

## **Annex 7 - Recovery, Reentry, Return, and Relocation**

### **A. PURPOSE**

1. This section moves the incident from the “Emergency Phase” to the “Intermediate or Recovery Phase.”
2. It describes the criteria for termination of protective actions, criteria for release of potentially contaminated commodities, and dose minimization considerations.
3. Activities are identified which must be completed to return the affected area, as nearly as possible, to its pre-incident conditions.

### **B. SITUATION**

1. An incident at the Beaver Valley Power Station (BVPS) involving the uncontrolled release of radioactive materials to the offsite area has occurred and required the implementation of protective actions. The uncontrolled release has stopped and further uncontrolled release of radioactive materials from the site is unlikely and the plant is stable.
2. BVPS has terminated the “emergency” and has entered the recovery phase, according to their procedures.
3. Responsible federal and state agencies have determined that the criteria designated herein governing relaxation of protective actions has been met.
4. The governor determines that, on either a selective or a general basis, as appropriate, recovery operations may begin.

### **C. CONCEPT OF OPERATIONS**

1. The Governor of West Virginia (or designee) shall create a State Recovery Task Force to develop a plan to guide recovery of offsite areas affected by an incident at the Beaver Valley Power Station (BVPS). This group will consist at a minimum of the representatives from the following State Agencies:
  - a. West Virginia Division of Homeland Security and Emergency Management (WV DHSEM)
  - b. WV Department of Health and Human Resources (DHHR)
  - c. Dept. of Ag
  - d. Department of Environmental Protection (DEP)
  - e. Division of Natural Resources (DNR)
  - f. West Virginia University Extension Service (WVUES)

The Task Force may be supplemented by other agencies and non-governmental organizations as needed. The structure, functions and responsibilities of the State Recovery Task Force are described in Paragraphs E. and F. of this Annex.

2. Counties affected by the evacuation will ascertain the operability of essential public services in their districts and inform the State Emergency Operations Center (SEOC) of their status. Residents will not be authorized to return to their homes until essential public services are operable.
3. Until the Governor declares that recovery operations may commence, reentry to evacuated areas shall be restricted to:
  - (1) initially designated volunteer and professional emergency workers; and,
  - (2) Certain farmers, industrial workers, institutional workers and others who apply and qualify for emergency worker entry authorization;
  - (3) Evacuated residents will not be admitted unless they show actual need and qualify for emergency worker status under 2 above or are accompanied by an Emergency Worker.
4. Criteria for relaxing protective actions:
  - a. General
 

The principle of “As Low as Reasonably Achievable” (ALARA) applies, as appropriate, to the criteria found herein in relation to radiation dosage.
  - b. Re-entry
    - (1) Emergency Workers – The Following Protective Action guidelines will apply: Occupational dose limit for emergency workers for whole body exposure specified by the Environmental Protection Agency (EPA) and the DHHR, is 5 Rem for the recovery phase. As a precaution, DHHR and DHSEM have set turn back values 1 for workers of 1 Roentgen. These values are for 1 year and separate from any dose accumulated during the emergency phase.
    - (2) Selected Evacuated Residents
 

Evaluation has determined that further radioactive release from the nuclear power plant is unlikely, and that the plant is in a stable condition.
    - (3) Recovery Workers
 

Occupational dose limit for recovery workers for whole body exposure specified by the EPA and the DHHR, is 5 Rem for the recovery phase. As a precaution, DHHR and DHSEM have set turn back values for workers at 1 Roentgen. These limits are for 1 year and separate from any dose accumulated during the emergency phase.

- c. Return - General Public
  - (1) Evaluation has determined that further radioactive release from the nuclear power plant is unlikely, and that the plant is in a stable condition.
  - (2) Projected radiation exposure above background will not exceed established EPA Protective Action Guides of 2 rem for the first year and 0.5 rem for years thereafter as determined by the characterization of radioactive material deposited and the measurement of radiation dose rates. (see section D.10)
  - (3) Essential public services, (e.g., public water, electricity, sewage treatment, etc.) are operable.
  - (4) The counties have reestablished their seats of government.

#### D. DEFINITIONS

1. **Access Control Point (ACP)** - Locations through which authorized access to and egress from exclusionary and restricted zones can be accomplished.
2. **Evacuated Residents** - Relocated adults with proof of former residence who wish to retrieve personal property.
3. **Exclusionary Zone** - That region in which the full extent of radiocontamination has been verified. (In the early stages of the incident, this may include the entire plume EPZ.) Emergency workers will be the only personnel authorized access to exclusionary zones.
4. **Recovery** - The generic term used for the overall process of decontamination and/or restoration of vital services and infrastructure to allow for resumption of normal activity in areas in which protective actions have been implemented.
5. **Recovery Operations** - Activities carried out to return the offsite area around the nuclear plant to its pre-incident condition (as nearly as possible).
6. **Recovery Workers** - Non-pregnant adults performing governmental functions or public service; farmers, institutional, industrial, or commercial employees.
7. **Reentry** - The temporary return of emergency workers and others authorized by the governor for a prescribed period into the exclusionary or restricted zones.
8. **Relocation** - A protective action implemented during the recovery whereby evacuees or sheltered individuals residing in areas exceeding PAGs are removed and/or excluded from return to restricted areas until directed by the state and are accommodated at a new location for an extended period -- months to years.

9. **Restricted Zone** - That region within the plume deposition area where whole body exposure to the public from ground deposition and/or inhalation of re-suspended radiocontaminants is expected to meet or exceed plume PAGs up to four days after termination of the incident or exceed PAGs for continuous occupancy. It may also include a buffer zone to prevent radiocontaminants from being deposited in unrestricted areas.
10. **Return** - The permanent return of citizens, businesses, governments, and institutions to their dwellings, places of employment, or operating sites after restricted areas have been determined to be safe for occupancy by the State.

## E. **ORGANIZATION**

### 1. **State Recovery Task Force (SRTF)**

The SRTF will, at a minimum, be staffed by representatives from the following departments and will be chaired by the Director of DHSEM or designee.

#### State Representatives

WV DHSEM  
 Dept. of Ag  
 WV DHHR  
 DEP  
 DNR

**NOTE:** Other State agencies will be added or removed as needed.

#### Federal Representatives

Federal representation on the SRTF may include some or all of the agencies identified in the Nuclear/radiological Incident Annex of the National Response Framework.

### 2. **Staff Support for the Task Force**

Administrative and public information support for the SRTF shall be provided by WV DHSEM, with additional assistance to be provided, upon request, from other participating state agencies.

### 3. **Radiological Technical Support for the Task Force**

BPH (or designee), with assistance from appropriate federal agencies, shall both serve on and be the principal radiological technical advisor to the State Recovery Task Force.

### 4. **Task Force Meetings**

Meetings of the SRTF shall generally take place in the office of the WV DHSEM, or in other designated locations. Departments will be requested to provide a representative. In some instances, telecommunications are acceptable.

#### 5. **Duration of Task Force Operations**

The SRTF shall continue to function until recovery operations are complete, or until the Governor (or his/her designee), as advised by the SRTF Chairperson, determines that overall recovery management functions can be completed through the individual statutory responsibilities of West Virginia State and local governments.

### F. **RESPONSIBILITIES**

#### 1. General

##### a. State Recovery Task Force (SRTF)

The SRTF, while consisting of several state agencies, will work as one unit. The WV DHSEM Director (or designee) will chair the SRTF. It is responsible for coordination and implementation of existing plans and for developing or modifying instructions based on the realities and circumstances of the time. Policies and procedures to be established shall include:

- (1) Guidance for the restoration of affected areas (as closely as possible) to their pre-incident condition.
- (2) Development of a prioritized list of restoration activities in affected counties and identification of state and federal agencies or organizations responsible to assist.
- (3) A decontamination and restoration plan which includes the appropriate types of decontamination actions or activities to recover the area and establishes priorities for decontamination and restoration actions.
- (4) The identification/tasking of individuals or organizations who will carry out decontamination and restoration activities and the determination of their roles and responsibilities, which include coordination between the federal, state and county levels.
- (5) Assign decontamination and restoration projects including, but not limited to the following:
  - (a) Decontaminating and restoring buildings and equipment used to provide basic services such as general

government, fire, law enforcement, postal, water, electricity, and sewage.

- (b) Decontaminating and restoring business, industrial and agricultural sites, buildings and equipment.
  - (c) Removing and disposing of materials, equipment, soils, farm animals and pets, food products, farm or garden produce and other items which cannot be decontaminated, or which have perished or spoiled while the area has been evacuated.
  - (d) Decontaminating or otherwise restoring agricultural lands to productive use.
  - (e) Determining limitations on area hunting and fishing (e.g., length of seasons, bag limits, etc.).
- (6) Return and/or relocation assistance to evacuated individuals, businesses and industries.
  - (7) Guidelines for tracking and recovering costs incurred for all activities associated with the incident and implementing a system to accomplish cost tracking and recovery.
  - (8) An approach to providing continuing information about recovery actions, activities and timetables to the public through the media.
  - (9) Determining in consultation with the appropriate federal authorities, the disposition of contaminated materials, which must be removed from the area during restoration.
  - (10) Determining which areas (if any) must remain restricted on a long-term or permanent basis due to radiological considerations.

b. SRTF Chairperson

The Director of the Division of Homeland Security and Emergency Management (or designee), acting on behalf of the governor, shall chair the State Recovery Task Force. The responsibilities of the Task Force Chairperson shall include but not be limited to the following:

- (1) Organizing and convening the State Recovery Task Force.
- (2) Coordinating the development of SRTF procedures for the direction of the recovery effort and for coordination among all the involved entities.
- (3) Making recommendations to the governor.
- (4) Issuing directives on behalf of the governor.

- (5) Acting under the direction of the governor in the execution of his/her emergency powers.
- (6) Setting up a SRTF meeting schedule and the agenda for such meetings, and
- (7) Coordinating information collection and research to support SRTF decision-making.

c. State Recovery Task Force Members

- (1) Coordinate state and federal agency support of recovery operations.
- (2) Provide public information.
- (3) Assist affected counties in the conduct of a coordinated damage assessment, which considers the broadest context of damage, both tangible and intangible.
- (4) Maintain records and reports acquired during the incident.
- (5) Coordinate the mitigation of radiological contamination.
- (6) Provide field teams for taking samples for analysis of leafy vegetation, milk (grade "A" & "B"), meat and meat products, poultry and poultry products, soil, water, snow, produce, fish, wildlife, animal feed and grain, eggs and honey.
- (7). Coordinate the collection of samples and the disposition of contaminated food products based on FDA criteria.
- (8) Impound or dispose of contaminated food products as appropriate.
- (9) Divert fluid milk to processing of manufactured milk products, as appropriate.
- (10) Provide a plan to limit area fishing (e.g., length of seasons, creel limits, etc.), if necessary.
- (11) Provide a plan to limit area hunting (e.g., length of seasons, bag limits, etc.), if necessary.
- (12) Inform the governor on the status of operations regarding food chains.
- (13) Provide an assessment of the environmental impacts and a plan for recovery.

- (14) Establish river access control points as required.
- (15) Coordinate federal augmentation of state sampling operations and analysis of contamination.
- (16) Develop a recommended short/long-term monitoring and sampling plan for evacuated areas, which identifies numbers and locations of samples to be taken.
- (17) Reassess the need for monitoring and sampling personnel, identify roles and responsibilities of participating agencies and organizations. Make field assignments based on the SRTF recovery plan.
- (18) Provide for the radiological exposure control of monitoring and sampling personnel to include protective clothing, dosimetry, personnel and vehicle decontamination sites, stay times, etc.
- (19) Direct and conduct monitoring of radiation levels and environmental sampling.
- (20) Coordinate, direct and conduct sample evaluation, dose assessment and dose projection.
- (21) Annually reevaluate the public health effects of current radiation levels.
- (22) Identify areas where current radiation levels or cumulative dose values remain too high for recovery activities to take place, either temporarily or permanently.
- (23) Annually reconsider, revise, and relax (where possible) Protective Action Recommendations (PARs).
- (24) Provide revised PAR information to the SRTF public information function so the public can be informed of changing radiological conditions.
- (25) Develop a decontamination and restoration plan for the approval of the SRTF, which includes the appropriate types of decontamination actions or activities to recover the area and establishes priorities for decontamination and restoration activities.
- (26) Identify individuals or organizations that will carry out decontamination and restoration activities and determine their roles and responsibilities.
- (27) Coordinate and arrange for the radiological exposure control of decontamination / restoration personnel including protective clothing, dosimetry, personnel and vehicle decontamination site,

stay times, etc. (This can be done in conjunction with the development of similar provisions for monitoring and sampling personnel.)

- (28) Participate in incident response critiques and develop (with the assistance of all affected agencies) a detailed after-action report focusing on lessons learned and methods to improve performance.
- (29) Coordinate additional activities as deemed appropriate by the SRTF.

d. Affected Counties

- (1) Provide assistance to the SRTF.
- (2) Provide overall direction and coordination of recovery operations within the specific county.
- (3) Expedite reestablishment of normal county government organization and functions.
- (4) Coordinate support of county recovery operations.
- (5) Realign (if necessary) staff responsibilities in order to encompass recovery duties.
- (6) Maintain controlled entry points to evacuated areas.

2. Re-entry Phase

a. State Recovery Task Force

- (1) In coordination with affected counties, revise and implement plans for maintaining access control to exclusion zones.
- (2) Coordinate with the state agencies regarding the identification of groups requiring access to controlled areas.
- (3) Provide information updates about areas under access control to the public information staff so the public can be informed through the media.
- (4) Realign (if necessary) agency staff responsibilities in order to assist in the discharge of reentry-related duties.
- (5) Provide the SRTF Chairperson with property damage information as may be available.

- (6) Provide communication support to American Nuclear Insurers by acquiring additional telephone lines for installation in designated claim centers, if required.
- (7) Provide field teams for the purpose of taking samples.
- (8) Effect necessary coordination with federal entities.
- (9) Inform the SRTF Chairperson on the status of operations in regard to food chains.
- (10) Maintain river access control points as required.
- (11) Determine needs that can be met by the Federal Radiological Monitoring and Assessment Center (FRMAC).
- (12) Request and coordinate federal offsite monitoring and assessment support.
- (13) Develop environmental monitoring strategy and, in coordination with the FRMAC, dispatch teams to verify deposition areas and collect environmental area monitoring badges (i.e. LUXEL P9) and particulate air samples as necessary.
- (14) Verify deposition footprint, establish radiological zones, and transmit locations of restricted and exclusion areas to the state EOC.
- (15) Recommend to the SRTF Chairperson when recovery activities should commence.
- (16) Provide radiological support to entry point operations.

b. Affected Counties

Establish Access Control Points (ACPs) to evacuated areas in coordination with WVBPH to include a monitoring station at each ACP.

3. Return

a. State Recovery Task Force

- (1) Provide to the governor a comprehensive evaluation of the potential impact of allowing the public to return to their homes, farms and businesses.

- (2) Advise the Governor when preparations are completed to the extent that return of the public is feasible.
- (3) In coordination with affected counties, revise and implement human services and economic assistance plans and procedures to aid the physical return of resident individuals, business and industries to previously evacuated areas. These plans and procedures will include what kind of support will be offered, who will provide it, and how, when, and where such support will be provided.
- (4) Identify agencies and organizations which will be managing the returning public effort and determining their roles and responsibilities, to include coordination between federal, state and county governmental agencies.
- (5) Establish an economic assistance hotline to provide information to businesses and individuals concerning where this type of assistance can be obtained.
- (6) Provide periodic information updates to media outlets on the progress of return activities so the public will remain informed.
- (7) Provide information and advice to individuals, business and industries about further personal decontamination activities that need to take place upon return to their facilities.
- (8) Notify (based on the governor's decision) appropriate counties when evacuees can return to their residencies.
- (9) Realign staff responsibilities (if necessary) to encompass recovery duties.
- (10) Advise the governor of the classifications and locations of the non-restricted areas and when the return of the public to those areas may commence.
- (11) Develop a long-term environmental monitoring program for each zone of classification.
- (12) Develop (in coordination with Department of Agriculture) a long-term ingestion pathway-monitoring program for each zone of classification.
- (13) Set stand-down and/or cutoff dates with the FRMAC for sampling programs as their usefulness for assessment diminishes.
- (14) Provide for radiological monitoring of emergency worker monitoring and decontamination stations and reception and mass care centers.

- (15) Assist in and support decontamination of emergency worker monitoring and decontamination stations and reception and mass care centers and certify them for return to public use.
  - (16) Provide the governor an assessment of the physiological impacts of recovery.
  - (17) Provide assistance to individuals with long-term medical problems associated with real or perceived radiation exposure.
  - (18) Coordinate the collection of samples.
  - (19) Provide field teams for the purpose of taking samples.
  - (20) Coordinate food product and agricultural sampling activities with USDA.
- b. Division of Corrections
- Provide the SRTF with an assessment of the readiness to reoccupy state and county correctional facilities.
- c. Department of Education
- Provide the SRTF an assessment of the readiness to reopen educational institutions.
- d. Department of Environmental Protection
- Provide the SRTF an assessment for safe levels of residual radioactive contamination in water, soil or airborne particulates within the affected area(s).
- e. Division of Natural Resources
- Reestablish the use of natural and recreational areas.
- f. Department of Health and Human Resources
- (1) Provide the SRTF an overall assessment (short and long-term) of the psychological impact of the incident.
  - (2) Coordinate individual and family counseling for stress and/or other evacuation-related emotional or psychological problems or conditions.
- g. Division of Highways
- Provide the SRTF an assessment of the transportation system and readiness to reopen all or selected roadways.

## h. West Virginia State Police

Provide for the orderly return of evacuees from host areas to their counties along major state routes.

## i. American Red Cross

Close mass care centers as they are emptied.

## j. Affected Counties.

(1) Notify WVDHSEM when affected counties are prepared for return of evacuees with consideration for the following items:

- (a) Establishment of vital services - police, fire, EMS.
- (b) Establishment of vital utilities - electric, gas, water, telephone, sewage plants and waste disposal.
- (c) Reopening of essential commercial services - gas stations, drug stores, and supermarkets.
- (d) Reopening of hospitals and nursing homes and the return of patients and residents.
- (e) Public information announcements which provide clear and concise information and instruction concerning all facets of the return effort (affected jurisdictions, return routes, effective date/time, exposure reducing measures to be taken upon return, etc.).

(2) Provide overall direction and coordination of return operations within the respective county.

(3) Inform WVDHSEM of the status of return of evacuees from mass care centers.

(4) Coordinate the provision of law enforcement in returning jurisdictions.

(5) Provide assistance (as needed) for the transportation of evacuees back to their homes.

(6) Assist with the return of evacuated access/functional needs populations to institutions and facilities (e.g., nursing homes, hospitals, correctional institutions, etc.).

(7) Provide information services to returning evacuees.

- (8) In coordination with the SRTF prepare and release appropriate public information announcements regarding return of evacuees to their respective counties.
- (9) Provide information and advice to businesses and industries about further decontamination activities that may be necessary after they return to their facilities.

#### 4. Relocation

##### a. State Recovery Task Force

- (1) Refine and implement human services and economic assistance plans and procedures to aid the relocation of individuals, businesses and industries who, because of radiocontamination, cannot return to previously evacuated areas. These plans and procedures will include what kind of support will be offered, who will provide it, and how, when, and where such support will be provided.
- (2) Identify agencies and organizations which will be managing the relocation effort and determining their roles and responsibilities, to include coordination between federal, state and county governmental agencies.
- (3) Assist with the identification of temporary or permanent housing and jobs in other areas and with a resettlement effort, if it becomes necessary.
- (4) Assist with the resettlement of evacuated special populations into other equivalent institutions or facilities (e.g., nursing homes, hospitals, correctional institutions, etc.).
- (5) Assist with the identification of buildings or facilities, which can support resettled businesses or industries.
- (6) Provide information about where economic assistance to relocated individuals, business and industries can be obtained.
- (7) Provide periodic information updates to media outlets regarding relocation activities in order that they remain informed.
- (8) Realign staff responsibilities (if necessary) in order to support relocation activities.

##### b. Division of Corrections

Provide the SRTF a plan to relocate evacuated state and county correctional facility inmate populations.

## c. Department of Education

Provide the SRTF a plan to relocate evacuated educational institution populations into suitable facilities.

## d. DHHR

(1) Provide the SRTF a plan to relocate evacuated nursing homes, assisted living facilities, and hospitals into other equivalent institutions or facilities.

(2) Provide the SRTF a plan to assist individuals with long-term medical problems associated with real or perceived radiation exposure.

(3) Provide the SRTF a plan to provide individual and family counseling for stress and/or other relocation-related emotional or psychological problems or conditions.

## f. American Red Cross

Close (in coordination with the county emergency management) remaining mass care shelters as they are emptied.

5. Loss Compensation

## a. State Recovery Task Force

(1) In coordination with federal, state and local governments, the utility and its insurers, take appropriate action to ensure that the extent of utility, public, and private liability is determined and that compensation actions are underway.

(2) Develop (in conjunction with American Nuclear Insurers) an insurance information system. Provide periodic information updates on the progress of loss compensation to media outlets so the public can remain informed.

(3) Provide a plan to assist claimants in documenting their losses.

(4) Provide a plan to assist claimants in settling claims with and recovering damage from the utility and its insurers under the provisions of the Price-Anderson Act or in seeking assistance.

## b. Office of the Attorney General

Provide the SRTF a plan to assist injured parties with litigation, if necessary, to recover damages sustained from the incident.

## 6. Long-Term Impact

### State Recovery Task Force

- a. Develop and implement a process for monitoring and tracking the long-term effects of the incident on the population, the economy, and the environment, in the affected area by the responsible agencies as a part of their continuing functions.
- b. Establish, as appropriate, study groups with federal, state and local representation for documentation and analysis of the incident.
- c. Provide a process for long-term agricultural and land management practices (e.g., soil removal, crop rotation, tillage) which will further reduce future contamination of feed and food crops.
- d. Provide a process to reduce the long-term impacts of the incident on markets for state and local agricultural products and goods.
- e. Provide a process to assess the long-term impacts on markets for state and local products, goods, and services.
- f. Provide a process to reduce the long-term impact on state and local tourism and travel.
- g. Provide a process to mitigate the long-term impacts on the affected area's indigenous wildlife.
- h. Evaluate the potential for the spread of contamination as a result of wildlife migratory patterns.
- i. Provide a process to study long-term health risks and to provide a program of periodic follow-up health monitoring of the affected populations.