteer" by choice of employment).
2. Rescue personnel should be broadly familiar with the consequences of exposure.
3. Women capable of reproduction should be advised of the risk before taking part in these actions.
4. Other things being equal, volunteers above the age of 45 should be selected.
5. Planned dose to the whole body shall not exceed 100 rems.
6. Hands and forearms may receive additional dose of up to 200 rems (i.e. a total of 300 rems).
7. Internal exposure should be minimized by the use of the best available respiratory protection, and contamination should be contolled by the use of available protective clothing.
8. Normally, exposure under these conditions should be limited to once in a lifetime.
9. Persons receiving exposure as indicated above, should avoid procreation for a period of up to a few months.

c. Extraodinary Emergency Operations

This applies under less than life saving circumstances where it is still desirable to enter a hazardous area to protect facilities, eliminate further escape of effluents, or to control fires.

All elements listed under guidance give for b. above should be followed except (5) and (6). Change values in (5) and (6) to:

(5) Planned does to the whole body shall not exceed 25 rems.

(6) Planned doese of hands and forearms shall not exceed including the whole body component.

d. Persons receiving exposure as indicated above will be provided expert medical treatment, consultation and service including documentation of actual doses by use of individual personnel dosemeters.

PROTECTIVE ACTIONS

A wide variety of protective actions are available that can be used to reduce or elimate the effects of radiation and contamination.

For the purpose of this plan protective actions are considered in two aspects:

A. Preventive Actions

Preventive actions are those taken to prevent the exposure and/or contamination of people or things and include the following:

1. Covering to Prevent Contamination

Selected objects and material may be protected from contamination by covering them before the "cloud" arrives. For example, to avoid the contamination of food obtained from livestock, all livestock feed should be covered. Machinery that cannot be decontaminated economically, should be covered. Windows and doors of homes should be closed and sealed. Livestock should be put onto the best covered space. Providing cover against contamination may require time needed for other actions such as evacuation; thus, under some circumstances, it may not be operationally feasible.

Closing water intake valve from a contaminated reservoir to a municipal water distribution system has the same effect as covering. It prevents contamination of the water system and prevents the general public from ingesting contaminated water. This is a no cost action that requires little planning and does not require public participation. It requires coordination with essential water consumers (fire

service) and a public information announcement.

2. Shelter from Radiation

The average home offers significant protection. Shelter, to be used effectively, requires professional evaluation and planning. If available, it offers an alternative to evacuation.

3. Evacuate

Evacuation is a major countermeasure to prevent or reduce exposure and contamination. It is a complex operation possibly involving several governmental departments. Its effectiveness is considerably enhanced by detailed planning. State support for evacuation will be in accordance to the Kentucky Nuclear Civil Protection Plan. See Attachment 9 and 10 for additonal information.

4. Respirators

Most respirators are effective in preventing the inhalation of airborne particulate radioactive materials. These are most applicable to emergency workers operating in the contaminated areas. Respirators offer no protection from gamma radiation.

5. Protective Clothing

Protective clothing is worn to prevent contamination of the skin. Its principal value is to reduce or eliminate the need for skin decontamination, but offers no protection from gamma radiation.

6. Import Clean Food and Water

The radiation and contamination levels may be low enough to meet occupancy standards, but not low enough for contaminated food and water in the area to meet ingestion standards. Such food and water should be tested in a laboratory to determine if they meet ingestion standards. Meanwhile, food and water would be imported until local

supplies are determined to be safe from contamination. Uncontaminated foods such as those stored in sealed containers refrigerators, freezers, etc. could be used.

B. Restorative Actions

Recovery of restorative actions are those necessary to allow re-entry into an area or release of things for use after having been contaminated. Some of these actions are:

1. Decontaminate

Decontamination is the removal of radioactive material from surface. It is a corrective action to reduce the likelihood of ingestion and beta skin exposure and, to a lesser degree, whole body radiation exposure. Decontamination is a relatively expensive action that is performed under professional supervision. Allowing radioactive material to decay is an alternative to decontamination.

2. Special Chemical Treatment

Special chemical treatment is a form of decontamination applied to contaminated water, milk, or other contaminated substances from which the radioactive chemicals can be removed. It is used to recover resources that would otherwise require disposal, or which would, if ingested, subjected the population to internal contamination.

3. Radioactive Decay

Allowing time for radioactive decay is a delaying action, keeping the general population from radioactive items and areas, to provide time for the natural process of decay to occur. The normal use of items and areas can be resumed when radiation and/or contamination levels meet acceptable

standards.

Awaiting decay is a major countermeasure applicable to radiaiton that decay rapidly. The cost of allowing time for decay would be evaluated in relation to the cost of other countermeasures.

EVACUATION - URBAN OR HIGH POPULATION

The purpose of evacuation is to remove persons from threatened or contaminated areas to radiation free areas.

1. Local

   Local Government has the responsibility for planning, initiating and coordinating local evacuation. The decision to evacuate is governed by an evaluation of the threat and radiological and meterological conditions. The evacuation plan should be in conformity to the State's Nuclear Civil Protection Plan. On warning that evacuation is or may be necessary the local head of government will take preparatory action as provided in the local plan. Local plan should:

   a. Be developed in coordination with Federal, State and local jurisdictions that may be involved in the evacuation and/or reception, or through which evacuation routes may pass;
   b. Designate areas which are likely to require evacuation and identify points of safety nearby;
   c. Establish primary and alternate evacuation routes;
   d. Identify and make arrangements with sources of transportation for mass evacuation;
   e. Provide for barricading access roads to the contaminated or exclusion area;
   f. Set up procedures for orderly access to, progress along, and exit from evacuation routes;

g. Designate relocation sites and coordinate receiption arrangements with the Red Cross, Salvation Army, and other appropriate welfare, relief, and other agencies;

h. Consider special needs for evacuation of school children hospital patients, and other groups which may require specialized transportation and other transportation;

i. Provide for alert and warning of persons located in a potential evacuation area; and

j. Provide for preparation and dissemination of appropriate instructions to the general public;

2. State

KyDES has the responsibility to plan for and to coordinate response to requests from the local head of government for support in evacuation. Since evacuation is a large undertaking involving many resources, many state agencies may be involved. Agencies that may be involved are:

a. Kentucky State Police

1. Has primary responsibility for traffic supervision and control on all state and federal highways;
2. Assists local law enforcement agencies in establishing evacuation routes and traffic control procedures;
3. Assists in expediting movement of vehicular and pedestrian traffic from emergency areas;
4. Assists in preventing unauthorized traffic in, and controlling movement around emergency areas;
5. Assists in providing traffic control around mass care facilities;
6. Assists in providing traffic control during emergency

operations;

b. National Guard

Within capabilities and as directed by the Governor, assists in the evacuation.

c. Department of Transportation

Provide motor transportation

d. Bureau for Health Services, Department for Human Resources

Arranges for health and medical care for evacuees during evacuation and at evacuation centers in support of local authority.

e. Department for Human Resources, Bureau for Social Insurance

Provide guidance and assistance to local government in the shelter, feeding, and medical care of the evacuated citizens.

f. Department for Natural Resources and Environmental Protection

Provide guidance if the threat includes water resources and personnel for search in rural areas.

g. Department of Agriculture

Provides guidance and assistance to agencies responsible for evacuation of livestock, and coordinates the identification and establishment of evacuation/reception areas for livestock, the care of livestock in these areas, and assists in segregation of livestock and effecting the return of such animals to owners.

3. Federal

a. DOE

DOE has the capability to predict or delineate the areas affected by fallout due to a nuclear detonation.

b. DCPA

DCPA will coordinate federal assistance needed to conduct

the evacuation, shelter and feeding of the evacuess, and assist in their return home.

c. Department of Transportation

Has principal responsibility of coordinating all federal agencies having transportation resources for conducting evacuation operations.

d. FDAA

FDAA has the responsibility of coordinating federal disaster assistance if the area applies for and receives a Presidential Disaster Declaration.

EVACUATION - RURAL OR LOW POPULATION

Local officials may establish a policy that, in the event of a threat, evacuation will be effected immediately. If the county is designated a risk county under the Kentucky Natural Disaster Plan evacuation procedures should follow this plan. This reduces risk and gives prime consideration to the safety of personnel, but results in production downtime, and can be costly in terms of dollars if the threat is a hoax.

A. The following actions are presented for consideration:

1. Determine who will make the decision to evacuate and destination of the evacuees.
2. Establish an evacuation plan that is in conformity to the Kentucky Natural Disaster Plan.
3. If evacuation is effected and personnel held on standby pending completion of the search, a "holding" area should be established. This area should be at a distance and direction to protect personnel from blast and other effects.
4. Determine who makes the decision to permit re-entry.
5. Shut down air conditioning and heating systems to minimize dispersal of radioactive material.
6. In the event that radioactive materials have been dispersed in the area contamination control and decontamination should be planned for. See Attachment 9

B. State and Federal Actions

See Attachment 9, Section 2 and 3.