

**VERMONT RADIOLOGICAL EMERGENCY RESPONSE PLAN**

**Town of Marlboro  
Emergency Response Plan**

**A Community Located Within the  
Vermont Yankee Nuclear Power Station  
Emergency Planning Zone**

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Vermont Emergency Management  
230 Main Street  
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Brattleboro, VT 05301

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**MARLBORO EMERGENCY RESPONSE PLAN**

The attached Basic Plan and Implementing Procedures for the Town of Marlboro are approved.

\_\_\_\_\_  
Selectboard Chair  
Date

\_\_\_\_\_  
Selectboard Member  
Date

\_\_\_\_\_  
Selectboard Member  
Date

\_\_\_\_\_  
Selectboard Member  
Date

\_\_\_\_\_  
Selectboard Member  
Date

\_\_\_\_\_  
Emergency Management Director  
Date

\_\_\_\_\_  
Director, Vermont Emergency Management  
Date

This plan is approved by the State when signed by the Director of Vermont Emergency Management.

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Region One - Boston, Massachusetts	1
Contract Reviewers	1
<b>Nuclear Regulatory Commission</b>	
Headquarters - Washington, D.C.	1
Region One - King of Prussia, PA	1
<b>Vermont Emergency Management</b>	
Waterbury, VT	1
<b>Vermont Department of Health</b>	
<b>Vermont Yankee Nuclear Power Station</b>	
Brattleboro, VT	1
<b>Town of Marlboro, Vermont</b>	
Town Office	1
Selectboard	1
Emergency Management Director	1
Principal, Marlboro East Elementary School	1
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Vermont Yankee Emergency Notification Form VEM 1  
Urgent Message Form VEM 2  
Guidance Form for the Administration of Potassium Iodide VEM 3  
Precautionary Actions for Children VEM 4  
Governor's Declaration of Emergency VEM 5  
EPZ Radio Operator Status Report VEM 6  
Meteorological and Special Information Form VEM 7  
List of Farms, Water Sources, and Stored Feed  
Guide for Preparing News Releases for the News Media  
Child Care and Private School Transportation Needs  
Special Facilities Transportation Needs  
Radio Log  
Operations Log Sample  
Marlboro Access Control Instructions  
Marlboro Traffic and Access Control Points  
Control Dosimetry Form  
Dosimetry Packet Issuance Record  
Radiological Readings Form  
Emergency Worker Exposure Control Information Sheet  
Exposure Log  
Regulatory Guide 8.13 Instruction Concerning Prenatal Radiation Exposure  
Regulatory Guide 8.13 Acknowledgment Form  
Directions for Use of Potassium Iodide (KI)  
Route Alerting Briefing Form  
Route Alerting Team Assignment Worksheet  
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**LIST OF IMPLEMENTING PROCEDURES**

- IP – 1 Selectboard Chair / Selectboard
- IP – 2 Emergency Management Director
- IP – 3 Operations Section Chief Fire & Rescue Branch Director
- IP – 4 Police Branch Director
- IP – 5 Control Point Officer
- IP – 6 Highway Branch Director
- IP – 7 Communications Unit Leader
- IP – 8 Supply Unit Leader / Radiological Officer
- IP – 9 Medical Unit Leader / Health Officer
- IP – 10 Public Information Officer
- IP – 11 Finance & Administrative Section Chief
- IP – 12 Re-entry Processing

**ADDENDUM**

Marlboro Staff Notification List

General Telephone Listing

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NuReg-0654 Cross Reference

**LIST OF SUPPORTING DOCUMENTS AND REFERENCES**

**SUPPORTING DOCUMENTS**

Windham Central Supervisory Union Superintendent's Plan  
Marlboro Elementary School Plan  
Reception Center Plan

**REFERENCES**

State of Vermont Radiological Emergency Response Plan  
State of Vermont Ingestion Pathway Plan  
Notification Manual  
Traffic and Access Control Manual  
RERP Fund Disbursements Policy  
NUREG-0654, FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological  
Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"

## **INTRODUCTION**

**IN THE ABSENCE OF A COMPREHENSIVE ALL-HAZARDS PLAN TO ADDRESS NATURAL AND TECHNOLOGICAL EMERGENCIES FACED BY THE TOWN OF MARLBORO, THIS PLAN, AND ASSOCIATED PROCEDURES, ORGANIZATIONS, AND PROTOCOLS, IS ADAPTABLE TO OTHER TYPES OF EMERGENCY SITUATIONS.**

The Selectboard for the Town of Marlboro, accepting their responsibility for the general well-being and safety of the population in the Town of Marlboro, has developed this plan in coordination with Vermont Emergency Management to provide advice and assistance in the event of a radiological incident at the Vermont Yankee Nuclear Power Station. While the Selectboard expects that a radiological emergency will present challenges this Plan will not adequately meet, the guidelines and resources herein will be of use.

It provides for timely warning of any impending danger and an organized manner in which to protect or evacuate, through the use of local resources and in cooperation with State resources, those persons who may be located in Marlboro at the time of any incident.

Vermont Town Radiological Emergency Response Plans are written as part of the Vermont Radiological Emergency Response Plan (VRERP). The town plans are not bound in the same volume as the Vermont Radiological Emergency Response Plan, nor is the Vermont Radiological Emergency Response Plan bound within this plan **HOWEVER, EACH TOWN HAS A COPY OF THE VERMONT RADIOLOGICAL EMERGENCY RESPONSE PLAN FOR QUICK REFERENCE FOR THOSE OPERATIONS TO BE COMPLETED BY STATE STAFF.**

## **PLAN MAINTENANCE**

The Emergency Management Director is responsible for maintenance of this plan. Changes, corrections, or additions, submitted by local or State government agencies will be entered and distributed upon receipt of notice that change is required.

Amendments, corrections, or additions required by statute or regulation, local, State, and/or Federal, shall be entered in accordance with the effective date of such action or other criteria.

All requests for amendment or notification of changes in personnel or telephone numbers shall be made in writing to the Emergency Management Director, who, after approval, shall forward a copy addressed to:

Attention: Radiological Emergency Response Planner  
Vermont Emergency Management  
230 Main Street  
Suite 306  
Brattleboro, VT 05301

Changes in key response personnel and notification telephone numbers are to be reported ten days prior to the effective date of such change to permit prompt amendment of organizational structure and/or emergency notification lists.

Major alterations of the structure or concepts of this plan will require additional orientation and/or training sessions. The Emergency Management Director through the Local Training Officer jointly with Vermont Emergency Management will schedule necessary training programs, as appropriate.

## **BASIC PLAN**

### **1. AUTHORITY**

- A.** United States Public Law 920 81st Congress 1950 (as amended).
- B.** NUREG-0654 FEMA-REP-1, Revision 1.
- C.** Chapter 1, Title 20, Vermont Statutes Annotated.
- D.** FEMA Planning Guidance
- E.** Vermont Radiological Emergency Response Plan: Plume and Post Plume portions.

## 2. **SITUATIONS AND ASSUMPTIONS**

### A. **Situations**

- (1) Potential emergencies exist at the Vermont Yankee Nuclear Power Station (VYNPS) in the Town of Vernon, Vermont. It is vital that emergency operations, if necessary, are controlled and effective. The fixed location of the power station simplifies planning for such a potential danger.
- (2) The Town of Marlboro's capability to maximize the preservation of life and property will be augmented by coordination with the State of Vermont and surrounding communities in the event of a release of radioactive material from Vermont Yankee Nuclear Power Station.
- (3) The objective of this plan is to ensure effective use of local and State resources and improve the coordination of local and State responses necessary to protect the citizens of Marlboro.
- (4) The Vermont Yankee Nuclear Power Station 10 mile Emergency Planning Zone (EPZ) is defined as the entire Town of Marlboro for protective action purposes.
- (5) If Marlboro is evacuated, the Emergency Alert System station (WTSA) will remain on the air. Rescue, Inc. will relocate to another facility as directed by the State Emergency Operations Center. The relocation of the News Media Center / Joint Information Center will be evaluated based upon the habitability of the facility.
- (6) The Emergency Planning Zone (EPZ) map has been further divided into sectors corresponding to 16 standard compass directions. The bearing of each sector is indicated by letter or letters denoting the compass point. Each sector is a 22 ½ degree segment.
- (7) No evacuation or sheltering is presently proposed beyond the 10 mile plume exposure Emergency Planning Zone. Protective actions relative to animal feeds, milk products, garden produce, and potable water supplies will be implemented, as required. A 50 mile Ingestion Pathway Zone has been established to prevent or minimize the health effects from direct, long-term exposure to deposited radioactive materials and the ingestion of contaminated foodstuffs.
- (8) Marlboro has a resident population of approximately 970 (2000 census). This information can be used in predicting traffic volume and population patterns that could affect evacuation as well as traffic and access control point operations.

- (9) Due to the terrain features surrounding the Vermont Yankee Nuclear Power Station, the State of Vermont implements protective actions on a whole town basis.
- (10) It is the responsibility of local governments, upon receiving notification from the proper authorities, to present guidance and assistance in reducing or preventing consequences that might affect the lives and/or safety of Marlboro residents. In the Town of Marlboro, the schools and special institutions may require individual planning and assistance.
- (11) The principal highway is U.S. Route 9 running east and west through the Town connecting Marlboro to Brattleboro to the east and Wilmington to the west. All other roads in the Town are two lane and secondary in nature.

## **B. Assumptions**

- (1) Radioactive materials are present in quantities capable of creating a threat to the life, health, and well-being of the population in Marlboro and necessitate planning to assure public safety and protection.
- (2) Nuclear power is not generated with those elements necessary to create an explosion. The hazard from Vermont Yankee Nuclear Power Station is a release of radioactive material to the environment.
- (3) Upon the occurrence of a leak in certain systems, radioactive material could be released into the atmosphere or into the water near the plant. Such a release could create a hazard downwind or downstream from Vermont Yankee Nuclear Power Station.
- (4) In order to assume its responsibility to make decisions concerning the public health and safety, local government will rely on instructions and information provided by the State whenever possible. Federal assistance requested by the State of Vermont is also available to support response operations.

**3. MISSION**

To develop a plan in coordination with State government to safeguard the public if an incident were to occur at the Vermont Yankee Nuclear Power Station that could affect the health and safety of the public in Marlboro.

#### 4. **EMERGENCY PLANNING**

##### A. **Emergency Classification Levels**

(1) The Vermont Yankee Nuclear Power Station has established emergency classification levels in conformance with current federal regulations. The initial message to the Town of Marlboro will include one of the following emergency classifications.

- **Notification of an Unusual Event**
- **Alert**
- **Site Area Emergency**
- **General Emergency**

#### **NOTIFICATION OF AN UNUSUAL EVENT**

##### Class Description

Notification of an Unusual Event indicates that events are in process or have occurred that indicate a potential degradation in the level of plant safety or a security threat to facility protection. No release of radioactive material requiring off-site response or monitoring is expected unless further degradation of safety systems occurs.

##### Purpose

Off-site officials are notified to ensure the following.

- 1) The first step in any response later found to be necessary has been carried out.
- 2) The operating staff is elevated to a state of readiness.
- 3) A systematic handling of information and decision making is provided.
- 4) Key emergency response personnel respond to the Emergency Operations Center (EOC), if needed.

## **ALERT**

### Class Description

Alert indicates that events are in progress or have occurred that involve an actual or potential substantial degradation in the level of plant safety OR a security event that involves probable life-threatening risk to site personnel or damage to site equipment due to hostile action. No release of radioactive material requiring off-site response or monitoring is expected unless further degradation of safety systems occurs.

### Purpose

The purpose of the Alert declaration is to ensure the following.

- 1) Response centers including the Marlboro Town Emergency Operations Center are adequately staffed.
- 2) State and local authorities are given information on the current status of the emergency.
- 3) Necessary preparatory actions are begun or completed.

## **SITE AREA EMERGENCY**

### Class Description

Site Area Emergency indicates that events are in progress or have occurred that involve actual or likely major failure in plant functions needed for protecting the public OR hostile action that results in intentional damage or malicious acts; toward site personnel or equipment that could lead to likely failure or would prevent effective access to equipment needed for the protection of the public. Any release of radioactive material is expected to exceed the Environmental Protection Agency Protective Action Guides exposure levels only within the site boundary.

### Purpose

The purpose of the Site Area Emergency declaration is to ensure the following.

- 1) Appropriate tasks in ALERT above are completed.
- 2) Personnel required for evacuation of near-site areas are at duty stations if the situation becomes more serious.
- 3) There is coordination between state and local authorities.
- 4) Current information is provided to the public through state and local authorities.
- 5) The public is alerted to the emergency.
- 6) Certain pre-cautionary actions for the public are initiated.

## **GENERAL EMERGENCY**

### Class Description

General Emergency indicates that events are in process or have occurred that involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity OR hostile action that results in an actual loss of physical control of the facility. Any release of radioactive material is expected to exceed Environmental Protection Agency Protective Action Guides exposure levels beyond the site boundary requiring off-site response and monitoring.

### Purpose

The purpose of the General Emergency declaration is to ensure the following.

- 1) Appropriate tasks in ALERT and SITE AREA EMERGENCY above are completed.
- 2) Predetermined protective actions are initiated for the public.
- 3) Continuous assessment of information is provided by the licensee and off-site organization measurements.
- 4) Additional measures are initiated as indicated by actual or potential releases.
- 5) There is coordination between state and local authorities.
- 6) The public is alerted to the emergency.
- 7) Current information is provided to the public through state and local authorities.

### **Hostile Action (Definition)**

An act toward a Nuclear Power Plant or its personnel that includes violent force to destroy equipment, take hostages, and/or otherwise impair the license holder in order to achieve an end or objective. This includes attack by air, land, or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force. Other acts that satisfy the overall intent may be included.

## B. Notification

The State must be notified within 15 minutes form the time plant personnel have classified the emergency as an **UNUSUAL EVENT, ALERT, SITE AREA EMERGENCY, or GENERAL EMERGENCY**. The Selectboard is responsible for adopting a procedure for receiving notification from the State and maintaining the capability to disperse that information to the rest of the emergency response team.

- (1) The Town of Marlboro will receive initial notification from the 24 hour State Warning Point. See Figure 1, "Notification Chart for an Unusual Event", and Figure 2, "Notification Chart for Alert, Site Area Emergency, or General Emergency". The Alternate State Warning Point (ASWP) will assist the State Warning Point and may provide initial notification.
- (2) Receipt of the initial message will be the responsibility of the pager carriers (24 hour). If there is no response to pager activation, the pager carriers will be notified by telephone. If the town does not respond to the page or notification by commercial telephone, the alternate State Warning Point will dispatch uniformed law enforcement officers to the community to notify local officials.
- (3) Emergency response services will be notified of each emergency classification by telephone or pager as indicated in Figure 1, "Notification Chart for an Unusual Event", and Figure 2, "Notification Chart for Alert, Site Area Emergency, or General Emergency". See the Addendum to this Plan for the Marlboro Staff Notification List.
- (4) If initial notification of an event at Vermont Yankee Nuclear Power Station is received from a source other than the ones mentioned above, the individual should contact the State Warning Point or Vermont Emergency Management to verify the situation and respond appropriately.
- (5) The Communications Unit Leader is responsible for receipt of any escalation in classification and directed protective action from the State Emergency Operations Center. Each message will be immediately forwarded to the Emergency Management Director for appropriate action.
- (6) Households and businesses within Marlboro have National Weather Service Weather Alert Radios (also identified as tone alert radios) available to them and will be alerted when the Public Notification System (PNS) is activated. The National Weather Service Weather Alert Radios provide the public with instructions to tune to their local Emergency Alert System (EAS) station for further information. Emergency Alert System messages are not provided over the National Weather Service weather alert radios.

- (7) When the public is to be alerted, Vermont Emergency Management will coordinate the activation of the Public Notification System and the Emergency Alert System with the other affected State Emergency Management Agencies in Massachusetts and/or New Hampshire. Vermont Emergency Management will then notify the National Weather Service (NWS) in Albany, NY to activate the weather alert radios at the appointed time. Due to the coordination required, it will take approximately 15 minutes to activate the Public Notification System and Emergency Alert System. In a fast breaking situation, coordination with the other states is not required before notifying the public. A fast breaking situation occurs when Vermont Yankee Nuclear Power Station declares a General Emergency and recommends a protective action in their initial notification to the State Warning Point prior to the activation of the State Emergency Operations Center.
- (8) The Marlboro Elementary School principal will be notified of all escalations by the Emergency Management Director or designee.
- (9) The Town of Marlboro does not have any hospitals or nursing homes, but does have child care facilities. They will be notified by the Highway Branch Director.
- (10) The Town of Marlboro's recreational area will be notified by Fire Department personnel.
  - (a) South Pond Recreational Area
- (11) Local people in Marlboro that are unable to receive the notification, (e.g., "special -needs") will be notified by an Emergency Operations Center (EOC) staff individual using the telephone and/or door to door method. A list of "special-needs" individuals is retained in the Emergency Operations Center.
- (12) Vermont Emergency Management is responsible for requesting the activation of the Emergency Alert System radio stations.
- (13) Vermont Emergency Management is responsible for requesting the activation of the Weather Alert Radios through the National Weather Service office in Albany, New York.

**C. Verification – Pager**

Local pager carriers will verify that they received and understood the message indicated on their pager by notifying the State Warning Point (SWP) or Alternate State Warning Point (ASWP).

**D. Emergency Response Organizations (Figures 3 and 4)**

(1) Vermont Yankee Nuclear Power Station (VYNPS)

Vermont Yankee Nuclear Power Station by, virtue of its licensing agreements with the Nuclear Regulatory Commission (NRC) and agreements with the State of Vermont, has accepted responsibility for notifying the State within 15 minutes of classifying the emergency, evaluating conditions, and determining the magnitude of an incident.

Upon declaration of an emergency, Vermont Yankee Nuclear Power Station will mobilize its emergency response organization based upon the severity of the incident. The emergency response organization for the Vermont Yankee Nuclear Power Station is described further in their emergency response plan and procedures.

(2) Local Government

The primary responsibility for the safety of citizens and the protection of property rests with the government of Marlboro. In the event of a radiological emergency, Marlboro will mobilize and utilize all available resources to mitigate the emergency.

Where possible, town officials should be appointed to emergency assignments that most closely coincide with their normal daily activities (see Table 2, “Assignment of Responsibility”, and Figure 4, “Local Emergency Response Staff”).

Emergency response actions for the local emergency response organization are outlined in the implementing procedures following this plan.

(3) State Government

The State is prepared to augment local government operations through a coordinated delivery of resources and personnel. The State emergency response organization conforms to the normal government structure. Designated State agencies have assigned disaster response functions, either as the primary agency for a given functional field, or for the provision of support and assistance in carrying out functions assigned elsewhere.

General areas of responsibility for the State Agencies responding to a radiological emergency are outlined in Section 8 of the Vermont Radiological Emergency Response Plan.

Upon notification of an emergency or at the request of the Director, Vermont Emergency Management or designee, State agencies having assigned emergency response functions will dispatch designated representatives to the State Emergency Operations Center (EOC), Staging Area, Vermont Yankee Nuclear Power Station Emergency Operations Facility (EOF), and Joint Information Center (JIC). Refer to Section 8 of the Vermont Radiological Emergency Response Plan for more details on assigned emergency response functions.

(4) Federal Government

Technical and non-technical assistance is available from the Federal Government at the request of the State. The available assistance is outlined in the Federal Radiological Emergency Response Plan (FRERP) and the Federal Radiological Monitoring and Assessment Plan (FRMAP).

While many Federal agencies have been directed to assist in emergency operations, the general coordination of Federal disaster operations with the State is the responsibility of the Federal Emergency Management Agency (FEMA).

(5) Private Sector

Support from the private sector may be provided directly to Vermont Yankee Nuclear Power Station as well as local, State, and Federal organizations and agencies. Any support provided will be under the direction of the requesting agency and in accordance with existing agreements. The American Red Cross is the primary private sector response agency for managing and providing congregate care services at the Reception Center.

## **E. Emergency Operations Centers and Equipment**

- (1) The primary Emergency Operations Center for the Town of Marlboro is located in the Marlboro Fire House. The equipment located at the Emergency Operations Center is listed in Table 3, "Emergency Operations Center Equipment". Necessary furniture and other supplies, i.e., pens, pencils, etc., are located in the Emergency Operations Center or are readily available. Radiological Equipment is listed in Table 4 and Communications Equipment is listed in Table 5.
- (2) The Emergency Operations Center for Marlboro is located outside the ten mile Emergency Planning Zone. It is unlikely that the Emergency Operations Center would need to be evacuated during an emergency at Vermont Yankee Nuclear Power Station. However, an alternate Emergency Operations Center could be located at the Twin Valley High School, or other suitable facility as designated by the State Emergency Operations Center.
- (3) Continuity of government functions for the town during emergency and post-emergency operations will be performed at the Emergency Operations Center or alternate Emergency Operations Center.
- (4) Town representation at the near-site Emergency Operations Facility (EOF) will be accomplished through the State Emergency Operations Center.
- (5) Designated key personnel with emergency responsibilities may report to the Emergency Operations Center at an Unusual Event. Upon declaration of an Alert, Site Area Emergency or General Emergency, the Emergency Operations Center will be fully staffed.
- (6) Depending upon emergency conditions, some Emergency Operations Center staff positions may be combined at the discretion of the Emergency Management Director.
- (7) Once activated, the Emergency Operations Center will remain operational on a 24 hour basis. Two 12 hour shifts will be used to complete emergency response actions. The Emergency Operations Center positions that require two shift staffing are the Emergency Management Director and Communications Unit Leader. Other staff may be relaxed to a ready recall status based on emergency conditions. However, all positions will have sufficient trained staff available to provide 24 hour coverage should the situation require it. See the Plan Addendum for the Staff Notification List.

- (8) The State of Vermont will establish a central point for the receipt of all field monitoring data and sample media.
- (9) The State of Vermont will establish and staff a transportation staging area to provide additional transportation resources (buses, vans, ambulances, trucks, etc.), to Listing towns requesting them.

## **F. Medical Support**

- (1) Hospitals

The Brattleboro Memorial Hospital in Brattleboro, Vermont, is the primary hospital used for the treatment of contaminated and injured individuals. In the event Brattleboro Memorial Hospital cannot be used, the Cheshire Medical Center in Keene, New Hampshire or the Franklin Medical Center in Greenfield, Massachusetts will be used.

As MS-1 hospitals, Brattleboro Memorial Hospital, Cheshire Medical Center, and Franklin Medical Center personnel participate in biennial training and medical drills. The hospitals have procedures in place and the necessary supplies for the treatment of "contaminated injured" individuals.

- (2) Ambulance Service

Deerfield Valley and Rescue, Inc. are primary transportation support for the Town of Marlboro. Additional transportation will be requested through the State Emergency Operations Center or Staging Area. Deerfield Valley and Rescue, Inc. personnel participate in annual training and medical drills. Marlboro Rescue Squad will assist as necessary.

## **G. Emergency Alert System (EAS)**

- (1) Brattleboro Radio Station WTSA, dial setting 1450 AM or 96.7 FM (CPCS-1) is the primary designated regional Emergency Alert System station for the Vermont Yankee Emergency Planning Zone. It operates 24 hours a day and is used to notify the public of directed protective actions as well as provide emergency instructions and information.
- (2) Brattleboro radio station WKVT dial setting 1490 AM or 92.7 FM (CPCS-2) monitors the primary station and serves as a backup to WTSA.
- (3) Rutland radio station WWAY dial setting 100.7 FM transmitting near the top of Mount Snow in West Dover, Vermont also monitors the primary station and serves as a backup to WTSA.

- (4) All three radio stations maintain the capability to provide Emergency Alert System messages to the public. Pre-scripted messages have been developed by Vermont Emergency Management and are maintained at the State Emergency Operations Center. These messages contain clear and understandable information accurately reflecting the decisions of designated responsible authorities. They contain the necessary information and instructions to facilitate the directed protective action. The three radio stations have been issued the pre-scripted Emergency Alert System messages.
- (5) The State Emergency Operations Center is responsible for requesting Emergency Alert System activation and message broadcast. Local requests for activation of the Emergency Alert System must be approved and processed through the State Emergency Operations Center.

## **5. PROTECTIVE ACTIONS AND EMERGENCY RESPONSE**

Recommended protective actions for the plume exposure Emergency Planning Zone include sheltering and evacuation (see Table 6). Protective actions for the ingestion exposure Emergency Planning Zone are implemented to reduce the potential for the ingestion of contaminated foods, milk, and water. In support of this, access control to affected areas as well as care and feeding of domestic animals will also be recommended. Any protective actions taken by the Town of Marlboro will be directed by the State Emergency Operations Center. They will be based upon the Environmental Protection Agency Protective Action Guidelines, plant conditions, Vermont Yankee Nuclear Power Station protective action recommendations, dose assessment results, and other off-site specific conditions such as the presence of severe weather, a competing disaster, and/or local physical factors.

### **A. Protective Actions for the Public for the Plume Exposure Emergency Planning Zone**

#### **(1) Sheltering**

- (a) This concept provides for sheltering at or near the location where the instruction is received.
- (b) Sheltering involves remaining inside, closing all doors and windows, turning off all ventilation systems that draw in outside air, extinguishing all unnecessary combustion sources, and sealing all other outdoor air sources to the extent possible. All of these actions limit the exchange of indoor air with outside air that may be contaminated with radioactive material. Heavier construction materials or increased layers of building material increase the amount of protection from exposure to radiation. Therefore, shelter should be sought away from windows in the lowest level of the building such as the basement.
- (c) Sheltering is a valuable protective action because it can be implemented quickly, usually in a matter of minutes. The dose reduction benefit is a function of the type of structure, how well the structure is sealed, and how long the plume takes to travel over the area (see Table 7 and Table 8 for more details).
- (d) Once a protective action decision to shelter has been made by the Governor or designee, the Vermont Emergency Operations Center will notify the affected town(s) that sheltering is recommended. The public will be instructed to shelter via the Emergency Alert System.
- (e) The responsibilities associated with this protective action are outlined in the appropriate implementing procedures for emergency response personnel.

- (2) Ingestion of Potassium Iodide (KI)
- (a) Vermont has adopted guidance developed by the U.S. Food and Drug Administration and presented in their document "Guidance - Potassium Iodide as a Thyroid Blocking Agent in Radiation Emergencies, November 2001". Future guidance by the FDA may be adopted as it is issued.
  - (b) The FDA has determined that potassium iodide (KI) is a safe and effective means to prevent radioactive iodine uptake by the thyroid gland and reduce the risk of thyroid disease in the event of a radiation emergency. The non-radioactive potassium iodide saturates the thyroid gland. The individual's thyroid gland will not absorb any radioactive iodine as long as it remains saturated with the non-radioactive variety.
  - (c) It is important to note that potassium iodide only protects the thyroid gland from radiation exposure due to radioactive iodine. Other emergency actions such as evacuation, sheltering, or restricting the use of certain foodstuffs, milk, water, and animal feed are designed to minimize exposure from all radiation sources. Compliance with these types of instructions from appropriate officials is expected.
  - (d) The Food and Drug Administration (FDA) has stated that for optimal protection against inhaled radioiodines, potassium iodide should be administered before or immediately co-incident with passage of the radioactive plume. Potassium iodide may still offer substantial protection even if taken up to four (4) hours after exposure. The U.S. Nuclear Regulatory Commission (NRC) has supplied the State of Vermont with 130 milligram (mg) potassium iodide tablets. Vermont Emergency Management has purchased FDA approved 65 milligram tablets for distribution in schools and child care facilities because the task of dividing the larger tablets into proper doses for large numbers of children is time consuming. Both of these tablets are to be taken according to the dosage schedule in Table 9.

- (e) Potassium iodide is distributed to persons residing in the Vermont portion of the 10 mile Emergency Planning Zone around the Vermont Yankee Nuclear Power Station who voluntarily request it. Concurrent with this distribution, individuals will receive information on the risks and benefits, proper dosage, medical contraindications, and importance of following emergency preparedness directives. The major emphasis is to distribute potassium iodide to most of the general public prior to any emergency. Distribution to those persons who were exposed to the radioactive plume, but did not have potassium iodide available will occur at locations announced to the public by Emergency Alert System messages or news advisories.
  - (f) Table 9 is a summary of the FDA's recommended dosage chart. It may not be possible to quantify the thyroid exposure from inhaled radioiodines at the time of the emergency. The Health Services Coordinator and Radiation Health Advisor may use information from sources such as the Emergency Response Data System (ERDS) or the METPAC dose assessment software program to determine the advisability of telling emergency workers, institutionalized individuals, and members of the general public down wind from the plant to ingest potassium iodide. Emergency workers and institutionalized individuals will be notified about potassium iodide issuance through the Radiological Emergency Response Program communications system. The general public will be informed by either a Emergency Alert System message or news advisory. Town Emergency Operations Centers will be informed of the decision in a timely manner.
- (3) Evacuation
- (a) For the purposes of this plan, evacuation is defined as notifying persons living in an affected area to leave their homes and/or businesses and proceed to a safe location.
  - (b) The Selectboard is responsible for carrying out the Governor's order to evacuate. The evacuation message shall come from the Vermont Emergency Operations Center. The public will receive instructions to evacuate through the Emergency Alert System.
  - (c) Traffic and access control points will be established. Additional access control points will be established, as necessary (see the Traffic and Access Control Manual).
  - (d) The responsibilities associated with evacuation are outlined in the appropriate implementing procedures for emergency response staff members.

- (e) Special institution plans include information regarding the actions to be taken if an evacuation is required.
- (f) The primary means of evacuation will be by private vehicle. Evacuation of special needs individuals will take place using appropriate transportation such as ambulances, chair-vans, buses, etc. A confidential list containing names, locations, and type of assistance required by special needs individuals is maintained by the town.
- (g) The State Emergency Operations Center will recommend that all residents living in Marlboro proceed to the primary Reception Center or designated alternate facility if the emergency situation warrants it.
- (h) Evacuation of Vermont Yankee Nuclear Power Station employees is addressed in plant procedures. Evacuation of on-site personnel will pose no problem to the Town of Marlboro.
- (i) No Evacuation Time Estimate (ETE) Study has been conducted for Marlboro.
- (j) Access control will be established to prevent entrance into the restricted area using barriers and/or personnel.

**B. Protective Actions for the Public for the Ingestion Pathway Emergency Planning Zone Include:**

- (1) Control of Milk/Water/Food
  - (a) The control of milk, water, and other food products involves the modification of the collection, production, processing, marketing cycles, and use of potentially contaminated foodstuffs.
  - (b) The purpose of protective actions are to avoid the consumption and subsequent internal radiation exposure from contaminated foodstuffs.
  - (c) Farmers, food processing facilities, and the general public will be advised by news advisories or Emergency Alert System messages.

(2) Domestic Animals

Information concerning the care and feeding of domestic animals is addressed in emergency public information brochures. It is also provided by the Department of Health and State Department of Agriculture if required. Actions for the care and feeding of domestic animals include the following.

- (a) Farmers should place animals in barns, stables, poultry houses, pig sties, and other suitable structures. See Attachment 8 for a list of farms within Marlboro.
- (b) The animals should consume only stored feed and water from protected sources.
- (c) If an area is evacuated, control points will be established. Authorized personnel will be permitted to re-enter the area to feed and water the animals under controlled conditions.

**C. Monitoring and Decontamination**

- (1) Members of the general public will be monitored and decontaminated at the Reception Center or other appropriate locations. Monitoring and decontamination of the general public is addressed in the Reception Center Plan.
- (2) Town emergency workers and emergency vehicles will be monitored and decontaminated, if necessary, at the Emergency Worker Radiological Monitoring and Decontamination Station.
- (3) Upon termination of the emergency, the Vermont Department of Health will monitor decontamination stations for the presence of contamination and assist in decontaminating these locations, if necessary.
- (4) Any waste collected from decontamination stations will be disposed of by the Vermont Department of Health.
- (5) Off-site radiological monitoring will be accomplished by the Vermont Department of Health supplemented by assistance from other New England states under the current New England Compact on Radiological Health Protection. Federal assistance can be provided upon request by the State.

#### **D. Radiological Assessment**

Radiological assessment of the emergency will be performed by the Vermont Department of Health at the State Emergency Operations Center based upon data from Vermont Yankee Nuclear Power Station and monitoring teams.

#### **E. Radiological Exposure Control**

Exposure control is accomplished by measuring and recording personnel radiation exposure using Direct Reading Dosimeters (DRD's) and Dosimeters of Legal Record (DLR's). Exposure control is the responsibility of the Supply Unit Leader / Radiological Officer.

#### **NOTE**

**THE HEALTH SERVICES COORDINATOR (VERMONT COMMISSIONER OF HEALTH OR DESIGNEE) MUST AUTHORIZE INDIVIDUALS TO EXCEED THE 5 REM TOTAL EFFECTIVE DOSE EQUIVALENT (TEDE) LIMIT LISTED IN TABLE 10.**

The preparation, issuance, and use of dosimetry is described in the Supply Unit Leader / Radiological Officer Implementing Procedure.

The radioactivity level requiring decontamination efforts will be established in accordance with Vermont Department of Health procedures.

Potassium iodide will be distributed to each emergency worker at the time dosimetry is issued. The Health Services Coordinator, Vermont Department of Health will authorize emergency workers to take potassium iodide. Instructions for using potassium iodide are outlined in the Attachments. Potassium iodide for emergency workers is stored at the Emergency Operations Center. Additional potassium iodide is available at the Staging Area, if required.

## **6. POST-EMERGENCY RESPONSE**

### **A. Post-Emergency Response Activities**

The nature and extent of an accident and the resulting impact on the principal exposure pathways (ingestion, inhalation, and external whole body) will determine the scope of the post-emergency response efforts of Federal, State, and local organizations. Post-emergency response activities will include environmental sampling and analysis, relocation, re-entry, return, and recovery.

Post-emergency response activities will focus on a Restricted Zone that will be established by the Vermont Department of Health in conjunction with Vermont Emergency Management. Areas outside the Restricted Zone will be considered suitable for normal activity if contamination has not exceeded acceptable levels. The Vermont Department of Health will determine acceptable levels of contamination.

### **B. Organization and Operations**

The Town of Marlboro Selectboard, in consultation with the Emergency Management Director, will reduce the emergency response staff to those key personnel necessary to coordinate and assist in the post-emergency response with the State. A 24 hour operational capability will exist at the primary or alternate Emergency Operations Center. The amount of necessary personnel may not decrease, but their location and/or duties may be different from the response phase. Additional information regarding the actions and responsibilities needed during post emergency response is detailed in the State of Vermont Ingestion Pathway Plan.

### **C. Protective Actions**

Action would be taken to limit the long term exposure of the public to deposited radioactive material after the release has been brought under control. The following should be considered at that time.

- (1) The Department of Health in conjunction with Vermont Emergency Management is responsible for establishing Restricted Zone(s) based on radiological conditions. Access to the area(s) shall be strictly controlled.
- (2) Individuals who did not evacuate during the emergency phase will be directed to vacate areas designated as Restricted Zones. The purpose of this relocation is to avoid chronic exposure from deposited radioactive material.

- (3) Re-entry into Restricted Zone(s) is only allowed under controlled conditions. The Health Services Coordinator at the State Emergency Operations Center will grant access to perform tasks such as caring for farm animals, maintaining or properly shutting down manufacturing processes, or retrieving valuable and perishable property. The Health Services Coordinator will provide guidance to the affected municipalities on what tasks are allowed and the duration of exposure. Municipalities shall determine which persons qualify to re-enter and issue a restricted zone pass to those who do. Municipalities will request advice from the Health Services Coordinator at the State Emergency Operations Center to determine if the risk involved is justified by the task and if there are additional techniques to minimize exposure. Municipalities will maintain a record of the date, duration, and exposure of each individual who enters a Restricted Zone. This information will be transmitted to the Health Services Coordinator at the State Emergency Operations Center. Rather than allowing re-entry at every access control point, specific locations shall be designated as re-entry points. This will be coordinated by the State Emergency Operations Center.
- (4) Return refers to reoccupation of areas cleared for unrestricted use.

## **7. EXECUTION**

### **A. Command and Control**

- (1) The Town of Marlboro Selectboard is responsible for command and control of local activities and coordination of those activities with appropriate local, state, federal, and Vermont Yankee Nuclear Power Station officials.
- (2) Primary staff personnel include the following.
  - (a) Selectboard
  - (b) Emergency Management Director
  - (c) Operations Section Chief Fire & Rescue Branch Director
  - (d) Police Branch Director
  - (e) Highway Branch Director
  - (f) Communications Unit Leader
  - (g) Supply Unit Leader / Radiological Officer
  - (h) Medical Unit Leader / Health Officer
  - (i) Public Information Officer
  - (j) Finance and Administration Section Chief
- (3) Emergency staff personnel should be chosen from among town officials whose normal daily activities most closely coincide with their emergency assignment, where possible.

### **B. Concept of Operations**

- (1) The provisions of this plan take effect when the Selectboard, or designee, is in receipt of a properly verified notification message from the State Warning Point.
- (2) Only the Selectboard, Emergency Management Director, Operations Section Chief Fire & Rescue Branch Director, and Police Branch Director are required to be notified of an Unusual Event classification. Standby actions are required.

- (3) Upon receiving notification of an emergency classified as an ALERT or higher, all local Emergency Response Organization staff will report to the Emergency Operations Center and assume their responsibilities as outlined in their implementing procedures. Once the Emergency Operations Center is appropriately staffed, the Emergency Management Director may send excess personnel home to rest and be prepared to report for a second shift.
- (4) The Emergency Management Director will ensure that all known conditions that would affect the evacuation of Marlboro, if ordered, have been communicated to the State Emergency Operations Center. The status of these conditions should be updated as they change.
- (5) The public will be alerted by the activation of the CAN System and NOAA Weather Alert radios. They will be told to tune their radios to the Emergency Alert Station for instructions or information. Vermont Emergency Management is responsible for coordinating a predetermined time for activating the Public Notification System. Additionally, a high speed telephone dialer system may be deployed by Vermont Emergency Management to notify the public.
- (6) When an evacuation of the public is recommended, the State Emergency Operations Center will specify routes as outlined in Figure 5. Each household in Marlboro has been sent a current calendar that has more detailed maps and written directions.
- (7) When an evacuation of the Marlboro Schools and special institutions is directed by the State, the route described in their respective school plans will be used unless otherwise directed by the State Emergency Operations Center.
- (8) Residents will be monitored for radioactive contamination at the Reception Center as outlined in the Reception Center Plan.
- (9) The State Emergency Operations Center will inform local officials when and where the public may return to their homes based on technical advice from Vermont Department of Health officials.
- (10) State and/or local personnel working for the Town of Marlboro during a radiological emergency will come under local control.

### **C. Responsibilities of the Local Emergency Response Services**

Emergency responsibilities assigned to the Marlboro Emergency Response Organization are outlined in the Implementing Procedures (IP's).

**D. Support**

- (1) The Town of Marlboro will develop a list of unmet needs and forward them to the State Emergency Operations Center. This prioritized list of resources that the town cannot provide in a timely and effective manner should be updated as necessary.
  - (a) The State Emergency Operations Center and Staging Area will coordinate meeting those needs with resources from surrounding communities.
  - (b) State agency assistance will be obtained by the State Emergency Operations Center and coordinated by the Staging Area.
  - (c) Federal assistance will be obtained by the State Emergency Operations Center.
  - (d) The Town of Marlboro is not expected to support federal response, but may be asked to assist in providing local information and guidance.
- (2) The State Emergency Operations Center will inform local officials when and where the public may return to their homes based on technical advice from Vermont Department of Health personnel.

## 8. **ADMINISTRATION AND COMMUNICATIONS**

### A. Administration

#### (1) General

- (a) The Selectboard is responsible for radiological emergency response planning for the Town and assuring that Town emergency services are capable of continuous (24 hour) operation.
- (b) The Emergency Management Director (EMD) is the planning coordinator and is responsible for updating and coordinating this plan as well as distributing changes to holders of the plan.
- (c) Vermont Emergency Management will provide planning, preparedness, and training assistance. Letters of Agreement required to support the needs of the Town will be obtained and updated by Vermont Emergency Management.
- (d) Primary emergency staff members are responsible for notifying the Emergency Management Director when any personnel under their jurisdiction change their telephone number. The Emergency Management Director will review the Staff Notification List at least quarterly and update it if necessary.
- (e) This plan will be reviewed annually by the Emergency Management Director and primary emergency staff members to determine if changes are required.
- (f) Minor changes to the plan will be identified by a line bar in the left hand margin. The month, year, and revision number will be shown in the lower, right-hand corner of each page.
- (g) Radiological monitoring equipment will be inventoried and checked for operability quarterly and after each use by the Emergency Management Director, or designee. Any problems will be promptly reported to Vermont Emergency Management. The maintenance and calibration of equipment will be in accordance with procedures established by Vermont Emergency Management.
- (h) Dosimeters of Legal Record will be collected for readout and replaced as required by Vermont Emergency Management.

- (i) At least one copy of the emergency plan for the Marlboro Elementary School will be maintained in the Emergency Operations Center. The Emergency Management Director shall ensure that these plans are carried out.
  - (j) In the event evacuation is required, the Selectboard will notify the local postmaster or representative and ask to hold all mail, if feasible.
  - (k) The Emergency Management Director, acting on the advice of the Road Commissioner, will inform the State Emergency Operations Center in Waterbury when temporary or permanent changes occur to the Town highway system that could affect evacuation routes. Other conditions such as bad weather or emergencies that would affect the safety of an evacuation shall be promptly reported to the alternate State Warning Point.
  - (l) The State and Vermont Yankee Nuclear Power Station have established a policy for issuing and/or exchanging National Weather Service weather alert radios to Emergency Planning Zone residents. Vermont Yankee Nuclear Power Station provides receivers to each town to accomplish this and maintains a list of all residents who have been issued one.
  - (m) The Emergency Management Director will be responsible for assuring continuity of resources.
- (2) Expenditures
- (a) The Finance & Administration Section Chief will maintain a record of town expenditures resulting from an accident at the Vermont Yankee Nuclear Power Station.
  - (b) When the emergency has terminated, the expenses incurred beyond normal day-to-day costs will be forwarded to American Nuclear Insurers through Vermont Yankee Nuclear Power Station. A copy will be forwarded to Vermont Emergency Management.
  - (c) Expenses incurred during training, drills, and exercises shall be forwarded to Vermont Emergency Management for processing (refer to the Radiological Emergency Response Program Fund Disbursement policy).

(3) Training, Drills, and Exercises

(a) Training

- i. All local emergency response personnel, including volunteers, will be encouraged to attend annual training scheduled by Vermont Emergency Management in coordination with the Emergency Management Director.
- ii. Training will include, but will not be limited to, Introduction to Radiation, Exercise Overview, Emergency Planning Zones, Emergency Classification Levels, Command and Control, 24 hour Staffing, Notification Methods, Communications, Protective Actions, Exposure Control, Special Needs, Use of Monitoring Equipment, Decontamination, and Dosimetry. The training will be conducted by local, State, and Vermont Yankee Nuclear Power Station personnel. Refresher courses will be conducted as needed.
- iii. Mutual aid medical support personnel will be encouraged to attend annual training on handling contaminated, injured individuals. This training is held in conjunction with Vermont Yankee Nuclear Power Station.
- iv. A Vermont Emergency Management representative will ensure that attendance is taken at each training session.

(b) Exercises and Drills

- i. Drills are performed to exercise the radiological response plan and other emergency-related plans. This includes testing the interaction between government agencies using the National Incident Management System (NIMS), other logistical support sources, and Vermont Yankee Nuclear Power Station.
- ii. Local emergency response personnel will participate in a full scale biennial exercise and periodic drills to test the various elements outlined in this plan as well as meet federal and state requirements.
- iii. The scenario for the biennial exercise will be coordinated by Vermont Emergency Management with other affected State(s) and Vermont Yankee Nuclear Power Station. The scenario shall follow the guidelines established in Section 20 of the Vermont Radiological Emergency Response Plan (VRERP).
- iv. The Town of Marlboro may forward a list of objectives to test during an exercise to Vermont Emergency Management.

- v. Federal and state personnel will observe required exercises. A critique shall be scheduled at the conclusion of the exercise to evaluate the ability of organizations to respond as required by this plan. The critique shall be conducted as soon as practical after the exercise. Formal evaluation will result from the critique.
- vi. Vermont Emergency Management is responsible for working with the town to resolve any outstanding evaluation issues. The necessary training, plan and/or procedure changes, time schedule for completion, and person responsible for the corrective action will be identified.
- vii. A drill involving the actual evacuation of personnel will not be conducted in Marlboro because a serious accident could occur. An exercise using limited transportation vehicles may be conducted to determine response time.
- viii. Communication drills to test the notification system between the State of Vermont and local communities will be conducted as outlined in Section 20 of the Vermont Radiological Emergency Response Plan.

## **B. Communications**

### **(1) General**

- (a) The Communications Unit Leader is responsible for ascertaining if adequate communications are established between the Town of Marlboro and contiguous local governments, the Staging Area, and the State Emergency Operations Center. See Figure 6 for communication channels.
- (b) The Communications Unit Leader is responsible for ensuring that communications have been established between the Marlboro Emergency Operations Center and staff members operating outside the center such as traffic control personnel and special alerting teams.
- (c) If such communications are not available, the Communications Unit Leader will inform the Emergency Management Director, correct the communications problem, or request assistance from the State Emergency Operations Center.

- (d) Communication with Federal emergency response organizations is not required. The State Emergency Operations Center will establish this communication link.

(2) Exercises and Drills

(a) Monthly Communications Drill

This tests town and State Emergency Operations Center radio operability. It also helps town and State communications personnel gain familiarity with the equipment.

(b) Monthly Notification Drill

This tests the State notification system as well as the ability of State and local officials to respond promptly and effectively. Most of the drills are on scheduled dates and times. This drill has at least two different scenarios.

- i. General Emergency or Fast-breaker.
- ii. One of the three higher Emergency Classification Levels

(c) Weekly Pager Test

This verifies the effectiveness of the paging system in the Emergency Planning Zone. These tests are scheduled for different days of the week and on different shifts. The monthly notification drill is done instead of one of the weekly pager tests.

(d) Weekly Tone Alert Radio Test

The National Weather Service in Albany, New York conducts a test of the radio system between 11:00 A.M. and noon each Wednesday. Occasionally, the test is conducted during the same time period on Thursday. This verifies the ability of the National Weather Service to activate Weather Alert Radios remotely in portions of Marlboro not covered by sirens. An individual from each of the Emergency Planning Zone towns communicates the results of this test to Vermont Emergency Management.

(e) Monthly Siren Test

This test is conducted by Vermont Yankee Nuclear Power Station at noon on the first Saturday of each month. It is done to verify proper siren operation. The public is given a siren testing schedule in the Vermont Yankee Nuclear Power Station calendar.

(f) Periodic table-top drills or exercises are conducted to test a portion of, or the entire, Emergency Operations Center staff.

(3) Public Education and Information

(a) Public information calendars, posters, and brochures have been developed. They contain information on local radio stations, protective measures, public notification systems, evacuation routes, Reception Center locations, and the toll free rumor control telephone number. The calendars include a postage paid card to be completed by "special needs" residents and other residents requiring assistance.

(b) Calendars, posters, and brochures are reviewed annually and updated by Vermont Emergency Management and Vermont Yankee Nuclear Power Station. Calendars are distributed annually to each household, hotel, motel, and business within the plume exposure Emergency Planning Zone. Spare calendars are retained at town hall for new residents. Posters have been distributed to recreational and transient areas. The brochures are distributed annually to hotels, motels, and other areas visited by tourists.

(c) A special needs list showing the name, address, and type of assistance required is updated annually by the Emergency Management Director using the postage paid cards mentioned above. The list is used to direct vehicles for pickup, notify, and/or assist special needs residents. The list of persons and their transportation requirements is kept confidential.

(d) All Emergency Planning Information contained in the calendar is on the Vermont Emergency Management website ([vtnuclearsafety.com](http://vtnuclearsafety.com)) Individuals who visit the website can also request the information in different formats and submit a special needs card. Any special needs information received for Marlboro residents will be stored confidentially and sent to the Emergency Management Director or designee.

(e) Batteries, information, and instruction sheets for the National Weather Service Weather Alert Radios are available at the Town Office.

- (f) A brochure entitled "Agriculture and Nuclear Power in Vermont", which provides emergency information to farmers and livestock owners, is available at the Town Clerk's office, Vermont Emergency Management, and Vermont Extension Service in Bennington, Vermont. A copy of the brochure with all necessary revisions is kept at Vermont Emergency Management.
- (g) People should be periodically told how to receive notification of an event, shelter themselves, and evacuate the area at town gatherings and by the news media.
- (h) The Selectboard member, or designee, located at the Emergency Operations Center, will only be the spokesperson for town functions. That individual will coordinate the release of information with the State Emergency Operations Center and News Media Center / Joint Information Center.
- (i) Vermont Emergency Management, in conjunction with Vermont Yankee Nuclear Power Station, will conduct periodic news media briefings on State and/or local emergency plans.
- (j) Rumor control will be handled by the Vermont Emergency Management toll free number referenced in public information materials.

Radiological Emergency Response  
Implementing Procedure

**TOWN OF MARLBORO**

**ADDENDUM**

**Addendum to the Town Plan and Implementing Procedures**

MARLBORO STAFF NOTIFICATION LIST

GENERAL TELEPHONE LISTING

FIGURES

TABLES

GLOSSARY OF COMMONLY USED WORDS

ACRONYMS

NUREG-0654 CROSS-REFERENCE TO THE MARLBORO RADIOLOGICAL  
EMERGENCY RESPONSE PLAN

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## TOWN OF MARLBORO STAFF NOTIFICATION LIST

The Emergency Response Organization staff notification for the Town of Marlboro is listed below. The primary for each position should be contacted. If the primary is unavailable, contact the alternate. If the alternate becomes the first shift responder, then direct the primary to be the second shift responder. If there is a shortage of personnel, contact the State Emergency Operations Center for assistance.

TITLE	NAME	P/A	ADDRESS	HOME	WORK	PAGER	CELLULAR
Command/Control Selectboard	Gail MacArthur	P	P.O. Box 30, Marlboro	257-7328	254-2668 or 254-2181	742-9636	
	Lucy Gratwick	A		257-0181			
Public Information Officer	Marcia Hamilton	P	63 Hughes Road, Dummerston	464-5470	254-2181		
	Dick Lewontin	A		254-9167			
Emergency Management Director	Lucy Gratwick	P		257-0181		240-1368	
Police Branch Director	Clarence Boston	P	P.O. Box 16, Marlboro	254-3344			
	Sheriff Office	A	Windham Co Sheriff=s Office, PO Box 266, Newfane	722-9509	365-4941	240-1704	(802) 732-7064
Operations Section Chief Fire and Rescue Branch Director	David Elliott	P	3127 Higley Hill Road, Wilmington	464-8626	257-0252	742-9637	(802) 579-8802
	Allison Turner	A	Lucier Road. Marlboro	257-7369	257-4333		(802) 579-6633

Town of Marlboro Addendum

TITLE	NAME	P/A	ADDRESS	HOME	WORK	PAGER	CELLULAR
Communications Unit Leader	Allan McLane	P	P.O. Box 26, Marlboro	254-3845	246-5100		(802) 579-7987
		A					
Highway Branch Director	David Elliott	P	Route 9, Marlboro	464-8626	257-0252	742-9637	(802) 579-8802
	MVFC or designee	A		257-0252			
Medical Unit Leader / Health Officer	Susan Kunhardt	P	1196 Lower Dover Road, Brattleboro	464-3154			
	Wendy Kerlin	A	PO Box 118, South Newfane	348-7112			
Supply Unit Leader / Finance and Admin Section Chief	Linda Peters	P	P.O. Box 154, Marlboro	254-8781	254-2181		579-6254
	Andrea Howe	A		254-3176	254-2181		
Radiological Officer	Spencer Sahim	P	Lucier Road, Marlboro	257-7369		742-7281	
	MVFC	A	P.O. Box 69, 779 South Road, Marlboro	254-2860	(866) 352-1291	254-1301	

**GENERAL TELEPHONE LISTING**

**AMBULANCE**

Central Dispatch .....	257-7946
Deerfield Valley Rescue.....	464-5557
Golden Cross Ambulance .....	463-3726
Ker Ambulance Service.....	258-6500
Rescue, Inc. in Brattleboro.....	257-7679
Whitingham Ambulance Services, Inc. ....	368-2900

**AMERICAN RED CROSS**

Green Mountain Chapter, High Street Office .....	254-2377
Fax .....	254-2377

**ANIMAL RESCUE AND VETERINARY SERVICES**

State of Vermont Department of Health Veterinarian .....	(800) 640-4374 or 863-7240
State of Vermont Agency of Agriculture .....	828-2421
The Humane Society of the United States New England Regional Office ....	368-7290
Fax .....	368-2756
Rockingham Veterinary Clinic .....	875-3985
Springfield Animal Hospital .....	885-2505
United Animal Nations Emergency Animal Rescue Service .....	(916) 429-2457
Fax .....	(916) 429-2456
Vermont New Hampshire Veterinary Clinic .....	254-5422
Westminster Animal Hospital .....	722-4196

**EMERGENCY BROADCAST / EMERGENCY ALERT STATIONS**

WKVT (Alternate) - Brattleboro .....	254-2343
WTSA - Brattleboro.....	257-4644
Fax .....	258-9844
WVAY (Rutland) – West Dover.....	464-1111
Program Director for emergencies only.....	(315) 725-5919

**EMERGENCY OPERATIONS CENTER**

Dose Assessment .....	241-5372
Fax .....	241-5365
Information Officer .....	241-5337 or 241-5338
Public Information Officer.....	(800) 736-5530
Speaker telephone.....	241-5368
State Emergency Operations Center (Vermont Emergency Management) ..	244-8721
Toll Free .....	(800) 347-0488
Fax .....	241-5556

**EMERGENCY OPERATIONS FACILITY**

Main Telephone Number .....	451-4865
Fax .....	258-4274
Vermont State Liaison Team Leader .....	451-4865
Fax .....	451-4818
Vermont State Liaison Team .....	451-4817

*Note: Can also use exchange 258 in place of 451*

**HOSPITALS**

Brattleboro Memorial Hospital.....	257-0341
Cheshire Medical Center (Keene, NH).....	(603) 352-4111
Franklin Medical Center (Greenfield, MA).....	(413) 773-0211
North Adams Regional Hospital (North Adams, MA) .....	(413) 663-3701
Southwestern Vermont Medical Center (Bennington, VT) .....	442-6361

**JOINT INFORMATION CENTER**

Vermont State Liaison Team .....	451-4895, 451-4896, or 451-4897
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**LAW ENFORCEMENT**

State Police (Waterbury Dispatch).....	244-8727
State Police (Brattleboro).....	254-2382
State Police (Rockingham).....	875-2112
Windham County Sheriff.....	365-4941
Emergency .....	365-4949
Fax .....	365-4945

**NATIONAL WEATHER SERVICE**

Albany, NY .....	(518) 435-9574
Burlington, VT .....	862-2475

**RECEPTION CENTERS**

Bellows Falls Union High School .....	463-9080
High School.....	463-3944
High School Fax.....	365-4945
Command Center.....	463-9234 or 463-9744
Congregate Care.....	463-9074
Planning .....	463-9717
Reunification .....	463-9649
Transportation .....	463-9672
Fax .....	463-9322
Greenfield Community College .....	(413) 774-3131
Keene High School .....	(603) 352-0640

**RECREATIONAL AREAS**

Camp Waubanonng..... 254-8026  
 Fort Dummer State Park ..... 254-2610  
 Green Mountain Camp..... 257-1751  
 Hidden Acres Camping Resort..... 254-2098  
 KOA Campground East Dummerston ..... 254-2098  
 Living Memorial Park..... 254-6700  
     Office..... 254-5808  
     Skating Rink ..... 257-2311  
 Maple Valley ..... 254-6083  
 Vermont Fish and Wildlife Representative .....257-2814 or 257-2815

**SCHOOLS**

Academy School ..... 254-3743  
 Brattleboro Area Middle School ..... 451-3500  
 Brattleboro Union High School..... 451-3400  
 Dummerston Elementary School ..... 254-2733  
 Early Education Services ..... 254-3742  
 Green Street School ..... 254-3737  
 Guilford Central School..... 254-2271  
 Halifax School ..... 368-2888  
 Oak Grove School..... 254-3740  
 Twin Valley High School ..... 464-5255  
     Fax ..... 464-5903  
 Windham Southeast Supervisory Union Brattleboro Office .....254-3730 or 254-3731  
 Windham Southwest Supervisory Union Wilmington Office ..... 464-1300  
 Vernon Elementary School ..... 254-5373

**STAGING AREA**

AOT District Office ..... 254-5011 or 828-3510  
 Staging Area Manager ..... 257-2814  
 Staging Area FAX ..... 257-2836  
 Communications Unit Leader..... 251-2090  
 Communicator and Emergency Management Software Operator ..... 257-2815  
 Emergency Medical Services Local Coordinator..... 254-6393  
 RACES..... 257-2836  
 Radiological / Safety Officer..... 251-2091  
 Security Officer ..... 257-2816  
 Staging Area Unit Leader..... 257-2832  
 Staging Area Unit Leader (Dummerston Elementary School only) ..... 251-2135  
     Fax ..... 251-2134  
 Transportation Coordinator ..... 251-2092  
 Transportation Coordinator Assistant..... 257-2833  
 Vermont Department of Health Designee ..... 257-2837  
 Vermont National Guard Liaison ..... 257-2834

**TOWNS**

Brattleboro

Central Dispatch.....	257-7946
Emergency Management Director.....	254-4541
Emergency Operations Center	
Communications Room .....	251-8170 or 251-8179
Emergency Management Director .....	251-8171
Fax.....	254-6449
Fire Department.....	251-8172
Human Services .....	251-8182 or 251-8183
Police Department .....	251-8173
Public Works .....	251-8178
Radiation Monitoring.....	251-8174
Transportation Services.....	251-8175
Windham Southeast Supervisory Union .....	251-8176
Fire Department .....	254-4831
Police Department.....	257-7946
Public Works .....	254-4255
Select Board Chair – Richard DeGray.....	254-4005
Barbara Sondag .....	579-1225
Work.....	251-8102
Cell .....	579-8780
Town Clerk’s Office .....	251-8129
Town Manager .....	254-4541

Dummerston

Emergency Operations Center .....	257-5072
Fax.....	257-5601
Emergency Management Director (Pager).....	250-4627
Eric Davis .....	380-6533
West Dummerston Fire Department .....	254-2793
Dummerston Center Sub-station .....	254-8495
Select Board Chair – Tom Bodett.....	387-2322
Town Clerk’s Office .....	257-1496

**TOWNS (continued)**

Guilford

Emergency Operations Center .....	254-9328
Fax.....	254-9085
Emergency Management Director (Pager) .....	250-4624
Herbert Meyer.....	257-1256
Fire Department .....	254-4413
Guilford Central School .....	254-2271
Fax.....	258-2848
Guilford Community Church .....	257-2776
Highway Garage.....	254-2755
Select Board Chair - Richard Clark .....	257-4126
Town Clerk's Office .....	254-6857
Fax.....	257-5764

Halifax

Emergency Operations Center .....	368-7673
Fax.....	368-2677
Satellite Telephone.....	(254) 240-4315
Yellow Telephone .....	368-7318
Emergency Management Director (Pager) .....	250-4629
Lewis Sumner .....	368-2824
Fire Department .....	368-7733
Emergency Only .....	911
Halifax Elementary School .....	368-2888
Fax.....	368-7847
Yellow Telephone .....	368-2437
Select Board Chair - John LaFlamme, Jr. ....	368-2222
Superintendent, Windham Southwest Supervisory Union.....	464-1300
Town Garage.....	368-2803
Town Clerk's Office .....	368-7390

Marlboro

Emergency Operations Center .....	254-1301
Fax.....	254-5687
Emergency Management Director (Pager) .....	240-1368
Lucy Gratwick .....	257-0181
Fire Department MVFC (Non-emergency) .....	254-2860
South West Mutual Aid.....	(603) 352-1100
Marlboro Elementary School .....	254-2668
Marlboro Town Garage .....	257-0252
Meetinghouse School.....	257-0801
Select Board Chair – Gail MacArthur .....	257-7328
Town Office .....	254-2181
Town Clerk .....	464-0297

**TOWNS (continued)**

Vernon

Emergency Operations Center .....	257-0709
Fax.....	257-5597
Emergency Management Director (Pager) .....	250-8098
Annette Roydon.....	254-0004
Fire Department (Non-emergency).....	254-2425
Mutual Aid.....	(603) 352-1100
Police Department.....	254-6962
Select Board Chair - Michael Courtemanche .....	254-3871
Elementary School .....	254-5373
Town Clerk's Office .....	257-0292

**TRANSPORTATION**

First Student, Inc. Brattleboro Office .....	257-1761
Gerdes Transportation .....	368-7458

**VERMONT FISH & WILDLIFE DEPARTMENT**

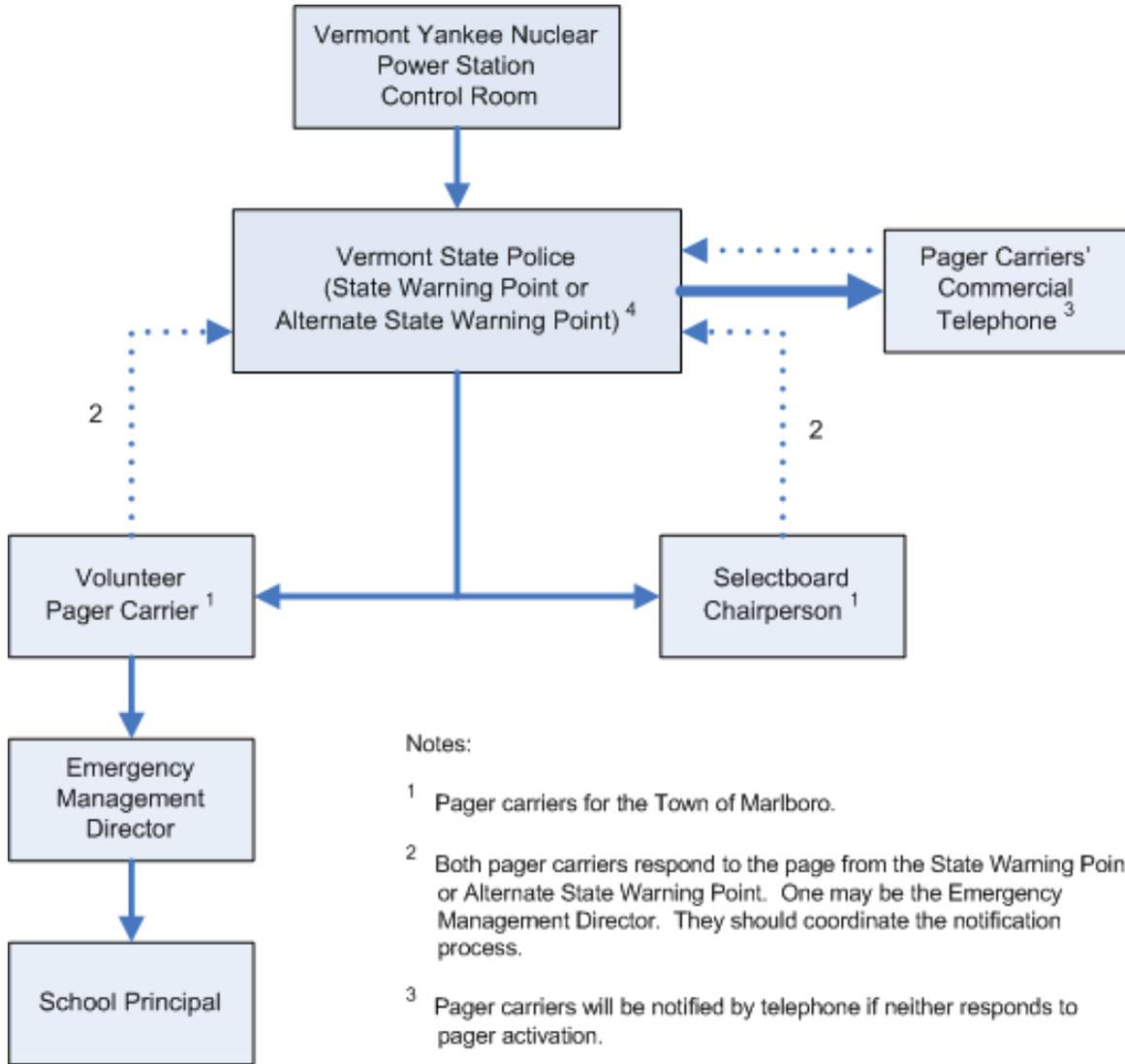
Local Representative .....	257-2814
Local Representative .....	257-2815

**VERMONT YANKEE**

Control Room.....	257-7711 (Extension 5270 or 5271)
Emergency Preparedness Manager .....	258-4183
Offsite Liaison .....	258-4168
Fax .....	258-2145
Simulator Control Room.....	PROVIDED EACH DRILL
Site Recovery Manager.....	257-5271 (Ext 4886)
Emergency Planning Duty Officer (Leave message & phone #) .....	258-4111

**FIGURE 1**

**Notification Chart for Unusual Event**



Notes:

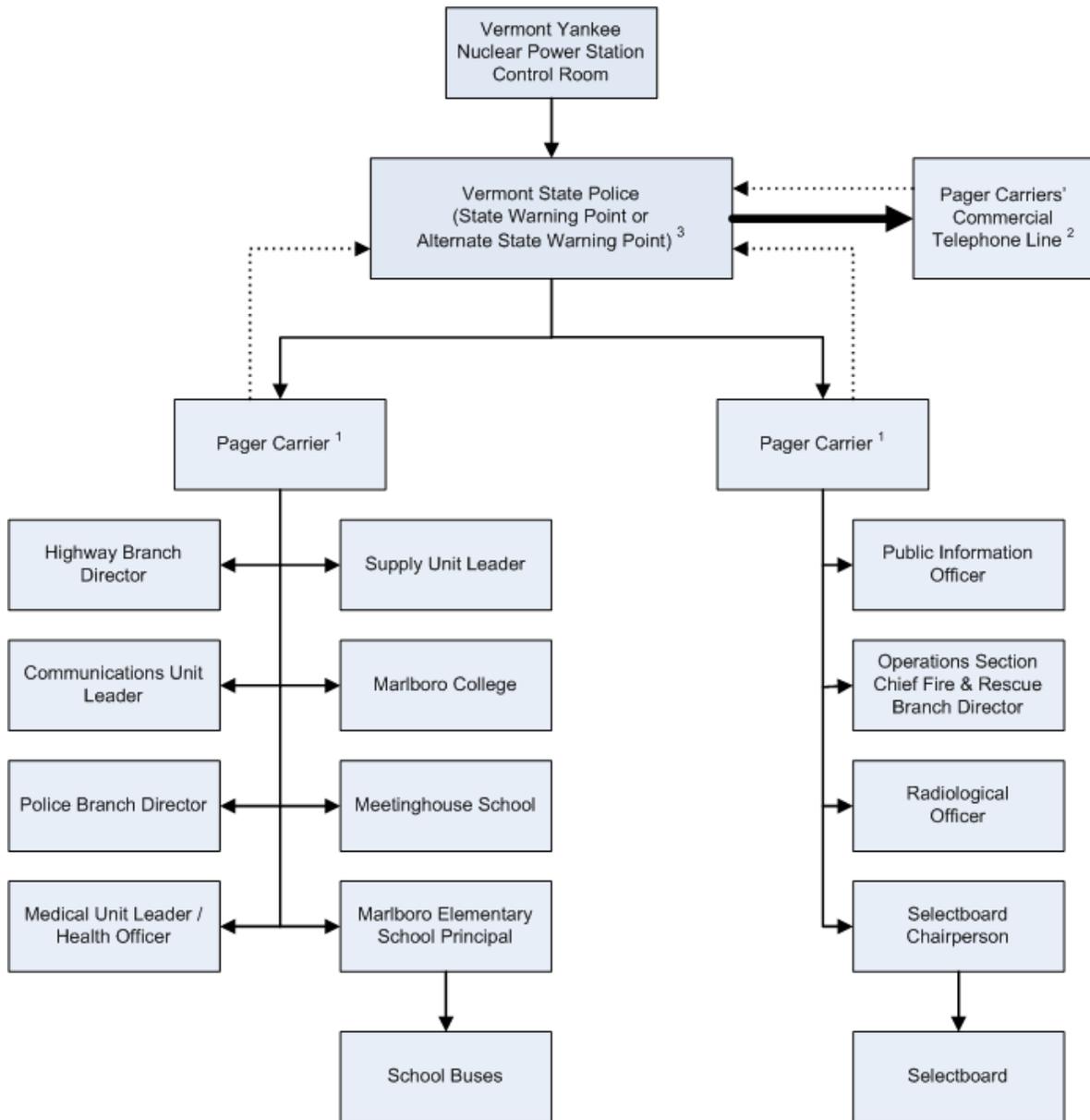
- 1 Pager carriers for the Town of Marlboro.
- 2 Both pager carriers respond to the page from the State Warning Point or Alternate State Warning Point. One may be the Emergency Management Director. They should coordinate the notification process.
- 3 Pager carriers will be notified by telephone if neither responds to pager activation.
- 4 If none of the town pager carriers responded to the page or notification by commercial telephone, the Alternate State Warning Point will dispatch uniformed law enforcement officers to the community to notify local officials.



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**FIGURE 2**

**Notification Chart for Alert, Site Area Emergency, and General Emergency**



Notes:

- <sup>1</sup> All pager carriers respond to the page from the State Warning Point or Alternate State Warning Point.
- <sup>2</sup> Pager carriers will be notified by commercial telephone if there is no response to pager activation.
- <sup>3</sup> If none of the town pager carriers responded to the page or notification by commercial telephone, the Alternate State Warning Point will dispatch uniformed law enforcement officers to the community to notify local officials.

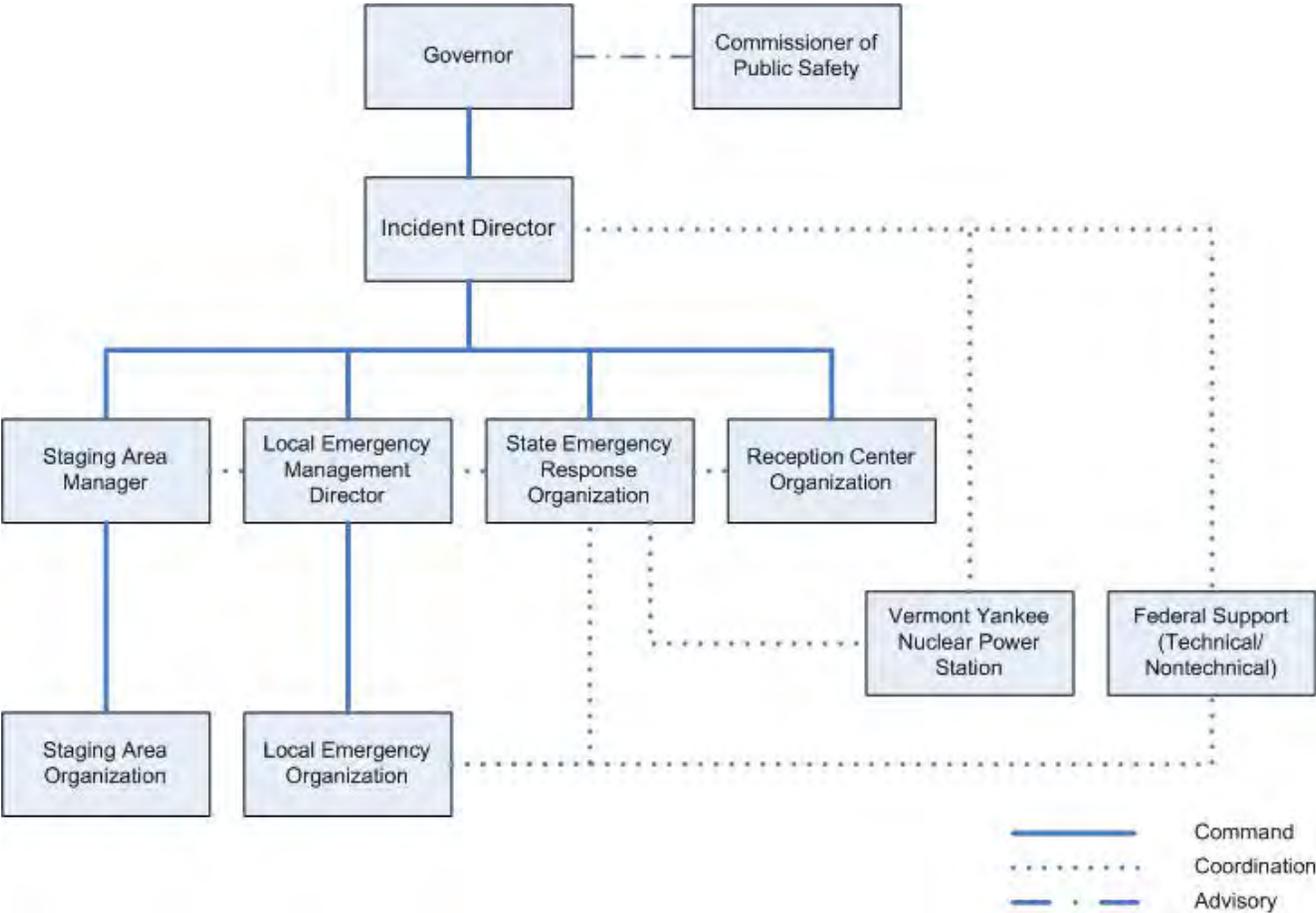


WHEN THE EMERGENCY OPERATIONS CENTER IS ACTIVATED, THE FIRST ARRIVING OFFICER WILL FOLLOW MARLBORO EMERGENCY OPERATIONS CENTER PROTOCOLS IN THE BINDER IN THE OFFICE.

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**FIGURE 3**

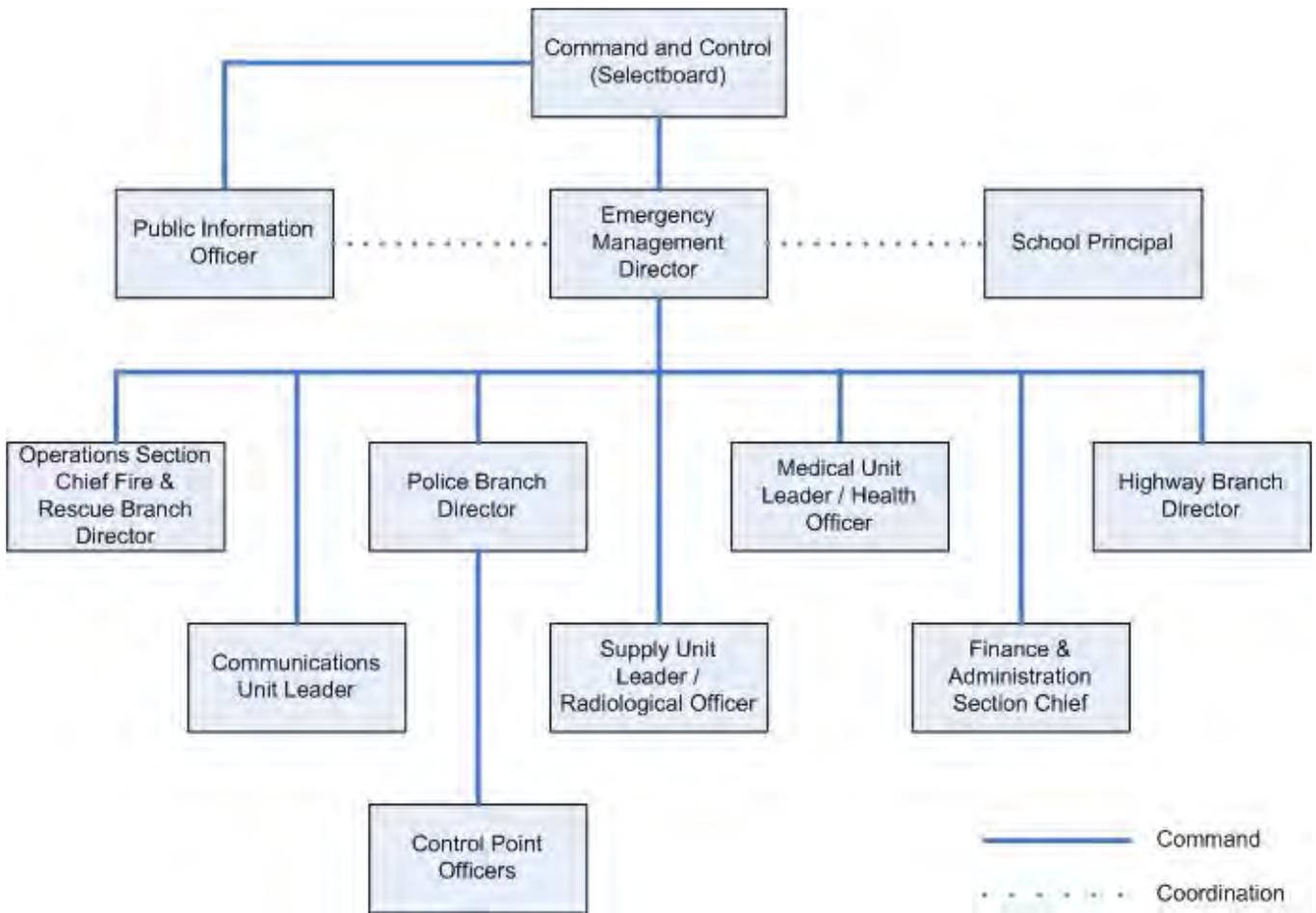
**State Emergency Response Organization Interface**



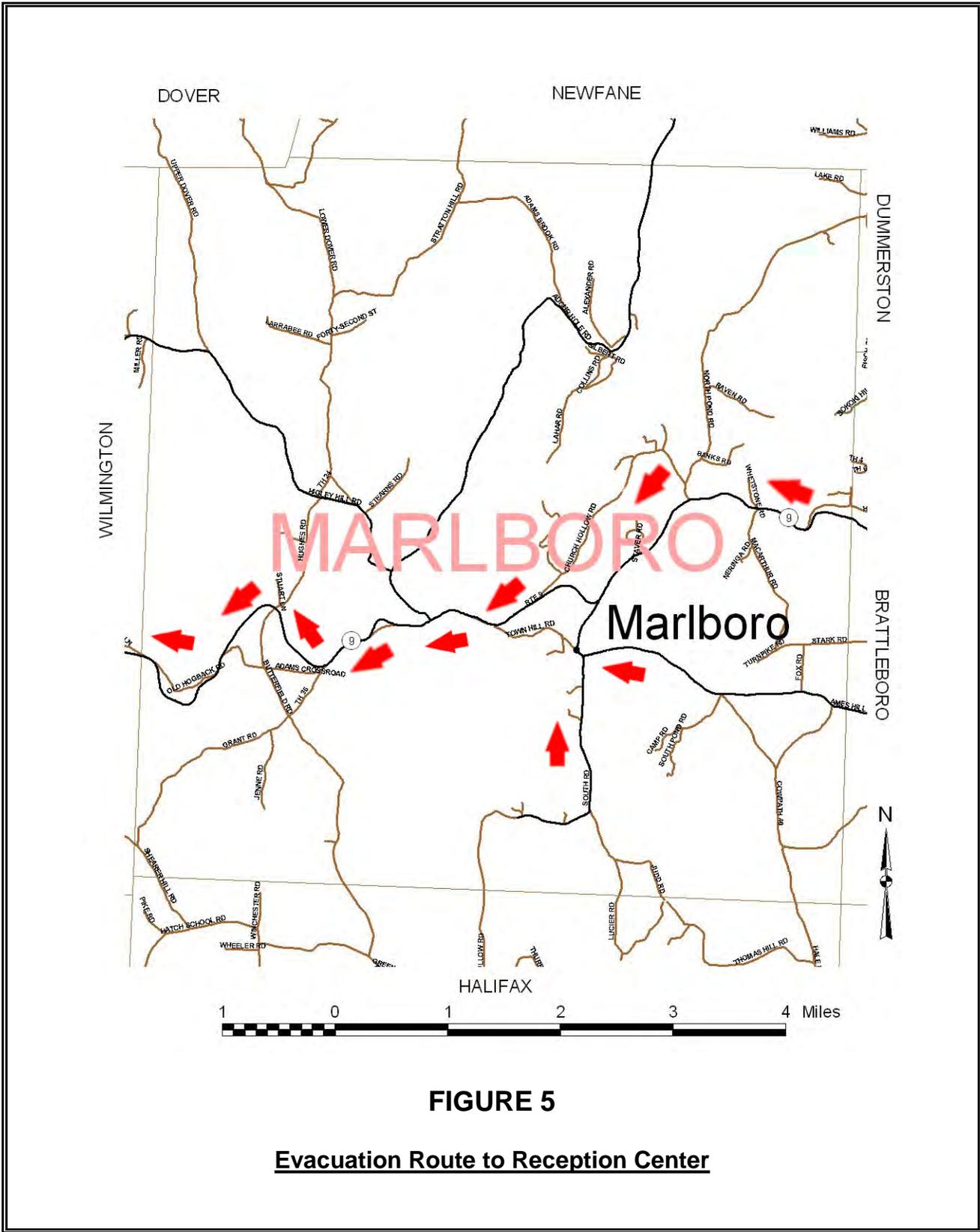
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**FIGURE 4**

**Local Emergency Response Organization**



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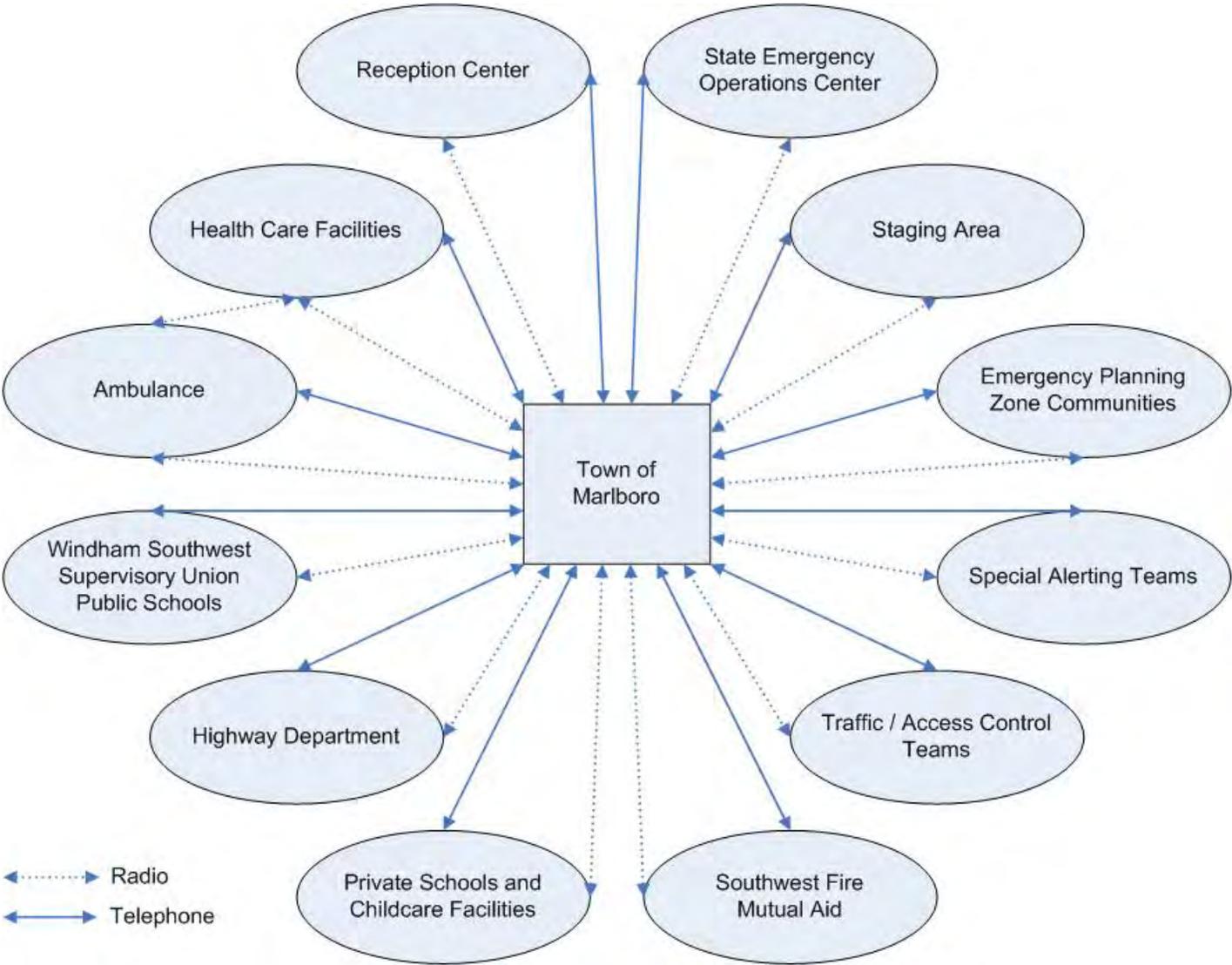
**FIGURE 5**

**Evacuation Route to Reception Center**

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**FIGURE 6**

**Communication Channels – Marlboro**



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**TABLE 1**

**Staff Notification**

Emergency Response Organization staff notification for the Town of Marlboro is listed in the Marlboro Plan Addendum. The primary for each position should be contacted. If the primary is unavailable, contact the alternate. If the alternate becomes the first shift responder, then direct the primary to be the second shift responder. If there is a shortage of personnel, contact the State Emergency Operations Center for assistance.

Other Emergency Telephone Listings are located in the Marlboro Plan Addendum.

The notification lists are confidential. They are updated by the town on a quarterly basis and will be replaced without requiring a change to this plan. They will be maintained at the Town Emergency Operations Center. A courtesy copy will be provided to Vermont Emergency Management in Waterbury.

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**Table 2**  
**Assignment of Responsibility**

Note: \* = Local

1	Command and Control	Selectboard*
2	Warning and Evacuation	Pager Carriers * Emergency Management Director * Fire Department * Vermont Emergency Management
3	Communications	Communications Unit Leader *
4	Public Health and Sanitation	Medical Unit Leader / Health Officer * Highway Branch Director * Supply Unit Leader / Radiological Officer * Vermont Department of Health
5	Fire	Fire Department *
6	Rescue	Fire Department *
7	Law Enforcement	Windham County Sheriff Vermont Department of Public Safety Vermont National Guard
8	Traffic and Access Control	Windham County Sheriff Vermont Department of Public Safety
9	Public Works (Engineering)	Highway Branch Director * Vermont Agency of Transportation
10	Public Information	Public Information Officer * Town Clerk * Selectboard * State Emergency Operations Center Information Officer
11	Emergency Medical Services	Medical Unit Leader / Health Officer * Deerfield Valley Vermont Department of Health
12	Social Services	Selectboard * Vermont Agency of Human Services
13	Transportation	Highway Branch Director * Superintendent of Highways * Vermont Agency of Transportation
14	Radiological Assessment	Vermont Department of Health
15	Radiological Exposure Control	Supply Unit Leader / Radiological Officer * Medical Unit Leader / Health Officer * Selectboard * Vermont Department of Health
16	Protective Actions & Response	Emergency Management Director * Vermont Department of Health
17	Supply/Fiscal	Selectboard * Town Treasurer *

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<b>TABLE 3</b>	
<b><u>Emergency Operations Center Equipment - Marlboro</u></b>	
NOAA - Weather Alert Radio ( <i>tune to 162.425</i> )	Furnishings
Telephones	Backup Power
Computer-based workstation	Lighting
Photocopier	Ventilation
Facsimile Machine	Restroom
Status Board	Plume EPZ Map
Ingestion Pathway Agricultural Info Booklet	Special Needs Listing ( <i>confidential</i> )
<b>PLANS</b>	
<b>State Emergency Plans</b>	
State Plume Plan State Post Plume Plan Staging Area Plan Reception Center Plan Notification Manual Traffic and Access Control Manual	
<b>Town Emergency Plans</b>	
Special Facilities Plans Marlboro Elementary School Emergency Plan	
<b>Vermont Yankee</b>	
Emergency Action Level (EAL) Reference Manual Evacuation Time Estimate (ETE) Study	

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**TABLE 4**  
**Radiological Equipment - Marlboro**

The quantity of equipment items on hand may vary but the minimum required is:

	<u>Range</u>	<u>Quantity</u>
CDV 700 (Survey Meter)	0 - 50 mR/hr	2
CDV 715 (Survey Meter)	0 - 500 R/hr	2
CDV 730 or DCA 622 (SRPD) Direct Reading Dosimeters (DRD)	0 -20 R	30
CDV 750 (Dosimeter Charger)		2
Headset		2
TLD's or Dosimeter of Legal Record (DLR)		75
Potassium Iodide (KI) 14 per package		6

Each emergency worker should be issued a 0-20 R self-reading dosimeter and Dosimeter of Legal Record in the emergency worker packet.

Additional dosimeters or monitoring equipment may be available at the Emergency Operations Center for other hazards that may be encountered by the town. Additional dosimeters or monitoring equipment may be requested through the Staging Area.

**CDV-700 SURVEY METER** - is a low-range instrument that measures gamma dose rates and detects the presence of beta. It can be used in decontamination operations, personnel monitoring and to determine the degree of contamination in food and water.

**CDV-715 SURVEY METER** - will measure gamma dose rates only. It is designed (1) for ground survey and (2) for use in fallout monitoring stations and shelters.

**CDV- 717 SURVEY METER**- is a CDV-715 with a removable ionization chamber attached to 25 feet of cable.

**DIRECT READING DOSIMETERS (DRD)** - are used to measure your body's accumulated exposure to radiation. There may be different brands and styles.

**CDV- 750 DOSIMETER CHARGER** - is used to charge or "ZERO" the dosimeter.

*NOTE: Comparable commercial models may be substituted for any of the above equipment.*

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**TABLE 5**  
**List of Communications Equipment - Marlboro**

<b>UNIT</b>	<b># of Units</b>	<b>DEPARTMENT</b>	<b>FREQUENCY</b>
<b>BASE</b>	1	Fire (Town, Tac IV, and Southwestern New Hampshire District Fire Mutual Aid)	154.115, 154.010, & 154.430
	1	Emergency Management	45.52 (EOC)
	1	Weather Alert Radio <i>(also in Table 3)</i>	162.425
<b>MOBILES</b>	9	Fire	154.115, 154.010, & 154.430
	6	Highway	154.115 & 154.430
	3	School and Buses	154.115, 154.010, & 154.430
<b>PORTABLES</b>	5	Fire	Multi-frequency including 154.010 & 154.430
	4	EM / Fire	Multi-frequency including 154.010 & 154.430
	0	Highway	153.785
<b>CELLULAR PHONES</b>			

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**TABLE 6**  
**Recommended Protective Action Guidelines (PAG's) for the Plume Exposure Pathway**

**Protective Action Guideline (Projected Dose to the Population)**

**Total Effective Dose Equivalent (TEDE) less than 1 Rem (<1 Rem)  
 Committed Dose Equivalent (CDE) to the Thyroid less than 5 Rem (<5 Rem)**

**Recommended Actions**

No planned protective action. State may issue an advisory to seek shelter and await further instructions. Monitor environmental radiation levels.

**Comments**

No specific minimum level is established for initiation of sheltering. Sheltering should be considered at projected doses below PAG's (1 Rem TEDE); however, implementing sheltering at very low levels may not be reasonable (e.g., less than 0.1 Rem [ $<0.1$  Rem] TEDE).

**Protective Action Guideline (Projected Dose to the Population)**

**Total Effective Dose Equivalent (TEDE) greater than or equal to 1 Rem ( $\geq 1$  Rem)  
 Committed Dose Equivalent (CDE) to the Thyroid greater than or equal to 5 Rem ( $\geq 5$  Rem)**

**Recommended Actions**

Conduct evacuation (or, some situations, sheltering) of populations in the predetermined area. Monitor environmental radiation levels and adjust area for evacuation or sheltering based on these levels. Control access.

**Comments**

Sheltering would be an alternative if evacuation is not immediately possible. Sheltering also may be the preferred protective action when it will provide protection equal to or greater than evacuation due to the nature of release composition from plant or other off-site-specific conditions (e.g., presence of severe weather, competing disaster and local physical factors that impede evacuation).

**Source:** EPA 400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, Revised 1991, Section 2.3, Page 2-4.

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<b>TABLE 7</b>	
<b><u>Representative Shielding Factors From A Gamma Cloud Source</u></b>	
<b>Structure or Location</b>	<b>Shielding Factor <sup>a</sup></b>
Outside	1
Vehicles	1
Wood-Frame House <sup>b</sup> (No Basement)	0.9
Basement of Wood House	0.6 <sup>c</sup>
Masonry House (No Basement)	0.6 <sup>c</sup>
Basement of Masonry House	0.04 <sup>c</sup>
Large Office or Industrial Building	0.02 <sup>c,d</sup>
<p><sup>a</sup> The ratio of interior dose to exterior dose.</p> <p><sup>b</sup> A wood frame house with brick or stone veneer is approximately equivalent to a masonry house for shielding purposes.</p> <p><sup>c</sup> There is variation in the shielding factor due to different wall materials and different geometries.</p> <p><sup>d</sup> The shielding factor depends on where personnel are located within a building, e.g., the basement or an inside room.</p>	
<p><b>SOURCE:</b> FRMAC Assessment Manual, Vol. 2, Table 3.6, dated September 1996</p>	

Radiation shielding is the primary concern of any radioactive plume. Shielding is accomplished by placing mass between people and the radioactive plume. Nuclear radiation is attenuated or weakened by the ionization process. Each time an alpha particle, beta particle, or gamma photon comes in contact with an atom, the radiation causes an electron to leave the atom's orbit, through attraction, repulsion or propulsion. Each time this electron interaction process occurs, the radiation loses a little of its energy. This happens whenever radiation comes in contact with, and attempts to pass through, any type of mass. The amount of radiation attenuation that occurs depends on the type and thickness of the material and the particular type of radiation that is attempting to penetrate the mass.

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**TABLE 8****Representative Shielding Factors for Surface Deposition**

<b>Structure or Location</b>	<b>Representative Shielding Factor <sup>a</sup></b>
Cars on Fully Contaminated Road	0.5
Cars on Fully Contaminated 50 ft. Road	0.25
Trains	0.4
One- and Two-story Wood-frame House (No Basement)	0.4 <sup>b</sup>
One- and Two-story Block and Brick House (No Basement)	0.2 <sup>b</sup>
House Basement, One or Two Walls Fully Exposed	0.1 <sup>b</sup>
One Story, Less Than 2 feet of Basement Walls Exposed	0.05 <sup>b</sup>
Two Stories, Less Than 2 feet of Basement Walls Exposed	0.03 <sup>b</sup>
Three- or Four-story Structures, 5,000 to 10,000 sq. ft. per Floor:	
• First and Second Floors	0.05 <sup>b</sup>
• Basement	0.01 <sup>b</sup>
Multi-story Structures, >10,000 sq. ft. per Floor:	
• Upper Floors	0.01 <sup>b</sup>
• Basement	0.005 <sup>b</sup>

<sup>a</sup> The ratio of the interior dose to the exterior dose

<sup>b</sup> Away from doors and windows

**Source:** FRMAC Assessment Manual, Vol. 2, Table 3.7, dated September 1996

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**TABLE 9****Recommended Doses of Potassium Iodide**

<b>Risk Group</b>	<b>Potassium Iodide Dose (milligrams)</b>	<b>Number of 130 mg Tablets</b>	<b>Number of 65 mg Tablets</b>
Adults over 18 years	130	1	2
Pregnant or lactating women	130	1	2
Children over 13 through 18 years *	65	1/2	1
Children over 3 through 12 years	65	1/2	1
Children over 1 month through 3 years	32	1/4	1/2
Birth through 1 month	16	1/8	1/4

*\* Adolescents approaching adult size (greater than or equal to 154 pounds) should receive the full adult dose of 130 milligrams (mg).*

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**TABLE 10****Recommended Guidance on Dose Limits for Emergency Team Workers**

<b>Dose Limit <sup>(1)</sup></b>	<b>Work Activity</b>	<b>Comments</b>
5 Rem Total Effective Dose Equivalent (TEDE)	All	Maintain ALARA <sup>(2)</sup> and control exposure of team members to extent practicable to these levels. (Appropriate controls for emergency workers will include time limitations, respirators, and stable iodine.)
10 Rem Total Effective Dose Equivalent (TEDE)	Protecting Valuable/ Essential Property	Lower dose not practicable. (Appropriate controls for emergency workers will include time limitations, respirators, and stable iodine.) Knowledgeable volunteers will be used whenever possible.
25 Rem Total Effective Dose Equivalent (TEDE)	Lifesaving or Protection of Large Population	Control exposure of emergency team members performing lifesaving missions to this level. (Control of time of exposure will be most effective.) Knowledgeable volunteers will be used whenever possible.
Greater than 25 Rem Total Effective Dose Equivalent (TEDE)	Lifesaving or Protection of Large Population	Only on a voluntary basis to persons fully aware of the risks involved. This includes the numerical levels of dose at which acute effects of radiation will be incurred and numerical estimates of the risk of delayed effects.

<sup>(1)</sup> NOTE: Emergency dose limits for the lens of the eye and for any organ (including skin and extremities) are three and ten times the listed values, respectively.

<sup>(2)</sup> NOTE: As Low As Reasonably Achievable (ALARA). The radiation protection philosophy of minimizing radiation exposure to the lowest practical level.

**Source:** EPA 400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, Revised 1991, Section 2.5, Page 2-9.

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## **GLOSSARY OF COMMONLY USED TERMS**

**ACCESS CONTROL** The establishment of roadblocks, road barriers, or other means to control public entry into designated areas.

**ACCESS CONTROL POINT (ACP)** A key intersection or area of road designated to restrict traffic into and within the Plume Exposure Pathway.

**AGRICULTURAL FACILITY** Any building or tract of land used for producing crops and/or raising livestock and in varying degrees the preparation and marketing of these commodities.

**ALARA** As defined in Title 10, Section 20.1003, of the *Code of Federal Regulations* (10 CFR 20.1003), ALARA is an acronym for "as low as (is) reasonably achievable," which means making every reasonable effort to maintain exposures to ionizing radiation as far below the dose limits as practical, consistent with the purpose for which the licensed activity is undertaken, taking into account the state of technology, the economics of improvements in relation to state of technology, the economics of improvements in relation to benefits to the public health and safety, and other societal and socioeconomic considerations, and in relation to utilization of nuclear energy and licensed materials in the public interest.

**ALERT** An emergency classification which indicates events are in progress or have occurred that involve an actual or potential substantial degradation in the level of plant safety OR a security event that involves probable life-threatening risk to site personnel or damage to site equipment due to hostile action. Releases are expected to be limited to small fractions of the U.S. Environmental Protection Agency (EPA) Protective Action Guidelines (PAG's) exposure levels.

**ALTERNATE STATE WARNING POINT** A place that can receive and transmit emergency notification messages should communications at the State Warning Point fail.

**ALPHA PARTICLE** A positively charged particle ejected spontaneously from the nuclei of some radioactive elements. It is identical to a helium nucleus that has a mass number of 4 and an electrostatic charge of +2. It has low penetrating power and a short range of a few centimeters in air. The most energetic alpha particle will generally fail to penetrate the dead layers of cells covering the skin, and can be easily stopped by a sheet of paper. Alpha particles are hazardous when an alpha-emitting isotope is inside the body.

**BACKGROUND RADIATION** The natural radiation that is always present in the environment. It includes cosmic radiation that comes from the sun and stars, terrestrial radiation that comes from the Earth, and internal radiation that exists in all living things. The amount of background radiation a person receives is dependent upon a variety of factors such as geographical location and the altitude of the city in which the individual lives. On average, a person living in the United States receives about 620 mrem per year from exposure to background radiation.

**BETA PARTICLE** A charged particle with a mass equal to  $1/1837$  that of a proton that is emitted from the nucleus of a radioactive element during radioactive decay or disintegration of an unstable atom. A negatively charged beta particle is identical to an electron, while a positively charged beta particle is called a positron. Beta particles may be stopped by thin sheets of metal or plastic.

**BOILING WATER REACTOR (BWR)** A common nuclear power reactor design in which water flows upward through the core where it is heated by fission and allowed to boil in the reactor vessel. The resulting steam then drives turbines that activate generators to produce electrical power. BWRs operate similarly to electrical plants using fossil fuel, except that the BWRs are powered by 370–800 nuclear fuel assemblies in the reactor core.

**BUFFER ZONE** An area adjacent to a restricted zone that residents may enter, but requires protective measures to minimize exposure to radiation.

**CANCELLATION** Cessation of school activities until further notice.

**CLADDING** The thin-walled metal tube that forms the outer jacket of a nuclear fuel rod. It prevents corrosion of the fuel by the coolant and the release of fission products into the coolant. Aluminum, stainless steel, and zirconium alloys are common cladding materials.

**COLD SHUTDOWN** The term used to define a reactor coolant system at atmospheric pressure and at a temperature below 200 degrees Fahrenheit following a reactor cool down.

**CONDENSER** A large heat exchanger designed to cool exhaust steam from a turbine below the boiling point so that it can be returned to the heat source as water. In a boiling-water reactor, it returns to the reactor core. The heat removed from the steam by the condenser is transferred to a circulating water system and is exhausted to the environment either through a cooling tower or directly into a body of water.

**CONGREGATE CARE** The support function that provides shelter, food, and other essential services for evacuees.

**CONGREGATE CARE CENTER (CCC)** A facility for temporary housing, care, and feeding of evacuees.

**CONTAINMENT BUILDING** The reinforced concrete, gas-tight shell or other enclosure around a nuclear reactor and essential plant systems to confine fission products that otherwise might be released to the atmosphere in the event of an accident.

**CONTAMINATION** Undesirable radiological, chemical, or biological material with a potentially harmful effect that is airborne, deposited in, or on the surface of structures, objects, soil, water, or living organisms in a concentration that makes the medium unfit for its next intended use.

**CONTROL ROD** A rod, plate, or tube containing a material such as hafnium or boron used to control the power of a nuclear reactor. By absorbing neutrons, a control rod prevents the neutrons from causing further fissions.

**CONTROL DOSIMETRY** Device used to measure background radiation during a storage period.

**COOLANT** A substance circulated through a nuclear reactor to remove or transfer heat. The most commonly used coolant in the United States is water. Other coolants include heavy water, air, carbon dioxide, helium, liquid sodium, and a sodium-potassium alloy.

**CORE** The central portion of a nuclear reactor that contains the fuel assemblies, moderator, control rods, and support structures. The reactor core is where fission takes place.

**CORE MELT ACCIDENT** An event or sequence of events that result in the melting of part of the fuel in the reactor core.

**DECAY HEAT** The heat produced by the decay of radioactive fission products after a reactor has been shut down.

**DECONTAMINATION** A process used to reduce, remove, or neutralize radiological, chemical, or biological contamination to reduce the risk of exposure. Decontamination may be accomplished by cleaning or treating surfaces to reduce or remove the contamination, filtering contaminated air or water, subjecting contamination to evaporation and precipitation, or covering the contamination to shield or absorb the radiation. The process can also simply allow adequate time for natural radioactive decay to decrease the radioactivity.

**DERIVED RESPONSE LEVEL** A calculated radionuclide concentration in foodstuffs, milk, and water, which if ingested without any protective actions, would result in a projected dose commitment equivalent to the preventive or emergency Protective Action Guidelines.

**DIRECT READING DOSIMETER (DRD)** A pen-like device that measures the cumulative dose of ionizing radiation received by the device. It is usually clipped to a person's clothing and worn to measure one's actual exposure to radiation.

**DOSE** A general term, which may be used to refer to the amount of energy absorbed by an object or person per unit mass. Known as the "absorbed dose," this reflects the amount of energy that ionizing radiation sources deposit in materials through which they pass, and is measured in units of radiation-absorbed dose (rad). The related international system unit is the gray (Gy), where 1 Gy is equivalent to 100 rad. By contrast, the biological dose or dose equivalent, given in rems or sieverts (Sv), is a measure of the biological damage to living tissue as a result of radiation exposure.

**DOSE RATE** The dose of ionizing radiation delivered per unit time. For example, rems or sieverts (Sv) per hour.

**DOSIMETER CHARGER** A device used to zero direct reading dosimeters prior to issuance.

**DOSIMETRY** Devices used to calculate the absorbed dose in matter and tissue resulting from indirect and direct exposure to ionizing radiation.

**DOSIMETRY PACKET** A package that contains dosimetry, a potassium iodide information card, and forms for measuring and documenting the workers exposure to radiation.

**DRILL** A supervised instruction period aimed at developing and maintaining skills in emergency response.

**EMERGENCY ACTION LEVELS (EAL's)** A pre-determined, site-specific, observable threshold for a plant condition that places the plant in an emergency class. The thresholds are based upon specific instrument readings, system abnormalities, event observation, or radiological levels.

**EMERGENCY ALERT SYSTEM (EAS)** A national warning system in the United States put into place in 1997 superseding the Emergency Broadcast System (EBS) and the CONELRAD System. It is jointly coordinated by the Federal Communications Commission (FCC), Federal Emergency Management Agency (FEMA), and National Weather Service (NWS).

**EMERGENCY CLASSIFICATION LEVEL (ECL)** Sets of plant conditions that indicate various levels of risk to the public and which might require response by an offsite emergency response organization to protect citizens near the site. Each level triggers a set of predetermined actions by the off-site Emergency Response Organization. The four levels in ascending severity are:

NOTIFICATION OF UNUSUAL EVENT  
ALERT  
SITE AREA EMERGENCY  
GENERAL EMERGENCY

**EMERGENCY CORE COOLING SYSTEM (ECCS)** Reactor system components (pumps, valves, heat exchangers, tanks, and piping) that are specifically designed to remove residual heat from the reactor fuel rods should the normal core cooling system (reactor coolant system) fail.

**EMERGENCY OPERATIONS CENTER (EOC)** A central command and control facility responsible for carrying out the principles of emergency management or disaster management functions at a strategic level in an emergency situation, and ensuring the continuity of operation of a company, political subdivision or other organization.

**EMERGENCY OPERATIONS FACILITY (EOF)** A licensee controlled and operated offsite support center with facilities for management of overall licensee emergency response, coordination of radiological and environmental assessment, determination of recommended public protective actions, and coordination of emergency response activities with Federal, State, and local agencies.

**EMERGENCY PLANNING ZONE (EPZ)** The 10 mile radius that surrounds all U.S. nuclear power plants. The people living in this area could be exposed to radiation from a radioactive plume if it is released from a plant during an emergency. Additionally, the 50 mile radius ingestion pathway Emergency Planning Zone is the area where it would be possible for radiological contamination of crops, agricultural products, land, and surface water to occur.

**EMERGENCY RESPONSE ORGANIZATION** A combination of local, state, federal, and private agencies that implement emergency response procedures.

**EXCLUSION AREA** The area established to control access to a previously evacuated area. It is established to control the spread of contamination and provide security.

**EVACUATION** The act of moving individuals and animals away from the path of the plume to avoid exposure to airborne radioactive material.

**EVACUATION ROUTES** Those roadways identified in state and local plans as the principal routes leading away from the plume exposure pathway Emergency Planning Zone in the event of an accident requiring evacuation.

**EXERCISE** An evaluated event involving response to a simulated emergency. The purpose of an exercise is to evaluate integrated responses of all or a portion of the components in an emergency response organization. Exercises also help to clarify roles and responsibilities, improve interagency coordination, find resource gaps, develop individual performance, and identify opportunities for improvement.

**EXPOSURE LIMIT** An upper limit on the acceptable amount of radiation dose an individual may receive.

**FUEL ASSEMBLIES** A structured group of fuel rods. Depending on the design, a reactor vessel may have dozens of fuel assemblies (also known as fuel bundles) which may contain 200 or more fuel rods.

**FUEL RODS** A long, slender, zirconium metal tube containing pellets of fissionable material that provide fuel for nuclear reactors. Fuel rods are assembled into bundles called fuel assemblies that are loaded individually into the reactor core.

**GAMMA RADIATION** High energy, short wavelength, electromagnetic radiation emitted from the nucleus of an atom. Gamma radiation frequently accompanies alpha and beta emissions and is always present during the fission process. Gamma rays are very penetrating and are best stopped or shielded by dense materials such as lead or depleted uranium. Gamma rays are similar to x-rays.

**GENERAL EMERGENCY (GE)** An emergency classification which indicates that events are in process or have occurred that involve actual or imminent substantial core degradation or melting, with potential for loss of containment integrity OR hostile action that results in an actual loss of physical control of the facility. Releases can reasonably be expected to exceed Environmental Protection Agency Protective Action Guidelines exposure levels off-site beyond the immediate site area.

**HALF-LIFE** The time in which one half of the atoms of a particular radioactive substance disintegrate into another nuclear form. Measured half-lives vary from millionths of a second to billions of years.

**HOST FACILITY** Any facility outside of the Emergency Planning Zone to which individuals in special needs facilities or residents are evacuated.

**INGESTION PATHWAY EMERGENCY PLANNING ZONE** The area with a 50 mile radius where it would be possible for radiological contamination of crops, agricultural products, land, and surface water to occur.

**INITIAL NOTIFICATION** The first communication from the Vermont Yankee Nuclear Power Station Control Room to the off-site Emergency Response Organization that an incident has occurred.

**IONIZING RADIATION** A form of radiation which includes alpha particles, beta particles, gamma rays, x-rays, neutrons, high-speed electrons, high-speed protons, and other particles capable of producing ions. When ionizing radiation passes through material such as air, water, or living tissue, it deposits enough energy to produce ions by breaking molecular bonds and displacing or removing electrons from atoms or molecules. This electron displacement may lead to changes in living cells.

**ISOTOPE** Two or more forms of a given element that have the same number of protons in their nucleus and the same or very similar chemical properties, but a different number of neutrons in their nucleus and distinct physical properties.

**LOSS OF COOLANT ACCIDENT (LOCA)** Those postulated accidents that result in a loss of reactor coolant at a rate in excess of the capability of the reactor makeup system resulting from breaks in the reactor coolant pressure boundary up to and including a break equivalent in size to the double-ended rupture of the largest pipe of the reactor coolant system.

**MELT DOWN** A term that is neither recognized by the International Atomic Energy Agency nor by the U.S. Nuclear Regulatory Commission, but is used in certain circles to describe a severe nuclear reactor incident that results in core damage. This can occur when a severe, compounded failure of a nuclear power plant system or components causes the reactor core to cease being properly cooled to the extent that the sealed nuclear fuel assemblies begin to overheat and melt. A meltdown is considered very serious because of the possibility that the reactor containment could be defeated, thus releasing the core's radioactive and toxic elements into the atmosphere and environment.

**MILLIREM (mR or mr)** A radiation measurement equivalent to one-thousandth of a REM.

**MONITORING** Periodic or continuous determination of the amount of ionizing radiation or radioactive contamination in an area.

**NATIONAL WEATHER SERVICE (NWS)** The National Weather Service is a subordinate agency of NOAA. The office located in Albany, New York is responsible for the activation of the NOAA weather alert radios in the event of an emergency at Vermont Yankee Nuclear Power Station and providing weather services for the two southern counties in Vermont. The office located at the Burlington International Airport provides service to the remainder of Vermont.

**NATIONAL WARNING SYSTEM (NAWAS)** A system used to convey warnings to United States-based federal, state and local governments as well as the military and civilian population. The original mission of NAWAS was to warn of an imminent enemy attack or an actual accidental missile launch upon the United States. NAWAS still supports this mission but the emphasis is on natural and technological disasters.

**NEWS MEDIA / JOINT INFORMATION CENTER** A co-located group of representatives from local, state, federal, and private organizations designated to handle public information needs during an event. An area has been designated at the Vermont Yankee corporate headquarters to perform this function.

**NOAA** A scientific agency within the United States Department of Commerce focused on the conditions of the oceans and atmosphere. It is the parent agency for the National Weather Service that activates weather alert radios. The acronym stands for **N**ational **O**ceanic and **A**tmospheric **A**dministration.

**NOTIFICATION OF AN UNUSUAL EVENT** An emergency classification that indicates that events are in process or have occurred that indicate a potential degradation in the level of plant safety or a security threat to facility protection. No releases of radioactive material requiring off-site response or monitoring are expected unless further degradation of safety systems occurs.

**NUCLEAR ALERT SYSTEM (NAS)** A dedicated microwave system utilized as the primary means of communication between the state and Vermont Yankee Nuclear Power Station during an emergency.

**NUCLEAR REACTOR** The heart of a nuclear power plant in which nuclear fission may be initiated and controlled in a self-sustaining chain reaction to generate energy or produce useful radiation. Although there are many types of nuclear reactors, they all incorporate certain essential features including the use of fissionable material as fuel, a moderator such as water to increase the likelihood of fission unless reactor operation relies on fast neutrons, a reflector to conserve escaping neutrons, coolant provisions for heat removal, instruments for monitoring and controlling reactor operation, and protective devices such as control rods and shielding.

**NUCLIDE** A general term referring to all known isotopes of the chemical elements both stable (279) and unstable (about 2,700).

**OFF-SITE** The area outside the authority of the nuclear facility licensee.

**ON-SITE** The area under the authority of a nuclear facility licensee.

**PERMANENT RESIDENT POPULATION** All members of the public who reside in the ten mile Emergency Planning Zone.

**PLANNING BASIS** Guidance in terms of size of the planning area (distance), time dependence of a release, and radiological characteristics of releases.

**PLUME** A visible or measurable discharge of a contaminant from a given point of origin. In the case of a nuclear power plant, the contaminant consists of radioactive particles and gases.

**PLUME EXPOSURE PATHWAY** An area 10 miles in radius from a nuclear power plant where the principal dose is received from external whole body exposure to gamma radiation from the plume and from deposited materials as well as inhalation exposure from the passing radioactive material.

**POTASSIUM IODIDE (KI)** A thyroid blocking agent that prevents the accumulation of radioiodine in the thyroid gland by blocking its absorption using stable (nonradioactive) iodine.

**PRECAUTIONARY ACTION** An action taken in advance to protect against plant conditions or other hazards that may escalate faster than the public's ability to react. This action is designed to protect people, animals, and the environment.

**PRECAUTIONARY TRANSFER** The movement of one or more segments of the population to a reception center or host facility prior to an evacuation of the general public. Likely population segments include children in schools, child care centers, and patients in health care facilities.

**PREVENTATIVE PROTECTIVE ACTIONS** Things done to prevent or reduce contamination of milk, water, and/or food products. The FDA Protective Action Guides (PAG's) are 1.5 REM to the thyroid and 0.5 REM to the whole body.

**PROJECTED DOSE** An estimate of the radiation dose that affected population groups could potentially receive through direct exposure to the plume if protective actions are not taken.

**PROTECTIVE ACTIONS** Things done to reduce or eliminate the public's exposure to radiation or other hazards.

**PROTECTIVE ACTION GUIDELINE (PAG)** The projected dose to reference man, or other defined individual, from an unplanned release of radioactive material at which a specific protective action to reduce or avoid that dose is recommended.

**PROTECTIVE ACTION RECOMMENDATION (PAR)** Those actions to protect the health and safety of the general public in the event of an emergency that are recommended to the state by Vermont Yankee Nuclear Power Station.

**QUALIFIED REPRESENTATIVE** Designated, trained state agency representative with the authority to respond and act in the name of the agency in lieu of or until replaced by an agency head.

**RACES** Licensed volunteer Radio Amateur (HAM) Communications personnel equipped by and affiliated with the state and local Emergency Management Agencies. The acronym stands for **R**adio **A**mateur **C**ivil **E**mergency **S**ervice.

**RADIATION** Alpha particles, beta particles, gamma rays, x-rays, neutrons, high-speed electrons, high-speed protons, and other particles capable of producing ions.

**RADIOACTIVITY** The property possessed by some elements such as uranium to spontaneously emit energy in the form of radiation as a result of the decay or disintegration of an unstable atom. Radioactivity is also the term used to describe the rate at which radioactive material emits radiation. Radioactivity is measured in curies (Ci), Becquerels (Bq), or disintegrations per second.

**RADIOLOGICAL EMERGENCY RESPONSE PLAN ( RERP)** The State of Vermont emergency response plan to be implemented in the event of a radiological emergency at Vermont Yankee Nuclear Power Station.

**RADIOLOGICAL OFFICER** A person who is responsible for radiological exposure control activities in a given community.

**REACTOR VESSEL** A pressure vessel containing the coolant, control rods, and reactor core.

**RECEPTION CENTER** A facility designated to provide evacuee and vehicle monitoring, decontamination, registration, assignment to congregate care facilities, and reunification assistance. Bellows Falls Union High School (BFUHS) located in the town of Westminster, VT has been designated as the Vermont Reception Center.

**RECOVERY** Refers to the process of reducing radiation exposure rates and concentrations of radioactive material in the environment to acceptable levels for return by the general public for unconditional occupancy or use after the emergency phase of a radiological event.

**RE-ENTRY** The temporary entry into a restricted zone under controlled conditions (i.e., to allow a farmer care for livestock).

**RELOCATION** A protective action that occurs in the post-emergency phase whereby individuals not already evacuated during the emergency phase are asked to vacate a contaminated area to avoid chronic radiation exposure from deposited radioactive material.

**REM** One of the two standard units used to measure the dose equivalent that combines the amount of energy from any type of ionizing radiation that is deposited in human tissue, along with the medical effects of the given type of radiation. For beta and gamma radiation, the dose equivalent is the same as the absorbed dose. By contrast, the dose equivalent is larger than the absorbed dose for alpha and neutron radiation, because these types of radiation are more damaging to the human body. The acronym stands for **Roentgen Equivalent Man.**

**RESTRICTED ZONE** An area of controlled access from which the population has been evacuated or relocated.

**RETURN** The reoccupation of areas previously restricted to the public when the radiation risk has been reduced to acceptable levels.

**ROENTGEN (R)** A unit of exposure to ionizing radiation. It is the amount of gamma or x-rays required to produce ions resulting in a charge of 0.000258 coulombs / kilogram of air under standard conditions.

**ROUTE ALERTING** A supplement to the public notification system (siren system and tone alert radios) which is implemented in the event of a public notification system failure. It is accomplished by municipal route alert teams traveling in vehicles along pre-planned routes delivering a predetermined message.

**SAMPLING** The collection of material at specified field locations.

**SCRAM** The sudden shutting down of a nuclear reactor by the reactor operator, usually by rapid insertion of control rods, either automatically or manually. Also known as a reactor trip, SCRAM is actually an acronym for "**Safety Control Rod Axe Man," the worker assigned to insert the emergency rod on the first reactor (the Chicago Pile) in the United States.**

**SITE** The property owned by a utility in the immediate area of a nuclear power plant.

**SHELTER** A protective action advising the at-risk populations to go inside, or remain indoors, as protection from a potential or actual radiological release from a nuclear power plant.

**SHELTER-IN-PLACE** A process for taking immediate shelter during and following the passage of a radioactive plume in a location readily accessible to the affected individual by sealing a single area such as a room from outside contaminants and shutting off all ventilation systems.

**SHIELDING** Any material or obstruction that absorbs radiation and thus tends to protect personnel or materials from the effects of ionizing radiation.

**SITE AREA EMERGENCY (SAE)** An emergency classification which indicates events are in process or have occurred that involve actual or likely major failure in plant functions needed for protecting the public OR hostile action that results in intentional damage or malicious acts; toward site personnel or equipment that could lead to likely failure or would prevent effective access to equipment needed for the protection of the public. Releases are not expected to exceed Environmental Protection Agency Protective Action Guidelines exposure levels, except near the site boundary.

**SOURCE TERM** An estimate made by researchers of the amount and chemical form of a contaminant released to the environment from a specific source over a certain period of time. The phrase is used in risk assessment studies to refer to estimates of toxic chemicals and radioactive materials released from a source.

**SPECIAL ALERTING** Special Alerting is a supplement to weather alert radios and is used to provide emergency notification to "Special Needs" individuals, specific facilities, campgrounds, recreation areas, or geographic areas of concern.

**SPECIAL FACILITIES** Public and private schools, day care centers, nurseries, hospitals, nursing homes, or other facilities responsible for, or occupied by, at risk individuals.

**SPECIAL NEEDS POPULATION** Individuals in the general population who are unable to take protective actions on their own. These individuals may require transportation and/or assistance to move to a reception center or other facility located outside of the Emergency Planning Zone.

**STAGING AREA** A location established at or near an incident where resources can be placed while awaiting assignment. There may be more than one staging area for an incident.

**STANDBY STATUS** A term used to describe the level of readiness of emergency personnel. It indicates that personnel have been notified and are available to activate duty stations if called upon.

**STATE WARNING POINT (SWP)** The state designated point to receive initial notification of a radiological emergency from a nuclear power plant.

**SUPPORT AGENCIES** State, local, and private agencies that provide personnel, equipment, facilities, or special knowledge to support the implementation of an emergency response.

**SURVEY METER** Any portable radiation detection instrument especially adapted for inspecting an area or individual to establish the existence and amount of radioactive material present.

**TERMINATION** The act of canceling a declared emergency classification because all of the underlying conditions have been fixed and the plant is considered safe. In a lower level condition, the plant may continue to generate power, while at a higher level it may not. It includes notifying everyone that was previously notified of the initial declaration that the emergency classification is no longer valid.

**THERMOLUMINESCENT DOSIMETER (TLD)** A small device used to measure radiation by measuring the amount of visible light emitted from a crystal in the detector when exposed to ionizing radiation. It is a permanent record dosimeter used to measure total beta/gamma exposure. TLD's are not readable by the emergency worker and must be processed in a laboratory.

**THYROID BLOCKING** The use of potassium iodide (KI) or other suitable drug to saturate the thyroid gland with stable iodine and thereby prevent thyroid uptake of radioiodine.

**TRAFFIC CONTROL POINTS (TCP)** Any of a number of key route intersections within and around the plume exposure pathway Emergency Planning Zone designed to facilitate the flow of traffic in a desired direction while discouraging the flow of traffic in other directions. Traffic Control Points may sometimes double as Access Control Points to restrict entry into the plume exposure pathway Emergency Planning Zone.

**TRANSIENT POPULATION** That segment of the public residing outside the Emergency Planning Zone, but visiting or working at places inside it.

**TRANSPORTATION RESOURCES** Vehicles such as ambulances, buses, and trucks used for evacuation of nursing home residents, school staff, students, and other population groups.

**TURBINE** A rotary engine made with a series of curved vanes on a rotating shaft, usually turned by water or steam. Turbines are considered the most economical means to turn large electrical generators.

**UNMET NEEDS** Resources required to support emergency operations that were neither provided nor available.

**UNUSUAL EVENT (TERMINATED)** A condition that warrants an Unusual Event declaration, but was immediately rectified such that the condition no longer existed by the time of the declaration. The event or condition did not affect personnel on-site, the public off-site, or result in radioactive releases requiring off-site monitoring.

**VERIFICATION** The process of confirming the validity of a notification message or action to be taken.

**WAYPOINT** An intermediate location where special needs individuals are directed to the facility that will accommodate them until they can return to their normal housing.

**WTSA** The primary EAS radio station for the Vermont Yankee Emergency Planning Zone located in Brattleboro, Vermont.

**ACRONYMS**

ACP	Access Control Point
AHS	Agency of Human Services
ALARA	As Low As Reasonably Achievable
ANR	Agency of Natural Resources
AOT	Agency of Transportation
ARC	American Red Cross
CAP	Civil Air Patrol
CPCS-1	Common Program Control Station - 1
CPM	Counts Per Minute
CD	Civil Defense
DHS	Division of Human Services
DOA	(Vermont) Department of Agriculture
DOC	(U.S.) Department of Commerce
DOD	(U.S.) Department of Defense
DOE	(U.S.) Department of Energy
DOT	(Vermont) Department of Transportation
DRD	Direct Reading Dosimeter
DRL	Derived Response Level
EAS	Emergency Alert System
EMS	Emergency Medical Services
ECL	Emergency Classification Levels
EOC	Emergency Operations Center
EOF	Emergency Operations Facility
EWMDS	Emergency Worker Monitoring and Decontamination Station
EPA	Environmental Protection Agency
EPZ	Emergency Planning Zone
FDA	Food and Drug Administration
FEMA	Federal Emergency Management Agency
FRERP	Federal Radiological Emergency Response Plan
FRMAC	Federal Radiological Monitoring and Assessment Center
FRMAP	Federal Radiological Monitoring and Assessment Plan
GE	General Emergency
HHS	(U.S. Department of) Health and Human Services
IEP	Ingestion Exposure Pathway
IPZ	Ingestion Pathway Zone
JIC	Joint Information Center
KI	Potassium Iodide
mR	Milliroentgen
NAS	Nuclear Alert System
NAWAS	National Warning System
NIAT	Nuclear Incident Advisory Team
NOAA	National Oceanic and Atmospheric Administration of the U.S. Department of Commerce
NPS	Nuclear Power Station

NRC	Nuclear Regulatory Commission
NWS	National Weather Service
PAG	Protective Action Guides
PIO	Public Information Officer
R	Roentgen
RACES	Radio Amateur Civil Emergency Service
RAD	A measurement of radiation energy deposited in material
REM	Roentgen Equivalent Man
RERP	Radiological Emergency Response Plan
RM&D	Radiological Monitoring and Decontamination
SAE	Site Area Emergency
STSA	State Transportation Staging Area
TCP	Traffic Control Point
TDD	Telecommunications Device for the Deaf
TLD	Thermoluminescent Dosimeter
UE	Unusual Event
USAF	U.S. Air Force
USCG	U.S. Coast Guard
USDA	U.S. Department of Agriculture
VEM	Vermont Emergency Management
VHD	Vermont Health Department
VHDL	Vermont Health Department Laboratory
VTNG	Vermont National Guard
VY	Vermont Yankee
VYNPS	Vermont Yankee Nuclear Power Station
YAEC	Yankee Atomic Electric Company

Town of Marlboro Radiological Emergency Response Plan

NUREG-0654 Cross Reference

The following is a cross-reference of those elements outlined in NUREG-0654 to be addressed in this local response plan.

NUREG-0654/FEMA-REP-1 Planning Criteria	Plan Section/Reference
<p><b>A. Assignment of Responsibility</b></p> <ol style="list-style-type: none"> <li>1.               <ol style="list-style-type: none"> <li>a. Identify all response organizations for Emergency Planning Zones.</li> <li>b. Organization and sub-organization concepts of operations</li> <li>c. Interrelationships of organizations (block diagram)</li> <li>d. Identify the individual in charge of emergency response by title.</li> <li>e. Provide 24-hour emergency response and staffing of communication links.</li> </ol> </li> <li>2.               <ol style="list-style-type: none"> <li>a. Specify functions and responsibilities of major elements and essential individuals.</li> <li>b. Legal basis for authority</li> </ol> </li> <li>3. Written agreements and legal instruments</li> <li>4. 24 hour operations on a protracted basis and responsible official</li> </ol>	<p>4.D.; Figure 4; Table 1</p> <p>5.B; Table 1</p> <p>Figures 4</p> <p>5.A.</p> <p>4.B.(2) and F.(5); Table 4</p> <p>4.D.(2); Figure 5; Sec. V.C</p> <p>1</p> <p>6.A.(1)(b)</p> <p>6.A.(1)(a) and A.(1)(b); Table 4</p>

NUREG-0654/FEMA-REP-1 Planning Criteria	Plan Section/Reference
B. On-Site Emergency Organization	Not Applicable

<p>NUREG-0654/FEMA-REP-1 Planning Criteria</p>	<p>Plan Section/Reference</p>
<p><b>C. Emergency Response Support and Resources</b></p> <ul style="list-style-type: none"> <li>1. a. Persons by title authorized to request federal assistance</li> <li>    b. Federal resources expected</li> <li>    c. Resources to support federal response</li> <li>2. a. Representative at Emergency Operations Facility</li> <li>    b. Licensee representative at principal off-site Emergency Operations Centers (EOC's)</li> <li>3. Laboratories and capabilities</li> <li>4. Organizations, facilities, and individuals that can be used in an emergency</li> </ul>	<p>Not Applicable</p> <p>Not Applicable</p> <p>5.D.(1)(a) and D.(2)</p> <p>4.F.(4)</p> <p>Not Applicable</p> <p>Not Applicable</p> <p>5.D.</p>

<p>NUREG-0654/FEMA-REP-1 Planning Criteria</p>	<p>Plan Section/Reference</p>
<p><b>D. Emergency Classification System</b></p> <ol style="list-style-type: none"> <li>1. Establishment of Emergency Classification Levels and Emergency Action Levels by licensee</li> <li>2. Initiating conditions</li> <li>3. Emergency classification and emergency action level scheme established consistent with utility</li> <li>4. Procedures on emergency actions</li> </ol>	<p>Not Applicable</p> <p>Not Applicable</p> <p>4.A.</p> <p>4.D.(2) and D.(3)</p>

<p>NUREG-0654/FEMA-REP-1 Planning Criteria</p>	<p>Plan Section/Reference</p>
<p><b>E. Notification Methods and Procedures</b></p> <ol style="list-style-type: none"> <li>1. Procedures for notification of response organizations including means for verification of messages</li> <li>2. Procedures for alerting, notifying, and mobilizing emergency personnel</li> <li>3. Initial messages from plant</li> <li>4a-n. Follow-up messages from plant</li> <li>5. Dissemination of initial and follow-up information to the public</li> <li>6. Administrative and physical means for notifying and providing prompt instructions to the public in Emergency Planning Zone</li> <li>7. Written messages to the public for protective action instructions</li> </ol>	<p>4.B.; 4.C.; Figure 1; Figure 2</p> <p>4.B.(3); Figure 1; Figure 2</p> <p>Not Applicable</p> <p>Not Applicable</p> <p>4.B.(4) through B.(10)</p> <p>4.B.(4) through B.(10)</p> <p>4.L.(2)</p>

<p>NUREG-0654/FEMA-REP-1 Planning Criteria</p>	<p>Plan Section/Reference</p>
<p><b>F. Emergency Communications</b></p> <ol style="list-style-type: none"> <li>1.                             <ol style="list-style-type: none"> <li>a. 24 hour capability for notification and activation of the emergency response network, including 24 hour manning of communication links</li> <li>b. Communications with contiguous state / local governments within the Emergency Planning Zones</li> <li>c. Communications with federal response organizations</li> <li>d. Communications between the nuclear facility and the Emergency Operations Facility, and State and local Emergency Operations Centers and radiological monitoring teams</li> <li>e. Alerting and activating emergency response personnel</li> <li>f. Provision of licensee communications with NRC</li> </ol> </li> <li>2. Communication links with fixed and mobile medical support facilities</li> </ol>	<p>4.B.(1), (2), and (3); Figure 1</p> <p>4.B.(1)(a); Figure 6</p> <p>Local government requests any assistance from the State</p> <p>4.B.(1)(a); 4.F.(4)</p> <p>4.B.(2); 4.B.(3); Figure 1; Figure 2</p> <p>Not Applicable</p> <p>4.B.(1)(b); Figure 6</p>

NUREG-0654/FEMA-REP-1 Planning Criteria	Plan Section/Reference
3. Periodic testing of the Emergency Communications System	6.A.(1)(f); 6.A.(3)(b)vii

<p>NUREG-0654/FEMA-REP-1 Planning Criteria</p>	<p>Plan Section/Reference</p>
<p><b>G. Public Education and Information</b></p> <ol style="list-style-type: none"> <li>1. Periodic dissemination of emergency information to the public.</li> <li>2. Public information program for permanent and transient populations in Emergency Planning Zone</li> <li>3. <ol style="list-style-type: none"> <li>a. Points of contact and physical locations designated for use by news media during emergency</li> <li>b. Provision of space for news media at the Emergency Operations Facility by the licensee</li> </ol> </li> <li>4. <ol style="list-style-type: none"> <li>a. Designated spokesperson with access to necessary information</li> <li>b. Arrangements for exchange of information between spokespersons</li> <li>c. Rumor control</li> </ol> </li> <li>5. Annual media orientation</li> </ol>	<p>6.B.(2)(a); 6.B.(2)(b); 6.B.(2)(c); 6.B.(2)(e);</p> <p>6.B.(2)(b)</p> <p>6.B.(2)(h)</p> <p>Not Applicable</p> <p>6.B.(2)(h)</p> <p>6.B.(2)(g)</p> <p>6.B.(2)(a); 6.B.(2)(i)</p> <p>6.B.(2)(h)</p>

<p>NUREG-0654/FEMA-REP-1 Planning Criteria</p>	<p>Plan Section/Reference</p>
<p><b>H. Emergency Facilities and Equipment</b></p> <ol style="list-style-type: none"> <li>1. Licensee shall establish a Technical Support Center (TSC)</li> <li>2. Licensee shall establish an Emergency Operations Facility (EOF)</li> <li>3. Establishment of Emergency Operations Center</li> <li>4. Activation and staffing of facilities and centers described in the plan</li> <li>5a-d. Licensee establishment of on-site monitoring systems.</li> <li>6a-c. Licensee acquisition of data from off-site monitoring and analysis equipment</li> <li>7. Radiological emergency equipment</li> <li>8. Meteorological instrumentation / data</li> <li>9. On-site Operations Support Center</li> <li>10. Periodic radiological equipment calibration, inventory, and inspection</li> <li>11. Emergency kit identification</li> <li>12. Central point for receipt and analysis of field monitoring data and samples</li> </ol>	<p>Not Applicable</p> <p>Not Applicable</p> <p>4.F.(1)</p> <p>4.F.(5)</p> <p>Not Applicable</p> <p>Not Applicable</p> <p>4.G.(4)</p> <p>Not Applicable</p> <p>6.A.(1)(f)</p> <p>4.F.(1); Table 2; Table 3</p> <p>See State Plan</p>

<p>NUREG-0654/FEMA-REP-1 Planning Criteria</p>	<p>Plan Section/Reference</p>
<p>I. Accident Assessment</p> <ol style="list-style-type: none"> <li>1. Plant systems and parameters</li> <li>2. Initial and continuous accident assessment by the licensee</li> <li>3a-b. Source term and magnitude of release</li> <li>4. Relationship between effluent monitor readings and on-site and off-site exposures and contamination for various meteorological conditions</li> <li>5. Licensee acquisition and evaluation of meteorological information</li> <li>6. Methodology to determine release rate/projected doses</li> <li>7. Capability and resources for plume Emergency Planning Zone field monitoring</li> <li>8. Assessment of potential magnitude and locations of radiological hazards</li> </ol>	<p>Not Applicable</p> <p>Not Applicable</p> <p>Not Applicable</p> <p>Not Applicable</p> <p>Not Applicable</p> <p>Not Applicable</p> <p>4.H.</p> <p>4.H.</p>

<p>NUREG-0654/FEMA-REP-1 Planning Criteria</p>	<p>Plan Section/Reference</p>
<p>9. Capability to detect and measure radioiodine concentrations</p>	<p>Not Applicable</p>
<p>10. Means for relating measured parameters to dose rates and gross measurements</p>	<p>Not Applicable</p>
<p>11. Airborne plume tracking</p>	<p>Not Applicable</p>

<p>NUREG-0654/FEMA-REP-1 Planning Criteria</p>	<p>Plan Section/Reference</p>
<p><b>J. Protective Responses</b></p> <p>1a-d. Means and time to warn on-site individuals</p> <p>2. Evacuation routes and transportation for on-site individuals to a suitable off-site location</p> <p>3. Monitoring of people evacuated from site</p> <p>4. Evacuation of on-site nonessential personnel at Site Area Emergency or General Emergency</p> <p>5. On-site accountability</p> <p>6a-c. Arrangements for respiratory protection, protective clothing, and radio-protective drugs for individuals remaining or arriving on-site</p> <p>7. Licensee protective action recommendations</p> <p>8. Evacuation Time Estimates in Licensee Plan</p> <p>9. Capability to implement protective measures based on Protective Action Guidelines and other criteria</p>	<p>Not Applicable</p> <p>4.J.(2)(h)</p> <p>Not Applicable</p> <p>4.I; Table 5; Table 6</p>

NUREG-0654/FEMA-REP-1 Planning Criteria	Plan Section/Reference
10. a. Maps showing the following. <ul style="list-style-type: none"> <li>§ Evacuation Routes</li> <li>§ Evacuation Areas</li> <li>§ Sampling and Monitoring Points</li> <li>§ Reception Centers and Congregate Care Facilities</li> </ul>	Refer to Evacuation Time Estimate Study

<p>NUREG-0654/FEMA-REP-1 Planning Criteria</p>	<p>Plan Section/Reference</p>
<p>b. Population distribution in Emergency Planning Zone by evacuation areas</p>	<p>Refer to State Plan</p>
<p>c. Means for notification of transient and resident populations</p>	<p>4.B.(4) through (10)</p>
<p>d. Protection of mobility impaired</p>	<p>4.B.(9); 4.J.(2)(f)</p>
<p>e. Use, quantities, storage, and distribution of radio-protective drugs</p>	<p>4.I.</p>
<p>f. State Health Department decisions on radio-protective drugs for emergency workers</p>	<p>4.J; State Plan; VT Dept of Health Procedures</p>
<p>g. Means of relocation</p>	<p>4.J.(2)(f)</p>
<p>h. Reception Centers and Congregate Care Facilities in host areas outside ten mile EPZ area</p>	<p>4.J.(2)(g)</p>
<p>i. Projected traffic capacities of evacuation routes during emergencies</p>	<p>Refer to Evacuation Time Estimate Study</p>
<p>j. Responsibility for and control of access to evacuated areas</p>	<p>4.J.(3)</p>
<p>k. Identification of and means for dealing with potential impediments to use of evacuation routes</p>	<p>6.A.(1)(j)</p>
<p>l. Evacuation time estimates</p>	<p>4.J.(2)(l); Refer to Evacuation Time Estimate Study</p>

NUREG-0654/FEMA-REP-1 Planning Criteria	Plan Section/Reference
m. Basis for protective action recommendations	Not Applicable

NUREG-0654/FEMA-REP-1 Planning Criteria	Plan Section/Reference
11. Protective measures for Ingestion Pathway Zone  12. Means for registering and monitoring evacuees	State of Vermont Ingestion Pathway Plan  4.G.(1)

<p>NUREG-0654/FEMA-REP-1 Planning Criteria</p>	<p>Plan Section/Reference</p>
<p><b>K. Radiological Exposure Control</b></p> <p>1a-g. On-Site Exposure Guidelines</p> <p>2. On-Site Radiation Protection Program</p> <p>3. a. 24 hour capability for determining emergency worker doses and provisions for distribution of dosimeters</p> <p>b. Frequency of dosimetry readings and maintenance of emergency worker dose records</p> <p>4. Decision chain for authorizing emergency workers to exceed Protective Action Guidelines</p> <p>5. a. Action levels for decontamination</p> <p>b. Means for decontamination of wounds, supplies, and equipment, and for waste disposal</p> <p>6a-c. On-site contamination control measures</p> <p>7. Decontamination of relocated on-site personnel</p>	<p>Not Applicable</p> <p>Not Applicable</p> <p>4.I.</p> <p>4.I.</p> <p>4.I.</p> <p>4.I.</p> <p>4.I.</p> <p>4.G.</p> <p>Not Applicable</p> <p>Not Applicable</p>

<p>NUREG-0654/FEMA-REP-1 Planning Criteria</p>	<p>Plan Section/Reference</p>
<p><b>L. Medical and Public Health Support</b></p> <ol style="list-style-type: none"> <li>1. Local and backup hospitals for medical evaluation of radiation exposure and uptake</li> <li>2. On-site first aid capability</li> <li>3. List of medical service facilities capable of providing medical support for contaminated injured individuals</li> <li>4. Transport of contaminated injured victims to medical facilities</li> </ol>	<p>4.K.(1)</p> <p>Not Applicable</p> <p>Not Applicable</p> <p>4.K. (2)</p>

<p>NUREG-0654/FEMA-REP-1 Planning Criteria</p>	<p>Plan Section/Reference</p>
<p><b>M. Recovery and Re-Entry Planning and Post-Accident Operations</b></p> <ol style="list-style-type: none"> <li>1. Procedures for re-entry and recovery and relaxing of protective measures</li> <li>2. Facility recovery organization</li> <li>3. Means for keeping response personnel informed of recovery operations</li> <li>4. Periodic estimation of total population exposure</li> </ol>	<p>4.E.</p> <p>Not Applicable</p> <p>Not Applicable</p> <p>Not Applicable</p>

<p>NUREG-0654/FEMA-REP-1 Planning Criteria</p>	<p>Plan Section/Reference</p>
<p><b>N. Exercise and Drills</b></p> <ol style="list-style-type: none"> <li>1.               <ol style="list-style-type: none"> <li>a. Exercises as set forth in FEMA and NRC rules</li> <li>b. Mobilization of resources under varying scenarios</li> </ol> </li> <li>2.               <ol style="list-style-type: none"> <li>a. Communication drills</li> <li>b. Fire drills</li> <li>c. Medical emergency drills</li> <li>d. Radiological monitoring drills</li> <li>e.                   <ol style="list-style-type: none"> <li>(1) Health physics drills</li> <li>(2) Analysis of in-plant liquid samples</li> </ol> </li> </ol> </li> <li>3.               <ol style="list-style-type: none"> <li>a. Drill and exercise objectives</li> <li>b. Date, time, place, and participating organizations</li> <li>c. Simulated events</li> <li>d. Time schedule of events</li> <li>e. Narrative summary</li> <li>f. Arrangements for materials to observers</li> </ol> </li> <li>4. Exercise evaluation and critiques</li> </ol>	<p>6.A.(3)(b)i</p> <p>6.A.(3)(b)ii</p> <p>6.A.(3)(b)iii</p> <p>Not Applicable</p> <p>4.K.</p> <p>Not Applicable at Local Level</p> <p>Not Applicable at Local Level</p> <p>Not Applicable</p> <p>Refer to State Plan</p> <p>6.A.(3)(b)vi.</p>

NUREG-0654/FEMA-REP-1 Planning Criteria	Plan Section/Reference
5. Implementing corrective actions	6.A.(3)(b)v.

<p>NUREG-0654/FEMA-REP-1 Planning Criteria</p>	<p>Plan Section/Reference</p>
<p><b>O. Radiological Emergency Response Training</b></p> <ol style="list-style-type: none"> <li>1. Training of appropriate individuals                             <ol style="list-style-type: none"> <li>a. Training for off-site agencies who may respond on-site</li> <li>b. Off-site response agency participants</li> </ol> </li> <li>2. On-site practical drills as part of training program</li> <li>3. Licensee First Aid Team Training</li> <li>4. Training program established for:                             <ol style="list-style-type: none"> <li>a. Directors or coordinators of response organizations</li> <li>b. Accident assessment</li> <li>c. Monitoring teams and analysis personnel</li> <li>d. Police, security, and fire fighting personnel</li> <li>e. Repair and damage control teams</li> <li>f. First aid and rescue personnel</li> <li>g. Local support services</li> <li>h. Medical support personnel.</li> <li>i. Licensee Headquarters personnel</li> </ol> </li> </ol>	<p>6.A.(3)(a)</p> <p>6.A.(3)(a)</p> <p>Not Applicable</p> <p>Not Applicable</p> <p>6.A.(3)(a)</p> <p>6.A.(3)(a)</p> <p>6.A.(3)(a)</p> <p>6.A.(3)(a)</p> <p>Not Applicable</p> <p>6.A.(3)(a)</p> <p>6.A.(3)(a)</p> <p>4.K.</p> <p>Not Applicable</p>

NUREG-0654/FEMA-REP-1 Planning Criteria	Plan Section/Reference
j. Emergency communications personnel	6.A.(3)(a)
5. Provisions for initial / retraining of emergency response personnel	6.A.(3)(a)

<p>NUREG-0654/FEMA-REP-1 Planning Criteria</p>	<p>Plan Section/Reference</p>
<p><b>P. Responsibility for Planning Effort</b></p> <ol style="list-style-type: none"> <li>1. Training for individual responsible for planning effort</li> <li>2. Title of person with responsibility for emergency planning</li> <li>3. Designation of Emergency Planning Coordinator</li> <li>4. Updating of plans and agreements</li> <li>5. Plan and procedure update dissemination</li> <li>6. Supporting documents</li> <li>7. Procedures required to implement the plan and appropriate plan section reference</li> <li>8. Table of Contents and NUREG-0654 Cross Reference</li> <li>9. Independent Program Reviews by licensee</li> <li>10. Quarterly updating of emergency telephone numbers in procedures</li> </ol>	<p>6.A.(3)(a)</p> <p>6.A.(1)(a)</p> <p>6.A.(1)(b)</p> <p>6.A.(1)(b); 6.A.(1)(d); 6.A.(3)(b)v.</p> <p>6.A.(1)(e)</p> <p>Table of Contents</p> <p>Table of Contents; Supporting Documents</p> <p>Table of Contents; Cross Reference</p> <p>Not Applicable</p> <p>6.A.(1)(c)</p>

Radiological Emergency Response  
Implementing Procedure

**TOWN OF MARLBORO**

**ATTACHMENTS**

Note: The forms in this procedure are valid samples. They may be used in an emergency. However, each facility is provided with a “kit” containing all necessary forms. Minor modifications have been made to the forms in the kit so that they are more usable. Some of these modifications would be difficult to put in the document format used for this implementing procedure. Photocopying forms is approved.

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# ATTACHMENT 1

<b>VEM 1 Form</b>	Message # _____
<b><u>VERMONT YANKEE EMERGENCY NOTIFICATION FORM</u></b>	
<i>(Check ALL appropriate boxes)</i>	
<input type="checkbox"/> THIS IS A DRILL	<input type="checkbox"/> THIS IS AN ACTUAL EVENT
<b>MESSAGE :</b> This is Vermont Emergency Management	
<b>DECLARED:</b> VERMONT YANKEE has declared an: <i>(check one)</i>	
<input type="checkbox"/> Unusual Event Terminated	<input type="checkbox"/> Alert
<input type="checkbox"/> Unusual Event	<input type="checkbox"/> Site Area Emergency
	<input type="checkbox"/> General Emergency
	<input type="checkbox"/> Entry to Recovery
at _____ hours due to EAL # _____	
OR	
<b>UPGRADED:</b> VERMONT YANKEE has upgraded the Protective Actions for the General Emergency which was declared at _____ Hours.	
<p>A. The Plant is: <i>(check one)</i></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"><input type="checkbox"/> Continuing normal operation.</div> <div style="width: 30%;"><input type="checkbox"/> Reducing present power levels.</div> <div style="width: 30%;"><input type="checkbox"/> Shut down.</div> </div>	
<p>B. There is: <i>(check one)</i></p> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"><input type="checkbox"/> No radiation release related to this event</div> <div style="width: 30%;"><input type="checkbox"/> A release of radiation BELOW federally approved operating limits in progress, related to this event</div> <div style="width: 30%;"><input type="checkbox"/> A release of radiation ABOVE federally approved operating limits in progress, related to this event</div> </div>	
<p>C. Present meteorological conditions are: wind speed is _____ mph and wind direction is from _____ degrees true north <i>(Unless otherwise specified, wind information is "High Wind")</i></p>	
<b>MESSAGE SIGN-OFF:</b>	
D. Please standby to acknowledge message	
E. Immediately hand deliver this message to your Emergency or Facility Director	
F. Follow your procedures for the designated Emergency Classification Level (ECL)	
<input type="checkbox"/> THIS IS A DRILL	<input type="checkbox"/> THIS IS AN ACTUAL EVENT
Received by: Operator: _____ Date: _____ Time: _____	
<i>(Please Print)</i>	
VEM 1 Town Form	OP3540 Rev 20 October 2008

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### ATTACHMENT 3

**VEM 3 Form**

Message # \_\_\_\_\_

**GUIDANCE FORM FOR THE ADMINISTRATION OF POTASSIUM IODIDE (KI)**  
**(Vermont Yankee)**

*(Check ALL appropriate boxes)*

THIS IS A DRILL

THIS IS AN ACTUAL EVENT

This is Vermont Emergency Management.

The Health Services Coordinator (Commissioner of Health) recommends the immediate taking of potassium iodide (KI) by the indicated groups of people who were in the following towns after \_\_\_\_\_ or are currently in those towns:

*(Date/Time)*

	<u>EMERGENCY</u> <u>WORKERS</u>	<u>PERSONS</u> <u>UNDER CARE *</u>	<u>GENERAL</u> <u>PUBLIC</u>
Brattleboro	[ ]	[ ]	[ ]
Dummerston	[ ]	[ ]	[ ]
Guilford	[ ]	[ ]	[ ]
Halifax	[ ]	[ ]	[ ]
Marlboro	[ ]	[ ]	[ ]
Vernon	[ ]	[ ]	[ ]
Other _____	[ ]	[ ]	[ ]
Other _____	[ ]	[ ]	[ ]

REMARKS: \_\_\_\_\_

Signed by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
*Commissioner of Health (or designee)*

**Immediately hand deliver this message to your Emergency or Facility Director**

Stand-by to acknowledge KI Guidance message:

THIS IS A DRILL

THIS IS AN ACTUAL EVENT

\* Persons Under Care are those in Hospitals, Nursing Homes, In-Home Care, Schools, and Child Care Centers

Received: Operator: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
*(Please Print)*

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**ATTACHMENT 4**

**VEM 4 Form**

Message # \_\_\_\_\_

**PRECAUTIONARY ACTIONS FOR CHILDREN**

*(Check ALL appropriate boxes)*

THIS IS A DRILL

THIS IS AN ACTUAL EVENT

**THIS IS VERMONT EMERGENCY MANAGEMENT**

**PLEASE TAKE THE FOLLOWING ACTION:**

**1. EARLY ASSEMBLY OF SCHOOL BUSES**

DIRECT THE SCHOOL BUSES TO ASSEMBLE AT THE SCHOOLS  
IN THE FOLLOWING TOWNS:

Brattleboro    Dummerston    Guilford    Halifax    Marlboro    Vernon

**2. ASSEMBLY OF BUSES / VEHICLES AT CHILD CARE CENTERS**

DIRECT BUSES/VEHICLES FROM STAGING AREA TO ASSEMBLE AT  
CHILD CARE CENTERS IN THE FOLLOWING TOWNS:

Brattleboro    Dummerston    Guilford    Halifax    Marlboro    Vernon

**3. Other (specify) \_\_\_\_\_**

\_\_\_\_\_  Brattleboro    Dummerston    Guilford    Halifax    Marlboro    Vernon

**Immediately hand deliver this message to your Emergency or Facility Director**

Please standby to acknowledge message

THIS IS A DRILL

THIS IS AN ACTUAL EVENT

Received by: Operator: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
*(Please Print)*

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# ATTACHMENT 5

VEM 5 Form

Message # \_\_\_\_\_

## GOVERNOR'S DECLARATION OF EMERGENCY

*(Check ALL appropriate boxes)*

THIS IS A DRILL

THIS IS AN ACTUAL EVENT

### THIS IS VERMONT EMERGENCY MANAGEMENT

THE GOVERNOR OF THE STATE OF VERMONT, \_\_\_\_\_  
DECLARED A STATE OF EMERGENCY THROUGHOUT THE STATE OF  
VERMONT BECAUSE OF THE CURRENT SITUATION AT VERMONT YANKEE  
NUCLEAR POWER STATION IN VERNON, VT., AT \_\_\_\_\_ HOURS  
TODAY.

THIS IS A ROUTINE STEP WHEN STATE GOVERNMENT NEEDS TO MOBILIZE  
RESOURCES IN A POTENTIAL DISASTER SITUATION.

THE CURRENT ACTION LEVEL AT THE PLANT IS:

Alert     Site Area Emergency     General Emergency

**Immediately hand deliver this message to your Emergency or Facility Director**

**A news advisory will be issued.**

Please standby to acknowledge message:

THIS IS A DRILL

THIS IS AN ACTUAL EVENT

Received: Operator: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
*(Please print)*

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## ATTACHMENT 7

<b>VEM 7 Form</b>	Message # _____
<b><u>METEOROLOGICAL AND SPECIAL INFORMATION FORM</u></b> <i>(Check ALL appropriate boxes)</i>	
<input type="checkbox"/> THIS IS A DRILL <span style="margin-left: 200px;"><input type="checkbox"/> THIS IS AN ACTUAL EVENT</span>	
<b><u>MESSAGE:</u></b>	
This is Vermont Emergency Management <input type="checkbox"/> State EOC <input type="checkbox"/> IFO at _____ / _____ <span style="margin-left: 150px;"><i>Date</i></span> <span style="margin-left: 50px;"><i>Time</i></span>	
1. Present meteorological conditions are: wind speed is _____ mph <span style="margin-left: 150px;">and wind direction is from _____ degrees true north</span> <span style="margin-left: 100px;"><i>(Unless otherwise specified, wind information is "High Wind")</i></span>	
2. Other: _____ _____	
3. Other: _____ _____	
<b><i>NOTE: This form will not be used to change ECLs or Protective Actions. It is used to keep facilities aware of meteorological conditions at Vermont Yankee and other information not on other VEM forms.</i></b>	
<b><u>MESSAGE SIGN-OFF:</u></b>	
4. Follow your Procedures for the designated Emergency Classification Level (ECL). 5. Please standby to acknowledge message:	
<input type="checkbox"/> THIS IS A DRILL <span style="margin-left: 200px;"><input type="checkbox"/> THIS IS AN ACTUAL EVENT</span>	
<b>RECEIVED BY:</b> Operator: _____ Date: _____ Time: _____ <span style="margin-left: 100px;"><i>(Please Print)</i></span>	
VEM 7 Town Form	Rev 2 October 2008

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## ATTACHMENT 8

### List of Farms, Water Sources, and Stored Feed Located in Marlboro

#### FARMS

None

#### STORED FEED RESOURCES

All livestock owners store hay and feed for private use only. Some owners offer limited quantities of hay for sale.

#### TRUCK FARMS

None

#### ORCHARDS

None

#### WATER RESOURCES

None

#### RELATED ACTIVITIES

None

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## ATTACHMENT 9

*(continued)*

5. Status of the Public Notification System (use only if the public notification system (EAS) has been activated):

Prepare a brief statement that the Public Notification System has been activated to alert the public. Also, provide information regarding the notification of special needs individuals and recreational areas.

6. Status of the latest directed protective action received from the state for the public.

The latest directed protective action, i.e. none, sheltering, or evacuation.

7. Status of sheltering or evacuation if directed:

(Sheltering) has been directed for the residents of Marlboro. A message via the local EAS Station has been released by the State of Vermont informing the residents to (take shelter in their homes or public buildings; and the residents have been informed to take precautionary measures such as placing a handkerchief or towel folded several times over their mouths and nose to filter the air should they be required to go outdoors.)

An Evacuation has been directed. (Traffic control points are being operated by emergency workers and the residents are proceeding to Bellows Falls Union High School.)

1. Status of potassium iodide (KI) Ingestion by the public:

State whether potassium iodide ingestion has been recommended for the public in Marlboro.

2. Status of other local activities concerning the emergency situation:

The following protective actions have been directives received from the state regarding care of livestock, status of drinking water, and vegetation samples. (List protective actions.)

### **REMINDER:**

**Only Provide Information Concerning the Activities Within Your Community.**

**ATTACHMENT 10**

**Child Care and Private School Transportation Needs**

Facility	Census		Transportation Needed			Destination
	Children	Staff	Bus	Van	Other	
Director:						
Director:						
Director:						
Director:						
Director:						
Director:						
Director:						
Director:						
Director:						

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## ATTACHMENT 11 SPECIAL FACILITIES TRANSPORTATION NEEDS

FACILITY	Time of Call	TOTAL FACILITY CENSUS		INDIVIDUALS MOVED BY FACILITY		TRANSPORTATION NEEDED										Facility Arrival Time	Facility Departure Time	
		Clients	Staff	Clients	Staff	Class I	Class I	Class II	Class II	Class III	Class III	Class IV	Class IV	Class V	Class V			
						Clients	Staff	Clients	Staff	Clients	Staff	Clients	Staff	Clients	Staff			Clients

- Class I: Ambulatory. Any Vehicle is OK.
- Class II: Resident is able to perform Stand-Pivot-Transfer. A vehicle with seat belts AND only 1 step which is less than 7 ½" is required.
- Class III: Resident is unable to perform Stand-Pivot-Transfer AND is not bound to a recliner chair or stretcher. A dedicated wheelchair vehicle is required.
- Class IV: Resident Requires Basic Life Support Ambulance for:
  - (1) Stretcher or recliner chair
  - (2) Bariatric I (each facility determines baseline up to 700 lbs)
  - (3) Bariatric II (701 to 1000 lbs)
  - (4) Facility defined (I.V. therapy, high oxygen requirements, etc.)
- Class V: Resident Requires Advanced or Specialty Life Support
  - (1) Ventilator
  - (2) Facility Defined

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## ATTACHMENT 14

### Marlboro Access Control Instructions

Police service personnel, with assistance from county and state law enforcement personnel (as requested), fire department personnel, and town highway personnel are responsible for staffing access control points outlined in Attachment 15. At least one individual will be assigned or appropriate barricades will be placed at each access control point. Upon arriving at the access control point, each individual is to contact the Emergency Operations Center and request instructions. If barricades are utilized, individuals will contact the Emergency Operations Center when the barricade(s) are at the access control point and await further instructions.

The Police Branch Director will instruct each individual to standby at their location until notified that access control should be implemented. When access control is to be implemented, the Police Branch Director will inform the individuals in the field. At this time, the individuals will set up a check point or put up barricades to prevent unauthorized entry to the town. The individuals at the check points are to allow entry of:

1. Emergency response personnel with reasonable identification, i.e., federal, state, town employees, utility employees, etc.
2. Emergency response vehicles with specific missions and destinations, i.e., buses, ambulances, wreckers, highway and fire vehicles.
3. Members of the press with press credentials.
4. Residents of Emergency Planning Zone towns re-entering the area for justifiable needs, e.g., livestock and poultry farmers, essential services workers, etc. These individuals may be required to be escorted by an Emergency Worker with dosimetry.

*Note: When in doubt, a decision to allow entry to individuals may be checked with the local Emergency Operations Center or the State Emergency Operations Center .*

5. Transients and commercial traffic are to be denied access.
6. In response to requests for information from the public, the officers should refer them to one of the local Emergency Alert System Stations for news and instructions as follows.

WTSA	1450 AM	96.7 FM	Brattleboro, VT
WKVT	1490 AM	92.7 FM	Brattleboro, VT
WVAY		100.7 FM	West Dover, VT

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## ATTACHMENT 15

### Marlboro Traffic and Access Control Points

1. One officer at the intersection of

Post Manned By Officer \_\_\_\_\_  
Dosimeter No. \_\_\_\_\_ Radio No. \_\_\_\_\_  
Time Assigned \_\_\_\_\_ Time on Post \_\_\_\_\_

2. One officer at the intersection of

Post Manned By Officer \_\_\_\_\_  
Dosimeter No. \_\_\_\_\_ Radio No. \_\_\_\_\_  
Time Assigned \_\_\_\_\_ Time on Post \_\_\_\_\_

3. One officer at the intersection of

Post Manned By Officer \_\_\_\_\_  
Dosimeter No. \_\_\_\_\_ Radio No. \_\_\_\_\_  
Time Assigned \_\_\_\_\_ Time on Post \_\_\_\_\_

4. One officer at the intersection of

Post Manned By Officer \_\_\_\_\_  
Dosimeter No. \_\_\_\_\_ Radio No. \_\_\_\_\_  
Time Assigned \_\_\_\_\_ Time on Post \_\_\_\_\_

*Note: Other Traffic / Access Control Points will be established as the need arises and will be manned by state and/or county police officers.*

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## ATTACHMENT 16

### Control Dosimetry Form

In the event of an accident at Vermont Yankee Nuclear Power Station that requires the distribution of emergency worker dosimetry, complete this form and forward it along with the control dosimetry to the Vermont Department of Health Representative at the State Emergency Operations Center after termination of local Emergency Operations Center operations.

Town: \_\_\_\_\_

The serial number of the control dosimetry accompanied by this form are:

Control: \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

The control dosimetry is stored at (include the exact location in the building):

Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

This form completed by:

\_\_\_\_\_  
Name Title (please print)

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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**ATTACHMENT 18**

Page \_\_\_\_\_ of \_\_\_\_\_

**Radiological Readings Form**

*(Use to Establish Background Radiation Readings)*

<p><b>___ INITIAL READINGS:</b> Use this process either before the emergency or during the emergency but prior to the arrival of a radiological release.</p>			
<p><b>___ SUBSEQUENT READINGS:</b> Use this process after a radiological release has been reported and just prior to determining if a person, a building or a piece of equipment is contaminated.</p>			
<b>Inside the EOC</b>	Date	Time	<u>Counts per minute</u>
<b>Outside the EOC</b>	Date	Time	<u>Counts per minute</u>
<b>Marlboro Elementary School</b>	Date	Time	<u>Counts per minute</u>
<b>Marlboro Fire Department</b>	Date	Time	<u>Counts per minute</u>
<b>Town Garage</b>	Date	Time	<u>Counts per minute</u>
<b>Other</b>	Date	Time	<u>Counts per minute</u>

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## ATTACHMENT 19

### Emergency Worker Exposure Control Information Sheet

#### Radiation Exposure Record Card

1. You must keep this sheet in your possession at all times when performing Emergency Worker duties.

#### Dosimetry

3. Dosimeters should be worn on outer clothing between the shoulders and waist from the time of issue until you are dismissed from duty or until notified by your supervisor that dosimetry is no longer necessary.
4. In no case should Dosimeters of Legal Record be used by more than one person.
5. Each emergency worker should read the self-reading dosimeter at least once every thirty minutes unless otherwise instructed.

#### Radiation Exposure Control

Recommended Guidance on Dose Limits For Emergency Team Workers		
Dose Limit (1)	Work Activity	Comments
5 Rem TEDE (2)	All	Maintain ALARA (3) and control exposure of emergency team members to extent practicable to these levels. (Appropriate controls for emergency workers will include time limitations, respirators and potassium iodide)
10 Rem TEDE	Protecting Valuable/Essential Property	Lower dose not practicable. (Appropriate controls for emergency workers will include time limitations, respirators, and potassium iodide) Knowledgeable volunteers will be used whenever possible.
25 Rem TEDE	Lifesaving or Protection of Large Population	Control exposure of emergency team members performing lifesaving missions to this level. (Control of time of exposure will be most effective) Knowledgeable volunteers will be used whenever possible.
>25 Rem TEDE	Lifesaving or Protection of Large Population	Only on a voluntary basis to persons fully aware of the risk involved. This includes the numerical levels of dose at which acute effects of radiation will be incurred and numerical estimates of the risk of delayed effects.
Notes: (1) Emergency dose limits for the lens of the eye and for any organ (including skin and extremities) are three and ten times the listed values, respectively. (2) <b>TEDE</b> = Total Effective Dose Equivalent (3) <b>ALARA</b> = As Low As Reasonable Achievable		

1. If you receive an exposure of 1R as measured by the self-reading dosimeter, you should notify the Radiological Officer. Thereafter, you should read your dosimeter every 15 minutes and notify the Radiological Officer every time you accumulate an additional 1R of exposure.
2. A dose limit of 5 Rem of Total Effective Dose Equivalent has been established. Doses above the 5 Rem limit are not allowed without specific authorization from the Vermont Department of Health; however, emergency workers and supervisors are cautioned that the 5 Rem TEDE is a limit and should attempt to keep exposure as low as reasonably achievable. The exposure to radiation should be kept to a minimum for all persons. Any one individual should not receive a total dose far in excess of other emergency workers if circumstances permit substitution of personnel, termination of assignment, or other protective action.

### **Potassium Iodide (KI)**

1. Iodine accumulates in the thyroid gland. Radioactive iodine is no different; it too will accumulate in the thyroid gland. Taking potassium iodide will have the effect of saturating the thyroid gland with non-radioactive iodine so that the radioactive iodine will not be absorbed in large quantities. Potassium iodide lessens the risk to the thyroid gland: otherwise it provides no protection against radiation.
2. The Health Services Coordinator (Commissioner, Vermont Department of Health), will make the decision whether or not potassium iodide should be ingested.
3. Should the Health Services Coordinator, Vermont Department of Health, decide that emergency workers should take potassium iodide, your community will be notified by the State EOC. Workers will be notified through their supervisors whether to take potassium iodide. TAKE POTASSIUM IODIDE ONLY WHEN YOU ARE INSTRUCTED TO DO SO.
4. The dose is one tablet (130 mg.) a day for 10 days. Workers are to record the date and time they take each potassium iodide tablet. Exceeding the dosage of one tablet per day does not provide greater protection, but increases the risk of side effects. If any side effects occur (i.e. skin rash, swelling of the salivary glands), discontinue taking potassium iodide and report to your supervisor.

**Termination of Assignment**

When you are relieved of your assignment by your supervisor and instructed to turn in your dosimetry, perform the following steps:

- \_\_\_\_\_ 1. Report to the Radiological Officer at the local Emergency Operations Center or at the Reception Center if the Emergency Operations Center staff has relocated.
- \_\_\_\_\_ 2. Remove and read your pocket dosimeter.
- \_\_\_\_\_ 3. Record the reading of the dosimeter.
- \_\_\_\_\_ 4. Subtract the before reading from the after reading and record the results on your Radiation Exposure Record.
- \_\_\_\_\_ 5. Ensure that the "before", "after", and "total" reading is also recorded on the "Dosimetry Packet Issuance Record". Initial in the right margin if the information recorded is accurate.
- \_\_\_\_\_ 6. Retain the Radiation Exposure Record for your records.
- \_\_\_\_\_ 7. Remove your Dosimeter of Legal Record and give it to the person in charge along with your direct reading dosimeter.

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**ATTACHMENT 21****U.S. Nuclear Regulatory Commission  
REGULATORY GUIDE****Office of Nuclear Regulatory Research  
REGULATORY GUIDE 8.13**

(Draft was issued as DG-8014/Revision 3, JUNE 1999)

**INSTRUCTION CONCERNING PRENATAL RADIATION EXPOSURE****A. INTRODUCTION**

The Code of Federal Regulations in 10 CFR Part 19, "Notices Instructions and Reports to Workers: Inspection and Investigations," in Section 19.12, "Instructions to Workers," requires instruction in "the health protection problems associated with exposure to radiation and/or radioactive material, in precautions or procedures to minimize exposure, and in the purposes and functions of protective devices employed." The instructions must be "commensurate with potential radiological health protection problems present in the work place."

The Nuclear Regulatory Commission's (NRC's) regulations on radiation protection are specified in 10 CFR Part 20, "Standards for Protection Against Radiation": and 10 CFR 20.1208, "Dose to an Embryo/Fetus," requires licensees to "ensure that the dose to an embryo/fetus during the entire pregnancy, due to occupation exposure of a declared pregnant woman, does not exceed 0.5 rem (5mSv). "Section 20.1208 also requires licensees to "make efforts to avoid substantial variation above a uniform monthly exposure rate to a declared pregnant woman." A declared pregnant woman is defined in 10 CFR 20.1003 as a woman who has voluntarily informed her employer, in writing, of her pregnancy and the estimated date of conception.

This regulatory guide is intended to provide information to pregnant women, and other personnel, to help them make decisions regarding radiation exposure during pregnancy. This Regulatory Guide 8.13 supplements Regulatory Guide 8.29, "Instruction Concerning Risks from Occupation Radiation Exposure" (Ref. 1), which contains a broad discussion of the risks from exposure to ionizing radiation.

Other sections of the NRC's regulations also specify requirements for monitoring external and internal occupational dose to a declared pregnant woman. In 10 CFR 20.1502, "Conditions Requiring Individual Monitoring of External and Internal Occupation Dose," licensees are required to monitor the occupational dose to a declared pregnant woman, using and individual monitoring device, it is likely that the declared pregnant woman will receive, from external sources, a deep dose equivalent in excess of 0.1 rem (1mSv). According to Paragraph (c) of 10 CFR 20.2106, "Records of Individual Monitoring Results," the licensee must maintain records of dose to an embryo/fetus if monitoring was required, and the records of dose to the embryo/fetus must be kept with the records of dose to the declared pregnant woman. The declaration of pregnancy must be kept on file, but may be maintained separately from the dose records. The licensee must retain the required form or record until the Commission terminates each pertinent license requiring the record.

The information collections in this regulatory guide are covered by the requirements of 10 CFR Parts 19 or 20, which were approved by the Office of Management and Budget, approval numbers 3150-0044 and 3150-0014, respectively. The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB number.

## **B. DISCUSSION**

As discussed in Regulatory Guide 8.29 (Ref. 1), exposure to any level of radiation is assumed to carry with it a certain amount of risk. In the absence of scientific certainty regarding the relationship between low dose exposure and health effects, and as a conservative assumption for radiation protection purposes, the scientific community generally assumes that any exposure to ionizing radiation may cause undesirable biological effects and that the likelihood of these effects increases as the dose increases. At the occupational dose limit for the whole body of 5 rem (50 mSv) per year, the risk is believed to be very low.

The magnitude of risk of childhood cancer following in utero exposure is uncertain in that both negative and positive studies have been reported. The data from these studies “are consistent with a lifetime cancer risk resulting from exposure during gestation which is two to three times that for the adult.” (NCRP Report No. 116, Ref. 2). The NRC has reviewed the available scientific literature and has concluded that the 0.5 rem (5 mSv) limit specified in 10 CFR 20.1208 provides an adequate margin of protection for the embryo/fetus. This dose limit reflects the desire to limit the total lifetime risk of leukemia and other cancers associated with radiation exposure during pregnancy.

In order for a pregnant worker to take advantage of the lower exposure limit and dose monitoring provisions specified in 10 CFR Part 20, the woman must declare her pregnancy in writing to the licensee. A form letter for declaring pregnancy is provided in this guide or the licensee may use its own form letter for declaring pregnancy. A separate written declaration should be submitted for each pregnancy.

## **C. REGULATORY POSITION**

### **1. Who Should Receive Instruction**

Female workers who require training under 10 CFR 19.12 should be provided with the information contained in this guide. In addition to the information contained in Regulatory Guide 8.29 (Ref. 1), this information may be included as part of the training required under 10 CFR 19.12.

### **2. Providing Instruction**

The occupational worker may be given a copy of this guide with its Appendix, an explanation of the contents of the guide, and an opportunity to ask questions and request additional information. The information in this guide and Appendix should also be provided to any worker or supervisor who may be affected by a declaration of pregnancy or who may have to take some action in response to such a declaration.

Classroom instruction may supplement the written information. If the licensee provides classroom instruction, the instructor should have some knowledge of the biological effects of radiation to be able to answer questions that may go beyond the information provided in this guide. Videotaped presentations may be used for classroom instruction. Regardless of whether the licensee provides classroom training, the licensee should give workers the opportunity to ask questions about information contained in this Regulatory Guide 8.13. The licensee may take credit for instruction that the worker has received within the past year at other licensed facilities or in other courses or training.

### 3. Licensee's Policy on Declared Pregnant Women

The instruction provided should describe the licensee's specific policy on declared pregnant women, including how those policies may affect a woman's work situation. In particular, the instruction should include a description of the licensee's policies, if any, that may affect the declared pregnant woman's work situation after she has filed a written declaration of pregnancy consistent with 10 CFR 20.1208.

The instruction should also identify who to contact for additional information as well as identify who should receive the written declaration of pregnancy. The recipient of the woman's declaration may be identified by name (e.g., John Smith), position (e.g., immediate supervisor, the radiation safety officer), or department (e.g., the personnel department).

The instruction should also identify who to contact for additional information as well as identify who should receive the written declaration of pregnancy. The recipient of the woman's declaration may be identified by name (e.g., John Smith), position (e.g., immediate supervisor, the radiation safety officer), or department (e.g., the personnel department).

### 4. Duration of Lower Dose Limits for the Embryo/Fetus

The lower dose limit for the embryo/fetus should remain in effect until the woman withdraws the declaration in writing or the woman is no longer pregnant. If a declaration of pregnancy is withdrawn, the dose limit for the embryo/fetus would apply only to the time from the estimated date of conception until the time the declaration is withdrawn. If the declaration is not withdrawn, the written declaration may be considered expired one year after submission.

### 5. Substantial Variations Above a Uniform Monthly Dose Rate

According to 10 CFR 20.1208(b), "The licensee shall make efforts to avoid substantial variation above a uniform monthly exposure rate to a declared pregnant woman so as to satisfy the limit in paragraph (a) of this section," that is, 0.5 rem (5 mSv) to the embryo/fetus. The National Council on Radiation Protection and Measurements (NCRP) recommends a monthly equivalent dose limit of 0.05 rem (0.5 mSv) to the embryo/fetus once the pregnancy is known (Ref. 2.) In view of the NCRP recommendation, any monthly dose of less than 0.1 rem (1 mSv) may be considered as not a substantial variation above a uniform monthly dose rate and as such will not require licensee justification. However, a monthly dose greater than 0.1 rem (1 mSv) should be justified by the licensee.

## D. IMPLEMENTATION

The purpose of this section is to provide information to licensees and applicants regarding the NRC staffs plans for using this regulatory guide.

Unless a licensee or an applicant proposes an acceptable alternative method for complying with the specific portions of the NRC's regulations, the methods described in this guide will be used by the NRC staff in the evaluation of instructions to workers on the radiation exposure of pregnant women.

## REFERENCES

1. USNRC, "Instruction Concerning Risks from Occupational Radiation Exposure," Regulatory Guide 8.29, Revision 1, February 1996.
2. National Council on Radiation Protection and Measurements, *Limitation Exposure to Ionizing Radiation*, NCRP Report No. 116, Bethesda, MD, 1993.

**APPENDIX**  
**QUESTIONS AND ANSWERS CONCERNING PRENATAL RADIATION EXPOSURE**

**1. Why am I receiving this information?**

The NRC's regulations (in 10 CFR 19.12, "Instructions to Workers") require that licensees instruct individuals working with licensed radioactive materials in radiation protection as appropriate for the situation. The instruction below describes information that occupational workers and their supervisors should know about the radiation exposure of the embryo/fetus of pregnant women.

The regulations allow a pregnant woman to decide whether she wants to formally declare her pregnancy to take advantage of lower dose limits for the embryo/fetus. This instruction provides information to help women make an informed decision whether to declare a pregnancy.

**2. If I become Pregnant, am I required to declare my pregnancy?**

No, the choice whether to declare your pregnancy is completely voluntary. If you choose to declare your pregnancy you must do so in writing and a lower dose limit will apply to your embryo/fetus. If you choose not to declare your pregnancy, you and your embryo/fetus will continue to be subject to the same radiation dose limits that apply to other occupational workers.

**3. If I declare my pregnancy in writing, what happens?**

If you choose to declare your pregnancy in writing, the licensee must take measures to limit the dose to your embryo/fetus to 0.5 rem (5 millisievert) during the entire pregnancy. This is one-tenth of the dose that an occupational worker may receive in a year. If you have already received a dose exceeding 0.5 rem (5mSv) in the period between conception and the declaration of your pregnancy, an additional dose of 0.05 rem (0.5 mSv) is allowed during the remainder of the pregnancy. In addition, 10 CFR 20.1208, "Dose to an Embryo/Fetus," requires licensees to make efforts to avoid substantial variation above a uniform monthly dose rate so that all the 0.5 rem (5 mSv) allowed dose does not occur in a short period during the pregnancy.

This may mean that, if you declare your pregnancy, the licensee may not permit you to do some of your normal job functions, if those functions would have allowed you to receive more than 0.5 rem, and you may not be able to have some emergency response responsibilities.

**4. Why do the regulations have a lower dose limit for the embryo/fetus of a declared pregnant woman than for a pregnant worker who has not declared?**

A lower dose limit for the embryo/fetus of a declared pregnant woman is based on a consideration of greater sensitivity to radiation of the embryo/fetus and the involuntary nature of the exposure. Several scientific advisory groups have recommended (References 1 and 2) that the dose to the embryo/fetus be limited to a fraction of the occupational dose limit.

**5. What are the potentially harmful effects of radiation exposure to my embryo/fetus?**

The occurrence and severity of health effects caused by ionizing radiation are dependent upon the type and total dose or radiation received, as well as the time period over which the exposure was received. See Regulatory Guide 8.29, "Instruction Concerning Risks from Occupational Exposure" (Ref. 3), for more information. The main concern is embryo/fetal susceptibility to the harmful effects of radiation such as cancer.

**6. Are there any risks of genetic defects?**

Although radiation injury has been induced experimentally in rodents and insects, and in the experiments was transmitted and became manifest as hereditary disorders in their offspring, radiation has not been identified as a cause of such effect in humans. Therefore, the risk of genetic effects attributable to radiation exposure is speculative. For example, no genetic effects have been documented in any of the Japanese atomic bomb survivors, their children or their grandchildren.

**7. What if I decide that I do not want any radiation exposure at all during my pregnancy?**

You may ask your employer for a job that does not involve any exposure at all to an occupational radiation dose, but your employer is not obligated to provide you with a job involving no radiation exposure. Even if you receive no occupational exposure at all, your embryo/fetus will receive some radiation dose (on average 75 mrem (0.75 mSv)) during your pregnancy from natural background radiation.

The NRC has reviewed the available scientific literature and concluded that the 0.5 rem (5 mSv) limit provides an adequate margin of protection for the embryo/fetus. This dose limit reflects the desire to limit the total lifetime risk of leukemia and other cancers. If this dose limit is exceeded, the total lifetime risk of cancer to the embryo/fetus may increase incrementally. However, the decision on what level of risk to accept is yours. More detailed information on potential risk to the embryo/fetus from radiation exposure can be found in References 2-10.

**8. What effect will formally declaring my pregnancy have on my job status?**

Only the licensee can tell you what effect a written declaration of pregnancy will have on your job status. As part of your radiation safety training, the licensee should tell you the company's policies with respect to the job status of declared pregnant women. In addition, before you declare your pregnancy, you may want to talk to your supervisor or your radiation safety officer and ask what a declaration of pregnancy would mean specifically for you and your job status.

In many cases you can continue in your present job with no change and still meet the dose limit for the embryo/fetus. For example, most commercial power reactor workers (approximately 93%) receive, in 12 months, occupational radiation doses that are less than 0.5 rem (5mSv) (Ref. 11). The licensee may also consider the likelihood of increased radiation exposures from accidents and abnormal events before making a decision to allow you to continue in your present job.

If your current work might cause the dose to your embryo/fetus to exceed 0.5 rem (5mSv), the licensee has various options. It is possible that the licensee can and will make a reasonable accommodation that will allow you to continue performing your current job, for example, by having another qualified employee do a small part of the job that accounts for some of your radiation exposure.

**9. What information must I provide in my written declaration of pregnancy?**

You should provide, in writing, your name, a declaration that you are pregnant, the estimated date of conception (only the month and year need be given), and the date that you give the letter to the licensee. A form letter that you can use is included at the end of these questions and answers. You may use that letter, use a form letter the licensee has provided to you, or write your own letter.

**10. To declare my pregnancy, do I have to have documented medical proof that I am pregnant?**

NRC regulations do not require that you provide medical proof of your pregnancy. However, NRC regulations do not preclude the licensee from requesting medical documentation of your pregnancy, especially if a change in your duties is necessary in order to comply with the 0.5 rem (5mSv).

**11. Can I tell the licensee orally rather than in writing that I am pregnant?**

No. The regulations require that the declaration must be in writing.

**12. If I have not declared my pregnancy in writing, but the licensee suspects that I am pregnant, do the lower dose limits apply?**

No, the lower dose limits for pregnant women apply only if you have declared your pregnancy in writing. The United States Supreme Court has ruled (in *United Automobile Workers International Union v Johnson Controls, Inc.*, 1991) that "Decisions about the welfare of future children must be left to the parents who conceive, bear, support, and raise them rather than to the employers who hire those parents" (Reference 7). The Supreme Court also ruled that your employer may not restrict you from a specific job "because of concerns about the next generation." Thus, the lower limit applies only if you choose to declare your pregnancy in writing.

**13. If I am planning to become pregnant but are not yet pregnant and I inform the licensee of that in writing, do the lower dose limits apply?**

No. The requirement for lower limits applies only if you declare in writing that you are already pregnant.

**14. What if I have a miscarriage or find out that I am not pregnant?**

If you have declared your pregnancy in writing, you should promptly inform the licensee in writing that you are no longer pregnant. However, if you have not formally declared your pregnancy in writing, you need not inform the licensee of your non-pregnant status.

**15. How long is the lower dose limit in effect?**

The dose to the embryo/fetus must be limited until you withdraw your declaration in writing or you inform the licensee in writing that you are no longer pregnant/. If the declaration is not withdrawn, the written declaration may be considered expired one year after submission.

**16. If I have declared my pregnancy in writing, can I revoke my declaration of pregnancy even if I am still pregnant?**

Yes you may. The choice is entirely yours. If you revoke your declaration of pregnancy, the lower dose limit for the embryo/fetus no longer applies.

**17. What if I work under contract at a licensed facility?**

The regulations state that you should formally declare your pregnancy to the licensee in writing. The licensee has the responsibility to limit the dose to the embryo/fetus.

**18. Where can I get additional information?**

The references to this Appendix contain helpful information, especially Reference 3, NCR's Regulatory Guide 8.29, "Instruction Concerning Risks from Occupational Radiation Exposure", for general information on radiation risks. The licensee should be able to give this document to you.

For information on legal aspects, see Reference 7, "The Rock and the Hard Place: Employer Liability to Fertile or Pregnant Employees and Their Unborn Children-What Can the Employer Do?" which is an article in the journal of *Radiation Protection Management*.

You may telephone the NRC Headquarters at (301)415-7000. Legal questions should be directed to the Office of the General Council, and technical questions should be directed to the Division of Industrial and Medical Nuclear Safety.

You may also telephone the NRC Regional Offices at the following numbers: Region I, (610) 337-5000; Region II, (404)562-4400; Region III, (630) 829-9500; and Region IV, (817) 860-8100. Legal questions should be directed to the Regional Counsel, and technical questions should be directed to the Division of Nuclear Materials Safety.

## REFERENCES FOR APPENDIX

1. National Council on Radiation Protection and Measurements, *Limitation of Exposure to Ionizing Radiation*, NCRP Report No. 116, Bethesda, MD, 1993.
2. International Commission on Radiological Protection, *1990 Recommendations of the International Commission on Radiological Protection*, ICRP Publications 60, Ann. ICRP 21: No.1-3, Pergamon Press, Oxford, UK, 1991.
1. USNRC, "Instruction Concerning Risks from Occupational Radiation Exposure, "Regulatory Guide 8.29, Revision 1, February 1996."<sup>1</sup> (Electronically available at [www.nrc.gov/NCR/RG/index.html](http://www.nrc.gov/NCR/RG/index.html))
2. Committee on the Biological Effects of Ionizing Radiations, National Research Council, *Health Effects of Exposure to Low Levels of Ionizing Radiation* (BEIR V), National Academy Press, Washington, DC, 1990.
3. United Nations Scientific Committee on the Effects of the Atomic Radiation, *Sources and Effects of Ionizing Radiation*, United Nations, New York, 1993.
4. R. Doll and R. Wakeford, "Risk of Childhood Cancer from Fetal Irradiation," *The British Journal of Radiology*, 70, 130-139, 1997.
5. David Wiedis, Donald Jose, and Timm o. Phoebe, "The Rock and the Hard Place: Employer Liability to Fertile or Pregnant Employees and Their Unborn Children-What Can the Employer Do?" *Radiation Protection Management*, 11, 41-49, January/February 1994.
6. National Council on Radiation Protection and Measurements, *Considerations Regarding the Unintended Radiation Exposure of the embryo, Fetus, or Nursing Child*, NCRP Commentary No. 9, Bethesda, MD, 1994.
7. National Council on Radiation Protection and Measurements, *Risk Estimates for Radiation Protection*, NCRP Report No. 115, Bethesda, MD, 1993.
8. National Radiological Protection Board, *Advice on Exposure to Ionizing Radiation During Pregnancy*, National Radiological Protection Board, Chilton, Didcot, UK, 1998.
9. M.L. Thomas and D. Hagemeyer, "Occupational Radiation Exposure at Commercial Nuclear Power Reactors and Other Facilities, 1996", Twenty-Ninth Annual Report, NUREG-0713, Vol.18, USNRC, 1998.<sup>2</sup>

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<sup>1</sup> Single copies of regulatory guides, both active and draft, and draft NUREG documents may be obtained free of charge by writing the Reproduction and Distribution Services Section, OCIO, USNRC< Washington, DC 20555-0001, or by fax to (301) 415-2289, or by email to <DISTRIBUTION@NRC.GOV>. Active guides may also be purchased from the National Technical Information Service on a standing order basis. Details on this service may be obtained by writing NTIS, 5285 Port Royal Road, Springfield, VA 22161. Copies of active ad draft guides are available for inspection or copying for a fee from the NRC Public Document Room at 2120 L Street NW, Washington, DC; the PDR's mailing address is Mail Stop LL-6, Washington, DC 20555; telephone (202) 634-3273; fax (202)634-3343.

<sup>2</sup> Copies are available at current rates from the U.S. Government Printing Office, P.O. Box 37082, Washington DC 20402-9328 (telephone (202) 512-1800); or from the National Technical Information Service by writing NTIS at 5285 Port Royal Road, Springfield, VA 22161. Copies are available for inspection or copying for a fee from the NRC Public Document Room at 2120 L Street NW., Washington, DC; the PDR's mailing address is Mail Stop LL-6, Washington, DC 20555; telephone (202) 634-3273; fax (202)634-3343.

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**ATTACHMENT 22**

**Regulatory Guide 8.13**

**Instruction Concerning Prenatal Radiation Exposure**

**Acknowledgment Form**

I, \_\_\_\_\_, have read and/or have been advised of the contents of Regulatory Guide 8.13, Dated June 1999. I understand that if I am pregnant, or if I suspect that I may be pregnant, I should notify my supervisor in writing. I understand that my decision to declare my pregnancy is completely voluntary on my part. I further understand my radiation exposure should not exceed 500 mR during the term of the entire pregnancy from all sources.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

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**ATTACHMENT 23****Directions for Use of Potassium Iodide (KI)**

(POTASSIUM IODIDE)  
(pronounced poe.TASS.e.um EYE.oh.dyed)  
(abbreviated: KI)  
TABLETS and SOLUTION U.S.P.

**NOTE:** TAKE POTASSIUM IODIDE ONLY WHEN PUBLIC HEALTH OFFICIALS TELL YOU (THROUGH YOUR LOCAL EOC OFFICIALS). IN A RADIATION EMERGENCY, RADIOACTIVE IODINE COULD BE RELEASED INTO THE AIR. POTASSIUM IODIDE (A FORM OF IODINE) CAN HELP PROTECT YOU.

IF YOU ARE TOLD TO TAKE THIS MEDICINE, TAKE IT ONE TIME EVERY 24 HOURS. DO NOT TAKE IT MORE OFTEN. MORE WILL NOT HELP YOU AND MAY INCREASE THE RISK OF SIDE EFFECTS.

**DO NOT TAKE THIS DRUG IF YOU KNOW YOU ARE ALLERGIC TO IODINE (SEE SIDE EFFECTS BELOW).**

**INDICATIONS:** Thyroid blocking in a radiation emergency only.

**DESCRIPTION:** Each tablet contains 130 mg. of potassium iodide.

**DIRECTIONS FOR USE:** Use only as directed by State public health authorities in the event of a radiation emergency. These directions are for emergency workers who will be 18 years of age or older. For directions for persons under 18 years of age, see FDA instructions.

- Take one (1) tablet once a day.
- Take for ten (10) days unless directed otherwise by State public health authorities. Store at controlled room temperature between 15° and 30°C (59° to 86°F). Keep package dry and foil packets intact.

**WARNING: Potassium iodide should not be used by people allergic to iodine.** Keep out of the reach of children. In case of overdose or allergic reaction, contact a physician or the State public health authority.

**HOW POTASSIUM IODIDE WORKS:** Certain forms of iodine help your thyroid gland work right. Most people get the iodine they need from foods, like iodized salt or fish. The thyroid can "store" or hold only a certain amount of iodine.

In a radiation emergency, radioactive iodine may be released into the air. This material may be breathed or swallowed. It may enter the thyroid gland and damage it. The damage would probably not show itself for years. Children are most likely to have thyroid damage.

If you take potassium iodide, it will fill-up your thyroid. This reduces the chance that harmful radioactive iodine will enter the thyroid gland.

**WHO SHOULD NOT TAKE POTASSIUM IODIDE:** The only people who should not take potassium iodide are people who know they are allergic to iodine. You may take potassium iodide even if you are taking medicines for a thyroid problem (for example, a thyroid hormone or anti-thyroid drug). Pregnant and nursing women and babies and children may also take this drug.

**HOW AND WHEN TO TAKE POTASSIUM IODIDE:** Potassium iodide should be taken as soon as possible after State public health officials tell you. You should take one dose every 24 hours. More will not help you because the thyroid can "hold" only limited amounts of iodine. Larger doses will increase the risk of side effects. You will probably be told not to take the drug for more than ten days.

**SIDE EFFECTS:** Usually, side effects of potassium iodide happen when people take higher doses for a long time. You should be careful not to take more than the recommended dose or take it for longer than you are told. Side effects are unlikely because of the low dose and the short time you will be taking the drug.

Possible side effects include skin rashes, swelling of the salivary glands, and "iodism" (metallic taste, burning mouth and throat, sore teeth and gums, symptoms of a head cold, and sometimes stomach upset and diarrhea).

A few people have an allergic reaction with more serious symptoms. These could be fever and joint pains or swelling of parts of the face and body and at times severe shortness of breath requiring immediate medical attention.

Taking iodide may rarely cause over activity of the thyroid gland, under-activity of the thyroid gland, or enlargement of the thyroid gland (goiter).

**WHAT TO DO IF SIDE EFFECTS OCCUR:** If the side effects are severe, or if you have an allergic reaction, stop taking potassium iodide. Then, if possible, call a doctor or State public health authority for instructions.

## ATTACHMENT 24

### Route Alerting Briefing Form

ASSIGNED ROUTE: \_\_\_\_\_ (See map)

VEHICLE ID:

\_\_\_\_\_

DRIVER=S NAME: \_\_\_\_\_

COMMUNICATOR=S NAME:

\_\_\_\_\_

COMPLETION TIME: \_\_\_\_\_

*This is the time you must notify the last house on the route and not the time you return to the beginning of the route or to the EOC or Fire Station.*

#### INSTRUCTIONS:

1. Driving speed
  - A. Where your route is mostly rural you may drive at a safe but faster speed between homes and businesses but when you approach the houses or businesses to be notified (50 yards before and 50 yards after) you must drive no faster than 10 miles per hour while making the announcement. Where the homes are isolated you must read the entire announcement twice.
  - B. Where your route is more densely populated you must drive no faster than 10 miles per hour but you may continuously make the announcement.
2. Reading the announcement
  - A. Read the announcement at a measured pace, enunciating the words carefully and clearly.
  - B. Ensure that the Public Address system is understandable and loud enough to reach each dwelling or business.
  - C. If you are operating after normal business hours and if you can determine that there is no one at that business, you may skip that business.
3. The announcement (See Attachment 4 for the Announcement Card)

<b>ATTENTION! ATTENTION!</b>
------------------------------

THERE IS AN EMERGENCY AT THE VERMONT YANKEE NUCLEAR POWER STATION

PLEASE TUNE YOUR RADIO TO  
RADIO STATION W TSA OR  
RADIO STATION WKVT OR  
RADIO STATION WWAY  
FOR OFFICIAL EMERGENCY INFORMATION

Date Completed: \_\_\_\_\_

Time Completed: \_\_\_\_\_

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**ATTACHMENT 25**

**Route Alerting Team Assignment Worksheet**

DATE: \_\_\_\_\_

SHIFT: \_\_\_\_\_

Operations Section Chief Fire and Rescue Branch Director: \_\_\_\_\_

ROUTE	DRIVER	COMMUNICATOR	VEHICLE	CURRENT ASSIGNMENT	ESTIMATED TIME EN ROUTE
1					
2					
3					
4					
5					
6					
7					
8					

ROUTE	DRIVER	COMMUNICATOR	VEHICLE	CURRENT ASSIGNMENT	ESTIMATED TIME EN ROUTE
9					
10					
11					
12					

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## **ATTACHMENT 26**

### **Emergency Alerting Route Maps**

(The maps are located at the Town Emergency Operations Center for emergency distribution to the Route Alerting Teams.)



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ATTACHMENT 27

Route Alerting Announcement Card

**ATTENTION!**

**ATTENTION!**

**THERE IS AN EMERGENCY AT THE  
VERMONT YANKEE NUCLEAR POWER  
STATION.**

**PLEASE TUNE YOUR RADIO TO:**

**RADIO STATION WTSA  
1450 AM & 96.7 FM**

**RADIO STATION WKVT  
1490 AM & 92.7 FM**

**RADIO STATION WWAY  
100.7 FM**

**FOR OFFICIAL EMERGENCY**

# INFORMATION

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## ATTACHMENT 28

### Restricted Zone Re-Entry Instructions

(Provided at Supply Unit Leader / Radiological Officer briefing)

Re-Entry Instructions
1. Use designated routes/directions to reach your destination.
2. Obey the stay time inside the restricted zone provided to you.
3. Conduct and complete your duties as soon as possible.
4. If not sure of actions to be taken, leave the area and return to the re-entry point.
Dosimetry Instructions
<p>A. <u>Wearing the Dosimeters</u></p> <ol style="list-style-type: none"> <li>1. Wear the Direct Reading Dosimeter (DRD) and Dosimeter of Legal Record on the upper torso area of the body. They may be clipped to a shirt, jacket, or coverall pocket. The Direct reading Dosimeter should always be worn next to the Dosimeter of Legal Record.</li> <li>2. Wear the DRD inside the outer clothing, if the area being entered is contaminated or wet.</li> <li>3. Handle the DRD gently.</li> <li>4. Do not submerge the DRD in water.</li> </ol>
<p>B. <u>Reading the DRD</u></p> <ol style="list-style-type: none"> <li>1. Point the DRD toward a light source and look through the eye piece.</li> <li>2. Locate the hairline and estimate the reading.</li> <li>3. Read your DRD dosimeter at frequent intervals (approximately every 15 minutes).</li> <li>4. Always read the dosimeter scale in the horizontal position to minimize the effects of</li> </ol>

gravity on the fiber.

5. Return to the re-entry point if you lose or break your DRD or if your DRD reads off-scale.

**Exiting Instructions**

1. Return to the same re-entry point that you entered.
2. Follow instructions explained at re-entry point.

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## ATTACHMENT 29

### Re-Entry Processing Form

Agency: \_\_\_\_\_ Control Point #: \_\_\_\_\_

Name: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Address in Restricted Zone\*: \_\_\_\_\_

Temporary Address\*: \_\_\_\_\_

Purpose of Entry and Destination: \_\_\_\_\_

Estimated Stay Time@ in the Restricted Zone: \_\_\_\_\_

Location of Access Control Point: \_\_\_\_\_

**Reading of Dosimeter of Legal Record (Later)**

**Remarks:**

Date of dosimetry reading: \_\_\_\_\_

Dosimetry reading: \_\_\_\_\_

**Dosimeter Log**

Issuing Agency: \_\_\_\_\_

Dosimeter of Legal Record ID No.: \_\_\_\_\_

DRD ID No.: \_\_\_\_\_

Date	Time		Direct Reading Dosimeter		
	In	Out	Entering	Return	Total
			R	R	R
			R	R	R
			R	R	R
			R	R	R
			R	R	R

* If Applicable	TOTAL	R
-----------------	-------	---

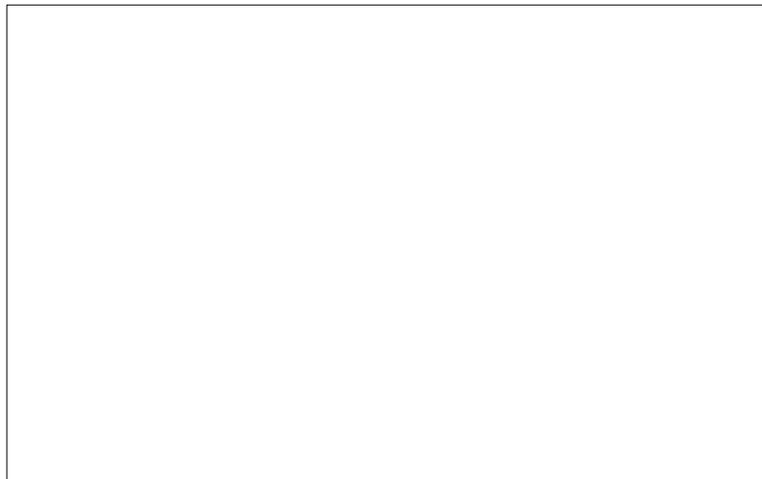
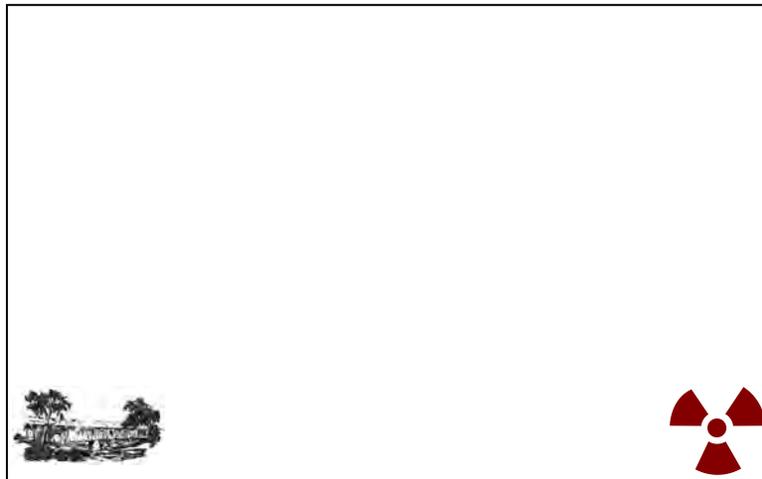
**ORIGINAL:** Retain and provide to the Health Department representative at the Staging Area.  
**COPY:** Provide to the individual entering the restricted zone. Copy for Control Point Officer.

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# ATTACHMENT 30

## RESTRICTED ZONE PASS

### Front and back views



*Note: The E-PASS may vary in color in order to be used as a control device. For example, orange passes may be issued on even numbered days and green passes on odd numbered days. Other colors may denote different towns.*

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Attachments

Name of Person Entering	Restricted Zone Pass No.	Reason For Entry	IN Date & Time	OUT Date & Time	Initials of Access Control Personnel

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Radiological Emergency Response  
Implementing Procedure

**TOWN OF MARLBORO**

**LIST OF IMPLEMENTING PROCEDURES**

IP – 1	Selectboard Chair / Selectboard
IP – 2	Emergency Management Director
IP – 3	Operations Section Chief Fire & Rescue Branch Director
IP – 4	Police Branch Director
IP – 5	Control Point Officer
IP – 6	Highway Branch Director
IP – 7	Communications Unit Leader
IP – 8	Supply Unit Leader / Radiological Officer
IP – 9	Medical Unit Leader / Health Officer
IP – 10	Public Information Officer
IP – 11	Finance & Administration Section Chief
IP – 12	Re-entry Processing

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Radiological Emergency Response  
Implementing Procedure

**TOWN OF MARLBORO**

**SELECTBOARD CHAIR / SELECTBOARD**

**IP - 1**

This Implementing Procedure (IP) was developed to guide the Marlboro Selectboard Chair / Selectboard in accomplishing the required tasks in the event of an emergency at the Vermont Yankee Nuclear Power Station (VYNPS).

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**APPLICABLE ATTACHMENTS**

<b><u>Number</u></b>	<b><u>Title</u></b>	<b><u>Page</u></b>
9.	Guide for Preparing News Releases for the News Media .....	17
13.	Operations Log Form .....	25

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## **RESPONSE ACTIONS**

### **UNUSUAL EVENT**

Upon receiving an initial message containing a classification of an UNUSUAL EVENT, the Selectboard Chair / Selectboard will perform the following.

- \_\_\_\_ 1. Receive the notification from a pager carrier or the State Warning Point.
- \_\_\_\_ 2. If initial notification is received from a source other than as indicated in Step 1, contact the State Warning Point or Vermont Emergency Management to verify the situation.
- \_\_\_\_ 3. Respond to the Emergency Operations Center (EOC), if necessary, and have key emergency response personnel respond, if needed.
- \_\_\_\_ 4. Standby for further information.

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**ALERT**

- \_\_\_ 1. Receive notification of an ALERT from a pager carrier or the State Warning Point.
- \_\_\_ 2. If initial notification is received from a source other than as indicated in Step 1, contact the State Warning Point or Vermont Emergency Management to verify the situation.
- \_\_\_ 3. Notify the other members of the Selectboard as well as the Police Branch Director, Medical Unit Leader / Health Officer, Public Information Officer, Supply Unit Leader / Radiological Officer, and Finance & Administration Section Chief to report to the Emergency Operations Center (EOC) if the situation warrants it. See the Staff Notification List.
- \_\_\_ 4. Report to the Emergency Operations Center.
- \_\_\_ 5. Obtain a copy of the Marlboro Town Plan and Implementing Procedure 1, "Selectboard Chair / Selectboard".
- \_\_\_ 6. Obtain an Operations Log Sheet and maintain a record of all telephone calls, actions taken, and any problems encountered during the emergency. Document the transmittal of all Emergency Alert System messages, informational and instructional messages, and news releases generated in the Marlboro Emergency Operations Center.
- \_\_\_ 7. Confer with the Emergency Management Director to ensure all response personnel have been notified and are en-route to the Emergency Operations Center.
- \_\_\_ 8. Conduct a briefing on the emergency situation after the Emergency Operations Center staff has arrived.
- \_\_\_ 9. Obtain dosimetry, potassium iodide (KI), and a briefing from the Supply Unit Leader / Radiological Officer.  
  
*Note: This will occur once the Supply Unit Leader / Radiological Officer has had the opportunity to properly prepare dosimetry and potassium iodide for issue.*
- \_\_\_ 10. Direct and control the town's emergency response operations.
- \_\_\_ 11. Ensure the Finance & Administration Section Chief maintains records of town expenditures and hours of town employees utilized as a result of an emergency at the Vermont Yankee Nuclear Power Station (see Implementing Procedure 11, "Finance & Administration Section Chief").

- \_\_\_\_\_ 12. Hold periodic briefings to update the Emergency Operations Center staff on the emergency situation, especially when there is a change in the emergency classification or a protective action is directed.
  
- \_\_\_\_\_ 13. Prepare or review and approve any Emergency Alert System message or news release generated by the town (see Implementing Procedure 10, "Public Information Officer").
  - \_\_\_\_\_ A. Coordinate news releases with the Vermont Public Information Officer, State Emergency Operations Center, and Vermont Public Information Officer at the News Media Center / Joint Information Center located at the Vermont Yankee Nuclear Power Station Brattleboro Office.
  
  - \_\_\_\_\_ B. Transmit any Emergency Alert System message generated by the town to the State Emergency Operations Center for review, approval, and activation.

*Note Due to the regional nature of the emergency, local requests for activation of the Emergency Alert System must be approved and processed through the State Emergency Operations Center.*
  
  - \_\_\_\_\_ C. Refer questions from the media, not related to town activities, to the News Media Center / Joint Information Center.
  
- \_\_\_\_\_ 14. If at any time you are required to leave the Emergency Operations Center, designate a replacement, and inform the Emergency Management Director.

**SITE AREA EMERGENCY OR GENERAL EMERGENCY**

Upon receiving an initial message, or a message containing an escalation to a SITE AREA EMERGENCY or a GENERAL EMERGENCY, the Selectboard Chair / Selectboard will perform the following.

- \_\_\_ 1. Receive the notification from a pager carrier or the State Warning Point.
- \_\_\_ 2. Perform all tasks in **ALERT** if not already completed.
- \_\_\_ 3. Hold periodic briefings to update the Emergency Operations Center staff on the emergency situation, especially when there is a change in the emergency classification or a protective action is directed.
- \_\_\_ 4. Prepare or review and approve any Emergency Alert System message or news release generated by the town (see Implementing Procedure 10, "Public Information Officer").
  - \_\_\_ A. Coordinate news releases with the Vermont Public Information Officer, State Emergency Operations Center, and Vermont Public Information Officer at the News Media Center / Joint Information Center located at the Vermont Yankee Nuclear Power Station Brattleboro Office.
  - \_\_\_ B. Transmit any Emergency Alert System messages generated by the town to the State Emergency Operations Center for review, approval, and activation of the Emergency Alert System.

*Note: Due to the regional nature of the emergency, local requests for activation of the Emergency Alert System or sirens must be approved and processed through the State Emergency Operations Center.*
  - \_\_\_ C. Refer questions from the media, not related to town activities, to the News Media Center / Joint Information Center.
- \_\_\_ 5. Be prepared to implement sheltering or evacuation of the town's residents when directed by the State Emergency Operations Center.
- \_\_\_ 6. Notify the State Emergency Operations Center when the town residents have been evacuated, and inform them of the approximate number of persons who did not evacuate, if known.
- \_\_\_ 7. Notify the post office of the evacuation and request all mail be detained.
- \_\_\_ 8. Ensure necessary arrangements have been made for security patrols.

- \_\_\_\_\_ 9. If at any time you are required to leave the Emergency Operations Center, designate a replacement, brief them on the emergency, and inform the Emergency Management Director.

**POST EMERGENCY**

The Selectboard Chair / Selectboard will perform the following.

- \_\_\_ 1. Coordinate the Town's post-emergency efforts with the Emergency Management Director.
- \_\_\_ 2. Form and chair a municipal Recovery Committee consisting of the following.
  - \_\_\_ A. Members of the Selectboard
  - \_\_\_ B. Emergency Management Director
  - \_\_\_ C. Operations Section Chief / Rescue Branch Director
  - \_\_\_ D. Police Branch Director
  - \_\_\_ E. Medical Unit Leader / Health Officer
  - \_\_\_ F. Supply Unit Leader / Radiological Officer
  - \_\_\_ G. Highway Branch Director
  - \_\_\_ H. Public Information Officer (PIO)
  - \_\_\_ I. Finance and Administration Section Chief
- \_\_\_ 3. Convene the committee as needed to perform the following.
  - \_\_\_ A. Determine the needs of the town.
  - \_\_\_ B. Determine what support needs will be requested from the State and write them in order of priority on an "Unmet Needs List" (the State may forward some of those requests on to Federal agencies).
  - \_\_\_ C. Provide the committee with current status reports from major departments.
  - \_\_\_ D. Develop and implement a Recovery Action Plan.
- \_\_\_ 4. Reduce the Emergency Response Staff to those key personnel necessary to assist in the post-emergency response with the state.
- \_\_\_ 5. Maintain a 24 hour operational capability, as required, at the Emergency Operations Center.

- \_\_\_ 6. Coordinate with the Emergency Management Director regarding the town's post-emergency efforts.
  
- \_\_\_ 7. Consider the following Post-Emergency response.
  - \_\_\_ A. Traffic and access control
  - \_\_\_ B. Restoration of emergency services
  - \_\_\_ C. Food and water supplies
  - \_\_\_ D. Relocation of the general public from the Restricted Zone that were not previously evacuated
  - \_\_\_ E. Re-entry into the Restricted Zone under controlled conditions
  - \_\_\_ F. Return of Town residents to areas outside the Restricted Zone
  - \_\_\_ G. Handling of public inquiries regarding:
    - \_\_\_ (1) Safety precautions
    - \_\_\_ (2) Health effects
    - \_\_\_ (3) Compensation for financial losses
    - \_\_\_ (4) Operation of schools
    - \_\_\_ (5) Farm and food issues

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**TERMINATION**

When a message is received from the State Emergency Operations Center that the incident has been terminated, the Selectboard Chair / Selectboard will perform the following.

- \_\_\_\_ 1. Turn in your dosimetry and any unused potassium iodide to the Supply Unit Leader / Radiological Officer.
- \_\_\_\_ 2. Attend termination briefing.
- \_\_\_\_ 3. Read and accept final report.

Radiological Emergency Response  
Implementing Procedure

**TOWN OF MARLBORO**

**EMERGENCY MANAGEMENT DIRECTOR**

**IP - 2**

This Implementing Procedure (IP) was developed to assist the Marlboro Emergency Management Director in taking necessary actions in the event of an emergency at the Vermont Yankee Nuclear Power Station (VYNPS).

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**APPLICABLE ATTACHMENTS**

<b><u>Number</u></b>	<b><u>Title</u></b>	<b><u>Page</u></b>
9.	Guide for Preparing News Releases for the News Media .....	17
13.	Operations Log Form .....	25
19.	Emergency Worker Exposure Control Information Sheet .....	37

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## **RESPONSE ACTIONS**

### **UNUSUAL EVENT**

Upon receiving an initial message containing a classification of an UNUSUAL EVENT, the Emergency Management Director will perform the following.

- \_\_\_ 1. Receive the notification from a pager carrier or the State Warning Point.
- \_\_\_ 2. If initial notification is received from a source other than as indicated in Step 1, contact the State Warning Point or Vermont Emergency Management to verify the situation.
- \_\_\_ 3. Confer with the Select board Chair or Select board members. Determine if some or all of the Emergency Operations Center (EOC) staff should come to the Emergency Operations Center.
- \_\_\_ 4. Notify the following individuals of the emergency situation.
  - \_\_\_ A. Windham Central School Superintendent
  - \_\_\_ B. Marlboro Elementary School Principal
  - \_\_\_ C. Meetinghouse School Director
  - \_\_\_ D. President of Marlboro College
- \_\_\_ 5. Respond to the Emergency Operations Center (EOC), if necessary, and have key emergency response personnel respond, if needed.
- \_\_\_ 6. Standby for further information.

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**ALERT**

- \_\_\_ 1. Receive notification of an ALERT from a pager carrier or the State Warning Point.
- \_\_\_ 2. If initial notification is received from a source other than as indicated in Step 1, contact the State Warning Point or Vermont Emergency Management to verify the situation.
- \_\_\_ 3. Report to the Emergency Operations Center.
- \_\_\_ 4. Obtain your copy of the Marlboro Town Plan and Implementing Procedures.
- \_\_\_ 5. Notify the Emergency Operations Center (EOC) staff and Select board Representative and direct them to report to the Emergency Operations Center.
- \_\_\_ 6. Notify the following individuals of the emergency situation.
  - \_\_\_ A. Windham Central School Superintendent
  - \_\_\_ B. Marlboro Elementary School Principal
  - \_\_\_ C. Meetinghouse School Director
  - \_\_\_ D. President of Marlboro College
  - \_\_\_ E. Marlboro Elementary School Bus Coordinator
  - \_\_\_ F. Marlboro Highway Department
- \_\_\_ 7. Ensure all emergency services have blank copies of Attachment 13, "Operations Log Form".
- \_\_\_ 8. Maintain an Operations Log of your operations to include telephone calls, problems encountered, actions taken on requests, transmittal of news releases, and Emergency Alert System messages generated by the Town.
- \_\_\_ 9. Prepare the Emergency Operations Center for operation.
  - \_\_\_ A. Ensure all status boards and the ten mile Emergency Planning Zone maps are in place and assign an individual to maintain them.
  - \_\_\_ B. Ensure the Marlboro Elementary School, Marlboro Meetinghouse School, and Marlboro College Emergency Plans and Emergency Telephone Listing are available.
  - \_\_\_ C. Ensure miscellaneous office supplies (pens, paper, etc.) are available.

- \_\_\_ 10. Confer with the Select board to determine if additional Emergency Operations Center staffing is required.
- \_\_\_ 11. Check with the Communications Unit Leader to ensure communications have been established with both the State Emergency Operations Center and the Staging Area.
- \_\_\_ 12. Direct the Supply Unit Leader / Radiological Officer to prepare Dosimeters of Legal Record, direct reading dosimetry, and potassium iodide for the Emergency Operations Center staff and other emergency workers.
- \_\_\_ 13. Ensure records are maintained on town expenditures and hours of town personnel utilized as a result of an emergency at the Vermont Yankee Nuclear Power Station. Refer to the Finance & Administration Section Chief procedure.
- \_\_\_ 14. Obtain dosimetry, potassium iodide (KI), and a briefing from the Supply Unit Leader / Radiological Officer.

*Note: This will occur once the Supply Unit Leader / Radiological Officer has had the opportunity to prepare dosimetry and potassium iodide for issue.*

- \_\_\_ 15. Notify the State Emergency Operations Center and Staging Area when the Emergency Operations Center is operational.
- \_\_\_ 16. Ensure that the transportation needs are sent to the Staging Area Transportation Coordinator, when known.
- \_\_\_ 17. Brief Emergency Operations Center staff on the following.
  - \_\_\_ A. Status of the emergency
  - \_\_\_ B. Use of Attachment 13, "Operations Log Form"
  - \_\_\_ C. Use of Attachment 19, "Emergency Worker Exposure Control Information Sheet"
- \_\_\_ 18. Evaluate staffing requirements to support 24 hour operations.
- \_\_\_ 19. Promptly report all conditions that would seriously limit or prevent a safe evacuation, if one were ordered, to the State Emergency Operations Center.
- \_\_\_ 20. Ensure the Fire, Police, and Highway Services perform the following:
  - \_\_\_ A. Review their communications capability.
  - \_\_\_ B. Evaluate the road conditions to the Reception Center.
  - \_\_\_ C. Evaluate transportation resources available for evacuation of "special needs" individuals and other personnel requiring transportation.

- \_\_\_\_\_ D. Evaluate personnel requirements to support 24 hour operations.
- \_\_\_\_\_ 21. Request additional staffing, communications, and/or transportation resource requirements from the Staging Area or the State Emergency Operations Center.
- \_\_\_\_\_ 22. Ensure the AM/FM radio is set to one of the following stations in order to monitor the instructions and/or information being provided to the public by the State of Vermont.

WTSA	1450 AM	96.7 FM	Brattleboro, VT
WKVT	1490 AM	92.7 FM	Brattleboro, VT
WVAY		100.7 FM	West Dover, VT

- \_\_\_\_\_ 23. Prepare or review and approve any Emergency Alert System messages or news releases generated by the town (see Implementing Procedure 10, “Public Information Officer”).
  - \_\_\_\_\_ A. Coordinate news releases with the Vermont Information Officer, State Emergency Operations Center, and Vermont Public Information officer at the News Media Center / Joint Information Center located at the Vermont Yankee Nuclear Power Station.
  - \_\_\_\_\_ B. Transmit any Emergency Alert System messages generated by the town to the State Emergency Operations Center for review, approval, and activation of the Emergency Alert System.
 

*Note: Due to the regional nature of the emergency, local requests for activation of the Emergency Alert System or sirens must be approved and processed through the State Emergency Operations Center.*
  - \_\_\_\_\_ C. Refer questions from the media, not related to town activities, to the News Media Center / Joint Information Center (JIC).

- \_\_\_\_\_ 24. Ensure the National Weather Service (NWS) weather alert radio is being monitored on 162.425 MHZ when advised the Public Notification System will be activated.

*Note: The Operations Section Chief Fire and Rescue Branch Director will conduct route alerting to notify the public in addition to the National Weather Service notification.*

- \_\_\_\_\_ 25. Maintain **ALERT** status until an escalation of the emergency or termination occurs (see **TERMINATION** below).

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**SITE AREA EMERGENCY OR GENERAL EMERGENCY**

Upon receiving an initial message, or a message containing an escalation to a SITE AREA EMERGENCY or a GENERAL EMERGENCY, the Emergency Management Director will perform the following.

- \_\_\_ 1. Receive the notification from a pager carrier or from the State Warning Point.
- \_\_\_ 2. Complete any actions that have not already been performed in **ALERT**.
- \_\_\_ 3. Notify the Marlboro Elementary School Principal of the emergency situation.
- \_\_\_ 4. Ensure that the transportation needs have been sent to the Staging Area Transportation Coordinator and revised if necessary.
- \_\_\_ 5. Prepare or review and approve any Emergency Alert System messages or news releases generated by the town (see Implementing Procedure 10, “Public Information Officer”).
  - \_\_\_ A. Coordinate news releases with the Vermont Information Officer, State Emergency Operations Center, and Vermont Public Information officer at the News Media Center / Joint Information Center located at the Vermont Yankee Nuclear Power Station.
  - \_\_\_ B. Transmit any Emergency Alert System messages generated by the town to the State Emergency Operations Center for review, approval, and activation of the Emergency Alert System.

*Note: Due to the regional nature of the emergency, local requests for activation of the Emergency Alert System or activation of sirens must be approved and processed through the State Emergency Operations Center.*
  - \_\_\_ C. Refer questions from the media, not related to town activities, to the News Media Center / Joint Information Center.
- \_\_\_ 6. Ensure the National Weather Service (NWS) weather alert radio is being monitored on 162.425 MHZ when advised the Public Notification System will be activated.

*Note: The Operations Section Chief Fire and Rescue Branch Director will conduct route alerting to notify the public in addition to the National Weather Service notification.*
- \_\_\_ 7. Instruct the Operations Section Chief Fire and Rescue Branch Director to notify special needs individuals and recreational areas, as necessary.

- \_\_\_ 8. If the protective action of sheltering-in-place is directed, perform the following.
- \_\_\_ A. Notify all emergency response personnel.
  - \_\_\_ B. Notify the Marlboro Elementary School Principal, Meetinghouse School director, and Marlboro College of the sheltering directive.
  - \_\_\_ C. Dispatch an emergency worker to quickly tour the town to ensure residents are off the roads.
  - \_\_\_ D. Notify the State Emergency Operations Center when the residents are in their homes.
- \_\_\_ 9. If the protective action of evacuation is directed, perform the following.
- \_\_\_ A. Notify all emergency response personnel.
  - \_\_\_ B. Notify the Marlboro Elementary School Principal, Meetinghouse School director, and Marlboro College of the evacuation directive.
  - \_\_\_ C. Notify the State Emergency Operations Center when evacuation has been completed and provide the approximate number of persons who did not evacuate, if known.
  - \_\_\_ D. Ensure Police and Highway Services have coordinated access control into the town.
  - \_\_\_ E. Inform the post office of the situation.
  - \_\_\_ F. Ensure that any necessary arrangements for security patrols have been made.
- \_\_\_ 10. Upon receiving a message from the State Emergency Operations Center authorizing emergency workers to take potassium iodide, inform the Medical Unit Leader / Health Officer and ensure the emergency workers are notified. Resolve any questions about who should take the potassium iodide with the State Emergency Operations Center.
- \_\_\_ 11. Upon receiving a message from the State Emergency Operations Center authorizing the general public to take potassium iodide, ensure that all emergency workers are informed so that they can inform members of the general public as they evacuate or return to shelter in their homes.

*Note: There will be an Emergency Alert system message relaying this information.*

- \_\_\_\_\_ 12. Inform the Medical Unit Leader / Health Officer to contact local farmers and direct them to shelter milk producing animals and place them on stored feed and protected water supplies after conferring with the State Emergency Operations Center.
  
- \_\_\_\_\_ 13. Continue to conduct periodic briefings throughout the emergency.
  
- \_\_\_\_\_ 14. If the town Emergency Operations Center is required to evacuate, coordinate with the State Emergency Operations Center to relocate operations to another suitable facility.
  - \_\_\_\_\_ A. Ensure Emergency Operations Center staff members take their Implementing Procedures and other emergency documentation to the new location.
  
  - \_\_\_\_\_ B. Send an advance party to the new location to include a decision maker so that there is always a town official in contact with the State Emergency Operations Center. If possible, do not move the remainder until the advance party reports arrival at the new location.

*Note: The decision of, if, and, when to move the town Emergency Operations Center will depend upon actual or very likely conditions. The town population may have been evacuated before a release occurred. If the release never happens or is considered very small, you may not want to evacuate your Emergency Operations Center. Confer with the Operations Section Chief and Health Services Coordinator at the State Emergency Operations Center for further guidance.*
  
  - \_\_\_\_\_ C. Inform the State Emergency Operations Center when evacuation of the Emergency Operations Center begins and when it is complete.
  
- \_\_\_\_\_ 15. If you must leave the Emergency Operations Center, designate a replacement and inform the Selectboard.
  - \_\_\_\_\_ A. Brief your replacement on the current emergency classification and the status of the town's emergency response efforts.
  
  - \_\_\_\_\_ B. Turn over this procedure, your Operations Log, Message Forms, and any other relevant documents to your replacement.

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**POST EMERGENCY**

**RELOCATION / RE-ENTRY / RETURN** Upon receiving a message containing this classification, perform the following.

- \_\_\_\_ 1. Verify that releases of radioactive materials to the environment are under control or have ceased.
- \_\_\_\_ 2. Verify that Vermont Yankee Nuclear Power Station is in stable condition with no potential for further uncontrolled releases of radioactive materials.
- \_\_\_\_ 3. Brief Selectboard members on RELOCATION / RE-ENTRY / RETURN status.
- \_\_\_\_ 4. Determine the need for access control for restricted zones in Marlboro using advice from the State.
- \_\_\_\_ 5. Discuss the relaxation of protective actions outside any restricted zones with the State.
- \_\_\_\_ 6. Receive the State=s authorization to enter the recovery phase once the necessary criteria are met.
- \_\_\_\_ 7. Brief the Selectboard on the State=s recommendations.
- \_\_\_\_ 8. Assist the Selectboard as they establish a Recovery Committee comprised of the following Emergency Operations Center staff members.

Selectboard Members  
Emergency Management Director  
Operations Section Chief Fire and Rescue Branch Director  
Police Branch Director  
Supply Unit Leader / Radiological Officer  
Medical Unit Leader / Health Officer  
Highway Branch Director  
Public Information Officer (PIO)  
Finance & Administration Section Chief

- \_\_\_\_ A. Call in additional personnel as necessary.
- \_\_\_\_ B. Receive a status report from each Recovery Committee member regarding available staff, resources and anything that would impede the recovery effort.
- \_\_\_\_ C. Provide a status on local conditions to Vermont Emergency Management.

- \_\_\_ 9. Assist the Selectboard as they develop a plan of action for Marlboro recovery.
- \_\_\_ 10. Ensure that the Public Information Officer (PIO) has issued a press release regarding where municipal services can be obtained to include directions to the Emergency Operations Center if it has been relocated and how to apply for re-entry.
  - \_\_\_ A. Receive status of contaminated areas and decontamination efforts from Vermont Emergency Management.
  - \_\_\_ B. Inform Selectboard members of this status.
- \_\_\_ 11. Determine necessary response for recovery; assign a staff member to be responsible for each area of operation. These areas may include but are not limited to the following.
  - \_\_\_ A. Access Control
  - \_\_\_ B. Restoration of Town services
  - \_\_\_ C. Public Information
  - \_\_\_ D. Transportation for evacuees and others
  - \_\_\_ E. Relocation of the general public from the Restricted Zone who were not previously evacuated
  - \_\_\_ F. Re-entry into the Restricted Zone(s) under controlled conditions
    - \_\_\_ (1) Designate someone to process applications for re-entry.
    - \_\_\_ (2) Determine an expeditious approval process.
    - \_\_\_ (3) Ensure coordination with the Supply Unit Leader / Radiological Officer.
  - \_\_\_ G. The return of evacuated residents to non-restricted areas
  - \_\_\_ H. Security for evacuated areas and Restricted Zones
- \_\_\_ 12. Review this plan of action with Vermont Emergency Management and make adjustments as needed.
  - \_\_\_ A. Dismiss personnel not needed for Recovery activities.
  - \_\_\_ B. Ensure personnel remain on a ready recall status.

- \_\_\_\_\_ 13. Receive status and brief Selectboard members on the following State activities affecting Marlboro.
  - \_\_\_\_\_ A. Radiological assessment of food and water sources
  - \_\_\_\_\_ B. Decontamination activities
  - \_\_\_\_\_ C. Disposal of radioactive waste
  - \_\_\_\_\_ D. Establishment of a long term radiological monitoring program
  
- \_\_\_\_\_ 14. Perform the following upon notification of RETURN authorization by Vermont Emergency Management.
  - \_\_\_\_\_ A. Direct Committee members to implement their responsibilities under the Marlboro plan of action.
  - \_\_\_\_\_ B. Determine an expeditious approval process.
  - \_\_\_\_\_ C. Ensure coordination with the Supply Unit Leader / Radiological Officer.
  - \_\_\_\_\_ D. Implement preparations necessary for residents to return to evacuated areas.
  - \_\_\_\_\_ E. Provide Vermont Emergency Management with a status of RETURN activities.
  
- \_\_\_\_\_ 15. Receive information from Vermont Emergency Management on State, Federal, and Vermont Yankee Nuclear Power Station resources and financial assistance that is available.
  
- \_\_\_\_\_ 16. Upon completion of RELOCATION / RETURN activities, deactivate the Emergency Operations Center, and return to normal town operations.
  - \_\_\_\_\_ A. Collect and retain all documentation used during Emergency Operations Center operation such as procedures, logs, and forms.
  - \_\_\_\_\_ B. Ensure documentation is organized to facilitate easy retrieval of information.
  - \_\_\_\_\_ C. Schedule a time to debrief staff members on the emergency response.
  - \_\_\_\_\_ D. Ensure the Emergency Operations Center is cleaned, restocked, and returned to an emergency-ready condition.

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**TERMINATION**

When a message is received from the State Emergency Operations Center that the incident has been terminated, perform the following.

- \_\_\_ 1. Notify emergency response personnel.
- \_\_\_ 2. Schedule a time to debrief staff members on the emergency response.
- \_\_\_ 3. Close out communications with the State Emergency Operations Center and the Staging Area.
- \_\_\_ 4. Ensure the Emergency Operations Center is cleaned, restocked, and returned to an emergency-ready condition.
- \_\_\_ 5. Ensure direct reading dosimeter (DRD) measurements have been recorded on individual cards.
- \_\_\_ 6. Collect and review all documentation used during the emergency such as Operations Log Forms, Implementing Procedures, and VEM Forms.
- \_\_\_ 7. Turn in your dosimetry and any unused potassium iodide to the Supply Unit Leader / Radiological Officer.
- \_\_\_ 8. Conduct a critique with emergency response personnel on the operation of the emergency.
- \_\_\_ 9. Inventory Emergency Operations Center supplies, radiological equipment, etc., and report any shortages to the State Emergency Operations Center.
- \_\_\_ 10. Report any findings and recommended changes to the Plan and IP's to the State Emergency Operations Center.

Radiological Emergency Response  
Implementing Procedure

**TOWN OF MARLBORO**

**OPERATIONS SECTION CHIEF  
FIRE AND RESCUE BRANCH DIRECTOR**

**IP - 3**

This Implementing Procedure (IP) was developed to guide the Marlboro Operations Section Chief Fire and Rescue Branch Director in accomplishing the tasks necessary in the event of an emergency at the Vermont Yankee Nuclear Power Station (VYNPS).

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**APPLICABLE ATTACHMENTS**

<b><u>Number</u></b>	<b><u>Title</u></b>	<b><u>Page</u></b>
13.	Operations Log Form .....	25
19.	Emergency Worker Exposure Control Information Sheet .....	37
24.	Route Alerting Briefing Form.....	55
25.	Route Alerting Team Assignment Worksheet .....	57
26.	Emergency Alerting Route Maps .....	59
27.	Route Alerting Announcement Card .....	61

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## **RESPONSE ACTIONS**

### **UNUSUAL EVENT**

- \_\_\_\_\_ 1. Not usually notified at UNUSUAL EVENT. No action required unless directed by the Emergency Management Director.

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**ALERT**

Upon receiving notification of an ALERT, perform the following.

- \_\_\_ 1. Receive the notification from one or more of the following.
  - \_\_\_ A. The Marlboro Emergency Management Director (EMD).
  - \_\_\_ B. A pager carrier assisting the Emergency Management Director
- \_\_\_ 2. Report to the Emergency Operations Center and standby for further information.
- \_\_\_ 3. Obtain your copy of the Marlboro Town Plan and Implementing Procedure 3, "Operations Section Chief Fire and Rescue Branch Director".
- \_\_\_ 4. Obtain an Attachment 13, "Operations Log Form", and maintain a record of all telephone calls, actions taken, and any problems encountered during the emergency.
- \_\_\_ 5. Assess the situation and notify all fire department personnel to report to the Fire Station if needed.
- \_\_\_ 6. Obtain dosimetry, potassium iodide and a briefing from the Supply Unit Leader / Radiological Officer.

*Note: This will occur once the Supply Unit Leader / Radiological Officer has had the opportunity to properly prepare dosimetry and potassium iodide for issue.*

- \_\_\_ 7. Ensure that Fire and Rescue personnel receive dosimetry, potassium iodide and a briefing from the Supply Unit Leader / Radiological Officer.
- \_\_\_ 8. Review the list of [special-needs](#) individuals and recreational areas listed below with the Highway Branch Director and determine staffing requirements necessary to notify them.
  - \_\_\_ A. South Pond Recreational Area

- \_\_\_ 9. If deemed appropriate, Route Alerting Teams may be deployed to notify the public (use Attachment 25, "Route Alerting Team Assignment Worksheet").
  - \_\_\_ A. Assign Route Alert Teams to each route. Where possible, assign two people to each team.
  - \_\_\_ B. If additional people are needed for route alerting, notify the Selectboard or Emergency Management Director and have Mutual Aid Companies assist.
  - \_\_\_ C. Make vehicle assignments and assign routes.
  - \_\_\_ D. Brief the teams on their mission in the event they are needed.
    - \_\_\_ (1) Provide Attachment 24, "Route Alerting Briefing Form" to each team.
    - \_\_\_ (2) Provide Attachment 26, "Emergency Alerting Route Maps", and Attachment 27, "Route Alerting Announcement Card", to each team .
    - \_\_\_ (3) Answer any questions.
  - \_\_\_ E. Have the teams ensure that their equipment is operational.
    - \_\_\_ (1) Public address system
    - \_\_\_ (2) Vehicle
    - \_\_\_ (3) Communications equipment
  - \_\_\_ F. Ensure that the teams are kept together and deployed with their equipment to the Emergency Operations Center, fire station, or close to the beginning of their route. They should only perform additional tasks that can be stopped immediately. The teams will be contacted and deployed to their route without having to return to the Emergency Operations Center.

- \_\_\_ 10. Ensure fire personnel are periodically updated on the emergency situation.
- \_\_\_ 11. When the Communications Unit Leader receives a VEM 2 form with an Emergency Alert System activation, activate the Route Alerting Teams.
  - \_\_\_ A. Once the tone alert radio message has been heard, the teams should be instructed to “stand down” and return to their previous assignment.
  - \_\_\_ B. If the message is not heard on time and is presumed to have failed, deploy the teams immediately. Instruct them to use Attachment 24, “Route Alerting Briefing Form”, to alert the public by reading the following message using the public address system

**ATTENTION! ATTENTION!**  
**THERE IS AN EMERGENCY AT**  
**THE VERMONT YANKEE NUCLEAR POWER STATION**

**PLEASE TUNE YOUR RADIO TO**  
**RADIO STATION WTSA OR**  
**RADIO STATION WKVT OR**  
**RADIO STATION WVAY**  
**FOR OFFICIAL EMERGENCY INFORMATION.**

- \_\_\_ C. The completion time for each route is 45 minutes after the tone alert radios were scheduled to be activated.
- \_\_\_ D. If the tone alert radio message is heard at a later time, the teams may be recalled.
- \_\_\_ E. When the routes are completed, debrief the teams and provide new forms in the event they are needed again.
- \_\_\_ 12. Review transportation requirements needed with the Highway Branch Director to evacuate Aspecial-needs@ individuals, if required. Notify the Emergency Management Director of additional requirements.
- \_\_\_ 13. Assist the Police Branch Director in providing personnel at traffic/access control points, if requested.
- \_\_\_ 14. Provide periodic briefings on your activities to the Emergency Management Director and/or the Selectboard.
- \_\_\_ 15. If you must leave the Emergency Operations Center, designate a replacement, brief them on the emergency, and inform the Emergency Management Director.

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**SITE AREA EMERGENCY / GENERAL EMERGENCY**

Upon receiving notification of a SITE AREA EMERGENCY or GENERAL EMERGENCY, perform the following.

- \_\_\_ 1. Receive the notification from a pager carrier or the Emergency Management Director.
- \_\_\_ 2. Complete any actions that have not already been completed in ALERT.
- \_\_\_ 3. Ensure fire personnel are periodically updated on the emergency situation.
- \_\_\_ 4. When instructed, assign personnel to notify Δspecial-needs@ individuals and inform them of the emergency.

*Note: Ensure personnel have been issued dosimetry, potassium iodide, communications equipment, etc., prior to being dispatched.*

- \_\_\_ 5. When the Communications Unit Leader receives a VEM 2 form with an Emergency Alert System activation, activate the Route Alerting Teams.
  - \_\_\_ A. Once the tone alert radio message has been heard, the teams should be instructed to “stand down” and return to their previous assignment.
  - \_\_\_ B. If the message is not heard on time and is presumed to have failed, deploy the teams immediately. Instruct them to use Attachment 24, “Route Alerting Briefing Form”, to alert the public by reading the following message using the public address system

**ATTENTION! ATTENTION!  
THERE IS AN EMERGENCY AT  
THE VERMONT YANKEE NUCLEAR POWER STATION**

**PLEASE TUNE YOUR RADIO TO  
RADIO STATION WTSA OR  
RADIO STATION WKVT OR  
RADIO STATION WWAY  
FOR OFFICIAL EMERGENCY INFORMATION.**

- \_\_\_ C. The completion time for each route is 45 minutes after the tone alert radios were scheduled to be activated.
- \_\_\_ D. If the tone alert radio message is heard at a later time, the teams may be recalled.
- \_\_\_ E. When the routes are completed, debrief the teams and provide new forms in the event they are needed again.

- \_\_\_\_\_ 6. Assist the Police Branch Director in providing personnel at traffic / access control points, if requested.
- \_\_\_\_\_ 7. Provide periodic briefings on your activities to the Emergency Management Director and/or the Selectboard.
- \_\_\_\_\_ 8. When instructed, notify the recreational areas listed in Paragraph 8 in the ALERT section.
- \_\_\_\_\_ 9. Be prepared to provide continual support for other natural or technological emergencies in the town should conditions warrant evacuation.
- \_\_\_\_\_ 10. If you must leave the Emergency Operations Center, designate a replacement, brief them on the emergency, and inform the Emergency Management Director.

**POST-EMERGENCY**

- \_\_\_\_ 1. Coordinate with the Selectboard and/or Emergency Management Director regarding any actions that may be required by fire department personnel to assist in post-emergency response operations.
  
- \_\_\_\_ 2. Serve as a member of the municipal Recovery Committee.

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**TERMINATION**

- \_\_\_\_ 1. After the incident has been terminated, give all your Operations Log Forms and other documentation to the Emergency Management Director.
- \_\_\_\_ 2. Notify fire department personnel of the termination.
- \_\_\_\_ 3. Ensure all equipment is ready for another activation.
- \_\_\_\_ 4. Turn in your dosimetry and any unused potassium iodide to the Supply Unit Leader / Radiological Officer.

Radiological Emergency Response  
Implementing Procedure

**TOWN OF MARLBORO**

**POLICE BRANCH DIRECTOR**

**IP - 4**

This Implementing Procedure (IP) was developed to guide the Police Branch Director in accomplishing the necessary tasks in the event of an emergency at the Vermont Yankee Nuclear Power Station (VYNPS).

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**APPLICABLE ATTACHMENTS**

<b><u>Number</u></b>	<b><u>Title</u></b>	<b><u>Page</u></b>
13.	Operations Log Form .....	25
14.	Marlboro Access Control Instructions .....	27
15.	Marlboro Traffic and Access Control Points.....	29
19.	Emergency Worker Exposure Control Information Sheet .....	37
28.	Restricted Zone Re-Entry Instructions .....	63
29.	Re-Entry Processing Form.....	65
30.	Restricted Zone Pass.....	57
31.	Restricted Zone Log.....	69

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## **RESPONSE ACTIONS**

### **UNUSUAL EVENT**

- \_\_\_\_\_ 1. Not usually notified at UNUSUAL EVENT. No action is required unless directed by the Emergency Management Director.

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**ALERT**

Upon receiving notification of an ALERT, perform the following.

- \_\_\_ 1. Receive the notification from one or more of the following:
  - \_\_\_ A. The Marlboro Emergency Management Director
  - \_\_\_ B. A pager carrier assisting the Emergency Management Director
- \_\_\_ 2. Report to the Emergency Operations Center.
- \_\_\_ 3. Obtain your copy of the Marlboro Town Plan and Implementing Procedure 4, "Police Branch Director".
- \_\_\_ 4. Obtain a Operations Log Form and maintain a record of all telephone calls, actions taken, and any problems encountered during the emergency.
- \_\_\_ 5. Confer with the Emergency Management Director.
  - \_\_\_ A. Notify all police personnel and place them on standby.
  - \_\_\_ B. Direct police personnel to report to the Emergency Operations Center if necessary.
- \_\_\_ 6. Obtain dosimetry, potassium iodide, and a briefing from the Supply Unit Leader / Radiological Officer or Medical Unit Leader / Health Officer.

*Note: This will occur once the Supply Unit Leader / Radiological Officer has had the opportunity to properly prepare dosimetry and potassium iodide for issue.*
- \_\_\_ 7. Ensure all police personnel or other persons assigned to assist at control points receive dosimetry, potassium iodide and associated briefings prior to being dispatched to the field.
- \_\_\_ 8. Issue Implementing Procedure 5, "Control Point Officer", to the Officer or person assigned to a Control Point.
- \_\_\_ 9. Ensure that any conditions that would prevent or make an evacuation unsafe are reported to the Emergency Management Director and the State Emergency Operations Center.
- \_\_\_ 10. Assign an individual to control access at the entrance of the Emergency Operations Center.

- \_\_\_\_\_ 11. Be prepared to provide continual support for other natural or technological emergencies in the town.
- \_\_\_\_\_ 12. Provide periodic briefings on your activities to the Emergency Management Director and/or the Selectboard.
- \_\_\_\_\_ 13. If you must leave the Emergency Operations Center, designate a replacement, brief them on the emergency, and inform the Emergency Management Director.

**SITE AREA EMERGENCY / GENERAL EMERGENCY**

Upon receiving notification of a SITE AREA EMERGENCY or GENERAL EMERGENCY, perform the following.

- \_\_\_ 1. Receive the notification from one or more of the following:
  - \_\_\_ A. The Marlboro Emergency Management Director
  - \_\_\_ B. A pager carrier assisting the Emergency Management Director
- \_\_\_ 2. Complete any actions that have not already been completed in ALERT.
- \_\_\_ 3. Ensure police personnel are continually updated on the status of the emergency, including the following.
  - \_\_\_ A. Current emergency classification and any changes.
  - \_\_\_ B. Protective actions as directed by the Governor.
  - \_\_\_ C. Whether there has been a release from the plant.
  - \_\_\_ D. Where persons may apply for re-entry.
  - \_\_\_ E. The status of their control points.
- \_\_\_ 4. If sheltering-in-place is recommended, assign personnel to access control points and issue them a copy of Implementing Procedure 5, "Control Point Officer", with sufficient copies of the necessary attachments.
- \_\_\_ 5. If evacuation is recommended, perform the following.
  - \_\_\_ A. Provide advance coordination with adjacent communities.
  - \_\_\_ B. Assist the Highway Branch Director in determining appropriate evacuation routes.
  - \_\_\_ C. Assign personnel to Traffic and/or Access Control Points with proper dosimetry and potassium iodide and issue them a copy of Implementing Procedure 5, "Control Point Officer", with sufficient copies of the necessary attachments.

- \_\_\_ 6. Coordinate delivery of traffic control equipment with the Highway Branch Director.
- \_\_\_ 7. Assist the Operations Section Chief Fire and Rescue Branch Director with notification and evacuation of Aspecial-need individuals, if requested.
- \_\_\_ 8. Coordinate the arrangement of security patrols during evacuation activities with the Emergency Management Director.
- \_\_\_ 9. If additional staffing, equipment, or other support is required, request assistance through the Emergency Management Director.
- \_\_\_ 10. Provide periodic briefings on your activities to the Emergency Management Director and/or the Selectboard.
- \_\_\_ 11. If a shift change occurs, ensure that all control point personnel are monitored and necessary decontamination is accomplished prior to being released from duty. Coordination with the Supply Unit Leader / Radiological Officer will provide details about the nearest monitoring and decontamination facility. Supervisors should at least Aspot check some individuals to ensure that Radiation Exposure Records are being kept properly and radiation safety precautions are being followed.
- \_\_\_ 12. Coordinate with the Supply Unit Leader / Radiological Officer to determine how much exposure each person has received before reassigning them to a Control Point. Assignments must be made so that all personnel receive exposure "As Low As Reasonably Achievable". This will involve relocating Control Points, assigning personnel with higher exposure to duty in low dose areas, or following specific Vermont Department of Health instructions.
- \_\_\_ 13. Be prepared to provide continual support for other natural or technological emergencies in the town should conditions warrant evacuation.
- \_\_\_ 14. If you must leave the Emergency Operations Center, designate a replacement, brief them on the current status, and inform the Emergency Management Director.

**POST-EMERGENCY**

Coordinate with the Selectboard and/or Emergency Management Director regarding any actions that may be required by Police Service personnel to assist in post-emergency response operations. These actions will include but not be limited to the following.

- \_\_\_ 1. Provision of access control personnel
- \_\_\_ 2. Coordination with the Supply Unit Leader / Radiological Officer to ensure the proper monitoring and any necessary decontamination of access control personnel
- \_\_\_ 3. Cooperation with the person(s) issuing Restricted Zone Passes
- \_\_\_ 4. Coordination with state and local police departments on re-entry points
- \_\_\_ 5. Serve as a member of the municipal Recovery Committee

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**TERMINATION**

Perform the following after the emergency has been terminated.

- \_\_\_\_ 1. Give all of your Operations Log Forms and any other documentation to the Emergency Management Director.
- \_\_\_\_ 2. Notify police department personnel of the termination.
- \_\_\_\_ 3. Ensure all equipment is made ready for another activation.
- \_\_\_\_ 4. Turn in your dosimetry and any unused potassium iodide to the Supply Unit Leader / Radiological Officer.
- \_\_\_\_ 5. Discuss the actions to be taken for individuals located at Traffic and Access Control Points with the Selectboard and/or Emergency Management Director.

Radiological Emergency Response  
Implementing Procedure

**TOWN OF MARLBORO**

**CONTROL POINT OFFICER**

**IP - 5**

This position is not staffed unless control points are needed. This position may be staffed by county sheriff, state police, Marlboro Fire Department, Marlboro Town Highway, the Town Constable, or any combination thereof.

This Implementing Procedure (IP) was developed to guide the Control Point Officer in accomplishing the necessary tasks in the event of an emergency at the Vermont Yankee Nuclear Power Station (VYNPS).

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**APPLICABLE ATTACHMENTS**

<b><u>Number</u></b>	<b><u>Title</u></b>	<b><u>Page</u></b>
8.	List of Farms, Water Sources, and Stored Feed.....	15
13.	Operations Log Form.....	25
14.	Marlboro Access Control Instructions.....	27
15.	Marlboro Traffic and Access Control Points.....	29
19.	Emergency Worker Exposure Control Information Sheet.....	37
28.	Restricted Zone Re-Entry Instructions.....	63
29.	Re-Entry Processing Form.....	65
30.	Restricted Zone Pass.....	67
31.	Restricted Zone Log.....	69

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## **RESPONSE ACTIONS**

### **INITIAL NOTIFICATION**

- \_\_\_ 1. Receive an assignment from your supervisor.
- \_\_\_ 2. Ensure you have the following equipment before leaving for the Traffic Control Points / Access Control Points (TCP's / ACP's).
  - \_\_\_ A. Emergency worker packet including dosimetry and Radiation Exposure Form
  - \_\_\_ B. Flashlight with extra batteries
  - \_\_\_ C. A forms packet (see the APPLICABLE ATTACHMENTS section above)
  - \_\_\_ D. Diagram for your assigned location as needed
  - \_\_\_ E. Directions to the Reception Center
  - \_\_\_ F. Means of communication

- \_\_\_ 3. Upon arriving at your assigned location, perform the following.

- \_\_\_ A. Report to your supervisor that you have reached your destination.
- \_\_\_ B. Standby on the side of the road until notified that traffic / access control should be implemented.

*Note: Traffic control points may be utilized to facilitate traffic movement during an evacuation. They are eliminated when the evacuation is over.*

*Note: Access control points are established on the peripheries of sheltered and evacuated areas and between sheltered and evacuated areas. They support the protective action decisions of the Governor by controlling entry into these areas. The same location may be either an access or a traffic control point depending upon the situation.*

- \_\_\_ C. Review Attachment 14, "Marlboro Access Control Instructions", to better understand your control point assignment and how it relates to the other control points.

- \_\_\_ 4. Advise your supervisor if traffic control equipment has not arrived.

*Note: Refer all requests for information from members of the media to your Public Information Officer (PIO).*

- \_\_\_\_\_ 5. When notified to establish your post, deploy the required equipment as appropriate for your assignment.

*Note: The purpose of this equipment is to provide visual guidance to all drivers. They are not to serve as physical barriers to vehicular movement. This equipment should be spaced so that vehicles can safely move between individual cones and barricades if the driver needs to enter the controlled area.*

**TRAFFIC CONTROL DURING AN EVACUATION**

- \_\_\_\_ 1. Facilitate the flow of traffic by expediting the movement of evacuating vehicles and discourage the movement of vehicles entering the control area by using arm movements to indicate diversion paths of travel. Do not attempt to prohibit entering vehicles.
- \_\_\_\_ 2. Read your dosimetry according to the instructions provided to you by your supervisor. Report dosimetry readings in accordance with established procedures.
- \_\_\_\_ 3. Forward any requests for towing services to your supervisor. Provide explicit directions to the location of the incident.
- \_\_\_\_ 4. Periodically report intensity of traffic entering the controlled area to your supervisor. Also, report any sudden change in traffic volume either entering or evacuating the controlled area.

*Note: Control points that require additional staffing may have non-law enforcement personnel assigned. They may be National Guard, Agency of Transportation, municipal fire personnel, municipal highway department personnel, etc. There should be at least one trained and experienced sworn law enforcement officer at each control point if available.*

- \_\_\_\_ 5. Report to your supervisor when the evacuation is nearing completion. Persons at traffic control points will then be requested to secure their posts.

*Note: Avoid extended dialogue with motorists that may interfere with traffic control activities.*

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**ACCESS CONTROL DURING AN EVACUATION**  
**(before a Restricted Zone has been established)**

- \_\_\_ 1. At access control points, check all incoming drivers. Entry of the following vehicles and personnel is approved:
  - \_\_\_ A. Federal, state, and local emergency response personnel with identification.
  - \_\_\_ B. Emergency response vehicles with specific missions and destinations (e.g., buses, ambulances, tow trucks).
  - \_\_\_ C. Members of the press with press credentials en-route to the official Media Center (unless otherwise specified).
  - \_\_\_ D. Employees of Vermont Yankee responding to the plant who have appropriate identification.
  - \_\_\_ E. Area residents with a bona fide need to enter the area. This includes the following.
    - \_\_\_ (1) Farmers returning to provide for their animals. See Attachment 8, “List of Farms, Water Sources, and Stored Feed”, for a list of area farms.
    - \_\_\_ (2) Residents returning to provide transportation to family members or friends
    - \_\_\_ (3) Residents returning to their homes to prepare for an evacuation after an evacuation has been directed.

*Note: Residents must show appropriate identification (e.g., driver’s license) before entering the area.*
    - \_\_\_ (4) Entry of transients and commercial traffic shall be discouraged. When in doubt check with your supervisor. Direct them to the Town Emergency Operations Center to get a pass and dosimetry.
    - \_\_\_ (5) If, after being instructed not to enter, persons without a bona fide need insist upon entering, perform the following.
      - \_\_\_ (a) Inform them of the potential hazards of entering the area.
      - \_\_\_ (b) Refer them to your supervisor.
      - \_\_\_ (c) Inform them, if they persist, they are subject to arrest.
      - \_\_\_ (d) If the above fails to deter them, perform an arrest and call your supervisor.

- \_\_\_\_\_ (6) If you have any requests for information by the public, refer them to the local Emergency Alert System (EAS) stations listed below for news and instructions.

WTSA	1450 AM	96.7 FM	Brattleboro, VT
WKVT	1490 AM	92.7 FM	Brattleboro, VT
WVAY		100.7 FM	West Dover, VT

RESTRICTED ZONE ACCESS

*Note: During or after an evacuation, a Restricted zone<sup>®</sup> may be established. If this occurs, you will be notified by your supervisor. A Restricted zone<sup>®</sup> is an area that may be subject to radiological contamination. If a restricted zone has been established, more stringent controls for entry are required.*

- \_\_\_ 1. Upon establishment of a restricted zone, entry of the following personnel and vehicles is approved:
  - \_\_\_ A. Persons with Attachment 30, “Restricted Zone Pass”, Attachment 28, “Restricted Zone Re-Entry Instructions”, and dosimetry issued by the applicable town.
  - \_\_\_ B. Emergency workers on emergency assignments who have been approved to enter the restricted zone by the Vermont Health Department (VHD) as well as have the required dosimetry and radio communication.
  - \_\_\_ C. When in doubt contact your supervisor for special situations such as the following.
    - \_\_\_ (1) Equipment deliveries for Vermont Yankee Nuclear Power Station that have prior approval from your supervisor.
    - \_\_\_ (2) Persons who need to travel through one evacuated town to get to a location in another evacuated town.
  
- \_\_\_ 2. If, after being instructed not to enter, persons without bona fide need insist upon entering, perform the following:
  - \_\_\_ A. Inform them of the potential hazards of entering the area.
  - \_\_\_ B. Refer them to your supervisor.
  - \_\_\_ C. Inform them that if they persist, they are subject to arrest.
  - \_\_\_ D. If the above fails to deter them, perform an arrest and call your supervisor.

- \_\_\_\_\_ 3. Request information updates from your supervisor so that you can be knowledgeable with members of the public. Examples of information useful to you are:
- \_\_\_\_\_ A. Has a State of Emergency been declared by the Governor of Vermont?
  - \_\_\_\_\_ B. Has there been a radioactive release from the plant?
  - \_\_\_\_\_ C. If someone wants legal access, where do they go to get permission?
  - \_\_\_\_\_ D. Will your control point be used as an entry / exit point?
- \_\_\_\_\_ 4. Maintain a log of the people entering and leaving the restricted zone using Attachment 31, Restricted Zone Log”. Ensure all required information including Pass Number, Dosimetry Reading In, Dosimetry Reading Out, and dates and times of entry and egress are listed on the form.

*Note: A new log form will be started each shift that there are entries so that the form can be turned in to the Vermont Health Department representative at the Staging Area promptly.*

*Note: Control points that require additional staffing may have non-law enforcement personnel assigned. They may be National Guard, Agency of Transportation, municipal fire department personnel, municipal highway department personnel, etc. There should be at least one trained and experienced sworn law enforcement officer at each control point.*

- \_\_\_\_\_ 5. Instruct anyone entering the restricted zone to leave via the same access control point.
- \_\_\_\_\_ 6. Ensure that anyone leaving the restricted zone logs out and immediately reads their Direct Reading Dosimeters (DRD’s). Instruct them to report to the location that issued the Restricted Zone Pass to turn in the Pass and dosimetry equipment and be monitored for contamination. Ensure that they record their Direct Reading Dosimeter measurement on their copy of Attachment 29, “Re-entry Processing Form”.

**INTERAGENCY COORDINATION**

There may be situations where someone wishes to apply for permission for re-entry to the Restricted Zone to a location in one evacuated town that can only be reached by passing through an access control point located in another town. The applicant should apply to the town in which their property is located. That Town, if they approve the application, will coordinate with the town having the access control point or with the state if any state control points must be traveled through.

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**END OF SHIFT OR TERMINATION OF CONTROL POINT**

Stay at your assigned access control post until relieved. Perform the following at the end of your assignment.

- \_\_\_\_ 1. Give Attachment 31, “Restricted Zone Log”, to your supervisor if there are any entries.
- \_\_\_\_ 2. Report to the location designated by your supervisor to turn in your equipment and undergo radiological monitoring.
- \_\_\_\_ 3. Turn in your dosimetry and unused potassium iodide to the Supply Unit Leader / Radiological Officer.

Radiological Emergency Response  
Implementing Procedure

**TOWN OF MARLBORO**

**HIGHWAY BRANCH DIRECTOR**

**IP - 6**

This Implementing Procedure (IP) was developed to guide the Highway Branch Director in accomplishing the necessary tasks in the event of an emergency at the Vermont Yankee Nuclear Power Station (VYNPS).

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**APPLICABLE ATTACHMENTS**

<b><u>Number</u></b>	<b><u>Title</u></b>	<b><u>Page</u></b>
10.	Child Care and Private School Transportation Needs.....	19
11.	Special Facilities Transportation Needs.....	21
13.	Operations Log Form .....	25
14.	Marlboro Access Control Instructions .....	27
15.	Marlboro Traffic and Access Control Points.....	29
19.	Emergency Worker Exposure Control Information Sheet .....	37

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RESPONSE ACTIONS

UNUSUAL EVENT

- \_\_\_\_\_ 1. Not usually notified at UNUSUAL EVENT. No action is required unless directed by the Emergency Management Director.

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**ALERT**

- \_\_\_ 1. Receive notification of an ALERT.
- \_\_\_ 2. Report to the Emergency Operations Center.
- \_\_\_ 3. Obtain your copy of Implementing Procedure 6, "Highway Branch Director".
- \_\_\_ 4. Open and maintain a log of your activities.
- \_\_\_ 5. Receive Dosimetry, potassium iodide and a briefing from the Supply Unit Leader / Radiological Officer.

*Note: This will occur once the Supply Unit Leader / Radiological Officer has had the opportunity to properly prepare dosimetry and potassium iodide for issue.*

- \_\_\_ 5. Notify all Highway Department and school bus personnel and have them report to the Emergency Operations Center.
  - \_\_\_ A. Ensure all Highway Department and school bus personnel receive dosimetry, potassium iodide and a briefing from the Supply Unit Leader / Radiological Officer.
- \_\_\_ 6. Review the list of special needs individuals, schools, child care centers, and recreational areas that need to be notified with the Operations Section Chief / Fire and Rescue Branch Director.
  - \_\_\_ A. Determine the level of staffing necessary to perform these notifications.
  - \_\_\_ B. Coordinate with the Emergency Management Director to assign additional personnel as needed.

*Note: Do not cause panic when notifying child care and other facilities. Provide their staff member with an objective account of the situation (e.g., A Vermont Yankee is currently at an Alert. There has been no radioactive release. Review your procedures. Be prepared to shelter or evacuate as directed. If a precautionary transfer is ordered by the State, we will contact you. Please make any phone calls brief. Leave time between calls so that we can contact you.@).*

- \_\_\_ 7. Notify the "special needs" individuals listed on Attachment 11, "Special Facilities Transportation Needs".
  - \_\_\_ A. Determine the type of assistance necessary for each individual.
  - \_\_\_ B. Document this information on Attachment 11, "Special Facilities Transportation Needs".
  - \_\_\_ C. Give the Operations Section Chief Fire and Rescue Branch Director

the completed Attachment 11, “Special Facilities Transportation Needs”.

- \_\_\_ 8. Notify the child care centers listed on Attachment 10, “Child Care and Private School Transportation Needs”.
  - \_\_\_ A. Obtain the facility census.
  - \_\_\_ B. Determine if children and staff will be transported to the Reception Center or a designated host facility.
  - \_\_\_ C. Determine the number and type of each vehicle needed to transport the population of each child care. Document these figures on Attachment 10, “Child Care and Private School Transportation Needs”.
- \_\_\_ 9. Direct the staff to listen to an Emergency Alert System radio station for updates on the emergency.

WTSA	1450 AM	96.7 FM	Brattleboro, VT
WKVT	1490 AM	92.7 FM	Brattleboro, VT
WVAY		100.7 FM	West Dover, VT

- \_\_\_ 10. Be prepared to fax transportation needs to the Transportation Coordinator at the Staging Area. Use Attachments 10 and 11 from the forms packet. Once you have those forms filled out, send them to the Staging Area. Fax is preferred over telephone or radio.
- \_\_\_ 10. Immediately notify child care centers if the State issues a Precautionary Transfer Directive.
  - \_\_\_ A. Provide child care centers with the Estimated Time of Arrival (ETA) of requested transportation.
  - \_\_\_ B. Receive and document the times child care centers *depart* for the Reception Center.
  - \_\_\_ C. Receive and document the times child care centers *arrive* at the Reception Center.

**SITE AREA EMERGENCY**

- \_\_\_ 1. Receive notification of a SITE AREA EMERGENCY.
- \_\_\_ 2. Ensure actions under ALERT are complete.
- \_\_\_ 3. Evaluate local road conditions. Report any conditions that may affect evacuation to the Emergency Management Director.
- \_\_\_ 4. Organize the delivery of traffic and access control equipment with the Police Branch Director.
- \_\_\_ 5. Request reports on road conditions between Marlboro the Reception Center from the State Emergency Operations Center.
- \_\_\_ 6. Notify the “special needs” individuals listed on Attachment 11, “Special Facilities Transportation Needs”.
  - \_\_\_ A. Determine the type of assistance necessary for each individual.
  - \_\_\_ B. Document this information on Attachment 11, “Special Facilities Transportation Needs”.
  - \_\_\_ C. After you have completed notifying all special needs individuals, give the Operations Section Chief Fire and Rescue Branch Director and the Police Branch Director completed copies of Attachment 11, “Special Facilities Transportation Needs”.
- \_\_\_ 7. Notify the Transportation Coordinator at the Staging Area of the number and type of vehicles needed in the event of an evacuation directive, if you have not already done so.
- \_\_\_ 8. Immediately notify child care centers if the State issues a Precautionary Transfer directive.
  - \_\_\_ A. Provide child care centers with the Estimated Time of Arrival (ETA) of requested transportation.
  - \_\_\_ B. Receive and document the times child care centers depart for the Reception Center.
  - \_\_\_ C. Receive and document the times child care centers arrive at the Reception Center.

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**GENERAL EMERGENCY**

- \_\_\_ 1. Ensure that all child care centers and special facilities have been notified.
- \_\_\_ 2. Immediately notify child care centers and special facilities if the State issues a Shelter in Place Directive.
  - \_\_\_ A. Receive and document the times child care centers and special facilities report that they have sheltered.
- \_\_\_ 3. Immediately notify child care centers and special facilities if the State issues and Evacuation Directive.
  - \_\_\_ D. Provide child care centers and special facilities with the estimated time of arrival of requested transportation.
  - \_\_\_ E. Receive and document the times child care centers and special facilities depart for the Reception Center or host facility.
  - \_\_\_ F. Receive and document the times child care centers and special facilities arrive at the Reception Center or host facility.
- \_\_\_ 4. If additional vehicles are needed to transport personnel or resources, notify the Transportation Coordinator at the Staging Area and the Emergency Management Director.
- \_\_\_ 5. Provide periodic briefings on your activities to the Emergency Management Director and/or the Selectboard.
- \_\_\_ 6. Ensure Highway Department personnel are continually updated on the status of the emergency.
- \_\_\_ 7. If you must leave the Emergency Operations Center, designate and brief a replacement, then inform the Emergency Management Director.

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**POST - EMERGENCY**

- \_\_\_\_ 1. Coordinate with the Selectboard and Emergency Management Director regarding any actions that may be required to assist in the post-emergency phase of operations.
  
- \_\_\_\_ 2. These actions will include, but not be limited to, the following.
  - \_\_\_\_ A. Provision of transportation resources as needed by coordinating with private and State resources.
  - \_\_\_\_ B. Support of traffic and access control points with materials as required.
  - \_\_\_\_ C. Maintaining access to control points and other routes as assigned in the event of bad weather.
  - \_\_\_\_ D. Coordination with the Police Branch Director on re-entry points.
  - \_\_\_\_ E. Serve as a member of the municipal Recovery Committee
  - \_\_\_\_ F. Perform other duties as assigned

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**TERMINATION**

- \_\_\_\_ 1. When the emergency has terminated, notify all Highway Department personnel, then give all emergency related documentation to the Emergency Management Director.
  
- \_\_\_\_ 2. Give your dosimetry and unused potassium iodide to the Supply Unit Leader / Radiological Officer.

Radiological Emergency Response  
Implementing Procedure

**TOWN OF MARLBORO**

**COMMUNICATIONS UNIT LEADER**

**IP - 7**

This Implementing Procedure (IP) was developed to guide the Communications Unit Leader in accomplishing the necessary tasks in the event of an emergency at the Vermont Yankee Nuclear Power Station (VYNPS).

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**APPLICABLE ATTACHMENTS**

<b><u>Number</u></b>	<b><u>Title</u></b>	<b><u>Page</u></b>
1.	Vermont Yankee Emergency Notification Form VEM 1 .....	1
2.	Urgent Message Form VEM 2 .....	3
3.	Guidance Form for the Administration of Potassium Iodide VEM 3 .....	5
4.	Precautionary Actions for Children VEM 4.....	7
5.	Governor’s Declaration of Emergency VEM 5 .....	9
6.	EPZ Radio Operator Status Report VEM 6.....	11
7.	Meteorological and Special Information Form VEM 7 .....	13
12.	Radio Log .....	23
13.	Operations Log Form .....	25
19.	Emergency Worker Exposure Control Information Sheet .....	37

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**RESPONSE ACTIONS**

**UNUSUAL EVENT**

- \_\_\_\_\_ 1. Not usually notified at UNUSUAL EVENT. No action is required unless directed by the Emergency Management Director.

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**ALERT / SITE AREA EMERGENCY / GENERAL EMERGENCY**

- \_\_\_ 1. Report to the Emergency Operations Center.
- \_\_\_ 2. Obtain your copy of the Marlboro Town Plan and Implementing Procedure 7, “Communications Unit Leader”.
- \_\_\_ 3. Obtain dosimetry, potassium iodide (KI), and a briefing from the Radiological and Medical Unit Leader / Health Officers.

*Note: This will occur once the Supply Unit Leader / Radiological Officer has had the opportunity to properly prepare dosimetry and potassium iodide for issue.*

- \_\_\_ 4. Open and maintain an operations log.
- \_\_\_ 1. Ensure proper installation and operation of all communications equipment located in the Emergency Operations Center (Table 5 in the Town Plan).
- \_\_\_ 2. Notify the Emergency Management Director of any non-operational equipment.
- \_\_\_ 3. Establish communications with the State Emergency Operations Center, Staging Area, and the other Vermont Yankee Nuclear Power Station Emergency Planning Zone communities. Use plain language instead of ten codes or other special terminology.
- \_\_\_ 4. Ensure that the Emergency Operations Center clocks are synchronized with the State Emergency Operations Center.
- \_\_\_ 5. Receive messages from the State Emergency Operations Center pertaining to emergency classification escalation, protective actions, and other information.

*Note: The messages that you receive will vary in urgency. Extremely urgent messages have a ΔVEM@ number assigned to them. See Attachments 1 through 8 for samples of the urgent message forms. The operator at the State Emergency Operations Center will warn you prior to transmitting urgent messages. This will give you a chance to obtain the proper prior to the transmission. All of the substantive parts of each form are the same at all of the Emergency Operations Centers, Staging Area, and State Emergency Operations Center. This will speed up and enhance the accuracy of receiving messages. For example, the operator at the State Emergency Operations Center will transmit Δstandby for a VEM 4 message@, give you time to get the VEM 4 form ready, and then read the message to you. Ask the State Emergency Operations Center operator to repeat any parts of the message that were not clear to you. You may want to alert the Emergency Operations Center staff or Director that you are receiving an urgent message so that they are ready to take action. Once you have received the message, give the original to the Emergency Management Director and keep a copy for your records. All forms are two part forms.*

*Note: When the operator at the State Emergency Operations Center transmits a message he or she will read the message at reading speed, repeat the message at writing speed, and then take a roll call of all stations to verify proper receipt.*

*Note: The State Emergency Operations Center operator has been instructed to send Attachment 6, VEM 6 “EPZ Radio Operator Status Form”, summarizing the current status of the emergency if there have been no messages sent to you for 20 minutes. This form contains no new information. It gives you a summary of the actions taken and the current Emergency Classification Level. It also verifies that the radio is still working. This form does not have the same urgency as the numbered forms, but the State Emergency Operations Center operator will use the protocol described above. If you see that the status report does not coincide with your Emergency Operations Center status displays, request verification with the State Emergency Operations Center operator. Have someone correct any errors in your Emergency Operations Center displays immediately.*

*Note: Sometimes a message is sent in error by the State Emergency Operations Center. Ensure that all corrected messages are given immediate priority and provided to the Emergency Management Director and other appropriate personnel.*

- \_\_\_\_ 5. Log all messages sequentially on Attachment 12, “Radio Log”, and mark them as incoming or outgoing.
- \_\_\_\_ 6. Forward all messages received to the Emergency Management Director for appropriate action. Give urgent messages special treatment. Ensure that the Emergency Management Director is aware of which messages are urgent.
- \_\_\_\_ 7. Send all outbound messages. Discuss outbound message approval policy with the Emergency Management Director. Any urgent faxes should be preceded by a radio message warning the State Emergency Operations Center of the subject and number of pages. For example: a request from the town for a town Emergency Alert System message with proposed text might be faxed to the State Emergency Operations Center. Warning the State Emergency Operations Center by radio that the fax is coming should expedite a response.
- \_\_\_\_ 8. Confirm receipt of all Emergency Alert System messages and news releases faxed to your Emergency Operations Center with the State Emergency Operations Center by radio if message traffic permits and by fax if not. Promptly request clarification of any apparent discrepancies.
- \_\_\_\_ 9. Review staffing requirements to sustain 24 hour operation. Notify the Emergency Management Director of any shortcoming.
- \_\_\_\_ 10. Periodically brief the Emergency Management Director on your activities.

- \_\_\_\_\_ 11. Ensure that you have received dosimetry, potassium iodide, and a briefing from the Supply Unit Leader / Radiological Officer before a Site Area Emergency.
  
- \_\_\_\_\_ 12. In the event that your Emergency Operations Center is relocated to another location, take all of your messages, logs, blank forms, etc. with you. Notify the State Emergency Operations Center and other stations that you are shutting down the radio and that all messages should be sent to your new location. If you are a member of the advance party, brief your replacement thoroughly before you leave.
  
- \_\_\_\_\_ 13. If you must leave the Emergency Operations Center, or a shift change is required, designate and thoroughly brief a replacement on current conditions and inform the Emergency Management Director.

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**POST-EMERGENCY**

- \_\_\_\_ 1. If directed by State or local officials to maintain communications during the post-emergency response operations, continue to monitor and receive messages.
- \_\_\_\_ 2. If you must leave the Emergency Operations Center or a shift change is required, designate and thoroughly brief a replacement on current conditions and inform the Emergency Management Director.
- \_\_\_\_ 3. Perform other duties as assigned.

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**TERMINATION**

- \_\_\_\_ 1. Receive notification from the Emergency Management Director or designee that the incident is terminated and the Emergency Operations Center will be closed.
- \_\_\_\_ 2. Communicate the closing of your Emergency Operations Center to the State Emergency Operations Center and the Staging Area.
- \_\_\_\_ 3. Ensure that there are no outstanding or unresolved issues.
- \_\_\_\_ 4. When the emergency has terminated, give all your Operations Log Forms and other documentation to the Emergency Management Director.
- \_\_\_\_ 5. Turn in your dosimetry and unused potassium iodide to the Supply Unit Leader / Radiological Officer.

Radiological Emergency Response  
Implementing Procedure

**TOWN OF MARLBORO**

**SUPPLY UNIT LEADER / RADIOLOGICAL OFFICER**

**IP - 8**

This Implementing Procedure (IP) was developed to guide the Supply Unit Leader / Radiological Officer in accomplishing the necessary tasks in the event of an emergency at the Vermont Yankee Nuclear Power Station (VYNPS).

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**APPLICABLE ATTACHMENTS**

<b><u>Number</u></b>	<b><u>Title</u></b>	<b><u>Page</u></b>
8.	List of Farms, Water Sources, and Stored Feed.....	15
13.	Operations Log Form.....	25
16.	Control Dosimetry Form.....	31
17.	Dosimetry Packet Issuance Record.....	33
18.	Radiological Readings Form.....	35
19.	Emergency Worker Exposure Control Information Sheet.....	37
20.	Exposure Log.....	41
21.	Regulatory Guide 8.13 Instruction Concerning Prenatal Radiation Exposure.....	43
22.	Regulatory Guide 8.13 Acknowledgment Form.....	51
23.	Directions for Use of Potassium Iodide (KI).....	53

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## **RESPONSE ACTIONS**

### **UNUSUAL EVENT**

- \_\_\_\_\_ 1. Not usually notified at UNUSUAL EVENT. No action is required unless directed by the Emergency Management Director.

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**ALERT**

- \_\_\_ 1. Report to the Emergency Operations Center.
- \_\_\_ 2. Obtain your copy of the Marlboro Town Plan and Implementing Procedure 8, “Supply Unit Leader / Radiological Officer”.
- \_\_\_ 3. Open and maintain an operations log.
- \_\_\_ 4. Review staffing requirements to accomplish your tasks and provide 24 hour operational capability. Make any requests for additional resources to the Emergency Management Director.
- \_\_\_ 5. Obtain dosimetry, potassium iodide (KI), and survey meters. Ensure dosimeters and survey meters are within calibration and potassium iodide is within the expiration date.
- \_\_\_ 6. Perform an operational check of the dosimeter charger by doing the following.
  - \_\_\_ A. Loosen the thumbscrew in the top center of the charger with a coin (such as a dime) and remove bottom case. Install one AD cell@ battery (in the correct + and - way) and reassemble.
  - \_\_\_ B. Position the charger on a firm flat surface such as a table. Unscrew the cap on the charging contact and place the charging pin end of the dosimeter (opposite end of the pocket clip and eyepiece) on charging contact of the dosimeter charger.
  - \_\_\_ C. Apply downward pressure. You will see a meter scale and a vertical hairline while looking through the dosimeter. If no line is visible, rotate the control knob located in the upper right-hand corner of the charger until a line appears.
  - \_\_\_ D. Set the line to zero or slightly above by turning the control knob.

*Note: The charger is considered operational if the light source (bulb) is working and the charger can move the hairline on a direct-reading dosimeter to the zero position on the scale.*
  - \_\_\_ E. If the light source fails to work, perform the following.
    - \_\_\_ (1) Replace battery and repeat the operational check sequence (Item 6.A., above).

- \_\_\_\_\_ (2) Replace the light bulb with the spare provided inside the charger case, and repeat the operational check sequence.

- \_\_\_ F. If the light source works, but you are unable to move the line on the dosimeter, perform the following.
  - \_\_\_ (1) Clean the charging contact on the charger by rubbing with a pencil eraser, and repeat the operational check sequence (Item 6.B. above).
- \_\_\_ G. If this fails, try another dosimeter or another dosimeter charger and repeat steps 6.A. through 6.F.

\_\_\_ 7. Zero all the Direct Reading Dosimeters (DRD's) by performing the following or using an alternative charger.

- \_\_\_ A. Place the charging pin end of the dosimeter (opposite the pocket clip and eye piece) on the charging contact of the dosimeter charger.
- \_\_\_ B. Apply downward pressure on the dosimeter and you should see a meter scale and a hairline while looking through the dosimeter. If no line is visible, rotate the control knob of the dosimeter charger until a line appears. If you have trouble finding the line on a dosimeter, perform the following.
  - \_\_\_ (1) Apply more pressure on the dosimeter.
  - \_\_\_ (2) Clean the charging contacts on the dosimeter and the dosimeter charger with a pencil eraser.
  - \_\_\_ (3) Replace the battery in the dosimeter charger.
- \_\_\_ C. Set the line on the dosimeter to zero or slightly above by turning the control knob on the dosimeter charger.
- \_\_\_ D. Remove the dosimeter from the charging contact. Read the dosimeter to confirm that the hairline is on or just slightly above zero.

*Note: If time is critical, a reading as close to zero as possible is acceptable.*

*Note: If the dosimeter cannot be zeroed in three attempts, do not issue it. Defective Direct Reading Dosimeters should be bagged and labeled - ADefective Do Not Issue@.*

- \_\_\_ E. If the dosimeter is not to be issued immediately, allow the dosimeter to sit for 15 minutes, then read the dosimeter again. If the reading has increased or decreased noticeably, the dosimeter has excessive drift and should not be

used.

- \_\_\_ 8. Prepare the control dosimetry.
  - \_\_\_ A. Obtain control dosimetry.
  - \_\_\_ B. Record serial numbers, storage location, and current date on Attachment 16, "Control Dosimetry Form".
  - \_\_\_ C. Place the control dosimetry back in its storage location.
- \_\_\_ 9. Prepare or inspect dosimetry packets for Emergency Workers.
  - \_\_\_ A. Place the following items in each packet (plastic bag).

Item	Quantity
0-20 R Direct Reading Dosimetry (DRD)	1
Dosimeter of Legal Record	1
A foil-enclosed potassium iodide tablet in a plastic bag	1
Emergency Worker Exposure Control Information Sheet	1
Individual Radiation Exposure Record Card	1
String for Wearing Dosimetry	1
Pencil	1

- \_\_\_ B. List Direct Reading Dosimeter and Dosimeter of Legal Record serial numbers on Attachment 17, "Dosimetry Packet Issuance Record".
- \_\_\_ C. Ensure that an adequate supply of Regulatory Guide 8.13 forms are available for all female emergency workers.
- \_\_\_ 10. Issue dosimetry to Emergency Operations Center staff and other emergency workers as they report for duty.
- \_\_\_ 11. Ensure that dosimetry is issued to school bus drivers if necessary prior to their dispatch for a precautionary transfer of school children.

- \_\_\_\_ 12. Install batteries and perform an operational test on instruments to be issued.
- \_\_\_\_ A. Count rate and dose rate instrument operational check
- \_\_\_\_ (1) Turn OFF the meter (if you don=t, you may get a strong electrical shock).
- \_\_\_\_ (2) Remove the battery support bar to install batteries. Check the polarity and then reassemble.
- \_\_\_\_ (3) Turn the range selector to AX10", wait 30 seconds. Open the beta window; place it over check source on side of meter case. Observe a reading about halfway up meter face scale.
- \_\_\_\_ (4) Put on the headphones, and check for radiation without reading the meter face.
- \_\_\_\_ B. Dose rate instrument operational check
- \_\_\_\_ (1) Turn the meter off.
- \_\_\_\_ (2) Open the unit, and install the battery. Observe polarity.
- \_\_\_\_ (3) Turn the selector switch to AZERO@.
- \_\_\_\_ (4) Wait two minutes for warm up.
- \_\_\_\_ (5) Adjust needle position to A0@ on the face. AZeroing@ assures accuracy. The detector does not respond to radiation when zeroing the meter.
- \_\_\_\_ (6) Hold the selector switch in the ACIRCUIT CHECK@ position to test battery strength, proper installation, and meter circuits. Observe a needle deflection on the meter face near red area marked ACIRCUIT CHECK@.
- \_\_\_\_ (7) Test the operation of each range by rotating selector switch to each position, observing meter deflection. When not in a radiation field, the needle should not move further than 0.3 on the AX100", AX10, and AX1" scales and 0.6 on the AX0.1" scale.
- \_\_\_\_ 13. Using an operational count rate / dose rate instrument, take background readings at various indoor and outdoor locations at the Emergency Operations Center and record them on Attachment 18, "Radiological Readings Form". Hold the probe at waist height. By measuring background before there is a release of radioactive materials from the plant, you establish a baseline and determine the level at which personnel are contaminated.

- \_\_\_\_\_ 14. You may issue a count rate / dose rate instrument meter to trained emergency worker personnel to conduct a survey of equipment or facilities to determine suitability for continued use. In your briefing, stress methods to prevent spreading contamination.
  
- \_\_\_\_\_ 15. If the emergency is terminated at this time, return all dosimetry, potassium iodide (KI), and survey instruments to their original storage location.
  - \_\_\_\_\_ A. Remove batteries from survey meters prior to storage.
  - \_\_\_\_\_ B. Remove batteries from the dosimeter charger prior to storage.

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**SITE AREA EMERGENCY / GENERAL EMERGENCY**

- \_\_\_ 1. If the initial notification is a Site Area Emergency or a General Emergency perform the actions under ALERT first.
  
- \_\_\_ 2. Issue a dosimetry packet to emergency workers and provide a briefing.
  - \_\_\_ A. Obtain an Attachment 17, “Dosimetry Packet Issuance Record” and an Attachment 20, “Exposure Log”.
  
  - \_\_\_ B. Give one dosimetry packet to each individual.
  
  - \_\_\_ C. Print the date and time as well as the individual=s name, Direct Reading Dosimeter serial number, and Dosimeter of Legal Record serial numbers on Attachment 17, “Dosimetry Packet Issuance Record”.
  
  - \_\_\_ D. Print the individual=s name on Attachment 20, “Exposure Log”.
  
  - \_\_\_ E. Review Attachment 19, “Emergency Worker Exposure Control Information Sheet” with all individuals who receive a dosimetry packet.
  
  - \_\_\_ F. Instruct each individual to complete the reverse side of their Radiation Exposure Record card.

*Note: Remind emergency workers assigned outside of the Emergency Operations Center that they need to periodically check to see if there has been a release and read their dosimeters on a regular basis.*

- \_\_\_ 3. Ensure all female emergency workers have read, understood, and received a briefing and signed Attachment 22, “Regulatory Guide 8.13 Acknowledgment Form”, regarding Attachment 21, “Regulatory Guide 8.13 Instructions Concerning Prenatal Radiation Exposure@.
  
- \_\_\_ 4. Ensure all emergency workers have read Attachment 23, “Directions for the Use of Potassium Iodide (KI)”.

*Note: Emergency workers are to take potassium iodide only when authorized by the Health Services Coordinator, Vermont Department of Health.*

- \_\_\_ 5. Inform the Emergency Management Director when the distribution of dosimetry packets is complete.

- \_\_\_\_\_ 6. If a release is **NOT** in progress, read the following to all Emergency Operations Center staff and assigned emergency workers every 30 minutes.

ATTENTION all Marlboro Emergency Operations Center staff and emergency workers. Read your Direct Reading Dosimeters every 30 minutes. Report readings at 1 R and every additional 1 R increment.

- \_\_\_\_\_ 7. If a release **IS** in progress, read the following to all Emergency Operations Center staff and assigned emergency workers every 15 minutes.

ATTENTION all Marlboro Emergency Operations Center staff and emergency workers. Read your Direct Reading Dosimeters every 15 minutes. Report readings at 1 R and every additional 1 R increment.

- \_\_\_\_\_ 8. Record the time and date in the appropriate block on Attachment 20, "Exposure Log", as readings are reported to you.
- \_\_\_\_\_ 9. If a release is reported, use the same count rate / dose rate instrument, hold the probe at waist height, and check the same locations measured at ALERT. Record measurements on Attachment 18, "Radiological Readings Form".

*Note: Monitoring is appropriate if there has been a release. It should be done more often if the Town is downwind of a release. If an evacuation has been ordered, personnel should not stay to perform monitoring. If shelter-in-place has been ordered, monitoring should only be performed if it will not increase exposure to the operator.*

\_\_\_ 10. Take appropriate action for emergency workers receiving radiological exposure.

<b>IF</b>	<b>THEN</b>
<p>The Emergency Worker is approaching or has achieved a Direct Reading Dosimeter indication of <b>5 Rem.</b></p>	<p>Inform the Emergency Management Director and the worker=s supervisor that the worker must be relieved of duty and sent to the Emergency Worker Radiological Monitoring and Decontamination Station (EWRM&amp;DS).</p> <p style="text-align: center;"><b>OR</b></p> <p>The worker can be authorized to exceed 5 Rem by the Vermont Department of Health.</p>

\_\_\_ 11. If you are notified of, any individuals who are injured and contaminated coordinate transportation for this person with the Highway Branch Director.

\_\_\_ A. Notify the State emergency Operations Center of any injured and contaminated individual being sent to the hospital.

\_\_\_ 12. When instructed, notify the farms listed on Attachment 8, “List of Farms, Water Sources, and Stored Feed”. Inform them of the protective action to shelter and place milk producing animals on stored feed and protected water supplies.

- \_\_\_\_\_ 13. When directed by the Emergency Management Director (or designee), instruct emergency workers to take potassium iodide orally as authorized by the State Health Services Coordinator.
- \_\_\_\_\_ A. Resolve any questions about who should take the potassium iodide with the State Emergency Operations Center.
- \_\_\_\_\_ B. If authorized to ingest potassium iodide, emergency workers shall take one 130 mg tablet of potassium iodide a day for 10 days unless directed otherwise by State Health authorities. Provide each worker with nine additional tablets.
- \_\_\_\_\_ C. Additional potassium iodide supplies are available through the Staging Area.

*Note: The Vermont Department of Health has made potassium iodide (KI) available to members of the public who live or work in the Emergency Planning Zone. Small amounts of potassium iodide may be kept at schools and child care facilities in Emergency Planning Zone Towns. Schools and facilities with potassium iodide have instructions in their procedures on how to administer it to children and infants. See the School and Child Care Plans located in the Town Emergency Operations Center. Schools and facilities may choose not to store and administer potassium iodide. Persons in the Emergency Planning Zone desiring potassium iodide during an emergency will be instructed where to obtain it in an Emergency Alert System message or news advisory. Do not provide potassium iodide to members of the public from your supply. It is for emergency workers only.*

- \_\_\_\_\_ 14. Provide periodic briefings on your activities to the Emergency Management Director.
- \_\_\_\_\_ 15. Ensure you receive periodic updates on protective actions regarding food and water from the Emergency Management Director.
- \_\_\_\_\_ 16. Perform the following when an emergency worker has completed their assignment.
- \_\_\_\_\_ A. Ensure the emergency worker updates their Radiation Exposure Record card. Record beginning and ending readings on Attachment 17, "Dosimetry Packet Issuance Record", opposite their name and have them initial to verify the accuracy in the right margin.

*Note: The emergency worker retains the Radiation Exposure Record card.*

- \_\_\_\_\_ B. If there has been a radioactive release, direct the worker to the Emergency Worker Radiological Monitoring and Decontamination Station. Dosimetry will be collected there.

\_\_\_ C. If there has **NOT** been a radioactive release, collect dosimetry.

<b>IF</b>	<b>THEN</b>
The Emergency Worker will be assigned to emergency duties at a later time.	Collect their Direct Reading Dosimeter only.
The Emergency Worker has completed all duties and will NOT be reassigned.	Collect all items in their dosimetry packet.

- \_\_\_ 17. Coordinate with the Health Services Coordinator at the State Emergency Operations Center or designee to have dosimetry of personnel coming off shift read by the mobile lab when appropriate. New or zeroed dosimetry will be provided along with a list of personnel and exposures received. This will provide a basis for assignment of emergency workers when they return to duty.
- \_\_\_ 18. As workers are being reassigned, discuss their previous exposure with their supervisor. If possible, do not reassign personnel who have received higher exposures to outdoor activities involving radiation dose. Instead, assign them to indoor duties away from exposure.

The guiding principal is to keep all personnel exposures  
As Low As Reasonably Achievable (ALARA).

- \_\_\_ 19. If you need additional dosimetry supplies, request them from the Radiological / Safety Officer at the Staging Area.
- \_\_\_ 20. If you must leave the Emergency Operations Center, brief your replacement and inform the Emergency Management Director.

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**POST-EMERGENCY**

Perform the following tasks as assigned.

- \_\_\_ 1. Serve as a member of the Municipal Recovery Committee.
- \_\_\_ 2. Provide dosimetry to Municipal Emergency Workers.
- \_\_\_ 3. Ensure that Dosimeters of Legal record are sent in and read as needed.
- \_\_\_ 4. Issue dosimetry to and provide briefings similar to those given to emergency workers to all persons granted a Restricted Zone Pass.
- \_\_\_ 5. Collect dosimetry from persons granted Restricted Zone Passes upon their return from the restricted area.
- \_\_\_ 6. Serve as the municipal contact on radiation matters.
- \_\_\_ 7. Contact the State Emergency Operations Center for information about workers who were monitored, decontaminated if needed, and processed.
- \_\_\_ 8. Coordinate the return of dosimetry packets from the Emergency Worker Radiological Monitoring and Decontamination Station.
- \_\_\_ 9. Ensure that Dosimeters of Legal Record are sent to the mobile laboratory clearly marked with the name of the Town.
- \_\_\_ 10. Assist State personnel in local radiological operations as requested.
- \_\_\_ 11. Perform other duties as assigned.

*Note: If there is a release, emergency workers will go to the Emergency Worker Radiological Monitoring and Decontamination Station (RM&D) if necessary.*

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**TERMINATION OF EMERGENCY OPERATIONS CENTER OPERATIONS**

- \_\_\_ 1. Deactivate the Emergency Operations Center upon completion of RELOCATION / RE-ENTRY / RETURN activities, and return to normal Town operations.
  - \_\_\_ A. Request assistance as needed.
  - \_\_\_ B. Ensure each emergency worker updates their Radiation Exposure Card.
  - \_\_\_ C. Collect all dosimetry packets.
  - \_\_\_ D. Forward all Dosimeters of Legal Record (including control dosimetry) and a copy of the completed Dosimetry Issuance Record to the Health Representative at the Staging Area.
  - \_\_\_ E. Inventory and perform an operational check on Direct Reading Dosimeters and survey instruments. Report any shortages or damage to the Emergency Management Director. Remove survey meter and dosimeter charger batteries prior to storage.
  - \_\_\_ F. Collect all documentation used during Emergency Operations Center operations (i.e. procedures, logs, forms) and submit them to the Emergency Management Director.
  - \_\_\_ G. Attend and participate in the debriefing on the emergency response.
  - \_\_\_ H. Ensure that your portion of the Emergency Operations Center is cleaned, restocked, and returned to an emergency-ready condition.

*Note: Depending upon the situation, the role of the Emergency Operations Center may decrease while the need for radiological support may continue for quite some time. Even though the reactor may be rendered Asafe@ and the response portion of the emergency Aterminated@ the Arecovery@ or APost-Emergency@ portion may take considerably longer. Therefore Atermination@ has been placed after APost-Emergency@ in this procedure.*

Radiological Emergency Response  
Implementing Procedure

**TOWN OF MARLBORO**

**MEDICAL UNIT LEADER / HEALTH OFFICER**

**IP - 9**

This Implementing Procedure (IP) was developed to guide the Medical Unit Leader / Health Officer in accomplishing the necessary tasks in the event of an emergency at the Vermont Yankee Nuclear Power Station (VYNPS).

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**APPLICABLE ATTACHMENTS**

<b><u>Number</u></b>	<b><u>Title</u></b>	<b><u>Page</u></b>
8.	List of Farms, Water Sources, and Stored Feed.....	15
15.	Operations Log Form.....	29
19.	Dosimetry Packet Issuance Record.....	37
20.	Radiological Readings Form.....	39
21.	Emergency Worker Exposure Control Information Sheet.....	41
22.	Exposure Log.....	45
23.	Regulatory Guide 8.13 Instruction Concerning Prenatal Radiation Exposure.....	47
24.	Regulatory Guide 8.13 Acknowledgment Form.....	55
25.	Directions for Use of Potassium Iodide (KI).....	57

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**RESPONSE ACTIONS**

**UNUSUAL EVENT**

- \_\_\_\_\_ 1. Not usually notified at UNUSUAL EVENT. No action is required unless directed by the Emergency Management Director.

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**ALERT**

- \_\_\_\_\_ 1. Standby for further instructions or report to the Emergency Operations Center (EOC), if directed.
- \_\_\_\_\_ 2. If instructed to report to the Emergency Operations Center, perform the actions outlined under SITE AREA EMERGENCY / GENERAL EMERGENCY.
- \_\_\_\_\_ 3. Confer with the Operations Section Chief / Fire and Rescue Branch Director and Highway Branch Director to assist with special needs individuals.

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**SITE AREA EMERGENCY / GENERAL EMERGENCY**

- \_\_\_ 1. Report to the Emergency Operations Center.
- \_\_\_ 4. Obtain your copy of the Marlboro Town Plan and Implementing Procedure 9, "Medical Unit Leader / Health Officer".
- \_\_\_ 5. Maintain an Operations Log Form.
- \_\_\_ 6. Obtain dosimetry, potassium iodide, and a briefing from the Supply Unit Leader / Radiological Officer.

*Note: Emergency workers are to ingest potassium iodide only when authorized by the Health Services Coordinator, Vermont Department of Health.*

- \_\_\_ 7. Issue one tablet of potassium iodide to emergency workers as they receive their dosimetry in conjunction with the Supply Unit Leader / Radiological Officer.
  - \_\_\_ A. Complete Attachment 19, "Dosimetry Packet Issuance Record", in coordination with the Supply Unit Leader / Radiological Officer.
  - \_\_\_ B. Ensure emergency workers read Attachment 25, "Directions for Use of Potassium Iodide (KI)".
  - \_\_\_ C. Inform the Emergency Management Director when potassium iodide distribution has been completed.
- \_\_\_ 8. Review personnel requirements to accomplish your tasks and provide 24 hour operational capability. Any requests for additional personnel should be made to the Emergency Management Director.
- \_\_\_ 9. If you are aware of any individuals both injured and contaminated, coordinate their transportation with the Highway Branch Director.
- \_\_\_ 10. Notify the State Emergency Operations Center of individuals sent to the hospital.
- \_\_\_ 11. When instructed, notify the farms listed on Attachment 8, "List of Farms, Water Sources, and Stored Feed". Inform them of the protective action to shelter and place milk producing animals on stored feed and protected water supplies.

- \_\_\_\_ 12. When directed by the Emergency Management Director or designee, direct emergency workers to take (ingest) potassium iodide as authorized by the State Health Services Coordinator.
  - \_\_\_\_ A. Resolve any questions about who should take the potassium iodide with the State Emergency Operations Center.
  - \_\_\_\_ B. If the Vermont Department of Health authorizes emergency workers to take potassium iodide, emergency workers shall be provided with additional potassium iodide tablets.
  - \_\_\_\_ C. Additional potassium iodide supplies will be provided by the Staging Area.
- \_\_\_\_ 13. Assist the Supply Unit Leader / Radiological Officer in confirming recording dosimetry readings on the individual cards.
- \_\_\_\_ 14. Provide periodic briefings on your activities to the Emergency Management Director.
- \_\_\_\_ 15. Periodically request from the Emergency Management Director the status of any protective actions regarding local water and food.
- \_\_\_\_ 16. If you must leave the Emergency Operations Center, brief your replacement on the status of operations, and inform the Emergency Management Director.

**POST EMERGENCY**

Perform the following tasks as assigned:

- \_\_\_ 1. Serve as a member of the Municipal Recovery Committee.
- \_\_\_ 2. Assist the Supply Unit Leader / Radiological Officer in providing dosimetry to municipal emergency workers.
- \_\_\_ 3. Assist the Supply Unit Leader / Radiological Officer in ensuring that Dosimeters of Legal record are sent in and read as needed.
- \_\_\_ 4. Assist the Supply Unit Leader / Radiological Officer in issuing dosimetry to and recovering dosimetry from persons granted Restricted Zone Passes.
- \_\_\_ 5. Provide briefings similar to those given to Emergency Workers to all persons granted a Restricted Zone Pass.
- \_\_\_ 6. Assist in processing applications for re-entry.
- \_\_\_ 7. Serve as the municipal contact on health matters.
- \_\_\_ 8. Assist State personnel in local health operations such as the following.
  - \_\_\_ A. Maintaining the current status of food and water supplies.
  - \_\_\_ B. Maintaining records of any persons with allergic reactions to potassium iodide.
  - \_\_\_ C. Inform the Health Services Coordinator at the State Emergency Operations Center if an individual had an allergic reaction to potassium iodide.
- \_\_\_ 9. Perform other duties as assigned.

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**TERMINATION**

- \_\_\_ 1. After the final closeout of the incident has been completed, perform the following:
  - \_\_\_ A. Give all Operations Log Forms and other documentation to the Emergency Management Director.
  - \_\_\_ B. Give your dosimetry and any unused potassium iodide to the Supply Unit Leader / Radiological Officer.
  - \_\_\_ C. Give potassium iodide distribution records to the Emergency Management Director.
  - \_\_\_ D. Assist the Supply Unit Leader / Radiological Officer in collecting all Dosimeters of Legal Record and recording dosimetry readings on each individual=s card.

Radiological Emergency Response  
Implementing Procedure

**TOWN OF MARLBORO**

**PUBLIC INFORMATION OFFICER**

**IP - 10**

This Implementing Procedure (IP) was developed to guide the Public Information Officer in accomplishing the necessary tasks in the event of an emergency at the Vermont Yankee Nuclear Power Station (VYNPS).

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**APPLICABLE ATTACHMENTS**

<b><u>Number</u></b>	<b><u>Title</u></b>	<b><u>Page</u></b>
9.	Guide for Preparing News Releases for the News Media .....	17
15.	Operations Log Form .....	29
21.	Emergency Worker Exposure Control Information Sheet .....	41

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## RESPONSE ACTIONS

### UNUSUAL EVENT

- \_\_\_\_\_ 1. Not usually notified at UNUSUAL EVENT. No action is required unless directed by the Emergency Management Director.

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**ALERT / SITE AREA EMERGENCY / GENERAL EMERGENCY**

- \_\_\_ 1. Report to the Emergency Operations Center.
- \_\_\_ 2. Maintain an Operations Log Form.
- \_\_\_ 3. Obtain dosimetry, potassium iodide, and a briefing from the Supply Unit Leader / Radiological Officer and Medical Unit Leader / Health Officer.

*Note: This will occur once the Supply Unit Leader / Radiological Officer has had the opportunity to properly prepare dosimetry and potassium iodide for issue.*

- \_\_\_ 4. Obtain your copy of the Marlboro Town Plan and Implementing Procedure 10, "Public Information Officer".
- \_\_\_ 5. Obtain a briefing on the Town=s activities from the Selectboard and/or the Emergency Management Director.
- \_\_\_ 6. Prepare a news release concerning the status of the Town of Marlboro=s activities based on the briefing received using Attachment 9, "Guide for Preparing News Releases for the News Media".
  - \_\_\_ A. Have the Chairperson and Selectboard review and approve the release.
  - \_\_\_ B. Fax a copy of each news release to the State Emergency Operations Center Information Officer.
- \_\_\_ 7. If requested by the Selectboard or Emergency Management Director to issue an Emergency Alert System message, perform the following.
  - \_\_\_ A. Draft the message.
  - \_\_\_ B. Coordinate with the State Emergency Operations Center Information Officer.
  - \_\_\_ C. Request the Selectboard review and approve the message.

*Note: Due to the regional nature of the emergency, local requests for activation of the Emergency Alert System must be approved and processed through the State Emergency Operations Center.*

- \_\_\_ D. Fax a copy of each requested Emergency Alert System message to the State Emergency Operations Center Information Officer.
- \_\_\_ 8. Ensure the National Weather Service weather alert radio is operable and placed in the  $\Delta$ ALERT@ mode.

- \_\_\_\_ 9. Inform the Emergency Management Director when the National Weather Service weather alert radio is activated.
- \_\_\_\_ 10. Ensure the AM/FM radio is operable and the dial is set to one of the following stations. Monitor the information and instructions being disseminated to the public.

WTSA	1450 AM	96.7 FM	Brattleboro, VT
WKVT	1490 AM	92.7 FM	Brattleboro, VT
WVAY		100.7 FM	West Dover, VT

- \_\_\_\_ 11. If directed, assist in notifying special needs individuals by telephone.
- \_\_\_\_ 12. Continue to prepare news releases on the Town=s activities and have them approved by the Selectboard.

*Note: Provide information on Marlboro activities only. Refer all inquiries about other local community activities, State activities, or plant status to the News Media Center / Joint Information Center at Vermont Yankee Nuclear Power Station Corporate Headquarters in Brattleboro, Vermont. The telephone number is (802) 258-4181.*

- \_\_\_\_ 13. If you must leave the Emergency Operations Center, brief your replacement on the status of operations and inform the Emergency Management Director.

**POST EMERGENCY**

- \_\_\_\_ 1. If you are required during the post-emergency response operations, prepare media releases on the status of the Town=s activities in accordance with Steps 5 and 6 under ALERT / SITE AREA EMERGENCY / GENERAL EMERGENCY.
- \_\_\_\_ 2. Serve as a member of the Municipal Recovery Committee.
- \_\_\_\_ 3. Perform other duties as assigned.

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**TERMINATION**

- \_\_\_\_ 1. After the final closeout of the incident is completed, give your Operations Log Forms, prepared messages, and any other documentation to the Emergency Management Director.
  
- \_\_\_\_ 2. Give your dosimetry and any unused potassium iodide to the Supply Unit Leader / Radiological Officer.

Radiological Emergency Response  
Implementing Procedure

**TOWN OF MARLBORO**

**FINANCE & ADMINISTRATION SECTION CHIEF**

**IP - 11**

This Implementing Procedure (IP) was developed to guide the Finance & Administration Section Chief in accomplishing the necessary tasks in the event of an emergency at the Vermont Yankee Nuclear Power Station (VYNPS).

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**APPLICABLE ATTACHMENTS**

<b><u>Number</u></b>	<b><u>Title</u></b>	<b><u>Page</u></b>
15.	Operations Log Form .....	29
21.	Emergency Worker Exposure Control Information Sheet .....	41

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**RESPONSE ACTIONS**

**UNUSUAL EVENT**

- \_\_\_\_\_ 1. Not usually notified at UNUSUAL EVENT. No action is required unless directed by the Emergency Management Director.

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**ALERT**

1. Standby for further instructions.

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**SITE AREA EMERGENCY / GENERAL EMERGENCY**

- \_\_\_ 1. Report to the Emergency Operations Center (EOC).
- \_\_\_ 2. Obtain your copy of the Marlboro Town Plan and Implementing Procedure 11, "Finance and Administration Section Chief".
- \_\_\_ 3. Obtain dosimetry, potassium iodide, and a briefing from the Radiological and Medical Unit Leader / Health Officer.

*Note: This will occur once the Supply Unit Leader / Radiological Officer has had the opportunity to properly prepare dosimetry and potassium iodide for issue.*

- \_\_\_ 4. Open and maintain an Operations Log Form.
- \_\_\_ 5. Keep a record of town expenditures, hours of work by town employees, use of town equipment, supplies purchased, and any other expenditures resulting from an accident at the Vermont Yankee Nuclear Power Station.
- \_\_\_ 6. Assist in maintaining the status boards located in the Emergency Operations Center.
- \_\_\_ 7. Obtain supplies requested by local emergency response personnel such as food and office equipment.
- \_\_\_ 8. Request assistance from the State Emergency Operations Center Finance and Administration Section Chief if questions arise about future reimbursement or funding in general.
- \_\_\_ 9. Assist with other services as requested.
- \_\_\_ 10. If you must leave the Emergency Operations Center, brief your replacement on operations, and notify the Emergency Management Director.

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**POST-EMERGENCY**

- \_\_\_\_ 1. Coordinate with the Selectboard and/or Emergency Management Director regarding any required actions in the post-emergency phase.
- \_\_\_\_ 2. Serve as a member of the Municipal Recovery Committee.

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**TERMINATION**

- \_\_\_ 1. After the final closeout of the incident is completed, perform the following.
  - \_\_\_ A. Have the Selectboard review the expenses incurred by the Town.
  - \_\_\_ B. Forward a copy of the expenses incurred to the American Nuclear Insurers through the Vermont Yankee Nuclear Power Station in Vernon, Vermont after review and approval by the Selectboard.
  - \_\_\_ C. Send a copy of the expenses incurred to Vermont Emergency Management.
  - \_\_\_ D. Give your Operations Log Forms and any other documentation to the Emergency Management Director
  - \_\_\_ E. Give your dosimetry and any unused potassium iodide to the Supply Unit Leader / Radiological Officer.

Radiological Emergency Response  
Implementing Procedure

**TOWN OF MARLBORO**

**RE-ENTRY PROCESSING**

**IP - 12**

This Implementing Procedure (IP) was developed to guide Re-Entry Processing personnel in accomplishing the necessary tasks in the event of an emergency at the Vermont Yankee Nuclear Power Station (VYNPS).

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**APPLICABLE ATTACHMENTS**

<b><u>Number</u></b>	<b><u>Title</u></b>	<b><u>Page</u></b>
15.	Operations Log Form .....	29
16.	Guilford Access Control Instructions .....	31
17.	Guilford Traffic and Access Control Points .....	33
21.	Emergency Worker Exposure Control Information Sheet .....	41
30.	Restricted Zone Re-Entry Instructions .....	67
31.	Re-Entry Processing Form.....	69
32.	Restricted Zone Pass.....	71
33.	Restricted Zone Log.....	73

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## RE-ENTRY PROCESSING

This procedure is different from the others because it describes a function that may be assigned by the Emergency Management Director as an additional duty and would not normally be part of the response phase for the emergency. It is not broken down by emergency classification level.

- \_\_\_ 1. Receive notification from the Emergency Management Director that a Restricted Zone has been or will be declared.
- \_\_\_ 2. Set up a processing area.
- \_\_\_ 3. Obtain Forms and Passes.
- \_\_\_ 4. Obtain a map showing the current boundaries of the Restricted Area. Expect boundary changes to be made.
- \_\_\_ 5. Obtain a copy of the eligibility criteria and recommended duration of stay for persons who re-enter the Restricted Zone from the Health Services Coordinator or designee at the State Emergency Operations Center.
- \_\_\_ 6. Discuss the process for approving re-entry as well as what the "appeal" process is in the event someone is denied re-entry with the Emergency Management Director and Supply Unit Leader / Radiological Officer.
- \_\_\_ 7. Arrange to provide dosimetry and a thorough briefing to all persons granted a pass with the Supply Unit Leader / Radiological Officer.
- \_\_\_ 8. Determine the proper re-entry point from the Police Branch Director.
- \_\_\_ 9. Briefly interview applicants filling out Attachment 31, "Re-entry Processing Form."
  - \_\_\_ A. Approve the application.
  - \_\_\_ B. Deny the application, and explain the "appeal" process.
- \_\_\_ 10. Issue Attachment 32, "Restricted Zone Pass".
- \_\_\_ 11. Make an entry in Attachment 33, "Restricted Zone Log".
- \_\_\_ 12. Have the Supply Unit Leader / Radiological Officer issue dosimetry and fill out the Dosimeter Log portion of the Re-Entry Processing Form.
- \_\_\_ 13. Provide the pass holder with the first copy of Attachment 31, "Re-Entry Processing Form".
- \_\_\_ 14. Send the original to the Health Department representative at the Staging Area after the pass holder returns.

- \_\_\_ 15. Retain the bottom copy.
- \_\_\_ 16. Provide a copy of Attachment 30, "Restricted Zone Re-Entry Instructions" to each pass holder.
- \_\_\_ 17. Have the Police Branch Director contact any control points in other jurisdictions that the pass holder will use to get to their approved destination.
- \_\_\_ 18. Verify that the pass holder exited the restricted area as planned by contacting the Police Branch Director.
- \_\_\_ 19. Consider rescue efforts if an individual is overdue.
- \_\_\_ 20. Retrieve the Re-Entry Processing Form.
- \_\_\_ 21. Verify dosimeter readings are completed.
- \_\_\_ 22. Ensure the Supply Unit Leader / Radiological Officer receives the dosimetry.
- \_\_\_ 23. Start and maintain a file with each pass holder=s name and Re-Entry Processing Forms. A Re-Entry Processing Form is required for each trip. Some persons may be allowed to re-enter more than once daily if exposure is not excessive.
- \_\_\_ 24. Start and maintain a summary chart or table showing each pass holder and the exposures received. Give this information to the Supply Unit Leader / Radiological Officer and Medical Unit Leader / Health Officer.
- \_\_\_ 25. Thoroughly brief your replacement.
- \_\_\_ 26. When the need for re-entry ends, pack up all files and records and place them in safe storage. They could become evidence in legal proceedings.