

Beaver Valley Power Station Radiological Emergency Response Plan



Columbiana County, Ohio

**JANUARY 2022
REVISION 34**

RECORD OF CHANGES

RECORD OF CHANGES				
CHANGE NUMBER	DATE OF CHANGE	PAGE NUMBER	DATE ENTERED	CHANGE MADE BY (SIGNATURE)
Rev. 1	3/86	ALL	7/86	
Rev. 1A	3/87	Partial	7/87	
Rev. 2	3/88	ALL	7/88	
Rev. 3	3/89	ALL	7/89	
Rev. 4	3/90	ALL	6/90	
Rev. 5	9/90	ALL	1/91	
Rev. 6	11/91	ALL	1/92	
Rev. 7	8/92	ALL	1/93	
Rev. 8	8/93	ALL	1/94	
Rev. 9	8/94	ALL	1/95	
Rev. 10	7/95	ALL	1/96	
Rev. 10	12/96	ALL	1/97	
Rev. 11	10/98	ALL	10/98	
Rev. 12	1/00	ALL	1/00	
Rev. 13	3/01	ALL	3/01	
Rev. 14	1/02	ALL	1/02	
Rev. 15	1/03	ALL	1/03	
Rev. 16	1/04	ALL	1/04	
Rev. 17	1/05	ALL	1/05	
Rev. 18	1/06	ALL	1/06	
Rev. 19	1/07	ALL	1/07	
Rev. 20	1/08	ALL	1/08	
Rev. 21	1/09	ALL	1/09	
Rev. 22	1/10	ALL	1/10	
Rev. 23	1/11	ALL	1/11	
Rev. 24	1/12	ALL	1/12	
Rev. 25	3/13	ALL	3/13	
Rev. 26	1/14	ALL	1/14	
Rev. 27	1/15	ALL	1/15	
Rev.28	1/16	ALL	1/16	
Rev. 29	1/17	ALL	1/17	
Rev. 30	1/18	ALL	1/18	
Rev. 31	1/19	ALL	1/19	
Rev. 32	1/20	ALL	1/20	
Rev. 33	12/20	ALL	1/21	
Rev. 34	12/21	ALL	1/22	

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Detailed Record of Changes (12/27/2021)

PLAN REFERENCE	DESCRIPTION OF CHANGE	PAGE
Global	Changed revision to 34	ALL
Global	Changed references for State RERP to State REP Operations Manual	ALL
Table of Contents	Adjusted per revisions below	ALL
Section I.E.3.e.2.g	Clarified school closure	I-4
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Section I.E.3.e.4.j	Clarified school closure	I-5
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Section II Part A.II.E.1.e	Updated wording	II-A-5
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Section II Part A.II.I.1.c	Updated wording	II-A-8
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Section II Part A.III.C	Removed agricultural advisory reference	II-A-13
Section II Part A.III.E	Added agricultural advisory reference	II-A-14
Section II Part A.III.J	Removed State and Local Government Commission	II-A-14
Section II Part A.III.K,L and M	Renumbered due to elimination of Section II Part A.III.J	II-A-15
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Section II Part D. IV Alert 9	Changed JIC to JPIC	II-D-2
Section II Part D. IV Alert 12	Removed State mobile communications van	II-D-2
Section II Part D. IV SAE 11	Added Ohio Department of Agriculture	II-D-3
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Section II Part E. II.D.1	Changed General Health District to Health/Medical Officers	II-E-2

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Section II Part E. II.D.6	Added Emergency Management Resource Manual reference.	II-E-2
Section II Part E. III. D	Changed Operation Officer to Executive Room	II-E-2
Section II Part E. III. E	Removed State mobile communications van	II-E-2
Section II Part E. IV.B	Updated contact number	II-E-3
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Section II Part F. II.C	Updated title to match SOGs	II-F-1
Section II Part F. III.B.1.h	Changed JIC to JPIC	II-F-1
Section II Part F.III. B.1.m	Removed State mobile communications van, updated numbering	II-F-2
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Section II Part J Enc.7.G	Matched to Section II Part J.C	II-J-29
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Section II Part K.III.A	Added 0-200 mR dosimeter	II-K-2
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Section II Part K.IV.D.2	Removed Ellwood City Hospital reference.	II-K-3
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Section II Part M.II.E.4	Corrected term to recovery	II-M-2
Section II Part M.III.A.3	Changed JIC to JPIC	II-M-3
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Section V	Corrected footer numbering	All
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Section V (J.11.c.i)	Updated numbering	V-22

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CERTIFICATION

This, the Columbiana County, Beaver Valley Power Station Radiological Emergency Response Plan, will be activated, in the event an Incident/Emergency occurs at BVPS.

This plan is certified as being current as of December 31, 2021 and is supported by related Standard Operating Guidelines (SOGs). The plan and its attendant SOG's are reviewed on an annual basis and have been revised as necessary.

All plan holders of record will be provided copies of any revisions as they are compiled and made available for distribution.

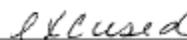
In witness whereof, we have hereunto set our hands this 12 day of, January 2022 A.D.



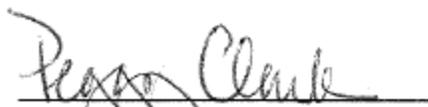
Columbiana County Commissioner



Columbiana County Commissioner



Columbiana County Commissioner



Director, Columbiana County
Emergency Management Agency

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SECTION I - GENERAL

A. BACKGROUND

1. The Beaver Valley Power Station (BVPS) is located in Northwestern Beaver County, Pennsylvania, immediately on the Ohio River and within five miles of the Ohio-Pennsylvania border.
2. The primary hazard consideration for this facility lies in the potential release of radioactive materials from an incident within the power station.
3. The total number of reactor hours of experience in the United States provides data showing a radioactive material release that would endanger the civil populace has:
 - a. Not occurred.
 - b. Has a very low probability of occurrence.
 - c. Could cause protective actions to be taken that would include access control, sheltering, respiratory protection, and/or evacuation.
4. Local government in Columbiana County has had experience in various types of emergency response actions over the years to include evacuation of residents during floods, landslides, and heavy blizzards. This experience factor forms a realistic basis for response plans should an incident occur at the BVPS that would force the evacuation of local residents.
5. The Deputy Director may perform all functions of the EMA Director in their absence or if directed.

B. ASSUMPTIONS

1. A radiological emergency can arise from the conduct of operations at the Beaver Valley Power Station ranging from a minor release of radioactive material within the station site to a major release of material in the worst possible scenario.
2. Ohio State governmental agencies will respond to assist the Columbiana County government on an "on-call basis," to perform responsibilities assigned in The Ohio Radiological Emergency Preparedness Operations Manual.
3. Local governmental agencies will respond as required to fulfill responsibilities for public safety.
4. The BVPS will comply with the notification process including the provision of essential information to local governments as to magnitude of release; areas affected, and recommended actions.

C. SCOPE

1. This plan will embrace all involved agencies that are capable of responding to radiation incidents involving BVPS.
2. It designates the tasks, responsibilities, and methods of accomplishment required for these agencies to fulfill their assignments.

SECTION I - GENERAL

D. PURPOSE

Columbiana County governmental agencies (county, city, village, and township) will act to insure the public health and safety of the populace in the event of an emergency at the Beaver Valley Power Station.

E. METHODS OF ACCOMPLISHMENT

1. Notification

- a. In the event of an incident at the BVPS, which may involve an offsite radiation hazard, the Columbiana County Sheriff's Dispatcher will be notified by the BVPS Control Room. The Sheriff's Dispatcher will then notify the County EMA Director who will begin notification procedures for all other agencies of government with emergency responsibilities. The County Sheriff's Dispatcher is manned 24 hours located at 8473 County Home Road, Lisbon and is the County's primary notification point.
- b. Minimum information for primary response agencies must include an estimate of the areas, which may be affected. Additionally, alerting and notification information should provide primary response agencies with enough information to permit assessment of the magnitude, nature, and consequences of the incident.

2. Direction and Control

- a. In the event of an emergency involving the BVPS, which may require governmental participation, the following "chain of command" will be observed:
 - 1) President, Columbiana County Board of Commissioners.
 - 2) Remainder, Columbiana County Board of Commissioners.
 - 3) Columbiana County EMA Director.
 - 4) Sheriff, Columbiana County.
- b. The Columbiana County direction and control of emergency operations during an accident associated with Beaver Valley Power Station will be maintained from the Columbiana County Emergency Operations Center (EOC) located at 215 South Market St. Lisbon, Ohio.
- c. The Columbiana County EOC is capable of operating on a 24-hour-per-day basis for an extended period of time during an emergency.
- d. The President of the Columbiana County Board of Commissioners has the overall responsibility for the protection of the health, safety and welfare of residents of the County. The Board of Commissioners has appointed an Emergency Management Agency Director to coordinate the emergency operations of the County government. The Director serves as the Chief of Staff for emergency operations for the Columbiana County Board of Commissioners.

SECTION I - GENERAL

3. Concept of Operations

- a. Initial and subsequent notification will be made to Columbiana County by the Beaver Valley Power Station according to procedures detailed in Section II E, Emergency Notification of this Plan.
- b. The President of the Columbiana County Board of Commissioners is responsible by law for emergency preparedness operations. The County Emergency Management Agency Director has been designated to serve as the chief of staff in all emergency situations.
- c. Recommendations for protective response will be made by the licensee and the Governor of Ohio to the President of the Board of Commissioners. Columbiana County will evaluate these recommendations and will formulate the Protective Action Decision to be taken and method for implementation.
- d. Prior to their implementation the Protective Action Decisions will be coordinated between Columbiana, Beaver and Hancock Counties to ensure that actions are consistent and workable for the entire affected area.
- e. County EOC operations specific to emergency action levels is reviewed annually and agreed upon with BVPS. A summary of actions taken:
(See **SOG-1**)

1) **UNUSUAL EVENT**

- a) Incoming message is received and logged at the County Sheriff's Dispatcher.
- b) EMA Director is notified by the Sheriff's Dispatcher.
- c) Columbiana County EOC receives a fax copy of the Initial Notification Form.
- d) EMA Director makes confirmation call to Ohio EMA and the Sheriff's Dispatcher.
- e) The Sheriff's dispatcher or EMA Director notifies, Commissioners, Sheriff, and the East Liverpool Dispatch.

2) **ALERT**

- a) Incoming message is received and logged at the County Sheriff's Dispatcher.
- b) EMA Director is notified by the Sheriff's Dispatcher.
- c) Columbiana County EOC receives a fax copy of the Initial Notification Form.
- d) EMA Director notifies Ohio EMA and confirms with the Sheriff's Dispatcher.
- e) The Sheriff's dispatcher or EMA Director notifies, Commissioners, Sheriff, and the East Liverpool Dispatch.

SECTION I - GENERAL

- e) The EOC staff are notified and mobilized as appropriate to the situation.
- f) When representatives from the following emergency response organizations arrive: EMA Director, Sheriff, fire services, and health medical, arrive the EOC is considered Operational.
- g) Schools, hospitals, nursing homes, registered daycare, and industries in the affected areas are notified and requested to implement emergency procedures appropriate to the situation. If school is not in session, consideration should be given to canceling school in the county **for the following day**.
- j) The public alert/notification system is brought to a standby status.
- k) The notification of support organizations is confirmed.

3) **SITE AREA EMERGENCY**

- a) Incoming message is received and logged at the County Sheriff's Dispatcher.
- b) EMA Director is notified by the Sheriff's Dispatcher.
- c) Columbiana County EOC receives a fax copy of the Initial Notification Form.
- d) EMA Director notifies Ohio EMA and confirms with the Sheriff's Dispatcher.
- e) The Sheriff's Dispatcher notifies East Liverpool Dispatcher and County Officials (if not already notified).
- f) EMA Director calls East Liverpool Safety Services Director with initial and follow-up information.
- g) The County Board of Commissioners and all EOC staff personnel are notified or updated.
- h) County EOC is Fully Activated along with communications.
- i) Representatives of emergency response organizations including fire departments, ambulance associations and transportation providers are notified and requested to mobilize and brief their emergency forces.
- j) Schools, hospitals, nursing homes, registered daycare, and industries in the affected areas are notified and requested to implement emergency procedures appropriate to the situation. If school is not in session, consideration should be given to canceling school in the county **for the following day**.
- k) If determined to be necessary, the public alert/notification system is activated. This will include supplementary alert/notification coverage and broadcast of emergency messages to the public.
- l) Notification of support organizations and the activation of their facilities are confirmed.
- m) Resource requirements are reported to the County EOC. County resource requirements will be reported to the State.

SECTION I - GENERAL

4) GENERAL EMERGENCY

- a) Incoming message is received and logged at the County Sheriff's Dispatcher.
 - b) EMA Director is notified by the Sheriff's Dispatcher.
 - c) Columbiana County EOC receives a fax copy of the Initial Notification Form.
 - d) EMA Director notifies Ohio EMA and confirms with the Sheriff's Dispatcher.
 - e) The Sheriff's Dispatcher notifies East Liverpool Dispatcher and County Officials (if not already notified).
 - f) EMA Director calls East Liverpool Safety Services Director with initial and follow-up information.
 - g) County EOC is fully activated along with all communications.
 - h) The County Board of Commissioners and all EOC staff personnel are notified or updated.
 - i) Representatives of emergency response organizations including fire departments, ambulance associations and transportation providers are notified and requested to implement SOG and brief their emergency forces.
 - j) Schools (if in session), hospitals, nursing homes and industries in the affected areas are notified and requested to implement emergency procedures appropriate to the situation. If school is not in session, consideration should be given to canceling school in the county **for the following day**.
 - k) If determined to be necessary, the public alert/notification system is activated. This will include supplementary alert/notification coverage and broadcast of emergency messages to the public.
 - l) Notification of support organizations and the activation of their support facilities are confirmed.
 - m) Traffic Control Points begin operation.
 - n) If determined to be necessary, implement protective actions, which could include access control, sheltering and/or evacuation.
 - o) Resource requirements are reported to the County EOC. County resource requirements will be reported to the State.
- f. Relocation, reentry, and return activities will be initiated when the State Ingestion Zone Recovery Reentry Assessment Group (IZRRAG) and Columbiana County has established a restricted zone following deposition of radiological materials. Activities will begin once the County and State have assurance of stable plant conditions. (See Section II-M "Relocation, Reentry and Post-Accident Operations".)

SECTION I - GENERAL

F. AUTHORITY

Authority for the Columbiana County Radiological Emergency Response Plan for the Beaver Valley Power Station (BVPS).

1. Sources of Authority
Authorities for the Radiological Emergency Response Plan of Columbiana County are contained in the following Federal, State, and Columbiana County sources:
2. **Federal Authority**
 - a. Title V, Public Law 93-288.
 - b. Rules and Regulations, NRC: 10 CFR Part 50 Appendix E.
 - c. Environmental Protection Agency-EPA-400-R-92-001, Manual of "Protective Action Guides and Protective Actions for Nuclear Incidents", May, 1992.
 - d. NUREG-0396 - EPA 520/1-78-016 "Planning Basis For the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear Power Plants", December, 1978.
 - e. NRC / FEMA NUREG-0654 / FEMA-REP-1 Rev-2, December 23, 2019.
 - f. Department of Homeland Security/Federal Emergency Management Agency. Docket ID FEMA-2004-004. Federal Registry-Vol.73, No.149-2008.
3. **State of Ohio Authority**
Executive Order of the Governor, June 17, 1978, pertaining to State agencies, Ohio Revised Code Sections: 5502.21 through 5502.99.
Section 3 of Article XVIII of the Ohio Constitution.
4. **Columbiana County Authority**
Columbiana County Board of County Commissioners Resolution authorizing the Columbiana County Disaster Services Agency (now Columbiana County Emergency Management Agency) to act in and for the County as the lead agency for the development and implementation of the Columbiana County Emergency Response Plan in support of the Beaver Valley Power Station.

SECTION II – PART A

EMERGENCY RESPONSE ORGANIZATION

I. Purpose

This Section will identify primary organizations participating in a response to a radiological emergency at the Beaver Valley Power Station (BVPS). It will summarize the individual responsibilities for specific emergency response functions and the basic structure for the County's emergency response effort, Ref: Enclosure 2, this section. All incoming emergency response and resources will incorporate according to this plan and all operating guides or according to direction from Columbiana County EMA.

NOTE: Anywhere in this document when referencing the Senior Official in an organization it is also implied the Subordinate Official or Designee.

II. Organizations (County)

A. Columbiana County Emergency Management Director

1. TASKS AND RESPONSIBILITIES

- a. Maintains readiness of the County Emergency Operations Center and recruits and trains primary and backup staff members to ensure 24-hour operations capability. Refer to County Resource Manual.
- b. Will conduct end of shift briefings for incoming staff.
- c. Coordinate emergency planning with all county agencies to ensure an integrated effort.
- d. Ensure that a sufficient degree of preparatory training courses are programmed in planning, radiological monitoring and decontamination, and operational procedures for local officials.
- e. Identify Reception Centers and Care Centers in the County and assist the Red Cross in preparing these centers for receiving evacuees.
- f. Determine that a sufficient number of Care Centers will be available to house evacuees via agreements.
- g. Make prior arrangements with the Red Cross, County School Boards, Department of Job and Family Services, and Health Department for support of evacuees in the Care Centers.
- h. Assist local authorities in the evacuation of residents within the Emergency Planning Zone of BVPS.
- i. Coordinate EMA Emergency Public Information in the 10-mile EPZ to ensure that a complete evacuation information program is available for all residents affected by an incident at BVPS.
- j. Work with State and local authorities to complete, test, and improve upon County-wide Emergency Warning Plan, Communications Plan.
- k. Assist local agencies in procuring supplies of required equipment.
- l. MOUs are reissued on a biennial basis with all Off-Site Response Organizations (ORO)
- m. Ensure availability of information documents to local residents, transients, and summer residents.

SECTION II – PART A

2. CONCEPT OF OPERATIONS

- a. Under guidance of the Columbiana County Commissioners, the Emergency Management Agency is responsible for coordination of county activities during an incident at the BVPS. Using data made available by BVPS, State, and local agencies, the EMA Director will provide the County Commissioners with information necessary for evaluating protective action recommendations. In addition, the EMA Director is responsible for maintenance of the County Radiological Emergency Response Plan and all supportive documents. The Plan and associated SOG's will be reviewed, and necessary changes made annually. The reissued documents along with a Record of Change are submitted to the State of Ohio and FEMA.
- b. The EMA Director will receive initial notification from the Sheriff's Dispatch. When conditions warrant EOC activation, the county agencies listed in Section II-E ENCL. 3 will be notified by telephone.
- c. The responsibility to implement protective actions rests with the Columbiana County Emergency Management Agency Director. The EMA Director will implement the recommendations of the County Board of Commissioners, which would be based upon the recommendations of BVPS and the Governor of Ohio as time permits. If the recommendations of the State, BVPS and/or the County Board of Commissioners, EMA Director or alternate cannot be obtained in a reasonable period, or if BVPS has recommended immediate action, the Sheriff's Dispatcher may order the implementation of protective actions in the affected area. For precautionary evacuations, in which there is sufficient lead-time, it is preferable to have the Governor recommend an evacuation.

3. ADDITIONAL SUPPORT

If requirements cannot be satisfied with resources from within the county, the EMA Director will request additional assistance from the OEMA. These requests include resources of the Federal and State government, and counties around other Energy Harbor plants that have radiological emergency response capabilities.

4. DIRECTION AND CONTROL

- a. The Columbiana County Commissioners have primary Direction and Control responsibilities. The Commissioners have delegated this responsibility to the EMA Director.
- b. Should the EMA Director be unavailable, his/her Alternate will be the EMA Deputy Director.
- c. The EMA Director will act as advisor or Director to county government and will assist in major decisions during emergency and recovery periods.
- d. The EMA Director will submit reports required by State government.

5. AUTHORITY

Guidelines to perform duties come from the Columbiana County Board of Commissioners.

SECTION II – PART A

B. COLUMBIANA COUNTY SHERIFF'S DEPARTMENT

1. TASKS AND RESPONSIBILITIES

- a. Provide 24-hour operation to serve as notification point of contact by BVPS to receive warning relative to radiological incidents.
- b. Provide required notification and warning. (See II-E)
- c. Assist in rescue activities, if required.
- d. Assist with staffing Traffic/Access Control Points on County/State roads in coordination with Ohio Highway Patrol. Will, with assistance of other civil authorities, limit access into the affected area as requested by the County EMA to personnel performing the following:
 - 1) Accident assessment
 - 2) Rescue of endangered or injured personnel
 - 3) Lifesaving activities
 - 4) Evacuation of population
 - 5) Care of livestock
- e. Provide escort and traffic control for evacuating residents.
- f. Provide security in evacuated area.
- g. Will assure that volunteers and individuals falling under his/her operational functional jurisdictions are:
 - 1) Familiar with hazards and risks of radiation exposure.
 - 2) Familiar with protective measures to be observed while operating within the controlled area.
 - 3) Updated on status of the incident.
- h. Provide access of re-entry into EPZ for requested resources from BVPS and Beaver County Pa.

2. CONCEPT OF OPERATIONS

The Columbiana County Sheriff's Dispatcher will receive the initial notification of a radiological incident at the BVPS. The primary means of notification is by telephone with radio as an alternate method. Upon receipt of notification the Sheriff's Dispatcher will contact the EMA Director, who will in turn confirm the emergency and provide guidance to the County Commissioners in the recommendations of necessary protective actions. Based on protective action recommendations, the Sheriff shall establish Traffic and Access Control Points (See Section II-J ENCL 16) and provide security for the Emergency Operations Center and evacuated areas.

3. ADDITIONAL SUPPORT

- a. Signs and barricades from County Engineer for roadblocks.
- b. Local police, the Ohio Highway Patrol, and Ohio National Guard.

4. DIRECTION AND CONTROL

Sheriff will operate from the County EOC during an emergency as a member of the Executive Group.

5. AUTHORITY

Ohio Revised Code, Chapter 5502.28.

SECTION II – PART A

C. COLUMBIANA COUNTY ENGINEER

1. TASKS AND RESPONSIBILITIES

- a. Support the evacuation of residents of the affected areas of the county by providing barriers and signs for controlling access to affected areas.
- b. Furnish equipment and manpower, as available, to assist in emergency conditions.
- c. Coordinate with the County Sheriff on re-entry control to affected areas.
- d. Make recommendations to the Sheriff pertaining to the use of roadways, routes, bridges and service areas based upon assessment of traffic ability, capacities and weather conditions.
- e. Assist county officials in evaluation of information received concerning the situation as it pertains to engineering problems.
- f. Provide input to Executive Group decisions.
- g. Provide equipment and personnel and coordinate with other support agencies to remove impediments to evacuation routes.
- h. **All operations performed within the confines of Ohio Revised and Administrative Codes.**

2. CONCEPT OF OPERATIONS

The Columbiana County Engineer will receive notification of an incident at BVPS via telephone from the EMA Director.

3. ADDITIONAL SUPPORT

- a. Ohio Department of Transportation
 - 1) Trucks
 - 2) Road barricades
- b. Township Trustees and Road Department
 - 1) Trucks
 - 2) Road barriers
- c. Ohio Department of Natural Resources
 - 1) Vehicles
 - 2) Boats and watercraft
- d. Federal Agencies
 - 1) Federal Highway Administration
 - 2) Federal Emergency Management Agency
 - 3) U.S. Department of Transportation

4. DIRECTION AND CONTROL

A County Engineer representative will operate from the County EOC.

5. AUTHORITY

Ohio Revised Code, Chapter 5502.28.

SECTION II – PART A

D. COLUMBIANA COUNTY AGRICULTURE SERVICES (USDA-FSA/CCSWCD)

1. TASKS AND RESPONSIBILITIES

- a. To provide information to the agricultural community on:
 - 1) Immediate actions for the protection of livestock and crops.
 - 2) Possible agricultural problems, which may occur in the county to include animal feed availability and donor programs.
- b. Make recommendations consistent with State and Federal emergency preparedness planning and guidance to local authorities concerning the agricultural aspects of a radiological emergency.

2. CONCEPT OF OPERATIONS

The agriculture services agent will work with local government officials to coordinate the output of information and guidance to public safety officials and the agricultural community. Information, in general, will be directed toward security, decontamination, and protective measures to be taken in a radiological environment and released to the public by the County Public Information Officer.

3. ADDITIONAL SUPPORT

If needed, will be obtained from the following sources:

- a. The Ohio State University Extension, Columbus, Ohio.
- b. The Ohio and U.S. Departments of Agriculture agents and administrators.

4. DIRECTION AND CONTROL

The County Agent will operate from the County EOC; the staff may operate from the field in compliance with the requirements of the situation.

5. AUTHORITY

Authorities to act as an educational arm of the USDA are assumed by the provisions of the Smith-Lever Act of 1914 and amendments thereto.

E. COLUMBIANA COUNTY DEPARTMENT OF JOB AND FAMILY SERVICES

1. TASKS AND RESPONSIBILITIES

- a. Assist Red Cross in the operations of Care Centers.
- b. Plan for long-range assistance to disaster victims.
- c. Assist the Red Cross in providing shelter, clothing, and meals for evacuees.
- d. Assist the County Mental Health Department in **coordinating** counseling services.
- e. Assist the County Health Department in **coordinating** nursing services.
- f. Assist in finding housing for evacuees.
- g. Provide financial assistance.
- h. May operate from the County EOC as required.
- i. Notify county licensed Day-Care providers of accident at BVPS, and any Protective Action Decisions issued by the Executive Group.

SECTION II – PART A

2. CONCEPT OF OPERATIONS

The Columbiana County Department of Job and Family Services primary responsibilities lie in the area of assistance to evacuated persons and recovery efforts. Through coordination with other EOC staff members, the department representative will determine the assistance required by evacuees and take actions to provide needed services. The department may provide food stamps, emergency funds for housing and clothing, provide childcare services, and assist in health and medical care.

3. DIRECTION AND CONTROL

The Director of the Department may conduct operations from EOC, as required.

4. AUTHORITY

Chapter 329, Ohio Revised Code.

F. COLUMBIANA COUNTY COMMISSIONERS

1. TASKS AND RESPONSIBILITIES

- a. Serve as members of the Executive Group.
- b. Declare a "County State of Emergency" when local resources have been exhausted or upon declaration of a SITE AREA EMERGENCY and enact all necessary actions that such declaration allows.
- c. Manage all government activities.
- d. Approve protective actions, if necessary.
- e. Provide for continuity of government.
- f. Authorize the issuance of all incident-related information.
- g. Establish curfews, policies and other controls.
- h. Request necessary assistance from State government.
- i. Request military support assistance.

2. CONCEPT OF OPERATIONS

The Columbiana County Commissioners have overall command of emergency operations in the event of an incident at the BVPS, which affects Columbiana County. They have the authority to utilize county funds, make command decisions for implementing PADs (Protective Action Decisions) and ensure that all possible actions are taken to protect the residents of Columbiana County. They will receive recommendations from the Emergency Operations Center Staff, the State of Ohio and BVPS pertaining to public impact and available solutions. In addition, the Commissioners will be responsible for providing information to the public through the County Public Information Officer and through the Emergency Alert System **and other electronic notifications.**

SECTION II – PART A

3. DIRECTION AND CONTROL

Should the President of the Columbiana County Board of Commissioners be unavailable in person or via phone the following shall be designated as alternates:

- a. Remainder of the County Commissioners.
- b. EMA Director or designee.
- c. Sheriff.

4. AUTHORITY

The primary command authority of the Columbiana County Commissioners is provided for by the Ohio Revised Code, Chapters 307 and 5502.21 to 5502.51.

G. CITY OF EAST LIVERPOOL

1. TASKS AND RESPONSIBILITIES

- a. Manage all city government activities.
- b. Evaluate all emergency related data.
- c. Determine necessary assistance from county government.

2. CONCEPT OF OPERATIONS

The City of East Liverpool has committed to participate under the Columbiana County Emergency Operations Plan (see ORC 5502.26 and 5502.271). They have the authority to utilize city funds, implement county PADs and ensure that all possible actions are taken to protect the residents of East Liverpool. They will receive recommendations from the Columbiana County Emergency Operations Center Staff pertaining to public impact and available solutions.

3. AUTHORITY

The primary command authority of the City of East Liverpool City Council is provided for by the City Charter.

H. COLUMBIANA COUNTY GENERAL HEALTH DISTRICT

1. TASKS AND RESPONSIBILITIES

- a. The General Health District may be represented in the EOC.
- b. Provide health advisory to the general public on non-radiological measures of health, safety, and evacuation procedures. All information will be released by the County Public Information Officer.
- c. Review special needs forms and verify special needs for residences that still require special assistance **coordinating with** other EOC Health/Medical Staff.
- d. Perform sanitary surveys to determine adequate environments for health protection in the evacuation centers.
- e. Coordinate public health services with surrounding counties receiving evacuated persons if required.
- f. Will make available Potassium Iodine (KI) to the General Public.
- g. Will store, transport, and administer KI to the evacuees at Reception Centers, as needed.

SECTION II – PART A

2. CONCEPT OF OPERATIONS

A department representative may be at the County EOC to insure coordination with the Ohio Department of Health's Radiological Health Unit. Information received from the State EOC will be used to issue instructions regarding the use of KI to the public, institutionalized, and emergency workers.

3. ADDITIONAL SUPPORT

Coordination with the Ohio Department of Health's Radiological Health.

4. DIRECTION AND CONTROL

A General Health District representative may be in the EOC.

5. AUTHORITY

- a. ORC Chapter 3701.01.
- b. Attorney General's Opinion #1531 of 1964.

I. COLUMBIANA COUNTY FIRE DEPARTMENTS

1. TASKS AND RESPONSIBILITIES

Fire Services Officer will represent County Fire Departments at the County EOC.

Tasks and responsibilities assigned to the Fire Services Officer include:

- a. Notification to County Fire Departments of an incident at the BVPS.
- b. Relay of information to County Fire Departments.
- c. Contact point for County Fire Departments **resources**.

2. CONCEPT OF OPERATIONS

The County Fire Services Officer will report to the County EOC to represent the fire departments located within the County. The Fire Services Officer will notify and brief fire departments and will be the point of contact for all fire departments reporting information or requesting assistance. Fire Services personnel will operate and perform monitoring and decontamination services as needed at Reception Centers and Emergency Worker Decon Centers. Fire Services personnel may perform Back-Up Route Alerting and other duties as needed.

3. DIRECTION AND CONTROL

The Fire Services Officer will be located in the County EOC to coordinate fire services.

J COLUMBIANA COUNTY PUBLIC INFORMATION OFFICER

1. TASKS AND RESPONSIBILITIES

- a. The PIO may report to the Joint Public Information Center (JPIC) to represent Columbiana County in coordination of emergency public information.

NOTE: The state PIO may act as the County PIO at the JPIC.

- b. Coordinate with the County Executive Group at the EOC regarding the development and distribution of emergency public information.

SECTION II – PART A

- c. Coordinate with the Public Information Officers representing BVPS, Hancock and Beaver Counties and the States of Ohio, Pennsylvania, West Virginia, and any Federal Agencies.
- d. The PIO will establish and maintain communications with the State PIO, concerning county issues, for media briefings and news releases.

2. CONCEPT OF OPERATIONS

In order to increase the credibility of emergency public information and decrease the number of conflicting reports, a Joint Public Information Center will be established with representation from BVPS, States, Counties and Federal Agencies. The various Public Information Officers will coordinate all news releases before distribution to the media. Media briefings may take place at a county facility or the JPIC, which shall be activated at no later than Site Area Emergency declaration.

3. DIRECTION AND CONTROL

The position of Public Information Officer will be filled by staff under control of the County Commissioners. County Public Information Officer reports to the EOC at ALERT or higher emergency classification.

K. COLUMBIANA COUNTY TRANSPORTATION STAGING OFFICER

1. TASKS AND RESPONSIBILITIES

- a. The Columbiana County Transportation Staging Officer will report to the Columbiana County Career and Technical Center and manages transportation resources.
- b. The County Transportation Staging Officer will coordinate with the County School Services and EMS to provide transportation.

2. CONCEPT OF OPERATIONS

The County Transportation Staging Officer should be knowledgeable in the availability of vehicles and potential evacuation routes.

L. COLUMBIANA COUNTY MENTAL HEALTH AND RECOVERY SERVICES BOARD

1. TASKS AND RESPONSIBILITIES

- a. The Mental Health Services Rep should have access to lists of the psychiatrists, psychologists, social workers, and clergy.
- b. The Mental Health Services Rep will ensure that such potential counselors receive instruction in the field of radiation effects and trauma counseling.
- c. Should such counseling assistance be required at the Care Centers, the Mental Health Services Rep will contact and dispatch counselors.
- d. The Mental Health Services Rep will assist in recovery planning and efforts.

2. CONCEPT OF OPERATIONS

The County Mental Health and Recovery Services Board possesses the expertise to provide psychological support and counseling to victims of disasters. In addition,

SECTION II – PART A

County clergy have the expertise in providing the religious and moral support often needed by such victims. These two groups will be available to provide counseling services should they be required.

3. DIRECTION AND CONTROL

The Director of the Columbiana County Mental Health and Recovery **Services** Board or designee will provide services as needed.

M. AMERICAN RED CROSS

1. TASKS AND RESPONSIBILITIES

- a. The Director of the local Red Cross will report to the County EOC and will function as the Red Cross Representative.
- b. The Red Cross Representative will develop and maintain plans and procedures for the activation and operation of Care Centers.
- c. The Red Cross Representative will provide Care Center managers and sufficient support staff to operate the Care Centers.
- d. The Red Cross Representative will coordinate with the County Job and Family Services in the operation of Care Centers.
- e. Conduct registration and reunification of evacuees and families.

2. CONCEPT OF OPERATIONS

The American Red Cross frequently activates and operates Care Centers to care for victims of natural and man-made disasters. This expertise will be extremely valuable should a serious emergency ever occur at the Beaver Valley Power Station. Several county departments and organizations would be available to assist the American Red Cross in the activation and operation of Care Centers:

- a. Local Fire Departments
- b. County School Boards
- c. County EMA
- d. County Sheriff
- e. Local Police Departments
- f. County Health Department
- g. County Mental Health and Recovery Board
- h. County Department of Job and Family Services
- i. Local Clergy
- j. Amateur Radio Operators

**ALL requests for assistance will be made through the County EOC.

3. DIRECTION AND CONTROL

A representative of the American Red Cross will operate from the County EOC during an emergency.

SECTION II – PART A

N. COLUMBIANA COUNTY SCHOOLS SERVICES

1. TASKS AND RESPONSIBILITIES

- a. The County School Services Officer will report to the County EOC.
- b. The County School Services Officer will coordinate extensively with the East Liverpool City School Superintendent, Beaver Local School Superintendent, and **East Liverpool Christian**.
- c. The County School Services Officer will maintain a resource list of school buses available in the County and will coordinate the provision of school buses with the Transportation Officer should the evacuation of school students and/or the general public is required.
- d. The School Services Officer serves as the Transportation Co-coordinator with the Health/Medical representative within the EOC.

2. CONCEPT OF OPERATIONS

The affected EPZ School Superintendent(s) will coordinate the retention/relocation of students with the County School Service Officer. The County School Services Officer will be responsible for coordinating the provision of additional buses to assist in the relocation of school students and/or the general public

3. DIRECTION AND CONTROL

The County School Service Officer will operate from the County EOC during an emergency.

O. COLUMBIANA COUNTY RADIOLOGICAL OFFICER

1. TASKS AND RESPONSIBILITIES

- a. Report to the County EOC to function as the County Radiological Officer.
- b. **Ensure** the establishment and activation of Decontamination Centers.
- c. Identify and pre-stage radiological equipment and record forms to those emergency response organizations that could be expected to perform activities within the affected area.
- d. Gather and maintain radiological exposure records of emergency workers.
- e. The County Radiological Officer, in conjunction with the State Radiological Analyst, will provide technical information to the Executive Group.

2. CONCEPT OF OPERATIONS

The County Radiological Officer will monitor exposure to and dose from radiological materials during the event.

3. DIRECTION AND CONTROL

The Radiological Officer will operate from the County EOC during an emergency.

SECTION II – PART A

P. COLUMBIANA COUNTY LAW ENFORCEMENT SERVICES OFFICER

1. TASKS AND RESPONSIBILITIES

- a. Report to the County EOC to function as the County Law Enforcement Services Officer.
- b. Serve as liaison between the County EOC and county and/or local law enforcement agencies.

2. CONCEPT OF OPERATIONS

Since the County Sheriff will function as a member of the Executive Group, a separate Law Enforcement Services Officer should function within the Operations Room of the County EOC. This position coordinates delivery of needed law enforcement services and support.

3. DIRECTION AND CONTROL

The County Law Enforcement Officer or designee will operate from the County EOC during an emergency.

Q. COLUMBIANA COUNTY EMS SERVICES OFFICER

1. TASKS AND RESPONSIBILITIES

- a. The County EMS Services will be represented in the EOC.
- b. The County EMS Services Officer will maintain a resource list of ambulances available in the County and will coordinate the provision of ambulances with the Transportation Staging Officer should the evacuation of Special Facilities / Special Needs be needed.

2. CONCEPT OF OPERATIONS

The County Emergency Medical Services will:

- a. Assist with the evacuation of Special Facilities/Special Needs individuals.
- b. Provide treatment for contaminated/injured persons and provide assistance to assure patients are transported to an appropriate facility.
- c. The County EMS Services Officer will be responsible for coordinating the provision of ambulances to assist in the evacuation of Special Facilities / Special Needs.

3. DIRECTION AND CONTROL

County EMS Services Officer or designee will operate from the County EOC during an emergency.

SECTION II – PART A

III. Organizations (State)

A. OHIO DEPARTMENT OF PUBLIC SAFETY

1. OHIO EMA

The Ohio EMA has primary responsibility for the development and maintenance of "The Ohio Radiological Emergency Preparedness Operations Manual". During a radiological emergency, the agency will provide prompt field radiological measurements and assist in the development of and recommendation of protective responses (including working with appropriate jurisdictions on restrictions of river and rail traffic), and recovery, reentry, return and relocation actions. Coordination with local agencies is accomplished through the Ohio EMA Resident Radiological Analyst (RRA) that ~~lives and~~ works full time in Columbiana County. The RRA is also responsible for coordinating county dose assessment activities in the event of an incident. The Ohio EMA shall coordinate requests for Federal assistance through FEMA Region V.

2. OHIO STATE HIGHWAY PATROL (OSHP)

The local posts of the OSHP will staff **access** control points and assist in traffic control and law enforcement activities. These actions are coordinated with the OSHP Commander by the local post commander and the OSHP representative in the Columbiana County EOC. (See **Section II-J Enclosure 16**) The Aviation Section shall serve as a backup to ODOT-Aviation for aerial transport of the initial response team.

B. ADJUTANT GENERAL'S DEPARTMENT OHIO NATIONAL GUARD

The Ohio National Guard (ONG) will provide logistical support and assist in area patrol, traffic control activities, notification, evacuation efforts, and public information, if needed. If requested, ONG can provide ambulances and drivers for transporting contaminated individuals to designated medical facilities. The ONG may dispatch a liaison to the State and Columbiana County EOCs to coordinate these activities.

C. OHIO DEPARTMENT OF HEALTH (ODH)

The ODH serves as the primary source of direction and control in the areas of accident assessment (as a member of the State Dose Assessment Team); recovery, reentry, relocation, and return guidance; and the determination of protective responses for the public. ~~In coordination with the Ohio Department of Agriculture (ODA), the ODH shall issue advisories for livestock and poultry, as necessary.~~ ODH supplies, maintains, and monitors the use of Potassium Iodide (KI) as a thyroid-blocking agent by emergency workers, institutionalized personnel, and the general public. ODH will issue a recommendation for persons to take KI, if necessary. Upon declaration of an Alert at BVPS, as per procedure a radiological health officer and team shall be dispatched to the State EOC and a liaison to the Columbiana County EOC. ODH also provides personnel to the affected area to screen and prepare samples for transport.

SECTION II – PART A

- D. OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA)
The OEPA has primary responsibility for field radiological sampling (water, vegetation, and soil) and coordination with local, regional, and Federal counterparts. As per procedure, OEPA shall dispatch a response team to the State EOC to serve as a member of the State Dose Assessment Team upon declaration of an Alert. A district representative of Ohio EPA shall be present in the Columbiana County EOC to serve as a member of the County Dose Assessment Group.
- E. OHIO DEPARTMENT OF AGRICULTURE (ODA)
The ODA shall assist the Ohio EMA and other State agencies in planning and directing a statewide program for protection against radiological damage to livestock, foodstuffs, and crops. **Issues advisories for poultry and livestock as necessary.** Control actions issued by ODA may include quarantine, isolation, and confiscation or destruction of crops, livestock and foodstuffs that might have been contaminated.
- F. OHIO DEPARTMENT OF TRANSPORTATION (ODOT)
The ODOT will provide a representative to the Columbiana County EOC to assist the County Engineer in determining routes of travel and impediment removal operations in the affected area. Other assistance will include emergency personnel, equipment, and supplies to help support the traffic control efforts on State highways. The Division of Aviation will provide aerial transportation for the initial response team.
- G. OHIO DEPARTMENT OF NATURAL RESOURCES (ODNR)
The ODNR will provide for the sampling of fish and wildlife within the ingestion pathway zone. ODNR also maintains information on primary and secondary sources of water and will prescribe methods of use for such sources in areas affected by radiological incidents.
- H. OHIO DEPARTMENT OF JOB AND FAMILY SERVICES (ODJFS)
The ODJFS will coordinate with local counterparts and other public agencies and private relief organizations for the operation of reception and care centers.
- I. PUBLIC UTILITIES COMMISSION OF OHIO (PUCO)
The PUCO will coordinate the overall information flow on status of public utilities in the affected area and ensure that appropriate actions are taken to restore services.
- J. ~~STATE AND LOCAL GOVERNMENT COMMISSION (SLGC)~~
~~The SLGC will serve as a liaison between local government officials (particularly elected officials) and State officials who are involved in an emergency response or who may be of assistance to the local governments in recovery efforts.~~

SECTION II – PART A

- J. OHIO DEPARTMENT OF INSURANCE (ODI)
The ODI will dispatch a representative to the State EOC to address public concerns regarding insurance.
- K. ATTORNEY GENERAL'S OFFICE
The Assistant Attorney General representing Ohio EMA will address legal questions and provide assistance in matters that pertain or may arise regarding state EMA operations.
- L. OHIO DEPARTMENT OF MENTAL HEALTH and ADDICTION SERVICES (Ohio MHAS)
The Ohio MHAS will dispatch a representative to the State EOC to coordinate mental health operations with the overall activities of the center and the activities necessary to provide staff, supplies, and facilities to treat victims suffering from disaster related mental disorders. If necessary, the department will assist ODJFS in staffing and providing appropriate services to reception and care centers. Access to facilities under direct control of the department may be provided for use as shelters, non-medical mass care centers, and as possible locations for temporary mobile shelters, as appropriate.

IV. Organization (Federal)

- A. FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)
FEMA will provide support for the State and Counties and ensure adequate Federal agency support exists for recovery operations as outlined in the National Response Framework (NRF). The Ohio EMA shall coordinate requests for Federal assistance through the FEMA Region V Director.
- B. U.S. DEPARTMENT OF AGRICULTURE (USDA)
The USDA, through the Farm Service Agency (FSA), will assist the State in identifying the types of crops being grown in a given area and will procure food for emergency feeding programs. In addition, through the Ohio State University Extension Service (OSUES), the USDA will assist the State in disseminating emergency information and providing technical information and advice to farmers.
- C. U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)
The U.S. EPA will support State and local counterparts in field radiological sampling and analysis. The Director shall ensure that general assistance in the areas of protective action and recovery and reentry guidance is provided and coordinates the post-emergency Federal radiological monitoring activities.
- D. U.S. DEPARTMENT OF ENERGY (DOE)
The U.S. DOE will establish and manage the Federal Radiological Monitoring and Assessment Center (FRMAC). As such, DOE shall coordinate offsite radiological monitoring and assessment for the Federal agencies during the initial phase of the emergency. Assistance from DOE will include: environmental monitoring of air, ground, and water; computer modeling dose projections; aerial monitoring; and, tracking of sampling information.

SECTION II – PART A

- E. U.S. NUCLEAR REGULATORY COMMISSION (NRC)
The U.S. NRC will assess the nature and extent of the radiological incident onsite and the potential for offsite consequences and provide technical advice and recommendations to State and County authorities for protective measures. The NRC is the Lead Federal Agency for Federal assistance for nuclear power plant events. Coordination for NRC activities will be made through the NRC Region III Offices.
- F. U.S. HEALTH AND HUMAN SERVICES (HHS)
The U.S. HHS will assist State and local health officials with the assessment, preservation, and protection of human health. HHS will also provide protective action guidance on the use of radioprotective substances.
- G. U.S. DEPARTMENT OF COMMERCE (DOC)
The U.S. DOC through the National Oceanic and Atmospheric Administration (NOAA) will provide current and forecast meteorological information, as requested.
- H. U.S. DEPARTMENT OF DEFENSE (DOD)
The U.S. DOD will provide manpower, logistics, and telecommunications, when available.
- I. U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD)
The U.S. HUD will assist in locating housing for displaced population, if needed.
- J. U.S. DEPARTMENT OF INTERIOR (DOI)
The U.S. DOI will provide advice and assistance concerning hydrologic and natural resources, including fish and wildlife, upon request.
- K. U.S. DEPARTMENT OF TRANSPORTATION (DOT)
The U.S. DOT will provide transportation advice and assistance to State and local authorities.
- L. NATIONAL COMMUNICATIONS SYSTEM (NCS)
The NCS will manage communication assets and assist in solving communications problems for the Federal government.
- M. DEPARTMENT OF HOMELAND SECURITY (DHS)
Once notified the Department of Homeland Security (DHS) reviews the situation and determines whether to assume Federal leadership for the overall response in accordance with the National Response Framework (NRF). If DHS does not assume Federal leadership for the response, a coordinating agency may request that DHS activate NRF elements to support the response.

SECTION II – PART A

ENCLOSURE 1

RESPONSE AGENCIES AND ORGANIZATIONS

County Organizations

County Emergency Management Agency*
County Commissioners*
County Sheriff*
County Engineer*
County Department of Job & Family Services
County General Health District*
County Mental Health and Recovery **Services Board**
County Board of Education
Columbiana County Soil and Water Conservation District

Local Police Departments

Primary:
Columbiana County Sheriff*
Support:
East Liverpool
Liverpool Township
St. Clair Township
Wellsville

Local Fire Departments

Primary:
East Liverpool Fire Department
LaCroft Fire Department
Dixonville Fire Department
Calcutta Fire Department
Glenmoor Fire Department
West Point Fire Department*
Middleton Township Fire and EMS*

Support:

Lisbon Fire Department
Wellsville Fire Department
East Palestine Fire Department
Franklin Twp. Fire Department
Guilford Lake Fire Department
Hanoverton Fire Department
Highlandtown Fire Department
Homeworth Fire Department
New Waterford Fire Department
North Georgetown Fire Department
Perry Twp. Fire Department
Salem Fire Department
Salineville Fire Department
Winona Fire Department
Columbiana Fire Department
Leetonia Fire Department

Affected Schools

Primary:
East Liverpool City Schools*
East Liverpool Christian School*
Support:
Beaver Local School District*
Columbiana County Career and Technical Center*
Lisbon Exempted Village Schools*
United Local Schools*
East Palestine Schools*

Private Sector Support Organizations

American Red Cross*
Beaver Valley Power Station*
Triangle Amateur Radio Club
East Palestine Amateur Radio Club
Lisbon Amateur Area Radio Association*
Salem Area Amateur Radio Club

Emergency Medical Organizations

Primary:
East Liverpool City Hospital
Salem Regional Medical Center*
New Waterford EMS*
Middleton Township Fire and EMS*
East Palestine EMS*

Support:

Columbiana EMS
Leetonia EMS
Life Team EMS
KLG EMS
West Point Fire/EMS
Winona EMS
Maple Cotton EMS
North Star EMS
Emergency Medical Transport EMS
Weirton (WV) Medical Center

State Agencies

Ohio Department of Public Safety
Ohio Emergency Management Agency*
Ohio State Highway Patrol (OSHP)*
Adjutant General's Office National Guard
Ohio Department of Agriculture (ODA)
Ohio Department of Health (ODH)
Ohio Department of Natural Resources (ODNR)
Ohio Department of Transportation (ODOT)*
Ohio Environmental Protection Agency (OEPA)*
Public Utilities Commission of Ohio (PUCO)
Ohio Department of Job and Family Services (ODJFS)
State and Local Government Commission (SLGC)
Ohio Department of Insurance (ODI)
Attorney General's Office
Ohio Department of Mental Health **and Addiction Services (Ohio MHAS)**
Governor's Office

*Principle Response Organizations in support of Columbiana County

SECTION II – PART A

ENCLOSURE 1
CONTINUED

COLUMBIANA COUNTY
EMERGENCY FUNCTION AND RESPONSIBILITY CHART

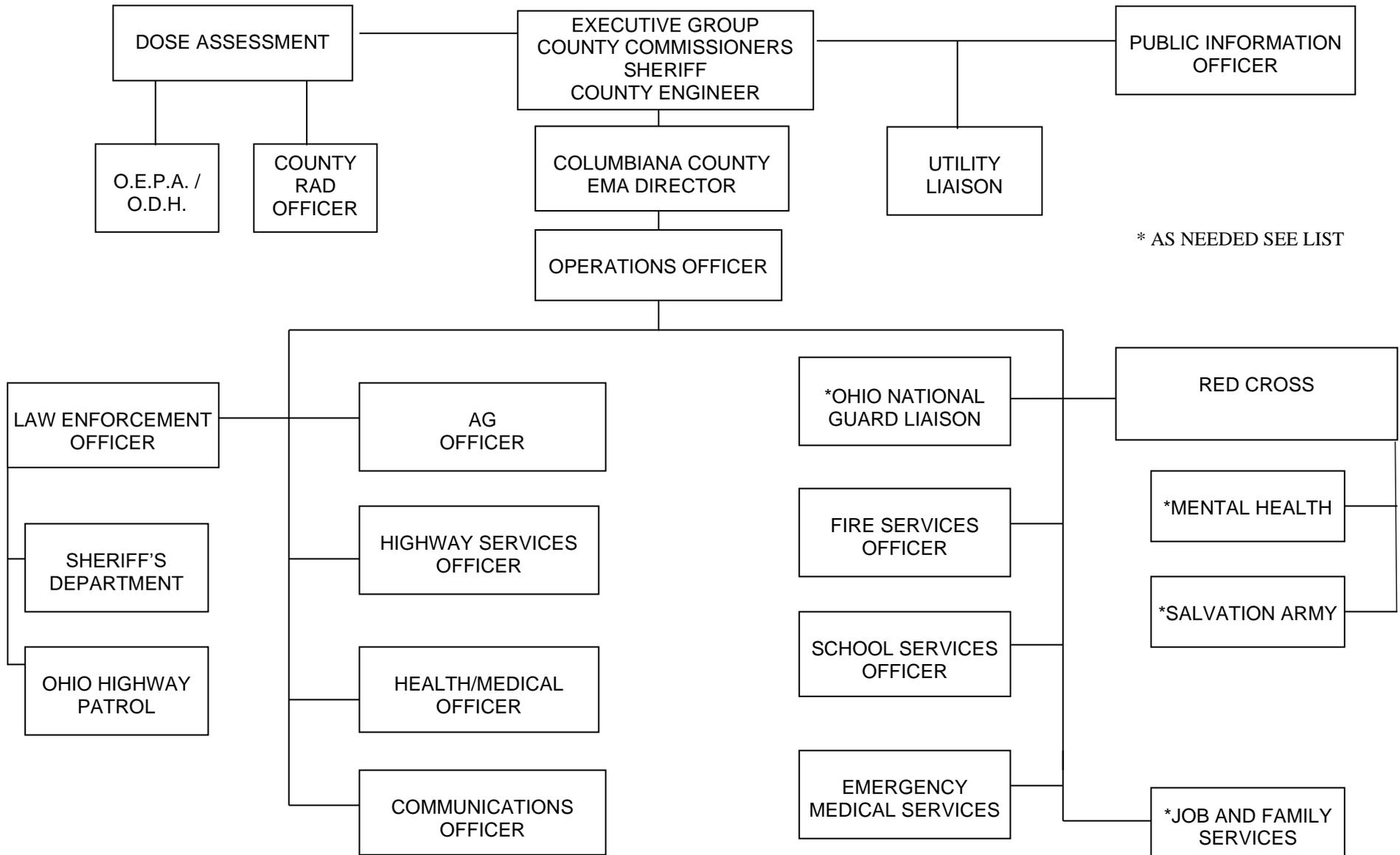
	County Commissioners	EMA Director	EOC Operations Officer	County Communications	Fire Safety	Law Enforcement	Health/Medical Officer	PIO	Transportation Officer	RAD EF Officer	School Service Officer	Red Cross	Agriculture Ext. AG
Direction & Control	P	S											
Notification		P	S	S	S	S	S		S		S		
Communications				P	S	S	S		S		S		
Public Alert/Notify.		P		S	S	S		S					
Accident Assessment		S*								T			
Public Health							P			S			
Social Services							S				S	P	
Fire Services				S	P								
Traffic Control				S	S	P							
Access Control				S	S	P							
Emergency Medical							P		S			S	
Law Enforcement						P							
Transportation					S		S		P		S		
Protective Response	P**	P**	S	S	S	S	S	S	S	T	S	S	S
Rad. Expos. Control	P**	P**					S			T			
Food and Water Purity							P			S			
Shelter and Care							S				S	P	
Highway Maintenance									P				
Security						P							
Recovery	P**	P**	S	S	S	S	S	S	S	S	S	S	S
P-Primary S-Support T-Technical **-Executive Group													

* Primary responsibility for accident assessment rest with the State of Ohio

SECTION II – PART A

Enclosure 2

COLUMBIANA COUNTY EMERGENCY RESPONSE AGENCY INTERRELATIONS



SECTION II – PART A

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SECTION II – PART B

ONSITE EMERGENCY ORGANIZATION

I. PURPOSES OF BVPS EMERGENCY RESPONSE FACILITIES

- A. Help in determining the plant safety status.
- B. Relieving the Control Room Operators of peripheral duties and communications not directly related to reactor system manipulations.
- C. Prevention of congestion in the Control Room.
- D. Assistance to the operators by technical personnel who have comprehensive plant data at their disposal.
- E. Coordinated emergency response by both technical and management personnel.
- F. Reliable communications between onsite and offsite emergency response personnel.
- G. A focal point for development of recommendations for offsite actions.
- H. Relevant plant data to the NRC for its analysis of abnormal plant operating conditions.

II. EMERGENCY RESPONSE FACILITIES

- A. Technical Support Center (TSC) Purposes:
 - 1. The near site support facility.
 - 2. Provides plant management and technical support to the reactor operating personnel in the Control Room.
 - 3. Technical data displays and plant record located in the TSC.
 - 4. Primary communications center for the plant.
 - 5. A senior official, designated by BVPS, shall use the resources of the TSC to assist the Control Room operators by handling the administrative items, technical evaluations, and contact with offsite activities, relieving the Control Room of these functions.
- B. Operational Support Center (OSC) Purposes:
 - 1. Located in close proximity to the Control Room.
 - 2. Onsite assembly area separate from the Control Room and the TSC where operations support personnel can report in an emergency.
 - 3. Direct communications between the OSC, TSC and Control Room must exist so that the personnel reporting to the OSC can be assigned to duties in support of emergency operations.
- C. Emergency Operations Facility (EOF) Purposes:
 - 1. Is located at the Beaver County Airport in Chippewa Township

SECTION II – PART B

2. Provides for the management of overall BVPS emergency response (including coordination with Federal, State and local organizations).
 3. Technical data displays and plant records located in the EOF.
 4. Coordination of radiological and environmental assessments, and determination of recommended public protective actions.
 5. A senior BVPS official in the EOF shall organize and manage BVPS offsite resources to support the TSC and Control Room.
- D. Joint Public Information Center (JPIC), to be located in the Pittsburgh Airport Industrial Park Building #3, Spring Run Road Extension, off Flaugherty Run Rd, located in Coraopolis, Pennsylvania. State and county EMAs are advised when the JPIC is activated.

The recommended features of the JPIC include:

1. A briefing room to accommodate members of the media;
2. Private work areas for public information personnel;
3. Effective communications systems to enable the PIOs to maintain contact with EOCs and all other relevant response locations;
4. Sufficient equipment & electrical service to support operations;
5. Office furniture, equipment, and supplies;
6. Parking;
7. Telephones / Internet connectivity for media use;
8. Access control to the facility;
9. Work area for a public inquiry telephone team;
10. Work area for a media inquiry telephone team; and
11. A media monitoring area.

Public information pertaining to an incident may state, but is not limited to:

1. Name of entity issuing the information.
 2. Name of facility involved.
 3. Date, time, and number of press releases/conference.
 4. Geographical or jurisdictional areas involved.
 5. Federal, State, County and BVPS coordinating efforts.
 6. Protective actions.
 7. Repeat of information released through EAS.
- E. Definitions of on-shift facility licensee responsibilities for emergency response, staffing of initial facility accident response, available augmentation of response capability, and the interfaces among various onsite and offsite support and response activities are specified under separate cover entitled "Emergency Preparedness Plan, Beaver Valley Power Station, Volume 1 Plan."

SECTION II – PART C

EMERGENCY RESPONSE SUPPORT AND RESOURCES

I. PURPOSE

To assure that provisions have been made for State/local staffing of the operators near-site EOF as well as identify other resources which may be called upon. Since the Beaver Valley Power Station is located in Pennsylvania the primary response of offsite support to onsite personnel is provided from Beaver County and the State of Pennsylvania. However Columbiana County will provide resource assistance as requested by the host county. These resources will respond to a staging area where job briefs will be given and dosimetry will be issued if access to sight is required.

II. RESOURCES

In addition to the Federal and State resources (see State Plan) and the County agencies and resources outlined in Section II, Part A of this Plan may call on the following organizations and facilities should additional “On or Near Site” assistance be required. State and Federal resources mentioned in Section II-A of this Plan and the State RERP may be requested by the county through Ohio EMA. These requests will be made by the Columbiana County EMA Director through authorization from the County Commissioners and/or Letters of Agreement.

- A. Local Fire Departments
- B. Local Police Departments
- C. Hospitals
- D. Schools
- E. EMS
- F. Special Facilities
- G. American Red Cross
- H. Amateur Radio Clubs

Names, addresses and telephone numbers of the above organizations are listed in the Columbiana County Emergency Resource Manual.

III. TASKS AND RESPONSIBILITIES

When called upon, the above organizations will report as soon as practical and may perform the following tasks in accordance with their jurisdiction, equipment, and manpower limitations:

- A. Local Fire Departments
 - 1. Protect lives and property.
 - 2. Fight fires.
 - 3. Assist in an orderly evacuation.
 - 4. Perform radiological monitoring and/or decontamination.
 - 5. Provide assistance to other fire units as required.
 - 6. Assist in public notification.
- B. Local Police Departments
 - 1. Maintain law and order.
 - 2. Assist in an orderly evacuation.
 - 3. Assist in manning of TCP/ACP.
 - 4. Assist in establishing security within the evacuated area.
 - 5. Will provide support to Beaver County as requested and available.
- C. Local Hospitals

SECTION II – PART C

1. Alleviate pain and suffering and affect healing.
 2. Conduct radiological monitoring and decontamination of contaminated persons.
 3. Establish and maintain a medical care facility to receive and treat persons.
 4. Maintain normal medical operations.
 5. Provide medical advisories to local government officials.
 6. Coordinate with local EMS.
- D. Local Schools
1. Provide for the safety and evacuation of students.
 2. Schools outside the 10-mile Emergency Planning Zone will prepare to act as Care Centers.
 3. The Superintendent will exercise all authority granted by the school board reference to school policies, equipment, and students.
 4. Provide transportation support for evacuation.
- E. EMS Services
1. Provide medical assistance and transportation to injured persons.
 2. Provide transportation for contaminated persons.
 3. Provide transportation for evacuees from hospitals, nursing homes and private residences on an as needed basis.
- F. Special Facilities (Private)
1. Provide for or coordinate the transport of patients should evacuation become necessary.
 2. Special Facilities within the 10-mile Emergency Planning Zone will prearrange for patient transfer to nursing homes outside the 10-mile Emergency Planning Zone.
- G. American Red Cross will
1. Set up Care Center operations at previously designated locations.
 2. Operate Care Centers.
 3. Provide mobile kitchen, when needed.
 4. Register evacuees staying in Care Centers.
 5. Lend medical assistance where appropriate.
- H. Amateur Radio
1. To provide communications for emergency operations.

IV. **SOURCES OF ADDITIONAL ASSISTANCE**

The Columbiana County EMA Director will evaluate requests for assistance or additional resources from other responding agencies. These requests will be satisfied from resources within Columbiana County to the extent possible. If requirements cannot be satisfied with resources from within the County, the Emergency Director will direct requests indicating additional needs to the Ohio EMA via electronic event tracking system(s) or phone call.

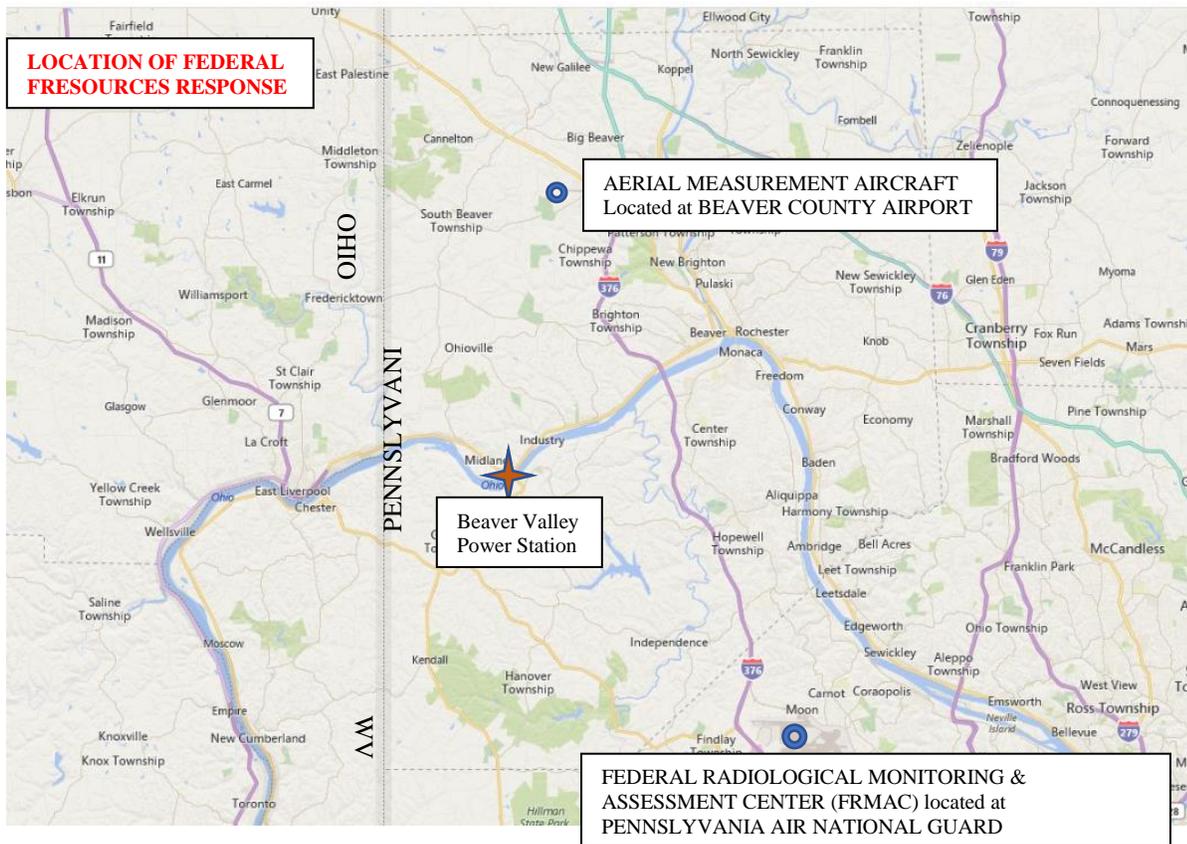
V. **REPRESENTATION AT THE EMERGENCY OPERATIONS FACILITY (EOF)**

The county may, at the discretion of the Commissioners, designate an individual to represent the county at the BVPS EOF to serve as a liaison between the County EOC and the facility. State representation at the EOF is discussed in [Section I- Assignment of Responsibilities](#) of the Ohio [REP Operations Manual](#).

SECTION II – PART C

VI. RESOURCES IN SUPPORT OF FEDERAL RESPONSE

Airport facilities to support large cargo aircraft will be arranged at the Greater Pittsburgh Airport. In addition, the Federal Radiological Monitoring and Assessment Center (FRMAC) shall be established at the Pennsylvania Air National Guard facility at Greater Pittsburgh Airport, Moon Township, and Allegheny County, PA. Aerial measurements system aircraft shall be staged and operated from the Beaver Valley Airport, Beaver County, PA. All facilities shall be notified and established by Pennsylvania EMA and coordinated through Ohio EMA. Communications equipment provided by Columbiana County is designed to ensure interoperability between federal, state, and local agencies.



SECTION II – PART C

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SECTION II - PART D

EMERGENCY CLASSIFICATION SYSTEM

I. PURPOSE

To assure that the standard emergency classification and action level scheme is in use by the facility operators and the response organizations of Columbiana County and the State of Ohio for initial offsite response measures. These classifications are; UNUSUAL EVENT, ALERT, SITE AREA EMERGENCY and GENERAL EMERGENCY.

II. CLASSIFICATIONS - (Description)

- A. UNUSUAL EVENT -. Events are in process or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.
- B. ALERT - Events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life-threatening risk to site personnel or damage to site equipment because of intentional malicious dedicated efforts of a hostile act. Any releases are expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels
- C. SITE AREA EMERGENCY -. Events are in process or have occurred which involve an actual or likely major failures of plant functions needed for protection of the public or security events that result in intentional damage or malicious acts; (1) toward site personnel or equipment that could lead to the likely failure of or; (2) prevents effective access to equipment needed for the protection of the public. Any releases are not expected to result in exposure levels which exceed EPA Protective Action Guideline exposure levels beyond the site boundary.
- D. GENERAL EMERGENCY - Events are in process or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity or security events that result in an actual loss of physical control of the facility. Releases can be reasonably expected to exceed EPA Protective Action Guideline exposure levels offsite for more than the immediate site area

III. ACTION LEVELS/STEPS

Upon notification of an emergency situation, local, county, State and Federal response agencies and private volunteer organizations will mobilize to provide personnel, equipment and expertise to accomplish appropriate response actions. Emergency response actions will be consistent with recommendations from BVPS and appropriate State and Federal agencies. Time permitting; response actions will take into account existing offsite conditions.

IV. RESPONSE AGENCY ACTIONS

Upon notification of a classified emergency situation, State and local response organizations will mobilize to provide the manpower, equipment and expertise to accomplish the following actions:

SECTION II - PART D

CLASS	ACTION	RESPONSE AGENCY (S)
UNUSUAL EVENT	1. Notify key response agencies.	Sheriff EMA Ohio EMA
	2. Provide fire or security assistance, if required	Sheriff Local Fire Dept. Local Police Dept.
	3. Provide news statements as required.	EMA
	4. Standby until verbal close-out	Sheriff EMA Ohio EMA
ALERT	1. Notify key response agencies	Sheriff EMA Ohio EMA
	2. Provide fire or security assistance, if required	Local Police Dept. Local Fire Dept. Sheriff
	3. Activate selected response personnel. Maintain 24-hour communication link	EMA Sheriff Ohio EMA
	4. EAS is placed on standby	EMA Sheriff
	5. Establish communications with Beaver and Hancock Counties	EMA
	6. Provide news statements and information to the public	Commissioners EMA Ohio EMA Governor's Office
	7. Advise school superintendent of BVPS status	EMA
	8. Activate County EOC, as warranted	EMA
	9. Dispatch representatives to the JPIC, EOF, and County EOC	EMA Sheriff ODH
	10. Activate assessment room at State EOC, in conjunction with County EOC	EMA Ohio EMA ODH
	11. Dispatch Radiological Monitoring Teams to affected area	Ohio EMA ODH
	12. Dispatch mobile communications van	Ohio EMA
12. Maintain ALERT status until upgrade or closeout.	All concerned Agencies	

SECTION II - PART D

CLASS	ACTION	RESPONSE AGENCY (S)
SITE AREA EMERGENCY	1. Complete actions under Alert.	All concerned Agencies
	2. Notify all EOC staff and agencies.	EMA Sheriff Ohio EMA
	3. Provide any assistance as requested by Offsite Response Organizations. (ORO)	All concerned local agencies
	4. Declare State of Emergency, activate ONG.	Commissioners Governor's Office
	5. Activate appropriate public notification of emergency status and provide public periodic updates. (SNB's, EAS, sirens, ENS, route verification, etc.)	Sheriff EMA Ohio EMA
	6. Assure all ORO's are activated.	EMA Ohio EMA
	7. Establish and provide background radiation levels to licensee and others.	Ohio EMA
	8. Continuously assess information from licensee and State Offsite monitoring teams with regard to changes in protective actions.	Commissioners EMA Ohio EMA ODH Governor's Office
	9. Request air and rail traffic within the affected area be restricted.	Ohio EMA
	10. Provide public information and conduct press briefings.	Commissioners EMA Ohio EMA Governor's Office
	11. Consider distribution of radiological emergency info to farmers, food processors, and distributors.	Agriculture Officer ODA USDA
	12. Staff emergency worker monitoring and decontamination stations.	Local Fire Depts.
	13. Staff traffic/perimeter control points.	Sheriff OSH P
	14. Issue livestock and poultry advisory.	ODA

SECTION II - PART D

CLASS	ACTION	RESPONSE AGENCY (S)
SITE AREA EMERGENCY	15. Notify "special facilities" of the protective action recommendation.	School Services General Health Dist. Job/Family Services Community Action
	16. Request FRERP and Presidential Declaration of Emergency through FEMA.	Ohio EMA PEMA
	17. Request radiological assistance from DOE	OEMA/PEMA
	18. Maintain Site Area Emergency status until closeout, reduction, or escalation.	All concerned Agencies
GENERAL EMERGENCY	1. Complete actions under Site Area Emergency	All agencies.
	2. Provide any assistance as requested.	All agencies
	3. Provide protective action recommendations.	Governor's Office
	4. Provide protective action decisions	Commissioners
	5. Activate sirens; EAS, and Emergency Notification System (ENS)	Commissioners EMA Sheriff
	6. Staff emergency worker monitoring and decontamination stations.	Local Fire Depts.
	7. Operate traffic/perimeter control points.	Sheriff, OSHP, ONG
	8. Notify agency and organization personnel of protective action recommendations.	EOC Reps.
	9. Maintain evacuation routes.	Co. Engineer ODOT
	10. Notify "special facilities" of the protective action recommendations.	EOC Reps
	11. If evacuation is recommended: a. Relocate mobility impaired to hospitals or care centers, depending on need. b. Provide transportation for special populations, non-auto-owning population, and health care facilities.	Local Fire/EMS Depts. Local School Districts Community Action Agency
	12. Provide security for evacuated areas.	Sheriff Local Police Depts.
	13. Monitor local emergency worker's exposure limits.	Rad. Officer

SECTION II - PART D

CLASS	ACTION	RESPONSE AGENCY (S)
GENERAL EMERGENCY	13. Provide public info. and conduct press briefings.	Ohio EMA EMA Commissioners. Governor's Office
	14. Provide offsite-monitoring results to licensee and County for joint assessment.	Ohio EMA ODH
	15. Issue livestock and poultry advisory.	ODA
	16. Consider administration of KI to Emergency Workers, Special Facilities & General Population.	ODH
	17. Distribute radiological info. to farmers, food processors and distributors.	Agriculture Officer
	18. Maintain "General Emergency" status until verbal closeout or reduction of emergency classification.	All concerned Agencies

KEY:

Agriculture Officer – U.S. Dept of Ag., Columbiana County representatives, **OSU Extension, USDA-FSA**

Co. Engineer - Columbiana County Engineer

Commissioners – Columbiana County Board of Commissioners

Community Action – Community Action Agency of Columbiana County

EAS – Emergency Alert System

EMA – Columbiana County Emergency Management Agency

ENS – Emergency Notification System

EOC - Columbiana County Emergency Operations Center

Gen. Health District – **Local Health Districts, Local Hospitals**

Governor’s Office – Governor, State of Ohio

Job/Family Services - Columbiana County Department of Job and Family Services

ODA – Ohio Department of Agriculture

ODH – Ohio Department of Health

ODOT – Ohio Department of Transportation

Ohio EMA/OEMA – Ohio Emergency Management Agency

OSHP – Ohio State Highway Patrol

ONG – Ohio National Guard

PEMA – Pennsylvania Emergency Management Agency

Rad Officer - Columbiana County Radiological Officer

Sheriff – Columbiana County Sheriff’s Office

SNB - Special News Bulletins

SECTION II - PART D

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SECTION II - PART E

EMERGENCY NOTIFICATION METHODS AND PROCEDURES

I. PURPOSE

The purpose of the notification process is to ensure rapid notification of local, county and State response and support organizations, to establish an orderly and prioritized method of alerting those agencies, to ensure that the concerned agencies have current Standard Operating Guidance or Administrative Procedure for mobilizing response personnel, and to ensure methods and procedures exist to provide warning and information to the general public. This notification procedure aligns with the BVPS emergency action and classification levels described in this plan.

II. TASKS AND RESPONSIBILITIES

It is the combined responsibilities of the nuclear power plant operator, county and state governments to provide for a 24-hour warning and communications link. It is also the responsibility of the concerned parties to assure that backup communications and warning measures exist. These links and capabilities are further discussed in the **V. NUREG-0654 Criteria F** portion of the **Ohio REP Operations Manual**, and Emergency Communications Section II-F portion of the Columbiana County RERP.

A. Beaver Valley Power Station

Immediately upon the determination that an emergency condition exists, the operator shall notify the Counties (in this case, Columbiana County).

B. Columbiana County

The Columbiana County Sheriff's Dispatcher will receive initial notification in the same format as transmitted to all other jurisdictions. That format is shown as Section II, Part E, Enclosure 1 of this Plan. Follow-up information will be transmitted in and on the same format as described in Section II, Part E, Enclosure 2 of this Plan. Upon receipt of the message Columbiana County verify the message with BVPS via phone call and facsimile. (NOTE: Ohio and Columbiana County may need additional notification information to compute dose assessment and preparation.)

C. The Columbiana County Sheriffs Dispatch is responsible for notifying the following agencies or departments:

1. EMA Director.
2. County Commissioners. (If not notified by EMA Director).
3. East Liverpool City Dispatch (If not notified by EMA Director).

If Beaver Valley Power Station recommends immediate protective action and dispatch is unable to contact higher authority, the appropriate EAS will be chosen from Enclosure 4 and EAS activated.

The Sheriffs Dispatch may change the sequence of these calls based on BVPS recommendations and the gravity of the situation.

Information regarding the safety of the plant that is received at the state or county level will be forwarded to the BVPS Control Room. See II-F-Enclosure 1.

D. Emergency Management Agency will notify the following agencies/departments at the ALERT declaration:

SECTION II - PART E

1. **Health/Medical Officers**
2. County Response Organizations
3. Communications Officer
4. County Emergency Management Agency Staff (key staff).
5. Ohio Emergency Management Agency (Confirmation)
6. Arriving "Key staff" will ensure the remainder of the EOC positions are notified in accordance with the "EOC Call-Down List" (**Emergency Management Resource Manual**)

III. **METHODS OF NOTIFICATION**

- A. The primary means of notification and communication between BVPS and all levels of government in the State of Ohio and Columbiana County will be via telephone call. Supplemental notification will be via facsimile and email. Backup communication is transmitted over "in place" radio systems from BVPS to Columbiana County.
- B. The above listed systems will also be used from Columbiana County to BVPS Control Room should threats involving the plant surface in the county. See: II-F-Encl-1
- C. Backup communications from Columbiana County to the municipalities and ORO's will be local fire, police and amateur radio.
- D. The Sheriff's Office (SO) Dispatch Center, because of its 24-hour operation, will be the primary warning point in Columbiana County. The SO dispatchers will remain as the warning/notification/communications link for subsequent messaging until such time as the County EOC becomes operational and notice is given the EOC will be primary warning point. The **Executive Room** will be responsible for incoming messages in the EOC and forwarding that information as well as subsequent protective action recommendations and decisions to all pertinent parties.
- ~~E. Once initial notification is given to the State and if the state mobile communications van has been requested and dispatched, the mobile van with its radio/telephone and repeater system will serve as a backup and re-affirmation to the entire communication warning system.~~

IV. **PUBLIC WARNING**

The public in the affected area will be warned that an emergency exists in the following ways:

- A. The primary means of notifying the public will be the activation of the Public Alert/Notification Siren System (complies with FEMA REP-10). There are 66 pole-mounted sirens in the area surrounding Beaver Valley Power Station, 6 are located in Columbiana County. The sirens will be activated with a sense of urgency without undue delay from a decision to implement a protective action (i.e., sheltering or evacuation). The public is instructed, annually by the BVPS public information brochure, newspaper advertisements, and Radio and Television advertisements to tune to local Emergency Alert System (EAS) stations for further instructions. (See Section II-G, Enclosures 1, 2).

SECTION II - PART E

- B. Access to the primary EAS station “WMXY” is via an ENDEC encoder. Messages are prerecorded or may be recorded as needed. If problems arise contact the station Master Control Room (330-965-3770). Per FCC requirements, WMXY meets the criteria as an A site participant in the area EAS plan. The plan and procedures set forth enables compliance with the 15 minute design objective.
- C. National Weather Service Pittsburgh may be used as a backup for direct EAS access.
- D. The EAS process will begin concurrently with siren activation. Pre-scripted EAS messages (See II-E, Enclosure 4) have been developed and are in place. These messages will be revised as the situation dictates and broadcast, with appropriate delay, after sirens are sounded. The EMA Director in conjunction with the Executives determine which message to broadcast and the instructions are forwarded to the Communications Section.
- E. Supplemental News Bulletins (SNBs) will follow the EAS message. SNBs are used to expand on the information contained in the EAS message.

NOTE: Columbiana County EPZ population is less than 5% non-English speaking so the EAS and SNB messages and other emergency information is provided in English.

- F. As a backup to the siren system, Columbiana County activates an Electronic Notification System (ENS), currently via WENS, concurrently with the sirens to alert residents to tune their radios or televisions to receive the EAS. The actual EAS message will be sent via the ENS also. The ENS has the ability to call, text, email, ~~and produce social media messages~~ to users who are registered in the system and to all landlines in the area (through purchase agreement between service provider and Columbiana County EMA). Additionally the ENS is connected to the FEMA Integrated Public Alert and Warning System (IPAWS), which is utilized to send an alert message to cell phones in the designated area utilizing Wireless Emergency Alerts (WEA). (See Enclosure 5)
- G. In the event that both the siren and ENS systems fail, Backup Route Alerting will be implemented as the third means of alert and notification. Fire departments or backup forces designated by the county, provide route alerting using vehicles and public address systems and door-to-door notification in the area of any siren failures.
- H. Siren and EAS activation will, if possible, be a coordinated effort between Columbiana County, Ohio; Hancock County, West Virginia; and Beaver County, Pennsylvania. The activation time will be agreed upon by the 3 County EMA Directors who will, in turn, notify their respective organizations responsible for the activation functions and inform them of activation time. The siren activation / EAS activation will be conducted with a sense of urgency without undue delay.

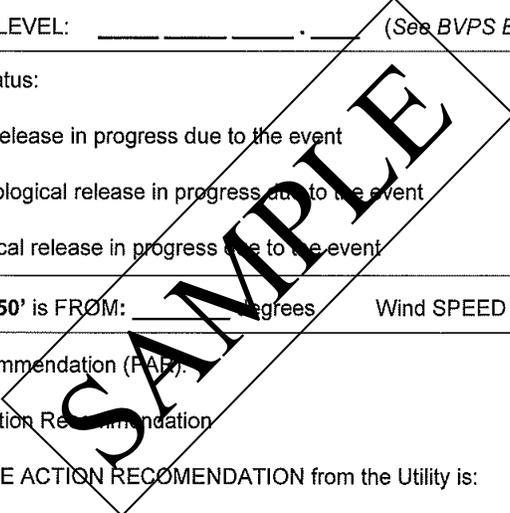
SECTION II - PART E

Enclosure 1

**FENOC NUCLEAR POWER PLANT
INITIAL NOTIFICATION FORM
Beaver Valley Power Station (BVPS)
1/2-EPP-IP-1.1.F01 Rev. 11**

STATE / COUNTY USE ONLY	
DATE: _____	TIME: _____
MESSAGE NO: _____	

1. Call Status: <input type="checkbox"/> This is a DRILL <input type="checkbox"/> This is an ACTUAL EMERGENCY	CODE WORD: <u>X-RAY</u>
2. Affected Station: Beaver Valley Power Station <input type="checkbox"/> UNIT 1 <input type="checkbox"/> UNIT 2 <input type="checkbox"/> BOTH Units 1 & 2	
3. Classification: <input type="checkbox"/> UNUSUAL EVENT <input type="checkbox"/> PAR MODIFIED (Check only 1 box) <input type="checkbox"/> ALERT <input type="checkbox"/> EVENT TERMINATION <input type="checkbox"/> SITE AREA EMERGENCY <input type="checkbox"/> GENERAL EMERGENCY	
4. Declared At: TIME: _____ hrs DATE: ____/____/____	
5. EMERGENCY ACTION LEVEL: _____ (See BVPS EAL Reference for more information)	
6. Radiological Release Status: <input type="checkbox"/> a. NO radiological release in progress due to the event <input type="checkbox"/> b. AIRBORNE radiological release in progress due to the event <input type="checkbox"/> c. LIQUID radiological release in progress due to the event	
7. Wind DIRECTION at 150' is FROM: _____ degrees Wind SPEED at 35' is: _____ mph	
8. Protective Action Recommendation (PAR): <input type="checkbox"/> a. NO Protective Action Recommendation <input type="checkbox"/> b. The PROTECTIVE ACTION RECOMENDATION from the Utility is: i. <input type="checkbox"/> EVACUATE <input type="checkbox"/> SHELTER ii. <input type="checkbox"/> 2 Miles - 360° AND the following sectors out to <input type="checkbox"/> 5 miles or <input type="checkbox"/> 10 miles <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F <input type="checkbox"/> G <input type="checkbox"/> H <input type="checkbox"/> J <input type="checkbox"/> K <input type="checkbox"/> L <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> P <input type="checkbox"/> Q <input type="checkbox"/> R AND that potassium iodide (KI) be administered to the general public in accordance with State procedures. The general public in unaffected areas should be advised to monitor EAS and prepare for further protective actions. iii. <input type="checkbox"/> Other: _____ <i>(PAR beyond 10-miles, following discussion with State Agencies, per IP-4.1 section 8.4)</i>	
9. Call Back Number: <input type="checkbox"/> Control Room: 724-643-8000 <input type="checkbox"/> TSC: 724-682-5427 <input type="checkbox"/> Alt TSC: 724-891-1946	
For Utility Use Only	
Approved: _____ Print/Sign (Emergency Director)	Peer Check: _____ Print/Sign



SECTION II - PART E

Enclosure 2

1/2-EPP-IP-1.1.F03
Rev. 8

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RTL# A5.715DR

BEAVER VALLEY POWER STATION

FOLLOW-UP NOTIFICATION FORM

11. UTILITY PROTECTIVE ACTION RECOMMENDATIONS (PARS):

- a. None
- b. EVACUATE 2 Miles - 360° 5 Miles - 360° 10 Miles - 360°
 AND Downwind Wedge N/A 5 Miles (check applicable sectors) 10 Miles (check applicable sectors)
 A B C D E F G H
 J K L M N P Q R

AND that potassium iodide (KI) be administered to the general public in accordance with State procedures.
The general public in unaffected areas should be advised to monitor EAS and prepare for further protective actions.

- c. SHELTER IN PLACE 2 Miles - 360° 5 Miles - 360° 10 Miles - 360°
 AND Downwind Wedge N/A 5 Miles (check applicable sectors) 10 Miles (check applicable sectors)
 A B C D E F G H
 J K L M N P Q R

AND that potassium iodide (KI) be administered to the general public in accordance with State procedures.
The general public in unaffected areas should be advised to monitor EAS and prepare for further protective actions.

12. DOSE ASSESSMENT INFORMATION FOR ACTUAL RADIOLOGICAL RELEASES ONLY:

- a. GASEOUS RELEASE INFORMATION ATTACHED (MIDAS, Back-up Method, etc., printout)

(Circle ventilation pathway)

UNIT #1		UNIT #2	
1	Ventilation Vent	1	Ventilation Vent
2	Supplemental Leak Collection and Release System	2	Supplemental Leak Collection and Release System
3	Process Vent (cooling Tower)	3	Decon Bldg/Waste Gas
4	Main Steam	4	Main Steam

- b. LIQUID RELEASE INFORMATION ATTACHED (liquid release calculation printout)
- c. OTHER INFORMATION ATTACHED (other dose assessment calculation printout performed.)
- d. NONE

13. ADDITIONAL INFORMATION (Optional):

SECTION II - PART E

Enclosure 2

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Rev. 8

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RTL# A5.715DR

BEAVER VALLEY POWER STATION

FOLLOW-UP NOTIFICATION FORM

6. CURRENT PLANT STATUS: _____

- **CONDITIONS:** STABLE UNSTABLE
- **REACTOR:** SHUTDOWN AT POWER
- **EQUIPMENT DAMAGE:** NONE MINOR MAJOR
- **COOLING:** NORMAL COOLDOWN (FORCED FLOW)
 NORMAL COOLDOWN (NATURAL CIRCULATION)
 SAFETY INJECTION COOLDOWN (FEED AND BLEED)
 N/A
- **PROGNOSIS:** STABLE DEGRADING IMPROVING

7. ACCIDENTAL RADIOLOGICAL RELEASE:

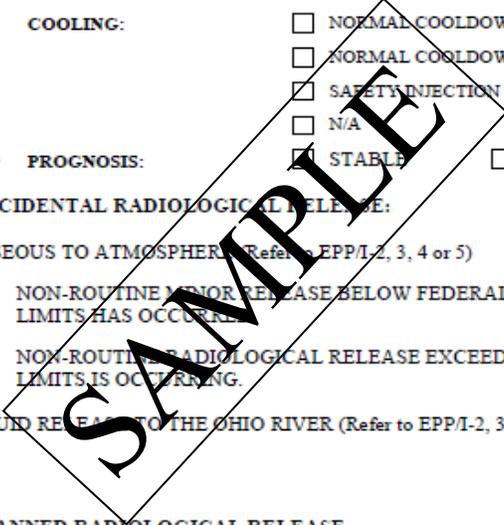
- GASEOUS TO ATMOSPHERE (Refer to EPP/I-2, 3, 4 or 5)
- NON-ROUTINE MINOR RELEASE BELOW FEDERALLY APPROVED OPERATING LIMITS HAS OCCURRED.
- NON-ROUTINE RADIOLOGICAL RELEASE EXCEEDING ROUTINE OPERATIONAL LIMITS IS OCCURRING.
- LIQUID RELEASE TO THE OHIO RIVER (Refer to EPP/I-2, 3, 4 or 5, or EPP/IP 2.7.1.)
- N/A

8. PLANNED RADIOLOGICAL RELEASE:

- NO ROUTINE BATCH RELEASE WAS IN PROGRESS PRIOR TO DECLARATION.
- ANY ROUTINE BATCH RELEASE HAS BEEN DISCONTINUED.
- A ROUTINE BATCH RELEASE IS CONTINUING.

9. SURFACE CONTAMINATION ESTIMATES: _____

10. REQUEST FOR OFFSITE SUPPORT: Specify Needs: _____



SECTION II - PART E

Enclosure 2

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RTL# A5.715DR

BEAVER VALLEY POWER STATION

FOLLOW-UP NOTIFICATION FORM

11. UTILITY PROTECTIVE ACTION RECOMMENDATIONS (PARS):

- a. None
- b. EVACUATE 2 Miles - 360° 5 Miles - 360° 10 Miles - 360°
 AND Downwind Wedge N/A 5 Miles (check applicable sectors) 10 Miles (check applicable sectors)
 A B C D E F G H
 J K L M N P Q R

AND that potassium iodide (KI) be administered to the general public in accordance with State procedures.
 The general public in unaffected areas should be advised to monitor EAS and prepare for further protective actions.

- c. SHELTER IN PLACE 2 Miles - 360° 5 Miles - 360° 10 Miles - 360°
 AND Downwind Wedge N/A 5 Miles (check applicable sectors) 10 Miles (check applicable sectors)
 A B C D E F G H
 J K L M N P Q R

AND that potassium iodide (KI) be administered to the general public in accordance with State procedures.
 The general public in unaffected areas should be advised to monitor EAS and prepare for further protective actions.

12. DOSE ASSESSMENT INFORMATION (FOR ACTUAL RADIOLOGICAL RELEASES ONLY):

- a. GASEOUS RELEASE INFORMATION ATTACHED (MIDAS, Back-up Method, etc., printout)

(Circle ventilation pathway)

UNIT #1		UNIT #2	
1	Ventilation Vent	1	Ventilation Vent
2	Supplemental Leak Collection and Release System	2	Supplemental Leak Collection and Release System
3	Process Vent (cooling Tower)	3	Decon Bldg/Waste Gas
4	Main Steam	4	Main Steam

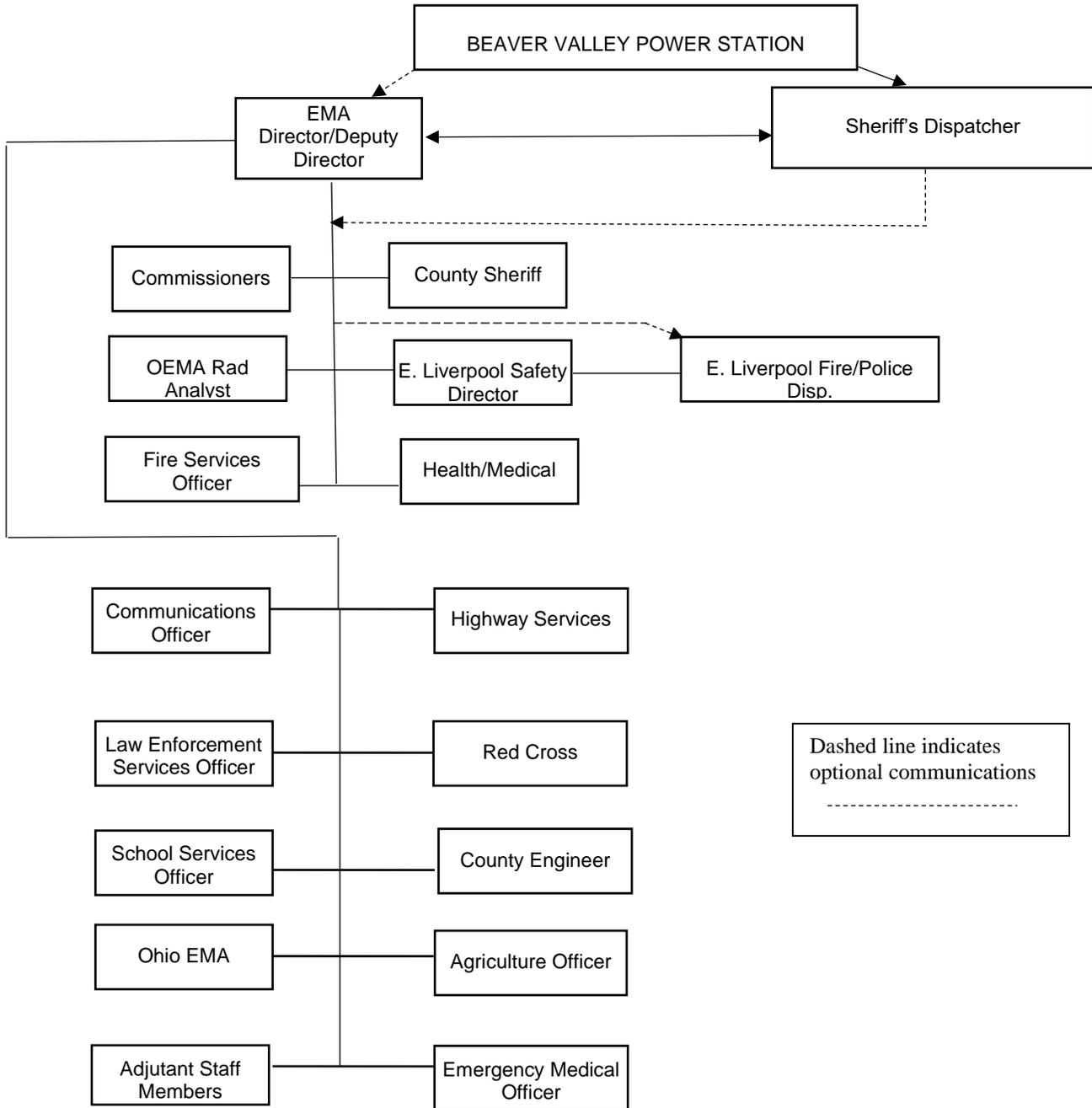
- b. LIQUID RELEASE INFORMATION ATTACHED (liquid release calculation printout)
- c. OTHER INFORMATION ATTACHED (other dose assessment calculation printout performed.)
- d. NONE

13. ADDITIONAL INFORMATION (Optional):

SECTION II - PART E

Enclosure 3

**COLUMBIANA COUNTY
NUCLEAR INCIDENT NOTIFICATION FLOW**



SECTION II - PART E

Enclosure 4

EAS Message - A

TEST

This is a **TEST MESSAGE** issued by the Columbiana County Board of Commissioners for the residents of Southeastern Columbiana County to include the City of East Liverpool and Liverpool, Saint Clair and Middleton Townships.

Today a drill is being conducted at the Beaver Valley Power Station. The purpose of this drill is to test the capabilities and preparedness of State and local agencies that would respond to emergencies at the nuclear power facility. This drill includes activation of the warning sirens located in the southeastern portions of Columbiana County. The sirens you hear **DO NOT** indicate an actual emergency, only a test of the public alert/notification system.

Again, **THIS IS ONLY A TEST**. Had this been an actual emergency, you would be instructed where to tune in your area for further instructions and official information.

Questions involving the test should be directed to 330-424-7139.

Recommended Broadcast Interval:

Starting Time _____ a.m./p.m.

Broadcast every _____ minute

Repeat _____ times after completion of the first broadcast.

SECTION II - PART E

Enclosure 4

EAS Message - B

LIMITED PRECAUTIONARY ACTION

This is a **LIMITED PRECAUTIONARY MESSAGE** issued by the Columbiana County Board of Commissioners for the residents of Southeastern Columbiana County to include the City of East Liverpool and Liverpool, Saint Clair and Middleton Townships.

Today a (_____) was declared at the Beaver Valley Power Station.

Site Area Emergency / General Emergency

State and local emergency management and health service personnel are assessing the situation.

The Columbiana County Board of Commissioners recommend you go indoors and listen or watch your local news media for further developments.

There is no immediate risk of radiation exposure or contamination to residents of Ohio.

If you would need transportation assistance to evacuate, please call (330) 420-1016. Repeat, (330) 420-1016.

Further information can be found in the BVPS annual mailing titled – Emergency Preparedness Information, the Columbiana-Mahoning County User Friendly Phonebook, and the Columbiana County EMA website. Please stay tuned to this station for further information, Special News Bulletins or EAS messages.

Questions involving the emergency should be directed to 330-424-7139.

Recommended Broadcast Interval:

Starting Time _____ a.m./p.m.

Broadcast every _____ minute

Repeat _____ times after completion of the first broadcast.

SECTION II - PART E

Enclosure 4

EAS Message - C
SHELTERING-IN-PLACE REQUIRED

This is an Important Emergency Bulletin issued by the Columbiana County Board of Commissioners for the residents of Southeastern Columbiana County to include the City of East Liverpool, Liverpool, Saint Clair and Middleton Townships.

Today an Emergency was declared at the Beaver Valley Power Station.

A recommendation to Shelter-in-Place has been issued by the Columbiana County Board of Commissioners for people located within the following identified areas:

NOTE: "If Pre-Recorded EAS Messages Are Not Available:
Highlight the Appropriate Boundaries to Be Read, Cross-Out Areas Not To Be Read"

Sub Area 1	The portion of East Liverpool and Liverpool Twp. bounded by: <ul style="list-style-type: none"> • East of Elizabeth St. and Fisher Rd. • South of St. Clair Township. • West of Pennsylvania - Ohio border. • North of the Ohio River.
Sub Area 2	The portion of East Liverpool and Liverpool Twp. bounded by: <ul style="list-style-type: none"> • East of Campground Rd. intersecting Annesley Rd. • South of St. Clair Township. • West of Fisher Rd. and Elizabeth St • North of the Ohio River.
Sub Area 3	The portion of St Clair Twp. bounded by: <ul style="list-style-type: none"> • East of Annesley Rd. intersecting Cannons Mills Rd. intersecting Sprucevale Rd. intersecting the Little Beaver Creek intersecting State Route 170. • South of Middleton Township. • West of Pennsylvania - Ohio border. • North of Liverpool Township.
Sub Area 4	The portion of Middleton Twp. bounded by: <ul style="list-style-type: none"> • East of State Route 170. • South of Pancake-Clarkson Rd. • West of Pennsylvania - Ohio border. • North of St. Clair Township.
Sub Area 1,2	The portion of East Liverpool and Liverpool Twp. bounded by:: <ul style="list-style-type: none"> • East of Campground Rd. intersecting Annesley Rd. • South of St. Clair Township. • West of Pennsylvania - Ohio border. • North of the Ohio River.
Sub Area 1,2,3	The portion of East Liverpool and Liverpool and St Clair Twp. bounded by: <ul style="list-style-type: none"> • East of Campground Rd. intersecting Annesley Rd. intersecting Cannons Mills Rd. intersecting Sprucevale Rd. intersecting the Little Beaver Creek, intersecting State Route 170. • South of Middleton Township. • West of Pennsylvania - Ohio border. • North of the Ohio River.
Sub Area 1,2,3,4	The portion of East Liverpool and Liverpool, St Clair and Middleton Twp. bounded by: <ul style="list-style-type: none"> • East of Campground Rd. intersecting Annesley Rd. intersecting Cannons Mills Rd. intersecting Sprucevale Rd. intersecting the Little Beaver Creek, intersecting State Route 170. • South of Pancake-Clarkson Rd. • West of Pennsylvania - Ohio border. • North of the Ohio River.
Sub Area 2,3,4	The portion of East Liverpool and Liverpool, St Clair and Middleton Twp. bounded by: <ul style="list-style-type: none"> • East of Campground Rd. intersecting Annesley Rd. intersecting Cannons Mills Rd intersecting Sprucevale Rd. intersecting the Little Beaver Creek, intersecting State Route 170. • South of Pancake-Clarkson Rd. • West of Pennsylvania - Ohio border for St Clair and Middleton Twp. • West of Fisher Rd. and Elizabeth St for Liverpool Twp. • North of the Ohio River.
Sub Area 3,4	The portion of St Clair and Middleton Twp. bounded by: <ul style="list-style-type: none"> • East of Annesley Rd. intersecting Cannons Mills Rd. intersecting Sprucevale Rd. intersecting the Little Beaver Creek, intersecting State Route 170. • South of Pancake-Clarkson Rd. • West of Pennsylvania - Ohio border. • North of Liverpool Township.

SECTION II - PART E

Potassium Iodine (KI)

Note: "Read or Include **ONLY** when instructed"

If your area is instructed to shelter-in-place, you will be asked to take Potassium Iodine (KI) at this time. If you do not have Potassium Iodine (KI) with you, continue to shelter.

KI will be provided at the Reception Center if you are evacuated.

Detailed instructions for sheltering-in-place can be found in the BVPS annual mailing titled – Emergency Preparedness Information, the Columbiana-Mahoning County User Friendly Phonebook, and the Columbiana County EMA website. Please stay tuned to this station for further information, Special News Bulletins or EAS messages.

Recommended Broadcast Interval:

Starting Time _____ a.m. /p.m.

Broadcast every _____ minute

Repeat _____ times after completion of the first broadcast.

SECTION II - PART E

Enclosure 4

EAS Message - D
EVACUATION REQUIRED

This is an Important Emergency Bulletin issued by the Columbiana County Board of Commissioners for the residents of Southeastern Columbiana County to include the City of East Liverpool, Liverpool, Saint Clair and Middleton Townships.

Today a General Emergency was declared at the Beaver Valley Power Station.

An **evacuation** has been recommended by the Columbiana County Board of Commissioners for people located within the following identified areas:

NOTE: "If Pre-Recorded EAS Messages Are Not Available:
Highlight the Appropriate Boundaries to Be Read, Cross-Out Areas Not To Be Read"

Sub Area 1	The portion of East Liverpool and Liverpool Twp. bounded by: <ul style="list-style-type: none">• East of Elizabeth St. and Fisher Rd.• South of St. Clair Township.• West of Pennsylvania - Ohio border.• North of the Ohio River.
Sub Area 2	The portion of East Liverpool and Liverpool Twp. bounded by: <ul style="list-style-type: none">• East of Campground Rd. intersecting Annesley Rd.• South of St. Clair Township.• West of Fisher Rd. and Elizabeth St• North of the Ohio River.
Sub Area 3	The portion of St Clair Twp. bounded by: <ul style="list-style-type: none">• East of Annesley Rd. intersecting Cannons Mills Rd. intersecting Sprucevale Rd. intersecting the Little Beaver Creek intersecting State Route 170.• South of Middleton Township.• West of Pennsylvania - Ohio border.• North of Liverpool Township.
Sub Area 4	The portion of Middleton Twp. bounded by: <ul style="list-style-type: none">• East of State Route 170.• South of Pancake-Clarkson Rd.• West of Pennsylvania - Ohio border.• North of St. Clair Township.
Sub Area 1,2	The portion of East Liverpool and Liverpool Twp. bounded by: <ul style="list-style-type: none">• East of Campground Rd. intersecting Annesley Rd.• South of St. Clair Township.• West of Pennsylvania - Ohio border.• North of the Ohio River.

SECTION II - PART E

Sub Area 1,2,3	The portion of East Liverpool and Liverpool and St Clair Twp. bounded by: <ul style="list-style-type: none"> • East of Campground Rd. intersecting Annesley Rd. intersecting Cannons Mills Rd. intersecting Sprucevale Rd. intersecting the Little Beaver Creek, intersecting State Route 170. • South of Middleton Township. • West of Pennsylvania - Ohio border. • North of the Ohio River.
Sub Area 1,2,3,4	The portion of East Liverpool and Liverpool, St Clair and Middleton Twp. bounded by: <ul style="list-style-type: none"> • East of Campground Rd. intersecting Annesley Rd. intersecting Cannons Mills Rd. intersecting Sprucevale Rd. intersecting the Little Beaver Creek, intersecting State Route 170. • South of Pancake-Clarkson Rd. • West of Pennsylvania - Ohio border. • North of the Ohio River.
Sub Area 2,3,4	The portion of East Liverpool and Liverpool, St Clair and Middleton Twp. bounded by: <ul style="list-style-type: none"> • East of Campground Rd. intersecting Annesley Rd. intersecting Cannons Mills Rd. intersecting Sprucevale Rd. intersecting the Little Beaver Creek, intersecting State Route 170. • South of Pancake-Clarkson Rd. • West of Pennsylvania - Ohio border for St Clair and Middleton Twp. • West of Fisher Rd. and Elizabeth St for Liverpool Twp. • North of the Ohio River.
Sub Area 3,4	The portion of St Clair and Middleton Twp. bounded by: <ul style="list-style-type: none"> • East of Annesley Rd. intersecting Cannons Mills Rd. intersecting Sprucevale Rd. intersecting the Little Beaver Creek, intersecting State Route 170. • South of Pancake-Clarkson Rd. • West of Pennsylvania - Ohio border. • North of Liverpool Township.

If Schools are in session students attending East Liverpool Schools, and the East Liverpool Christian School will be relocated to the Columbiana County Career and Technical Center or the Lisbon David Anderson High School. Employment Development Incorporated, South will be relocated to Columbiana County Career and Technical Center. All Relocation Schools will stay open until the situation terminates or changes.

If your area is being instructed to evacuate, you will be asked to take Potassium Iodine (K I) at this time. If you do not have Potassium Iodine with you please continue to evacuate and it will be provided to you at a Reception Center.

If you must have transportation assistance to evacuate, please call (330) 420-1016. Repeat, (330) 420-1016.

Detailed instructions for evacuation can be found in the BVPS annual mailing titled – Emergency Preparedness Information, the Columbiana-Mahoning County User Friendly Phonebook, and the Columbiana County EMA website. Please stay tuned to this station for further information, Special News Bulletins or EAS messages.

<p>Recommended Broadcast Interval:</p> <p style="text-align: center;">Starting Time _____ a.m./p.m.</p> <p style="text-align: center;">Broadcast every _____ minute</p> <p style="text-align: center;">Repeat _____ times after completion of the first broadcast.</p>

SECTION II - PART E

Enclosure 4

EAS Message - F
INADVERTENT SIREN ACTIVATION

This message is issued by the Columbiana County Board of Commissioners for the residents of Southeastern Columbiana County to include the City of East Liverpool, Liverpool, Saint Clair and Middleton Townships.

This is an important public service announcement for residents of the City of East Liverpool, Liverpool, Saint Clair and Middleton Townships in Columbiana County. The sirens you are hearing have been inadvertently activated. There is no emergency. Crews are being dispatched to correct the malfunction.

I repeat, there is no emergency. The sirens you are hearing have inadvertently activated. Crews are being dispatched to correct the malfunction.

Questions involving this inadvertent siren activation should be directed to 330-424-7139.

Recommended Broadcast Interval:

Starting Time _____ a.m./p.m.

Broadcast every _____ minute

Repeat _____ times after completion of the first broadcast.

SECTION II - PART E

Enclosure 4

EAS Message - I
SCHOOL EVACUATION NECESSARY

This message is issued by the Columbiana County Board of Commissioners for the residents of Southeastern Columbiana County to include the City of East Liverpool, Liverpool, Saint Clair and Middleton Townships.

Today a (_____) was declared at the Beaver Valley Power Station.
Site Area Emergency / General Emergency

Students attending East Liverpool Schools and the East Liverpool Christian School will be relocated to the Columbiana County Career and Technical Center or the Lisbon David Anderson High School. Employment Development Incorporated, South will be relocated to Columbiana County Career and Technical Center.

All Relocation Schools will stay open until the situation terminates or changes.

Parents or Guardians are urgently requested to pick up students at the Host Schools, NOT at their regular school.

Detailed instructions for school relocations can be found in the BVPS annual mailing titled – Emergency Preparedness Information, the Columbiana-Mahoning County User Friendly Phonebook, and the Columbiana County EMA website. Please stay tuned to this station for further information, Special News Bulletins or EAS messages.

Recommended Broadcast Interval:

Starting Time _____ a.m./p.m.

Broadcast every _____ minute

Repeat _____ times after completion of the first broadcast.

SECTION II - PART E

Enclosure 4

EAS Message - J
SITUATION SPECIFIC INFORMATION
(To be filled in as the situation arises.)

This message is issued by the Columbiana County Board of Commissioners.

As a result of an incident at the Beaver Valley Power Station.

Please stay tuned to this station for further information or instructions as they become available.

Recommended Broadcast Interval:

Starting Time _____ a.m./p.m.

Broadcast every _____ minute

Repeat _____ times after completion of the first broadcast.

SECTION II - PART E

Enclosure 5

ELECTRONIC NOTIFICATION SYSTEM (ENS) / IPAWS CONCEPT OF OPERATIONS

1. Authorities – The determination to use the ENS/IPAWS is the responsibility of the Columbiana County EMA in coordination with and under the authority of County Commissioners and Ohio EMA.
2. Personnel – A roster of authorized personnel with access to the ENS/IPAWS activation system is maintained by Columbiana County and is available in the Columbiana County EOC.
3. Training – All authorized personnel with ENS/IPAWS access are required to complete FEMA IS-247 in addition to training on use of the ENS/IPAWS Open Developer Software. Training records are maintained by Columbiana County.
4. Maintenance – The ENS/IPAWS open developer software is a web based application that is accessed by devices utilized and maintained by Columbiana County. The County and its vendor have cyber security protections in accordance with IPAWS. All authorized users of the ENS utilize a unique username and password to access the system.
5. Security – A roster of IPAWS Security Certificates, expiration dates and a recertification schedule are available from Columbiana County.
6. Demonstration/Training Tool – Columbiana County has the capability to utilize a Testing Certificate from FEMA to send test messages to the IPAWS Test Lab and utilizes the IPAWS Message Viewer to confirm that message have successfully propagated through the IPAWS OPEN system.
7. Testing – Columbiana County will complete monthly tests of the ENS/IPAWS Open Developer Software with the IPAWS Test Lab to maintain proficiency and to validate the messages are successfully propagated to IPAWS. These tests will be validated using the IPAWS Message Viewer. Test records are maintained in the Columbiana County EOC. Use of the system for actual events (non-REP) will also be used to validate the system.
8. Coverage – The ENS system will be used to alert residents within the 10-mile Emergency Planning Zone (EPZ) in Columbiana County. The system will make phone calls to all listed phone numbers and businesses as well as residents who have registered in the system. The system also sends text messages and emails to residents who are registered. All residents in Columbiana County receive information annually on how to register in the ENS system. Additionally, Columbiana County will send a Wireless Emergency Alert (WEA) message within the EPZ via IPAWS. The use of both the ENS and WEA messages cover essentially 100% of the residents, businesses and transients in the EPZ.
9. Agreements and Licensing – Should an emergency occur at Beaver Valley Power Station, Columbiana County maintains the ability and responsibility to alert the public consistent with the BVPS ANS Design Report.

Columbiana County is an approved IPAWS Public Alerting. A Memorandum of Understanding between the Columbiana County Emergency Services and the Federal Emergency Management Agency Integrated Public Alert and Warning System (IPAWS) Program Management Office regarding the use of the County Interoperable Systems and IPAWS OPEN Platform for Emergency Networks (IPAWS-OPEN) has been established.

SECTION II - PART F

EMERGENCY COMMUNICATIONS

I. PURPOSE

This Section will provide information on Columbiana County's communication system used to maintain communications among principal response organizations during an emergency at the Beaver Valley Power Station (BVPS).

II. EOC COMMUNICATIONS CENTER

- A. The Emergency Operations Center (EOC) Communications Center is located at 215 South Market St. Lisbon, Ohio.
- B. The EOC Communications Center includes those pieces of equipment necessary for the Emergency Management Agency (EMA) to communicate with BVPS and all the other response agencies. The County EMA will review telephone numbers quarterly to ensure timely notification with all agencies. Individual ORO call-down lists are maintained at local dispatch locations.
- C. The **Communications Officer** is responsible for the activation of the EOC Communications Center. This includes:
 - (1) Ensuring adequate staffing in the EOC Communications Center.
 - (2) Ensuring communications equipment is properly maintained and tested, and will keep records of equipment maintenance and results of communications tests.
 - (3) Equipment that interfaces with BVPS or OEMA are tested as per organizational protocol.

III. COMMUNICATIONS SYSTEM

- A. The public telephone system is used as the primary means of communications between the utility, local, county, State and Federal agencies. Upon activation of the County EOC, a Gold Executive Conference (GEC) may be established with BVPS, Columbiana County and the other effected States and Counties. The BVPS radio net is the backup system for notifications in lieu of commercial telephone failure.
- B. Once notification has been made and communication links are established, a telephone with radio backup network will be used to expedite agency communications.
 - (1) Combined equipment in the Sheriff's Dispatch Center and the County EOC's Emergency Communications Center (ECOMS) can access frequencies for the following agencies:
 - (a) Sheriff's Primary Notification Net
 - (b) Sheriff's Office/County vehicles
 - (c) Mutual Aid Response Organizations
 - (d) County Fire/EMS Departments
 - (e) Adjacent County Sheriffs
 - (f) County Police Departments
 - (g) Emergency Management Agencies - Adjacent Counties
 - (h) Beaver Valley Power Station and the Joint **Public** Information Center

SECTION II - PART F

- (i) Amateur Radio Emergency Services (ARES)
- (j) State EOC
- (k) County Engineer
- (l) State Field Monitoring Team
- ~~(m) State Emergency Communications Van~~
- (m) BVPS Emergency Control Center
- (n) American Red Cross
- (o) OSHP
- (p) National Weather Service
- (q) Hospitals and Mental Health Facilities

- (2) Equipment in the EOC will be maintained by Ohio EMA, County EMA, the Utility or their contracted representatives. (See Enclosure 3)

IV. TWENTY-FOUR (24) HOUR NOTIFICATION/COMMUNICATION

The initial notification call informing County Officials of an emergency at BVPS will come through the Sheriff's Dispatch Center. Once the EOC is activated, all notifications will be conducted through the EOC. The Dispatcher will notify appropriate responders by established procedures. (See Enclosure 1 and 2)

V. COMMUNICATIONS WITH CONTIGUOUS COUNTIES

Procedures are in place at BVPS for notification calls to be placed not only to adjacent County Sheriff's Departments but also to adjacent County Emergency Management Agency Coordinators with radio systems used as back up.

VI. COMMUNICATIONS WITH FEDERAL AGENCIES

County officials can communicate with Federal response organizations through the SHARES HF system. Ohio EMA's primary communications with Federal agencies will be by telephone, with radio as a supporting back-up system (See State Plan).

VII. COMMUNICATIONS WITH MEDICAL UNITS

Mobile medical units (ambulances) have radio communications with Salem Community Hospital and other area hospitals.

VIII. COMMUNICATIONS SYSTEM AUGMENTATION

~~Upon declaration of an ALERT classification, Ohio EMA dispatches the State mobile communications to Columbiana County. This asset will augment the existing communications links between the utility, State agencies and Columbiana County EOC. In addition, it has the capability of establishing and maintaining emergency communication links with response/support agencies via radio/telephone systems. The van is also used to relay information and data between State radiological monitoring teams in the area, and provides back-up radio capability with representatives in the JPIC.~~ Columbiana County has mobile Incident Command and Communications trailers available to be deployed as needed.

SECTION II - PART F

IX. TESTING OF COMMUNICATION SYSTEMS

The commercial phone communications are used on a daily basis. The radio link is tested weekly with content. Communications drills, including the aspect of understanding the content of messages are conducted monthly.

X. ACTIVATION AND MANNING OF COUNTY EOC

The staffing and manning of the Columbiana County EOC will be in accordance with the requirements of the emergency classification declared by BVPS.

XI. COMMUNICATIONS AMONG RESPONSE ORGANIZATIONS

- A. Upon notification of an accident, all Columbiana County response agencies communications will be transmitted from the County EOC. ~~The State mobile base station will be utilized to coordinate communications with field monitoring teams.~~
- B. Communications between primary and secondary response agencies located in the State and County EOC's, field locations, and Utility's EOF will be via telephone with radio as a backup.
- C. State response agencies on location in either the State or County EOC's can communicate with State Field Monitoring Teams through the MARC's radio system ~~or the repeater system in the Ohio Emergency Management Agency communications van~~, or via Amateur Radio organizations including RACES and ARES.
- D. Communications between the States, Counties and Utility will be by commercial telephone, with the BVPS industrial radio as a backup link to the counties.
- E. The primary communicator will be with the County Communications Officer and assigned communicator at each offsite location. An alternate will be also be established at each location.

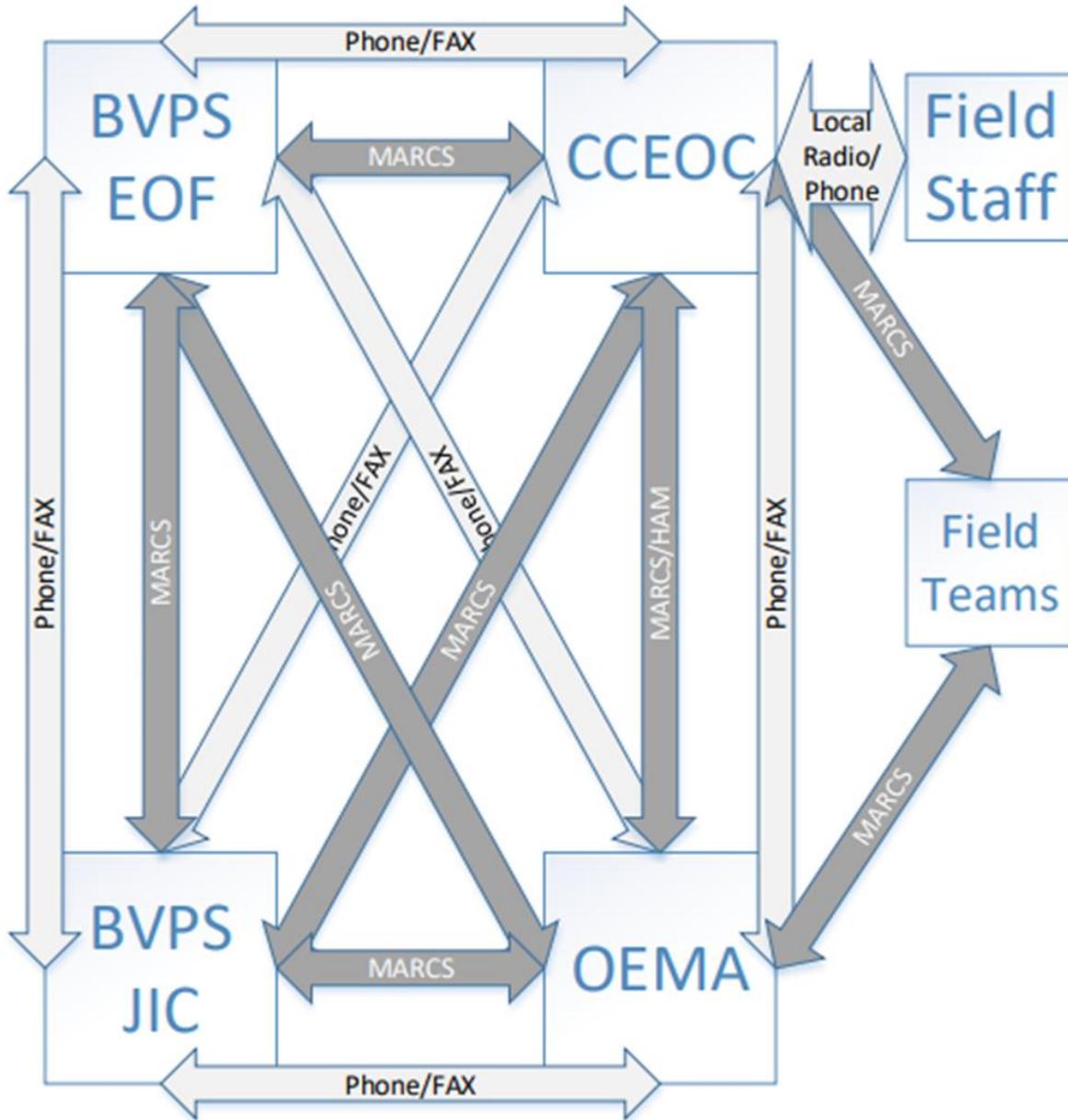
XII. COMMUNICATIONS AMONG MEDICAL PROVIDERS

Fixed medical providers communicate with ambulance services via radio. EOC's primary communication with fixed medical facilities will be via telephone or, secondarily, by dispatching a vehicle equipped with a mobile/hand held radio to the facility.

SECTION II - PART F

Enclosure 1

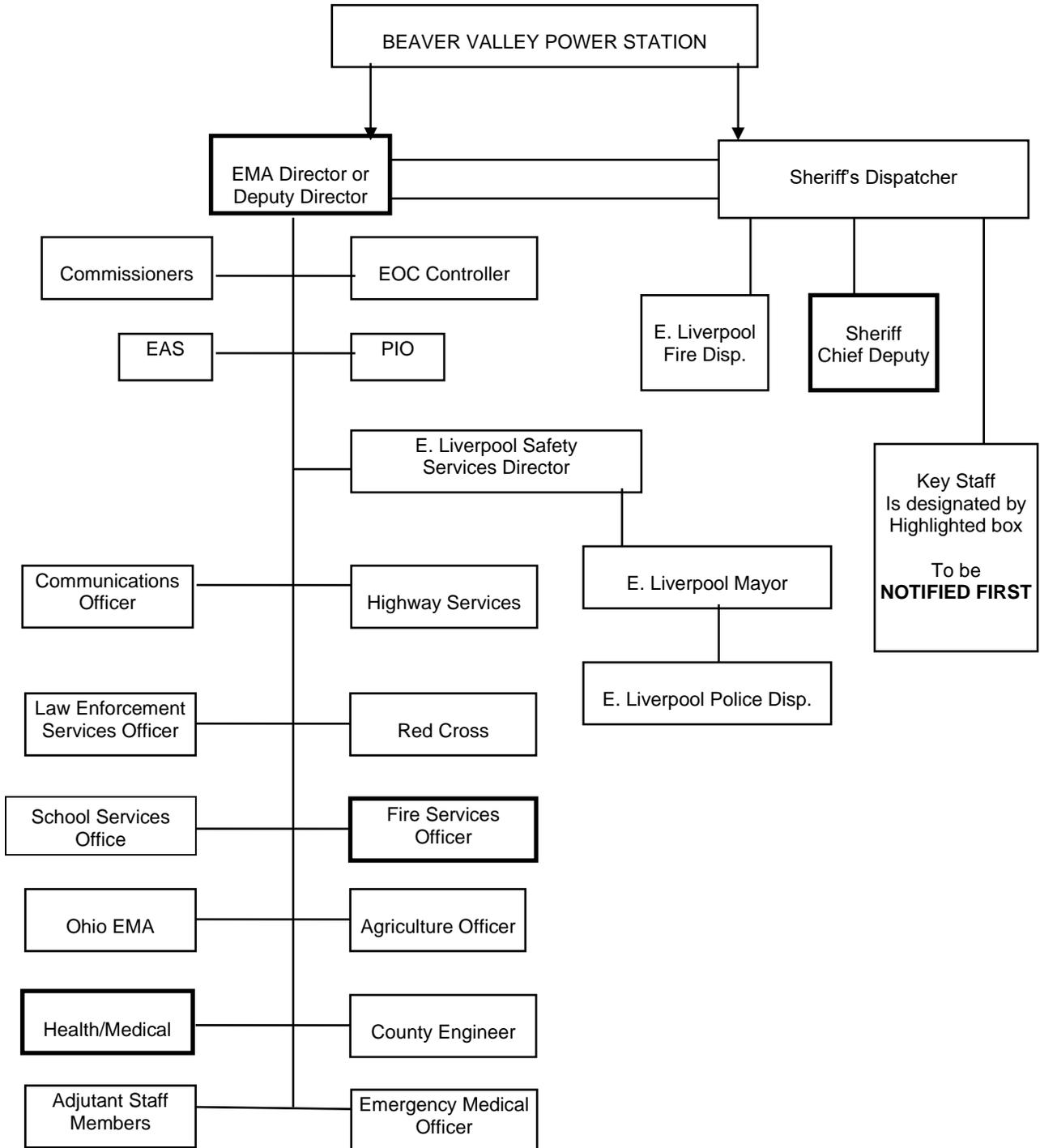
COMMUNICATIONS
CHART



SECTION II - PART F

Enclosure 2

NOTIFICATION FLOW CHART



SECTION II - PART F

Enclosure 3

COMMUNICATIONS EQUIPMENT LIST

1. Commercial phone system.
A cache of version flip phones.
10 GETS cards for the EOC
2. EOC radio assets:
vhf amateur transceiver
vhf/uhf amateur radio with small msg packet / nbems/fldigi local digital message handling.
vhf radio with EMA repeater (ktz241), other local vhf frequencies.
vhf amateur radio for the winlink rms ~~packet~~ station that will send-receive email via vhf for local use.
300 watt vhf amplifier for repeater redundancy on vhf simplex.
sage digital endec model 3644, connected to desktop using endec pro software,
hf/~~vhf/uhf~~ amateur radio for: CISA NCC SHARES hf radio system using the Winlink system.
Amateur radio national traffic system (nts) and (nbems/fldigi)
~~modem~~ software and Winlink software for high speed digital messaging on the cisa ncc shares hf radio system.
Ohio marcs radio
vhf public service radio in radio room
uhf public service radio in radio room
vhf ~~and uhf~~ mobile radios (2) ema vehicles, ~~radio room~~
vhf hand held radio cache with EMA repeater and simplex nifog frequencies vhf.
uhf hand held ~~radios~~ radio cache with public service, schools and nifog frequencies uhf.
four ~~input channel~~ gateways for cross banding EMA ~~radio room and portable public safety vhf and uhf bands~~.
.
3. Ecomm and Incident Command trailers:
EMCOMM;
~~Kenwood ts-2000~~ Yaesu ft-991a hf/vhf/uhf radios with ~~phone patch and~~ digital message capabilities.
Pactor 4 modem ~~nes~~ cisa ncc shares / ~~marcs~~ hf radio system.
Portable hf mag mount antennas and wire dipole antennas for hf.
vhf/uhf amateur radios.
vhf public service radio
uhf public service radio
500 watt hf amplifier.
~~300 watt vhf amplifier~~.
Battery and generator power.
2 channel gateway to cross band public safety vhf and uhf bands.

INCIDENT COMMAND;
Vhf public service radio
Uhf public service radio
Vhf (DMR) moto trbo radio
Battery and generator power.
.
4. Go kits 1 & 2
amateur vhf/uhf dual band radio
amateur radio hf/vhf/uhf radio with digital messaging
laptop computer with fldigi software
printer for message hard copy.
~~800~~ 3600 watt portable generators for field power.
Portable dual band vhf/uhf antenna.
Portable wire dipole for hf operations.

SECTION II - PART F

5. EMA radio equipment at other facilities:

Salem Hospital

1. Dual band amateur radio & antenna
2. EMA Repeater radio
3. MARCS Radio

~~Salvation Army - Salem
2 meter radio & antenna~~

ELO Hospital

1. Dual band amateur radio & antenna
2. EMA Repeater radio
3. MARCS Radio

CCCTC

1. Portable uhf antenna for communication with ELO school busses.
(stored at EMA)

SECTION II - PART F

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SECTION II - PART G

PUBLIC INFORMATION

I. PURPOSE

This section establishes the guidelines for official release of accurate and timely news bulletins and public information in conjunction with an emergency at the Beaver Valley Power Station (BVPS).

II. TASKS AND RESPONSIBILITIES

- A. All news releases and media contacts at the county government level will be made through:
 - 1. County PIO Officer.
 - 2. In the absence of or assistance to the County PIO, the Clerk to the County Commissioners or other County employees may be designated as the alternate PIO.
 - 3. All Public Inquiry responses will be conducted by the County PIO Officer.
- B. All city, village, and township officers are requested to coordinate news releases and information through the above officials.

III. PROCEDURES

- A. Until activation of the Joint Public Information Center (JPIC), the County PIO shall ensure that the news media and therefore the citizens are kept informed from the County EOC of events that affect the county. Primary communications with the JPIC will be via commercial telephone.
- B. Upon activation of the JPIC, county governmental news releases will be made on a periodic basis from the County EOC or through the Joint Public Information Center (JPIC), to be located in the Pittsburgh Airport Industrial Park Building #3, Spring Run Road Extension, off Flaugherty Run Road, located in Coraopolis, Pennsylvania. The county may be represented at the JPIC by the State PIO.
- C. Releases will be coordinated at the JPIC with participating Federal, State, Utility, and County agencies.
- D. Times of news releases will be announced by the Public Information Officer.
- E. Public information pertaining to an incident may state, but is not limited to:
 - 1. Name of entity issuing the information.
 - 2. Name of facility involved.
 - 3. Date, time, and number of press releases/conference.
 - 4. Geographical or jurisdictional areas involved.
 - 5. Federal, State, County and BVPS coordinating efforts.
 - 6. Protective actions.
 - 7. Repeat of information released through EAS/ENS.
- F. Supplemental News Bulletins (SNB) will follow the EAS/ENS message and include initial radiation or hazard release information:
 - 1. Date/time of incident.
 - 2. Brief description of incident.

SECTION II - PART G

3. Nature of hazard.
 4. Risks involved.
 5. Protective actions.
 6. Actions taken by operator and local governmental agencies.
- G. If a news release is an update of previously issued information, it should refer to:
1. Changes in incident status.
 2. Protective actions to be taken.
- H. News releases will close with a notation as to:
1. Issue date.
 2. Number of issue.

IV. FACILITIES

- A. Representatives of State, Federal and County governments will work together with the utility company's Public Information Officer (PIO). The State PIO in coordination with the County PIO will conduct all press briefings at the JPIC.
- B. The media center is located at the Joint Public Information Center (JPIC) at the Pittsburgh Airport Industrial Park Building #3 and is set up according to BVPS procedures.
- C. The county press briefing area:
1. Efforts at the county level should mirror the public information procedures at the State level.
 2. The release of information on county response efforts at the UNUSUAL EVENT and ALERT stages of an emergency is the responsibility of the County. Upon declaration of a SITE AREA EMERGENCY, all media inquiries and reporters should be directed to the JPIC.
 - a. A separate release point/press briefing area from the JPIC may be set up by the County for the convenience of the press, but only information that has already been released or cleared for release should be given out. This will be located at the Columbiana County EOC in a designated office.
 - b. To ensure accuracy and to decrease the possibility of misinformation being released, all press releases should be issued through the JPIC.

V. NEWS RELEASES

Periodic news releases to the media will be made concerning the update of emergency planning/actions, and regarding information from public inquiry, and other pertinent resources in the EOC. The information is compiled in the EOC and reviewed and approved by the Executive Group for accuracy and sensitive information before being released by the PIO.

SECTION II - PART G

VI. GENERAL PUBLIC INFORMATION AND EDUCATION

- A. BVPS provides for dissemination of information to the public annually regarding how they will be notified and what their actions should be during a radiological emergency. The content of such public information material will be coordinated with the CCEMA and OEMA to ensure that accurate and current information is furnished. This information includes, but is not necessarily limited to, the following:
1. Educational information on radiation.
 2. Who to contact for additional information.
 3. Respiratory protection.
 4. Sheltering.
 5. Evacuation routes.
 6. The taking of Potassium Iodide (KI).
- B. Means for disseminating this information to the public and with those with access and functional needs, may include, but is not necessarily limited to, the following:
1. Information in the telephone book.
 2. Emergency Information mailed to the residential and business population within the plume exposure pathway EPZ annually.
 3. Posting in public areas.
 4. Other publications, news articles, and advertisements distributed on an annual basis.
 5. Posted on the Columbiana County website.
- C. Every residential and business address in the EPZ will be provided with printed information on radiation and an Emergency Planning Packet. This material will inform the public within the Plume Exposure Pathway EPZ on how they will be notified, what their actions should be in an emergency, the agreed upon means of evacuation verification and the location of Reception Centers. Persons with Special needs individuals within the plume exposure pathway EPZ will be identified by mail-in card provided with the Emergency Planning Information packet, which is mailed out annually (Enclosure 1). Information received from returned Special Needs cards will be kept secure in a computer data base and in locked file. Job and Family Services maintains a secure data base on Special Needs clients to whom they provide services.
- D. CCEMA will coordinate with BVPS and OEMA to develop an annual Materials Packet for members of the news media. Such materials will be designed to acquaint the news media with the County, State and BVPS emergency plans, information concerning radiation, points of contact for release of public information and the need for timely and accurate reporting of information with data for the purpose of preventing the spread of rumors and misinformation. During an emergency, major media will be monitored for accuracy, with corrective actions taken if necessary, to dispel rumors and maintain reliable public information. In the event of an accident at the BVPS, rumor control numbers will be activated and published at the ALERT Classification level and manned at that time. The lines will be established to prevent unwarranted concern and alleviate problems, which could arise in the event of widespread rumors. Information Services (211) will assist in handling rumor control calls.

SECTION II - PART G

Only information previously approved for dissemination will be provided by the Public Inquiry Officer. A Public Inquiry Officer located in the County EOC will notify the County PIO of any recurring concerns so that they can be addressed during press briefings.

- E. A Transient Information Program has been developed for Columbiana County. Information on actions to be taken by transients is included in the information. The Transient Information Packets (consisting of Enclosures 1&2) are placed in locations frequented by non-County residents. The information is updated annually. The Transient Information Packets include what to do if you hear the sirens, where to tune your radio and written information on where to go. Transient locations are identified, and an adequate number of packets are provided to each location. If a transient location requires additional packets, the packets will be provided upon request.
- F. Pets and Service Animals - It is anticipated that most people will want to take these "members of their family" with them. Because of the complex challenges that exist during radiological events the only pets that will be considered for monitoring or decontamination are those pets classified as being domesticated service animals (e.g., dogs, cats).

Although it is recognized other species of animals may be categorized as pets/ service animals within individual households the following categories of animals will not be accepted at Reception Centers / Care Centers; animals classified as livestock, exotic, birds, reptiles, amphibians, fish, and arthropods. The American Red Cross manages the Care Centers and will follow the most current guidance.

- G. Within the Columbiana – Mahoning County User Friendly Phone directory there is located "Important Emergency Information" to aid the residents of southern Columbiana County should an emergency arise at the Beaver Valley Power Station.
- H. The State of Ohio has developed and produced a brochure entitled "The Ohio Agriculture Brochure". This brochure is distributed annually to producers, processors and distributors of food within a 10-mile radius of BVPS in Columbiana County Townships. In the event of a Site Area Emergency or higher classification at BVPS, the brochure will be disseminated to the agricultural community within the entire affected ingestion pathway zone ([Ohio REP Operations Manual VI. NUREG-0654 Criteria G.2](#)).
- I. Information is provided to the news media annually to address the requirements of "Media Day" in NUREG 0654 Rev 2, Planning Standard G.5 Media kits with pertinent emergency information (BVPS fact sheets, annual Emergency Information Brochure, and Transient flyers) are assembled by Energy Harbor and disseminated to the media.

SECTION II - PART G

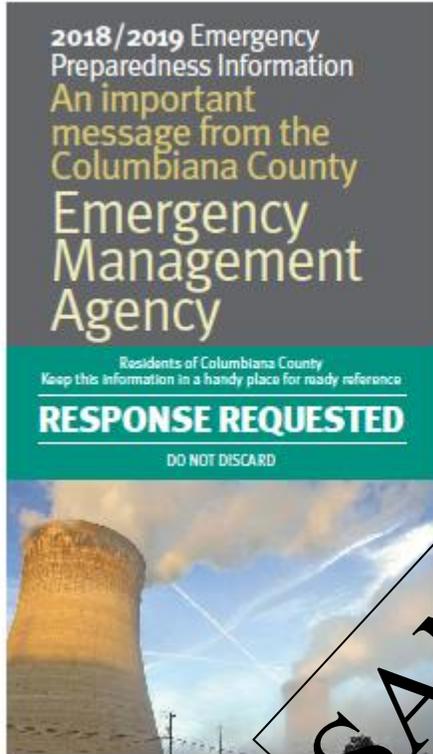
- J. Columbiana County EPZ population is less than 5% non-English speaking so the majority of information is provided in English. Phone #211 “information service” has an interpreter for non-speaking residents, and **Columbiana County has contracted translation services through #911.**

SECTION II - PART G

Enclosure 1 – page 1

EMERGENCY PUBLIC INFORMATION BROCHURE

(Sample Only) – Copy on file at Columbiana County EMA



When Sirens Sound

It's important to know what to do when you hear a siren. Sirens are used to warn you of an emergency. When you hear a siren, you should stop what you are doing and take cover. If you are outside, you should get into a building or under a sturdy object. If you are inside, you should stay in the center of the room and cover your head and neck. If you are in a vehicle, you should pull over to the side of the road and stay in the vehicle. If you are in a boat, you should head for the shore. If you are in a small boat, you should get out and go to a sturdy structure. If you are in a large boat, you should stay in the center of the boat. If you are in a plane, you should brace. If you are in a train, you should get down and cover your head and neck. If you are in a car, you should get out and go to a sturdy structure. If you are in a truck, you should get out and go to a sturdy structure. If you are in a bus, you should get out and go to a sturdy structure. If you are in a school bus, you should get out and go to a sturdy structure. If you are in a school, you should get under a desk. If you are in a church, you should get under a sturdy object. If you are in a synagogue, you should get under a sturdy object. If you are in a mosque, you should get under a sturdy object. If you are in a temple, you should get under a sturdy object. If you are in a synagogue, you should get under a sturdy object. If you are in a mosque, you should get under a sturdy object. If you are in a temple, you should get under a sturdy object.



Notification of an Emergency

WHAT SHOULD I DO IF I HEAR THE SIREN? (1)

1. Stop what you are doing and take cover. If you are outside, you should get into a building or under a sturdy object. If you are inside, you should stay in the center of the room and cover your head and neck. If you are in a vehicle, you should pull over to the side of the road and stay in the vehicle. If you are in a boat, you should head for the shore. If you are in a small boat, you should get out and go to a sturdy structure. If you are in a large boat, you should stay in the center of the boat. If you are in a plane, you should brace. If you are in a train, you should get down and cover your head and neck. If you are in a car, you should get out and go to a sturdy structure. If you are in a truck, you should get out and go to a sturdy structure. If you are in a bus, you should get out and go to a sturdy structure. If you are in a school bus, you should get out and go to a sturdy structure. If you are in a school, you should get under a desk. If you are in a church, you should get under a sturdy object. If you are in a synagogue, you should get under a sturdy object. If you are in a mosque, you should get under a sturdy object. If you are in a temple, you should get under a sturdy object.

Relocating and Receiving School Locations

Relocating and Receiving School Locations

SCHOOL NAME	ADDRESS	PHONE
...

Reception Centers and Pick-up Points

Reception Centers and Pick-up Points

...

Emergency Classifications

Emergency Classifications

...

Emergency Information

Emergency Information

...

WENS Information

WENS Information

Sign up for Columbiana County Emergency Alerts.

...

SECTION II - PART G

Enclosure 1 – page 2

EMERGENCY PUBLIC INFORMATION BROCHURE

(Sample Only) – Copy on file at Columbiana County EMA

Nuclear Energy FAQs

HOW IS NUCLEAR ENERGY MADE?
A nuclear energy plant is much like a power plant that burns coal or oil. The difference is the source of heat. At the Beaver Valley Power Station, heat comes from uranium instead of coal or oil. Uranium atoms are split to produce heat. The heat is used to turn water into steam. The steam runs a turbine generator to make electricity. When uranium atoms are split, radiation is produced. Normally, a nuclear power plant releases very small amounts of radiation as a gas. At most, this will add only one or two millirem to the normal dose received by people who live near the plant. This radiation is less than the limit set by the law. No radiation is released from cooling towers.

WHAT IS RADIATION?
Radiation has been part of our natural environment since the Earth was formed. The planet is bathed in cosmic radiation from outer space, and radioactive materials naturally present in the soil, rocks, air and seawater also emit this type of energy. From the very beginnings of human civilization, radiation has been part of everyday life.

SOURCES OF RADIATION
We are exposed to small amounts of radiation every day. It is in the air we breathe, the food we eat, even inside our own bodies. It is normal to be exposed to small amounts of radiation, but to be really, you should limit the amount. Radiation doses to people are measured in millirems. The average American receives over 300 millirems of radiation per year from nature – medical procedures, such as CT scans, add about the same amount of radiation dose.

HOW IS RADIATION CONTROLLED?
The U.S. Environmental Protection Agency and the U.S. Nuclear Regulatory Commission are the principal federal agencies responsible for establishing radiation protection regulations. EPA establishes standards to protect the general environment. The NRC prescribes and enforces limits on the amount of radiation that workers and members of the public can receive from commercial use of radioactive materials.

Radiation safety is based on time, distance and shielding. The less time spent near a source, the less radiation one receives. The greater the distance from a source, the less radiation one receives. Shielding also plays a role. For example, concrete gives a shielded effect on patients receiving X-rays. Used nuclear power plant fuel is stored underwater or in steel-lined concrete containers to protect people from penetrating radiation such as gamma rays. Although scientists have found no adverse health effects from doses lower than 10,000 millirems, radiation experts recommend keeping doses from man-made sources as low as reasonably achievable.

COLUMBIANA COUNTY RESIDENTS IMPORTANT:

If you or a family member require special assistance, please fill out and return this response card.

Special Needs Information Card

COLUMBIANA COUNTY 2019

If you or other members of your family would require special assistance in the event of an emergency evacuation, please complete this card and return it to the Columbiana County Emergency Management Agency.

I am hospitalized/deceased I am traveling required
 I am visually impaired I have limited mobility/bed/bath bound
 I have special medical considerations

Name _____
 Address _____
 City, State, Zip _____

Home Phone _____ Ext. Phone _____
 My local fire department is: _____
 Signature _____ Date _____

The Health Insurance Portability and Accountability Act (HIPAA) protects individuals' privacy, the confidentiality of any individual health information. As part of the Return Mail option, we request that you indicate if you are a patient or former patient of a health care provider. If you are, please indicate the name of the provider. By completing and signing this card, you represent and warrant that you are the individual named on this card and you are not providing this information to any other person. Information provided on this card will be used for emergency purposes only.

(THIS INFORMATION MAY BE SHARED WITH THE COUNTY EMERGENCY AGENCY AND YOUR LOCAL FIRE DEPARTMENT.)

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT NO. 1047 AKRON OH
POSTAGE WILL BE PAID BY ADDRESSEE

COLUMBIANA COUNTY EMERGENCY MANAGEMENT AGENCY
DISASTER MANAGEMENT CENTER
5000 OH 44302-1118

Residents of Columbiana County

RESPONSE REQUESTED

Special Needs Information Card

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

COLUMBIANA COUNTY RESIDENTS IMPORTANT:

If you are a farmer and require special assistance during a radiological emergency, please fill out and return this response card.

Farmers' Special Needs Card

COLUMBIANA COUNTY 2019

YES, I have an informational structure addressing agricultural concerns during a radiological emergency.

Name _____
 Address _____
 City, State, Zip _____
 Home Phone _____ Ext. Phone _____
 Signature _____

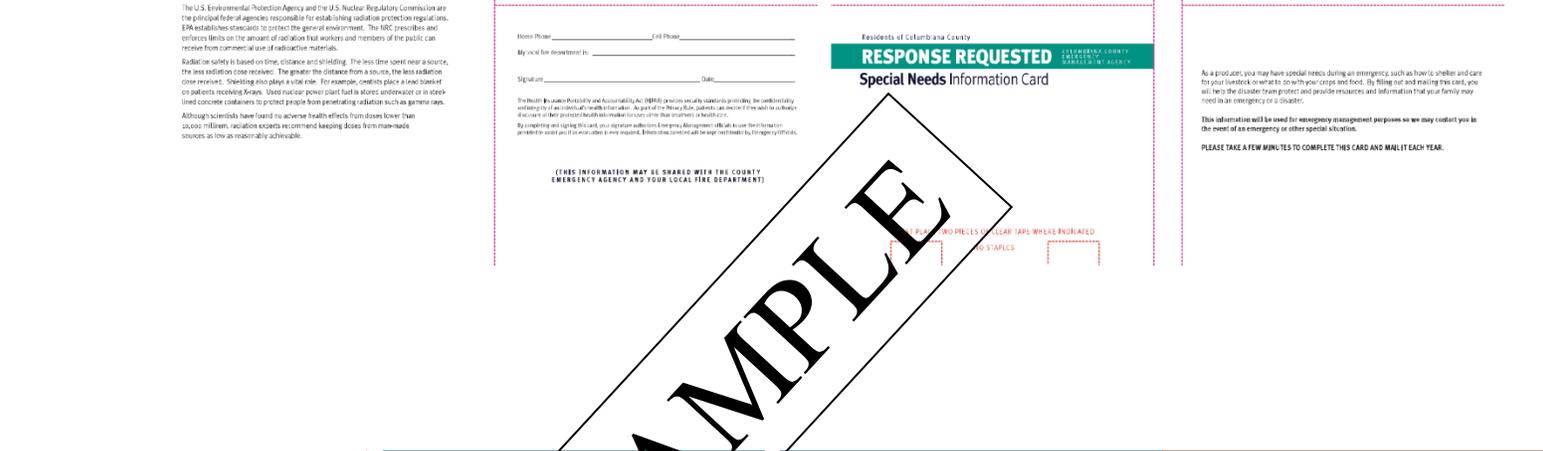
THE TYPE OF FARM I HAVE IS (CHECK AS MANY AS APPLY):

Dairy Beef Hog
 Poultry Horse Sheep
 Swine/boar Fruit Combining
 Other _____

As a producer, you may have special needs during an emergency, such as power to shelter and care for your livestock or needs to care for your crops and food. By filling out and mailing this card, you will help the disaster team protect and provide resources and information that your family may need in an emergency or disaster.

This information will be used for emergency management purposes so we may contact you in the event of an emergency or other special situation.

PLEASE TAKE A FEW MINUTES TO COMPLETE THIS CARD AND MAIL IT EACH YEAR.



NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

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COLUMBIANA COUNTY EMERGENCY MANAGEMENT AGENCY
DISASTER MANAGEMENT CENTER
5000 OH 44302-1118

Residents of Columbiana County

RESPONSE REQUESTED

Farmers' Special Needs Card

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

10-Mile Emergency Planning Zone Evacuation Subareas Map

Recommended Routes During an Evacuation

Evacuation routes are controlled by police for efficient movement out of your area. Once outside the 10-Mile Emergency Planning Zone, use appropriate routes to your destination. If you need a temporary place to stay, continue on the designated route to your designated Reception Center. At the Reception Center you will be given directions to a Red Cross Mass Care Center nearby.

AREA LOCATION	DESCRIPTION OF SUBAREA LOCATION	DIRECTION TO RECEPTION CENTER
SUBAREA 1 / UNIPPOOL TOWNSHIP	The portion of Unipool Township located by East of Elizabeth St. and Taylor Road. South of St. Clair Township, West of Pennsylvania - Ohio border, north of the Ohio River.	East on State Rt. 22 to County Road 22 (Rialto-South Ferry), West on County Road 22 to County Road 22 (South Ferry) to State Rt. 170 North on State Rt. 170 to the Reception Center at Negley Fire Department.
SUBAREA 2 / UNIPPOOL TOWNSHIP	The portion of Unipool Township located by East of Emergency Road between Emergency Road south of St. Clair Township, West of Taylor Road and Clarksville to north of the Ohio River.	North on County Road 425 (Pikeaway Avenue) to County Road 425 (East of Emergency Road) to State Rt. 170 North on State Rt. 170 to the Reception Center at Negley Fire Department.
SUBAREA 3 / ST. CLAIR TOWNSHIP	The portion of St. Clair Township located by East of Emergency Road between Emergency Road and Taylor Road. South of Taylor Road and Clarksville to north of the Ohio River.	West on State Rt. 425 to County Road 425 (Pikeaway Avenue) to County Road 425 (East of Emergency Road) to State Rt. 170 North on State Rt. 170 to the Reception Center at Negley Fire Department.
SUBAREA 4 / MIDDLETOWN TOWNSHIP	The portion of Middletown Township located by East of State Rt. 170, South of Pennsylvania-Ohio border, North of Unipool Township.	North on State Rt. 170 to the Reception Center at Beaver Local Sports Complex.

RECEPTION CENTERS

Beaver Local Sports Complex 13187 State Route 7, Lisbon, OH 44132
 Negley Fire/EMS 50683 Richardson Avenue, Negley, OH 44141

Family Preplanning

PREPARATION CHECKLIST

- MAKE A PLAN ON WHERE TO MEET IN CASE SEPARATED DURING THE EMERGENCY.
- KEEP AN EMERGENCY BAG OF SUPPLIES IN YOUR CAR:
 - Warm/dry clothes
 - Stained or soiled water
 - Flashlight and extra batteries
 - First Aid Kit
 - Maps
 - Blankets
 - Battery-Powered Radio
- WHAT TO TAKE IF I'M TOLD TO EVACUATE - IF TIME ALLOWS
 - Medications
 - Baby Food/Formula
 - Day food and water supply
 - Credit cards/cash
 - Important papers
 - Two changes of clothes per person
 - Extra pair of shoes per person
 - Blankets/sleeping bags for everyone
 - Toiletries
 - Eye glasses/contacts
 - Flashlight, radio, extra batteries
 - Cell phones/chargers/needed electronics
 - Emergency contact phone numbers
 - Maps
 - Please do take pet, pet food, water

Please remove this preplanning page and carry it with you when you evacuate.

NOTES

SECTION II - PART G

Enclosure 2

EMERGENCY TRANSIENT INFORMATION

(Sample Only) – Copy on file at Columbiana County EMA

Columbiana County Emergency Alert System

Do you know what to do when
the alert siren* sounds?

Turn on your radio or TV!

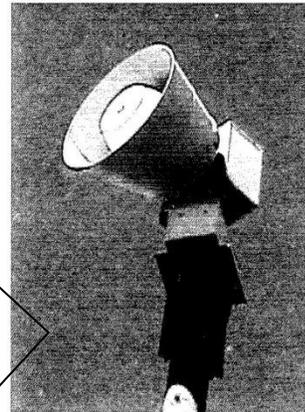
Radio

WKBN — 570 AM	WHOT — 101.1 FM
WSOM — 600 AM	WOGF — 104.3 FM
WOHI — 1490 AM	WQXK — 105.1 FM
WMXY — 98.9 FM	WBBG — 106.1 FM

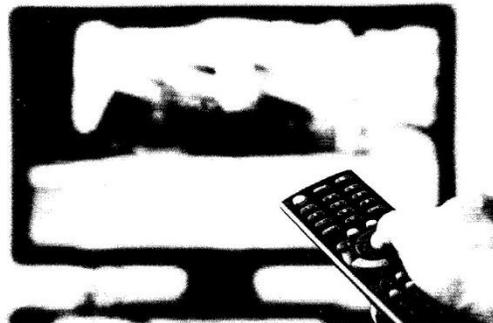
Television

WFMJ — Channel 21	WYTV — Channel 33
WKBN — Channel 27	WNEO — Channel 45

*The Alert Siren Signal is a steady, three-minute tone. The signal would alert the public of an emergency condition at Beaver Valley Power Station. If you hear the Alert signal ... Turn on your radio or TV for instructions.



COLUMBIANA COUNTY
OFFICE OF EMERGENCY
MANAGEMENT



SECTION II - PART H

EMERGENCY FACILITIES AND EQUIPMENT

I. PURPOSE

To assure that principal response organizations within Columbiana County have an awareness of the emergency facilities and equipment available to be utilized during a radiological emergency. The Emergency Management Director is responsible for the continued readiness of the facility

II. EMERGENCY OPERATIONS CENTER

Once an incident requiring emergency response has been declared at the Beaver Valley Power Station, the County Sheriffs Dispatch will begin his notification procedure. When the warning reaches the Emergency Management Director, they will take the necessary steps to open and activate the Emergency Operations Center (EOC). The level of EOC activation will depend upon the emergency action classification level and type of event.

A. Activation and Manning

1. The County EOC is located at 215 South Market St. Lisbon, Ohio. Radiological monitoring equipment has been pre-distributed to response organizations. Additional monitoring kits are maintained at the State EOC in Columbus and will be dispatched to Columbiana County with the State Radiological Monitoring Team personnel. These teams may stage at or near the County EOC. Field samples will be collected by State personnel in accordance with the State **REP Operations Manual** and procedures. These samples will be sent to an accredited laboratory for analysis from a pre-determined central point (See State **REP Operations Manual**).
2. Beaver Valley Power Station and State monitoring personnel will be dispatched to follow the plume. Their findings will also be forwarded to the County and State EOC's. The BVPS personnel will provide information to the State and County while State Teams are in route to Columbiana County.

B. The Columbiana County EOC will serve as the operations base for Columbiana County emergency response efforts. Emergency response agencies will send representatives to the County EOC to coordinate their agency's response with the overall effort. An Alternate EOC agreement is being prepared with County Jobs and Family Services. Radiological concerns from BVPS should not require a need to relocate the EOC. The County EOC is comprised of four response groups:

1. The Executive and Analysis Group (Direction & Control, Notification, Public Alert & Notification, Protective Response, Recovery):
 - a) The County Commissioners direct and control the emergency response effort; determine major responses to be implemented; issue Protective Action Decisions (PADs) and approve press releases.
 - b) EMA Director advises the County Commissioners regarding PADs; activates EAS; initiates siren activation; coordinates overall response effort; secures resources needed for response; maintains readiness, activates and coordinates EOC operations.

SECTION II - PART H

- c) The Sheriff directs department response; initiates siren activation; provides EOC security, and advises the County Commissioners on Sheriff's Office activities.
 - d) The County Engineer advises the Sheriff on the use of roadways, bridges and service areas based on traffic and weather conditions, and advises the County Commissioners on department activities.
2. The Assessment Group (Accident Assessment):
- a) The OEMA Resident Radiological Analyst directs the activities of the County Assessment Group; advises the Commissioners on radiological matters; analyzes projected dose rates; and interprets protective action recommendations from BVPS and the State.
 - b) The Columbiana County Radiological Officer monitors emergency worker exposure levels; keeps Commissioners, EOC staff and field agencies updated on radiological status; ensures emergency worker exposure limits are not exceeded; implements ODH recommendation to issue KI to emergency workers, institutionalized individuals and the General Public; collects and forwards PRDs; and maintains radiological records for local and County agencies.
 - c) The ODH Representative monitors the informal phone line; and coordinates with the Radiological Officer to control emergency worker exposures.
 - d) The OEPA representative will assist with the Dose Assessment process.
3. The Communications Group (Communications) will:
- a) Provide offsite communications, to include emergency notifications and changes in radiological status.
 - OSP
 - Sheriff's Department
 - Fire departments
 - Law enforcement
 - Ambulance services
 - **Amateur Radio**:
 - Bus
 - School
 - Special facilities (Hospital, Nursing Homes, WTI, etc.)
 - Pick-up points
 - ARC
 - County EOC

(Ref.: Section II-F; Emergency Communications)
 - b) Functions as Supervisor Exposure Director for emergency workers without a functional base of operation.
4. The Operations Group
- a) The Operations Officer ensures equipment in the EOC is operable; gathers information from EOC staff; updates the EMA Director of emergency response activities; sets shift durations; updates incoming staff and ensures coordination among EOC staff members.

SECTION II - PART H

- b) The Law Enforcement Officers (Traffic & Access Control, Security) coordinates state and local law enforcement for traffic control, access and perimeter control; coordinate security in evacuated areas.
- c) The Fire Services Officer (Fire Services) provides notification of protective actions to local fire/EMS departments; coordinates back-up route alerting, if needed; coordinates resources through mutual aid as requested.
- d) The School Services Officer (Transportation) notifies schools of protective actions; coordinates the relocation of school students; provides transportation resources for evacuating the general public.
- e) The Job & Family Services Representative (Social Services) coordinates with the ARC and provides services as required. Will contact the Mental Health **and Recovery Services** agency as required.
- f) The American Red Cross (Shelter & Care) Representatives from the Columbiana County Red Cross will provide information on number of evacuees expected to arrive at Care Centers and provide assistance as necessary; updates county officials on Care Center activities.
- g) The Health/Medical Officer (Public Health, Social Services) maintains the Special Needs list (ensuring notification of people on this list) and assesses their needs; coordinates with Emergency Medical Services Officer and School Services to ensure arrangements are made for evacuating special needs people.
- h) The Agriculture Services Officer (Recovery) coordinates with Ohio Dept. of Agriculture to provide information on crop and livestock protection and assess radiological damage on crops and livestock.
- i) The Highway Services Officer (Highway Maintenance) ensures traffic ability of all evacuation routes, barricade and sign deployment, clearance of road impediments, and locates alternate routes for evacuation.
- j) The Ohio National Guard Liaison coordinates logistical support for, and assistance for area security patrols, traffic control activities, evacuation efforts, and public information. If requested, the Liaison arranges augmentation of military ambulances to county resources and provides back-up bus drivers.
- k) The Ohio Environmental Protection Agency (Food & Water Purity) representative assists the County EOC with hazardous materials incidents, public water and wastewater concerns and other environmental matters.
- l) The Beaver Valley Power Station Representative provides updates on plant conditions and assists the EOC staff and Executive Group.
- m) The Emergency Medical Services Officer (Public Health) works with School Services and Health Medical to provide emergency medical care and transportation.

SECTION II - PART H

III. RADIOLOGICAL EQUIPMENT

- A. Radiological monitoring kits are provided to local emergency response units by Ohio EMA. The number and contents of kits distributed in the county are established by the Ohio EMA Resident Radiological Analyst (RRA) and are based upon the emergency response duties of specific agencies and to meet response needs based on this plan. Each kit may contain any of the following:
- 1 - Low range beta-gamma detector, CDV-700, Ludlum Model 3
 - 1 - High range gamma detector, CDV-715
 - 1 - Dosimeter charger (CDV-750)

Portal monitoring is available in the county; the monitor automatically detects background levels and compares them with predetermined values. The throughput of the portal is one person every 10 seconds.

Dosimeter packets will also be available for emergency workers. The packets may contain **any of** the following:

- Dosimeter, 0-200 mR range (CDV-138 or equivalent)
- Dosimeter, 0-200 R range (CDV-742)
- Dosimeter, 0-20 R range (CDV-730 or equivalent)
- Optically Stimulated Luminescent Dosimeter (OSLD)
- Potassium Iodide (KI) tablets
- KI Package Insert
- Dosimetry Report Form

- B. All equipment is inventoried and operationally checked. Radiological monitoring kits issued to local emergency response units are calibrated or exchanged annually. Direct-reading dosimeters are leak tested and instruments are calibrated annually and by the Ohio EMA; if necessary, OSLDs are annealed annually by the County's vendor. Maintenance of this equipment is performed per manufacturer's recommendations and is the responsibility of the Ohio EMA RRA who shall ensure that an adequate reserve of kits is maintained at the Columbiana EMA office for exchange or substitution as needed. (See Enclosure 3). Electronic records of maintenance and calibration are retained by the Ohio EMA RRA.
- C. Columbiana County does not conduct fixed radiation monitoring.

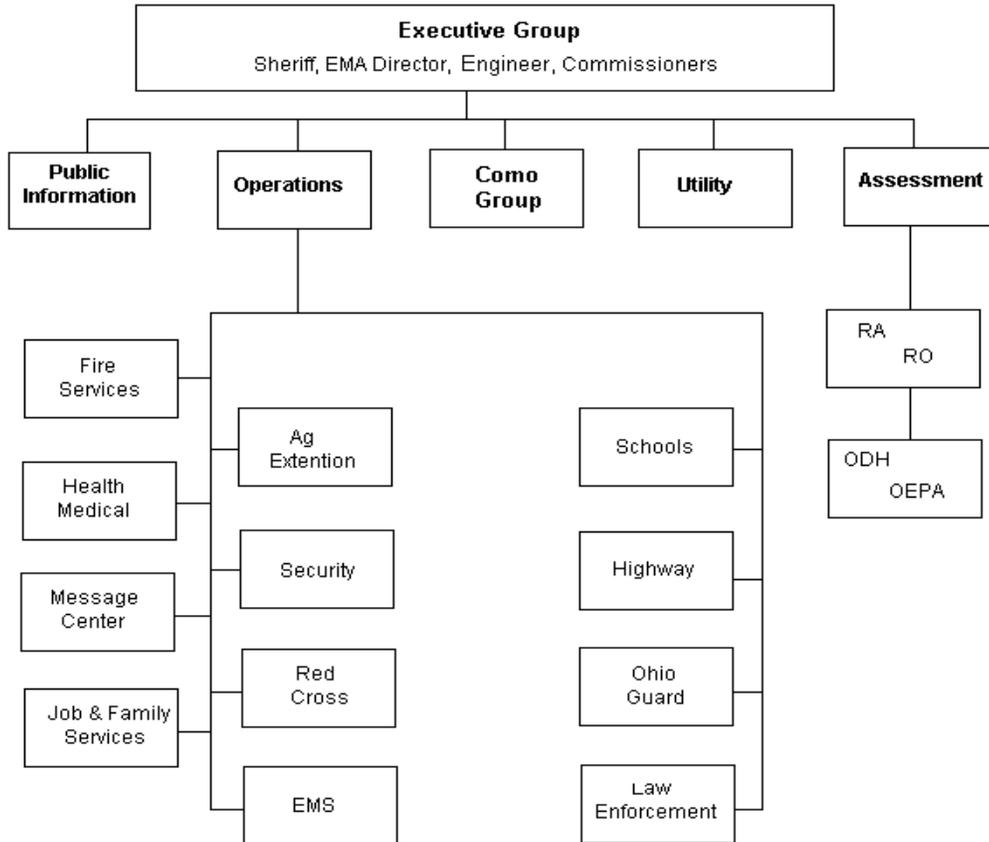
IV. FIELD MONITORING

Dose assessment, Field monitoring, and Interpretation of data is provided to the county by the State of Ohio.

SECTION II - PART H

Enclosure 1

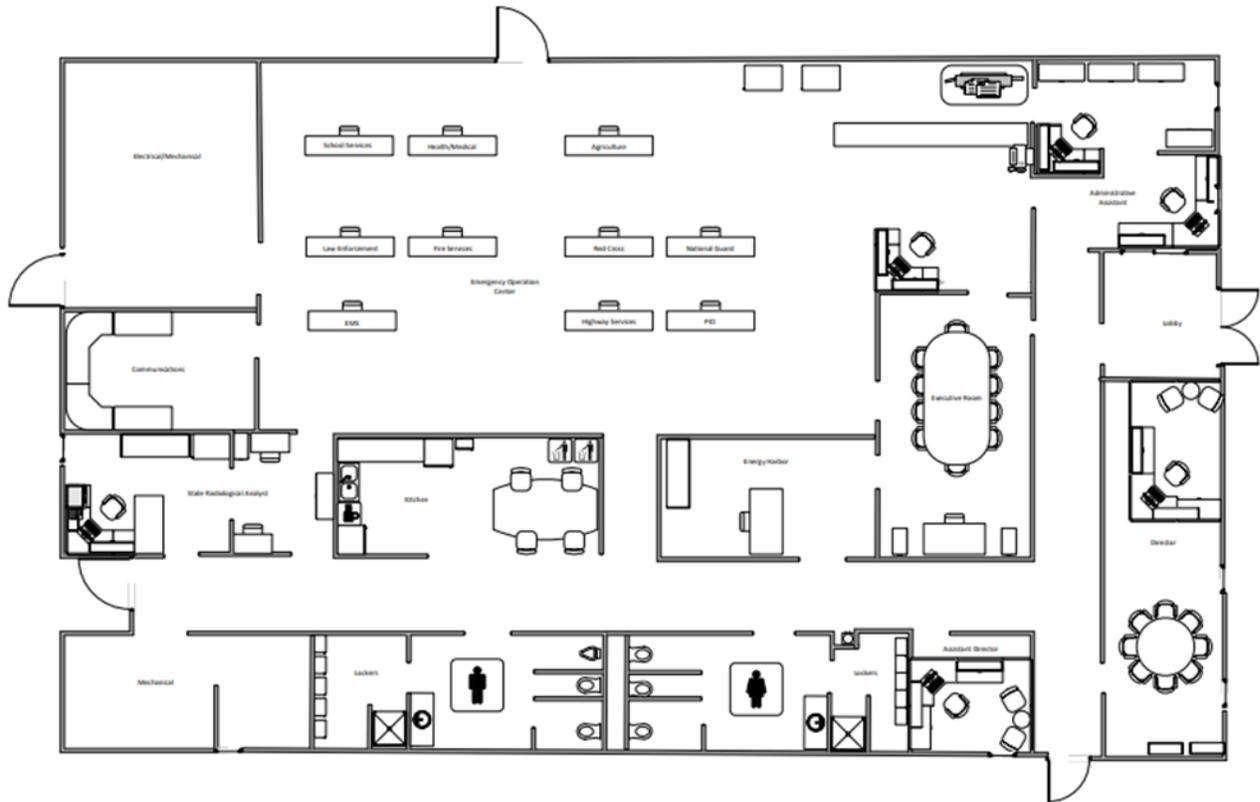
COLUMBIANA COUNTY EOC ORGANIZATION



SECTION II - PART H

Enclosure 2

COLUMBIANA COUNTY EOC.



ALTERNATE EOC

Columbiana County also has mobile Incident Command and Communication trailers available to be deployed as needed. An Alternate EOC agreement is being prepared with County Jobs and Family Services. Radiological concerns from BVPS should not require a need to relocate the EOC,

SECTION II - PART H

Enclosure 3

RADIOLOGICAL MONITORING STATIONS/EQUIPMENT

Radiological Monitoring Kits, Dosimeter Packets, and Portal Monitors are distributed at the following locations.

The kit may contain:

- Ludlum Model - 3
- CDV-750 dosimeter charger

The dosimeter packet may contain:

- CDV-742 dosimeter, CDV-730 dosimeter, CDV-138, OSLD, Dosimeter Report Form, Packet of KI with relating instructions.

-- Contents of Packets and Kits may be modified as necessary --

Organization	Lud 3	CDV-138s	Kits with OSLD	Kit #s	OSLD xtra	Non-Kit OSLD #s	KI
Beaver Local Sch Bus	0	0	30	202-231			30
Calcutta FD	0	0	12	29-40			12
Calcutta Healthcare Center	0	0	10	232-241	50	421-470	150
Columbiana Cnty Ed Serv Cnt Bus	0	0	10	166-175			11
Columbiana Cnty EMA 1	0	0	1	1			1
Columbiana Cnty EMA 2	0	0	1	2			1
Columbiana Cnty EMA 3	0	0	1	3			1
Columbiana Cnty EMA 4	0	0	1	4			1
Columbiana Cnty EMA EXTRA	3	44	24	28,398-420	40	661-700	400
Columbiana Cnty EMA TRAINING	6	0	0				0
Columbiana Cnty Garage	0	0	4	96-99			4
Columbiana Cnty Sheriff	0	0	26	176-201			26
Columbiana EMS	0	0	4	394-397			4
Community Action Bus CARTS	0	0	27	124-150			27
Dixonville FD Liverpool Twp	0	0	12	270-281			12
E Liverpool FD	0	0	27	341-367			27
E Liverpool Hospt	0	0	10	380-389	70	591-660	200
E Liverpool PD	0	0	4	368-371			4
E Liverpool Sch Bus	0	0	25	296-320			25
East Palestine FD	0	0	8	20-27			8
Glenmoor FD	0	0	6	286-291			6
Heritage Thermal Services	0	0	8	372-379	20	571-590	20
LaCroft FD Liverpool Twp	0	0	10	260-269			10
Leetonia FD	0	0	4	390-393			4
Liverpool Twp PD	0	0	4	282-285			4
Middleton Twp. FD/EMS	6	0	25	41-65			25
New Waterford FD/EMS	0	0	4	16-19			4
Ohio DOT	0	0	6	118-123			6
Ohio EMA	0	1	1	5			1
Ohio National Guard	0	0	30	66-95			30
Ohio State Hwy Patrol	0	0	18	100-117			18
Orchards of E Liverpool 1	0	0	6	321-326	35	471-505	75
Orchards of E Liverpool 2 Rehab	0	0	4	327-330	15	506-520	20
Allegiant Services(CCDD)	0	0	15	151-165			15
Salem Community Hospital	3	10	10	6-15			10
St Clair Twp PD	0	0	4	292-295			4
Valley Oaks Care Center	0	0	10	331-340	50	521-570	150
West Point FD	6	0	18	242-259			18

SECTION II - PART H

Enclosure 4

EMERGENCY SUPPLIES/EQUIPMENT

- A. Each EOC Staff member will have available the following supplies:
1. County RER Plan
 2. County EOP
 3. County Resource Manual
 4. Appropriate Standard Operating Guidelines
 5. Message Forms
 6. Telephones
 7. Telephone Books
 8. Pens/Pencils
 9. Tablets
 10. In/Out Box
- B. Fire, police, and ambulance services have necessary equipment required for day-to-day activities (i.e., turnout gear, protective headgear, appropriate respiratory protection, medical supplies, etc.) and will serve as emergency equipment in the event of a radiological incident.
- C. The Red Cross will supply the cots and blankets used at the County Care Centers.

SECTION II - PART H

Enclosure 5

ACTIVATION AND MANNING OF COUNTY EOC

The notification of staff and manning for the Columbiana County EOC will be in accordance with the requirements of the emergency classification declared by the Beaver Valley Power Station follows:

1. UNUSUAL EVENT:

Notification of County EMA.
No activation or staffing required.

2. ALERT:

Notification of the following staff as required:

1. **County EMA ***
2. County Commissioner Representative
3. **Sheriff ***
4. County Engineer
5. Communications Officer
6. State Resident Radiological Analyst
7. Operations Officer
8. Security
9. Public Information Officer
10. **Fire Services Officer ***
11. Law Enforcement Services Officer
12. Highway Services Officer
13. **Health/Medical Officer***
14. School Services Officer
15. Agriculture Officer
16. Red Cross
17. Message Center Director
18. Communicators
19. Runners/Loggers/Plotter
20. Radiological Officer
21. Utility Liaison
22. Emergency Medical Services Officer

***EOC will be declared operational when starred positions are staffed.**

SECTION II - PART H

3. SITE AREA EMERGENCY:

Activation of the following staff as required:

1. County EMA
2. County Commissioner Representative
3. Sheriff
4. County Engineer
5. Communications Officer
6. State Resident Radiological Analyst
7. Operations Officer
8. Security
9. Public Information Officer
10. Fire Services Officer
11. Law Enforcement Services Officer
12. Highway Services Officer
13. Health/Medical Officer
14. School Services Officer
15. Agriculture Officer
16. Red Cross
17. Message Center Director
18. Communicators
19. Runners/Loggers/Plotter
20. Radiological Officer
21. Utility Liaison
22. Emergency Medical Services Officer

4. GENERAL EMERGENCY:

Requires the same staffing as SITE AREA EMERGENCY

SECTION II - PART H

Enclosure 6

EMERGENCY OPERATIONS CENTER EQUIPMENT, DISPLAYS AND FUNCTIONS

The County EMA maintains the EOC and during emergencies, operates it, ensuring that it remains operational 24 hours a day throughout the emergency. During an emergency, the EOC becomes the operations base of the County government.

A. Functions

- 1) Formulation of appropriate actions for the protection of the public.
- 2) Posting of information and operations data to enhance coordination among response organizations.
- 3) Establishment of central location for coordination of response efforts.
- 4) Provision for work areas for personnel who staff it during emergencies.

B. Equipment

1) Furniture

Tables & Chairs

2) Telecommunications (Ref. Section II-F)

Telephones / Fax machines / Television / AM/FM Radios

3) Office Equipment

Photocopiers / Computers / Typewriter / Message Trays

4) Facility Support

- a) Kitchen Equipment
- b) Emergency Generator

5) Maps

- a) Sector map with sub-areas
- b) Radiological monitoring/plume map
- c) Traffic/Perimeter control map
- d) Siren location map
- e) Primary Evacuation Routes map
- f) Reception Center map
- g) Field monitoring points map

6) Status Boards

- a) Weather/meteorological status board
- b) Care Center status board
- c) Major events status board
- d) Plant status board
- e) Field monitoring status board

- 7) Back-Up AC power for the facility is provided by the county Engineer's system, it is tested weekly and records are available.

SECTION II - PART H

Enclosure 7

Emergency Worker Decon Center / Reception Center Inventory

Administrative Kit
Aprons
Booties
Brush
Bucket
China Markers
Clipboard
Dry Erase Marker
Duct Tape
Garbage Bags
Gloves Latex
Handy-wipes
Latex Gloves
Masking tape
Paper Clips
Pencils
Pens
Permanent Marker
Probe covers
Rope
Rubber Gloves
Scissors
Scotch Tape
Shampoo
Soap
Sponge
Stapler w/staples
Surveyor tape
Towels
Utility Knife w/blades
Writing Tablet
Zip Lock Bags

SECTION II - PART I

ACCIDENT ASSESSMENT

I. PURPOSE

This section will describe the accident assessment and radiological monitoring activities in the 10-mile Emergency Planning Zone (EPZ) in Columbiana County.

II. OBJECTIVE

Accident assessments are those actions taken to determine the extent and nature of an incident, to determine the stability of the situation, and to determine or project the consequences of the incident. The State of Ohio will assure that assessment will be made independently from the nuclear power plant in the event of a radiological emergency condition. (Ref. [Ohio REP Operations Manual](#)).

III. RESPONSIBILITIES

A. Beaver Valley Power Station

Initial assessment of the emergency and evaluation of the radiological release consequences will be performed by Beaver Valley Power Station (BVPS) personnel in accordance with the Station Plan and associated procedures. Based on plant parameters and atmospheric dispersion models, BVPS will determine the projected dose values. Designated BVPS personnel will direct all operations at the Beaver Valley Site, and in the event of an emergency, will advise appropriate State and County governmental agencies of the situation, and will provide recommendations to mitigate the offsite consequences of the incident.

Installed instrumentation systems at the BVPS provide onsite personnel with a continuously updated status of plant system conditions. The facility is manned, on an around the clock basis, by a staff of operating personnel who have been thoroughly trained in onsite emergency plans. Consequently, these individuals are in a position to assess the accident and report the assessment and recommendations for protective actions to State and County officials. BVPS operations personnel will accomplish initial offsite monitoring. Monitoring will be continued after the State of Ohio monitoring personnel arrive to assess the offsite radiological impact. The information will be disseminated to State and County EMA organizations to assist in protective action decisions.

B. State Government

The Ohio Department of Health (ODH) has the primary responsibility for accident assessment in the 10-mile EPZ in Columbiana County. ODH is responsible for supplying Potassium Iodide (KI) to County Health Departments for storage/distribution to Schools and the General Public as appropriate. In addition, ODH supplies KI to the Ohio EMA Resident Radiological Analyst for pre-distribution to Emergency Workers and Special Facilities in advance of an incident. The Ohio EMA has the primary responsibility for environmental radiological monitoring in the 10-mile EPZ in Columbiana County.

SECTION II - PART I

1. The State of Ohio will send field monitoring teams with radiological survey instrumentation to pre-selected locations in Columbiana County (Reference **State REP Operations Manual, IX. NUREG-0654 Criteria J**, for specific locations). The teams will be dispatched from the Ohio EMA Headquarters in Columbus upon declaration of an ALERT, SITE AREA EMERGENCY or GENERAL EMERGENCY at BVPS. **The estimated travel time to Columbiana County is three (3) hours.** Upon arrival at a staging area, the monitoring teams will then be deployed to designated field monitoring locations. ODH will dispatch personnel to the area to screen and prepare samples for transport to Columbus.
2. The State of Ohio FMT's will take air samples and ambient readings and report the results to the State Dose Assessment Team located in the State Emergency Operations Center (EOC). The Field Team Center and County EOC will receive this information concurrently. (Reference **State REP Operations Manual, IX. NUREG-0654 Criteria I** for activation, notification means, field team composition, transportation, communications, equipment and deployment times.)
3. The State Dose Assessment Team will assess the hazard and consequences of any radiological releases from BVPS based upon field monitoring results and data from the Utility. This assessment will be provided to the Governor or their designated representative in the State EOC. The Governor or their representative, in consultation with other members of the decision-making group, will formulate recommendations for protective actions to be taken. The decision to issue a recommendation for General Public, emergency workers and institutionalized personnel to take KI may be made by the ODH, based upon the EAL or projected dose to the thyroid exceeding 5 rem CDE. All protective action recommendations will be transmitted to the Columbiana County Commissioners **or their designated representative** via telephone line. State staff will conduct Dose Assessment in the County EOC only as an assistance to the Executive Group. Official Dose Assessment occurs at the State EOC.
4. Three State representatives located in the County EOC will be available to act as advisors to the County Commissioners, as needed on protective action recommendations and dose assessment. They are:
 - a. Radiological Health Specialist, Ohio Department of Health
 - b. Resident Radiological Analyst, Ohio EMA
 - c. On-Scene Coordinator, Northeast District Office, OEPA.
5. Ingestion Pathway sampling and analysis are provided by the state Ingestion Zone Recovery Reentry Assessment Group (IZRRAG).

SECTION II - PART I

C. County Government

1. The Columbiana County Commissioners will consider State and Utility recommendations along with other applicable information as the basis for making protective action recommendations to the public in the 10-mile EPZ in Columbiana County.
2. Columbiana County Emergency Management Agency maintains a limited radiological monitoring capability within the county. This capability is available for response to radiological incidents and is arranged by the Columbiana County EMA Director. Some of the county radiological monitoring personnel maintain radiological instruments (CDV-700, CDV-715, and Ludlum Mod-3). The assigned instruments are operationally tested and periodically calibrated (See Section II, Part H, and Paragraph III). These county radiological monitoring personnel will be utilized for contamination monitoring at various Reception Centers and Emergency Worker Decontamination Stations. The County EMA Director will provide technical assistance on all recommendations from BVPS and State accident assessment efforts to the Board of Commissioners and other EOC personnel, as necessary, to assist in the analysis of protective actions.

IV. PROCEDURES

- A. Personnel from the Beaver Valley Power Station will provide recommendations to local government via telephone lines backed up by Beaver Valley Power Station radio systems. Depending upon the severity of the incident Emergency Classification System, County government will respond initially to the recommendations of BVPS until independent assessment can be **completed by the State EOC and communicated via State Protective Action Recommendations.**
- B. The State has assigned a Resident Radiological Analyst to the Columbiana County EOC to assist the county in the interpretation of the technical information provided by BVPS, **State EOC, and State Field Monitoring Teams.** The Analyst will be in radio and telephone contact with BVPS. **State Radiological Field Monitoring Team (FMT) information is obtained from the State FMT Coordinator located with the County Assessment Group** to provide timely information and recommendations to the county emergency response personnel.
- C. All measurements taken in Columbiana County by State monitoring teams will be reported to the Dose Assessment Team in the State EOC, who in turn, will pass information to the County Assessment Group. In addition, the Ohio EMA representative located in the BVPS Emergency **Operations** Facility may monitor radio transmissions of field sampling data **(through the State communications van).** The same information may be obtained directly in the County EOC Communications Center over the State EMA frequency.

SECTION II - PART I

- D. The central field monitoring data reception, collection and analysis for the State of Ohio is in Columbus. Radiological environmental samples will be transported to appropriate laboratories for analysis. Collection of field samples from State sampling teams shall be at a sample screening point as established by ODH.

SECTION II - PART J

PROTECTIVE RESPONSE

I. PURPOSE

This section identifies the basis for decisions regarding protective actions recommended to the public, the implementation of those protective actions and the provisions made for continued protection of emergency workers and care of evacuees.

II. RESPONSIBILITIES

The Columbiana County Board of Commissioners are responsible for implementation of protective measures for the affected population and emergency workers. The Commissioners will reach their decisions by weighing information, data, and protective action recommendations from BVPS, the State, Federal and local sources. The decision-making process involves comparison of benefits versus risks and any constraints which may result from each particular action under consideration.

III. METHODS OF ACCOMPLISHMENT

- A. An initial call will be made to the Columbiana County Sheriff's Dispatcher over a telephone line from the BVPS with any initial conditions and/or protective action recommendations from the utility.
- B. As the County EOC is manned, the County Commissioners / representative will have the following guidance to assist in the decision-making process:
 1. The Beaver Valley Power Station will continue to make recommendations to the County EOC for protective actions as the situation warrants.
 2. The County EOC Staff will assist the Commissioners in protective action **decisions**.
 3. A representative from the Beaver Valley Power Station will be present to assist in interpretation of plant status and recommendations.
 4. The Ohio EMA Radiological Analyst for Columbiana County (or the Resident Radiological Analyst in the nearest planning zone) will also be present in the EOC to assist in interpretation of data and protective action recommendations.
 5. The State Assessment Team located in the State EOC and activated at an "ALERT" shall make protective action recommendations through the Governor to County officials via a telephone call/facsimile. Some of the variables that will influence decision making regarding protective actions for the 10-mile Emergency Planning Zone are:
 - a. Projected radiation dose
 - b. Measured radiation dose
 - c. Portion of EPZ affected
 - d. Time available to take an action that could reduce radiation doses.
 - e. Radiation dose pathway
 - f. Available resources
 - g. Local weather and/or road conditions
 - h. Plant conditions
 - i. Direction of release

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6. The criteria established in EPA-400-R-92-001, Manual of Protective Action Guides And Protective Actions For Nuclear Incidents, and the protective action guides established by the Dept. of Health and Human Services/Food and Drug Administration for the ingestion of food, water, and milk.
 7. Ohio **REP Operations Manual**.
 8. Maps/ Evacuation Route monitoring location centers will be maintained and updated annually by county EMA.
- C. Upon arrival in the county, and as they become operational, the State Field Monitoring Team(s) will provide monitoring data to the County and State EOCs.
 - D. The State EOC will provide recommendations to the County EOC for protective actions. An Ohio EMA Radiological Analyst will provide guidance.
 - E. A means of relocation for residents within the affected area will be via public and private transportation and based on the BVPS evacuation time estimate (See III.T, below).
 - F. Means for protection of **those with access and functional needs**, or institutionalized population will be provided by public and private transportation with the Ohio National Guard providing additional transportation, if required, after local resources have been expended. Service is to be established through the implementation of mutual agreements and/or through the military support to civil authorities (ONG) and evacuate in order: Hospitals, Nursing Homes, Registered Daycares, and Residences.
 - G. The use of Radioprotective drugs is addressed in the State Plan
 - H. Care Centers for all county residents residing in the affected area are located within Columbiana County.
 - I. Projected traffic capabilities of evacuation routes are listed in Enclosure 1.
 - J. Control of access to evacuated areas will be a responsibility of the Columbiana County Sheriff and the Ohio State Highway Patrol.
 - K. Due to the location of BVPS the evacuation of site personnel is addressed in the Beaver County, Pennsylvania plan, if employees reach Ohio they are treated as general evacuees.
 - L. Columbiana County has a past history of seasonal flooding in low-lying areas due to its geographical location with respect to the Ohio River and its tributaries. Because of these situations, alternate evacuation routes may be required. This decision will be coordinated at the county level as the situation requires.
 - M. In complying with NRC requirements for evacuation time estimates, local, county and city agencies were consulted. These agencies provided information and

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opinions concerning their institution and the overall evacuation procedures for local residents. **The Evacuation Time Estimates are periodically updated by the Beaver Valley Power Station and Energy Harbor Nuclear.**

- N. A small section of Columbiana County is within 5 miles distance from BVPS. Sub-Area 0-1, the eastern end of East Liverpool and Liverpool Township, has only 798 residents. Sub-Area 0-2 extends from 0-1 to the western boundary of the EPZ; this area includes most of East Liverpool and part of Liverpool Township, with 14,174 residents. Sub-Area 0-3, the eastern portion of St. Clair Township, including the community of Calcutta, has 5428 residents. Farthest north, Sub-Area 0-4 in Middleton Township has only 156 residents (See Attachment-5 for Sub Area description). The EPZ in Columbiana County has a total of 20,556 residents.

O.

EPZ Permanent Resident Population as per ETE "2012"		
Sub-Area	Year 2000	Year 2010
1	756	798
2	16,328	14,174
3	5,386	5,428
4	165	156
TOTAL	22,635	20,556

- P. Columbiana County is subject to severe seasonal storms. High winds and rain, coupled with run-off, have contributed to serious flooding of low-lying areas associated with high river levels. Additionally, the County has been threatened from the effects of heavy snowfalls, mud slides and other natural disasters. Any one or a combination of these "adverse" situations can add a period of hours to the overall time for an evacuation. All estimates are, therefore, considered to be conservative in nature

- Q. **SPECIAL FACILITIES**
Schools and day care facilities within the State of Ohio's portion of the ten-mile radius of BVPS could be evacuated within the time frames indicated in Enclosures 13 and 14. Special attention must be given to the hospitals and nursing homes in the City of East Liverpool, 8-9 miles west of the Beaver Valley Power Station.

- R. **NOTIFICATION**
Notification of an emergency at the BVPS for the State of Ohio is based upon a combination of systems; electronic warnings via sirens, radio, and television messages; and **Columbiana County Electronic Notification System (ENS).**

- ~~S. **CONFIRMATION**
Upon receipt of notification, Ohio residents are to place a previously provided "I Have Been Notified" sign in a front window or doorway. As an alternative, or backup, a white cloth may be tied to a door handle. Fire departments will drive assigned routes or territories and look for confirmation signs.~~

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S. ETE from 2012 KLD Engineering study

Table 7-1. Time to Clear the Indicated Area of 90 Percent of the Affected Population

	Summer		Summer		Summer	Winter				Winter			Winter	Summer	Summer
	Midweek		Weekend		Midweek Weekend	Midweek				Weekend			Midweek Weekend	Weekend	Midweek
Scenario:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
Region	Midday		Midday		Evening	Midday				Midday			Evening	Midday	Midday
	Good Weather	Rain	Good Weather	Rain	Good Weather	Good Weather	Rain	Snow	Good Weather	Rain	Snow	Good Weather	Special Event	Roadway Impact	
Entire 2-Mile Region, 5-Mile Region, EPZ, and States															
R05	2:20	2:25	2:15	2:20	2:15	2:25	2:30	3:00	2:15	2:20	2:50	2:15	2:15	2:20	

Table 7-2. Time to Clear the Indicated Area of 100 Percent of the Affected Population

	Summer		Summer		Summer	Winter				Winter			Winter	Summer	Summer
	Midweek		Weekend		Midweek Weekend	Midweek				Weekend			Midweek Weekend	Weekend	Midweek
Scenario:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
Region	Midday		Midday		Evening	Midday				Midday			Evening	Midday	Midday
	Good Weather	Rain	Good Weather	Rain	Good Weather	Good Weather	Rain	Snow	Good Weather	Rain	Snow	Good Weather	Special Event	Roadway Impact	
Entire 2-Mile Region, 5-Mile Region, EPZ, and States															
R05	4:40	4:40	4:40	4:40	4:40	4:40	4:40	6:10	4:40	4:40	6:10	4:40	4:40	4:40	

RO5 is the EPZ within Ohio

T. SPECIAL PROVISIONS

Under adverse conditions the possibility of retention of some or all patients and residents of hospitals and nursing homes in those institutions will be considered. Equipment or materials exist within these structures that can be utilized for the purpose of providing shielding or rendering them as safe as possible from the effects of radiation. The trauma that could result from the attempted movement of elderly infirm, or ICU patients/residents could prove to be more hazardous than the possible effects of radiation.

U. ALTERNATE ROUTES OF EVACUATION

Due to the geographical restrictions placed upon lateral movement within this County by rivers, hills, ravines, etc. and the limited number of bridges across waterways, and other means of by-passing obstacles, there are no preplanned alternate routes of exit from the 10-mile EPZ as a whole, however, within certain areas, such as the City of East Liverpool, local officials will work to develop such alternate means of exit as are available and required within the community and inform the public of any changes involving the exit planning process. Routes available for use in an evacuation include County Route 428 North (Sprucevale-St. Clair Avenue), County Route 447 North (Dresden Avenue), State Route 39 West, and State Route 7 South. These routes will only be used if the preplanned routes are impassable or overcrowded.

IV. PROTECTIVE ACTIONS - IMPLEMENTATION

There are two types of protective actions which may be recommended by the County Commissioners and broadcast to the public over EAS and **County ENS**: Sheltering in place and Evacuation.

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A. Sheltering-in-Place

1. Sheltering-in-Place may be recommended for the rapid passage of a plume, or when weather or road conditions indicate that sheltering would be safer than requesting an evacuation.

If sheltering-in-place is the protective action recommended to the public, they will be instructed to do the following:

- a. Remain indoors with ventilation system turned off and doors and windows closed. Limit exposure outside. Ensure that livestock and pets are adequately sheltered. While outdoors, cover the mouth with a cloth. Before returning indoors, leave outer clothing outside.
 - b. Monitor local radio/television stations that carry EAS for further instructions/information.
 - c. Transients will be informed to take shelter in a public building, such as a police or fire station, library, school, etc.
 - d. School children will be sheltered-in-place, if necessary. Parents should not try to pick them up unless advised. Use telephone only for emergencies.
2. In response to a sheltering-in-place recommendation in Columbiana County, the Law Enforcement Officer will coordinate with the Ohio State Highway Patrol, Ohio Department of Transportation (ODOT), local police departments, and the County Engineer's Office as necessary to control access to the affected area.
 3. The Fire Service Officer in the county EOC will notify local fire departments of the sheltering-in-place recommendation.
 4. Affected citizens with access and functional needs and special facilities, including schools and health care facilities will be notified of the sheltering-in-place recommendation by appropriate County EOC personnel. The County School Services Officer will notify school district superintendents. Health/Medical Officer will notify the health care facility administrators, **and other special facilities**, in the affected area of the recommendation.
 5. The EMS Service Officer in the county EOC will notify local ambulance companies of the sheltering recommendation.

B. Evacuation

1. If evacuation is the recommended protective action, residents will be instructed to leave the affected area along designated routes and go to specific Reception Centers. At the reception centers, the evacuee and vehicle will be checked for contamination (if potential for contamination exists) and decontaminated as needed. They will then be directed to a Care Center for registration, if necessary. Officials registering evacuees at Care Centers will use the standard American Red Cross **Disaster Shelter Registration** forms.
2. If an incident occurs while school is in session, the County School Services Officer will notify public school officials of the emergency, including

SECTION II - PART J

notification of an evacuation recommendation. School officials will ensure that appropriate protective actions are taken for students in their care. Consideration will be given to relocating school children at SITE AREA EMERGENCY, in advance of an evacuation recommendation for the general public. In the event of a rapidly escalating incident, school children will receive priority use of evacuation resources. Children not already picked up by parents will be transported by buses and drivers from school districts within the county. School children living within the EPZ but attending schools outside the EPZ will be retained at their school for parental pickup. Parents will be informed of their child's location through local radio and television announcements, and internal school electronic notification systems.

3. Licensed Day-Care providers are advised of protective actions by the County Health/Medical Officer. ~~Job and Family Services representative.~~
4. Most evacuating population will travel in their own vehicles, driving out of the EPZ. (See Enclosure 1 for evacuation routes.) People in need of assistance (such as transportation) will be informed via EAS/ENS messages where to call for assistance. When a decision is made to evacuate the public, school district buses not needed for evacuation of school children will be dispatched to the affected area. People in densely populated areas of the EPZ (East Liverpool) will be picked up at designated transportation pickup points. (See Enclosure 17 for a listing of transportation pickup points.)
5. A list of people with Special Needs (mobility impaired, hearing impaired, etc.) is maintained by the County EOC and is available to the County Health/Medical Officer and EPZ fire departments for use in any emergency. The Special Needs listing shall be updated yearly as part of the Public Information Brochure mailed directly to homes within the EPZ. The brochure contains a postpaid mail-in card requesting information on specific needs (including transportation) that could require special attention during an evacuation. The cards are pre-addressed to the Columbiana County EMA who shall ensure that listings available to the Health/Medical Officer are kept up to date. Access and Functional Needs residents will be provided transportation depending upon their needs.
6. The Health/Medical Officer at the Columbiana County EOC will notify affected citizens with access and functional needs and health care facility administrators (hospital, nursing homes, and group homes) of the emergency, including notification of an evacuation recommendation. The administrators will ensure that appropriate protective actions are taken for patients in their facility. The Health Medical officer will coordinate with receiving facilities to ensure equal level of care is provided. Transportation requirements beyond the capability of the facility will be reported to the County EOC. Patients unable to ride on a bus will be transported by local emergency medical service ambulance units, supported by necessary other ambulance units, to host facilities in northern Columbiana County. (See Enclosure 14 for a listing of health care facilities and respective host facilities.) Other patients will be transported by local school district buses

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~~and volunteer drivers.~~ Residents in group homes will be evacuated by the staff in facility and personal vehicles, with local school district bus support, as needed. Transportation needs for individuals will also be addressed with School Services and/or EMS Officers. (See Enclosure 15)

7. Care Centers will be staffed with American Red Cross (ARC) volunteers supported by regular school cafeteria, maintenance, and security personnel. ARC is responsible for management of Care Centers, including registration of evacuees upon their arrival.
8. Trained members of local fire departments will monitor evacuees and vehicles at Reception Centers for radiological contamination. All evacuees will be monitored within 12 hours of their arrival at a Reception Center. Appropriate records will be maintained. Those found to be contaminated will be decontaminated at that time. (See Enclosure 2)
9. Transportation for evacuees without personal vehicles will be coordinated by the School Services Officer in the EOC through the County School Districts as available. Pick-up points will be located at school and fire departments located in the 10-mile EPZ.
10. ~~Domesticated pets and Service Animals have consistently been kept in captivity over a long enough period of time that they exhibit marked differences in behavior and appearance from their wild relatives.~~
It is recognized other species of animals may be categorized as pets within individual households the following categories of animals will not be accepted at Reception Centers for monitoring and decontamination; animals classified as livestock, exotic, birds, reptiles, amphibians, fish, and arthropods.
It is likely that pets will be decontaminated to levels preventing the spread of contamination to humans ~~and will be allowed to return to non-detectable levels by natural processes.~~ Monitoring and Decontamination of animals may be delayed due to other priorities.
 - a. All pets will be under the control of their owners at all times. Any animal entering the Reception Center will be collared and on a leash. Under no circumstances should animals be allowed to run freely while at Reception Center locations.
 - b. Monitoring for animals can be accomplished using portal monitors or hand-held portable survey instruments.
 - c. Pet owners will be monitored prior to household pets. If the pet owner is determined to be contaminated, then the pet will automatically be assumed to be contaminated as well.
 - d. For pets requiring decontamination; pet owners will be issued rubber gloves and given detailed instructions on proper decontamination techniques. Decontamination of pets will include washing them with soap and water, or simply using a garden hose to decontaminate.
 - e. Hair, decontamination wash water, excreta, and any other potentially contaminated materials should be collected and held for proper storage and disposal.

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- f. Personnel monitoring forms will be completed for any pets monitored/decontaminated. Forms will be maintained as prescribed by the existing county radiological plan.
 - g. Pet owners will be advised of existing Red Cross policy regarding animals at Care Centers prior to departing the facility.
11. Public Emergency Information Forms are mailed annually to every residential and business address in the 10-mile EPZ. Included in this information packet is a Special Needs Information Card to be completed and mailed to the Columbiana County Emergency Management Agency by any person requiring special attention during an evacuation. These cards are sorted and distributed to appropriate fire departments and the fire departments will assist the General Health District in the evacuation of handicapped or disabled persons. The Special Needs list is maintained and updated annually by the County EMA.
12. Persons requiring transportation will be evacuated using buses. The School Services Officer is responsible for dissemination of school buses. Public information programs will provide information to the public as to the supplies they should bring to the Care Centers.
- C. **Dose Exceedance:** Permission for an emergency worker to exceed their recommended dose **is coordinated through the county EOC** (Enc. 7). Requests will be sent to EOC through the Radiological Office who will consult with the Ohio Department of Health to receive guidance on the request. The RO will advise the Commissioners of the situation to provide approval/denial of the request.
- D. Potassium Iodide is a stable compound of iodine. KI is useful for radiological emergency response; it can be taken orally to saturate the thyroid gland with nonradioactive iodine. It blocks the gland's ability to absorb radioactive iodine.
- KI is only effective against radioiodine and provides no protection from the other inhaled or ingested mixed fission products that are also released during a nuclear power plant loss of containment accident.
- KI is to be used in conjunction with the Sheltering or Evacuation protective action recommendation. The taking of Potassium iodine will not be used as a replacement for evacuation. KI is pre-distributed to residents and schools in the ten-mile emergency-planning zone. If an evacuee forgot his KI, additional doses will be distributed at Reception Centers, as needed for transients and residents.
(See Enclosure 19)
- E. Traffic/Access Control is necessary for the implementation of Sheltering-in-Place and Evacuation actions. Access Control consists of both manned and unmanned roadblocks. Access Control will serve to keep unauthorized persons outside of affected areas. Traffic Control will direct evacuees out of the affected area. The Law Enforcement Officer in the EOC will direct all personnel involved in Traffic/Access Control. The Sheriff, based on information concerning what sub-areas are affected by protective actions, and based on weather and road

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conditions as supplied to him by the County Engineer, may alter Access Control Points and manpower from those previously designated. (See Enclosure 16)

Traffic/Access Control: County Sheriff's Department / Ohio Highway Patrol
Support: Local Police Departments / County & State Highway

Impediments to the flow of evacuation traffic will be addressed on the operations floor by Law enforcement and Highway Services.

- F. Food, Milk, Water, and Livestock Feed Control is the protective action that entails controlling food, milk, water, and livestock feed supplies which may become contaminated. These actions are potentially necessary for the entire ingestion exposure pathway EPZ. Controls are designed to keep radioactive material out of the human food chain. The EMA Director will provide local coordination for County, State, and Federal agencies involved in controlling food, milk, water and livestock feed supplies. The agriculture services agent will work with local government officials to coordinate the output of information and guidance to public safety officials and the agricultural community. These agencies will, however, rely heavily upon the resources of the responsible State and Federal agencies, as outlined in [Section I. NUREG-0654 Criteria A of the State REP Operations Manual](#).
- G. For all ingestion pathway planning purposes, Columbiana County will adopt State of Ohio ingestion pathway protective action guidelines. These PAGs are in agreement with USDA recommendations.

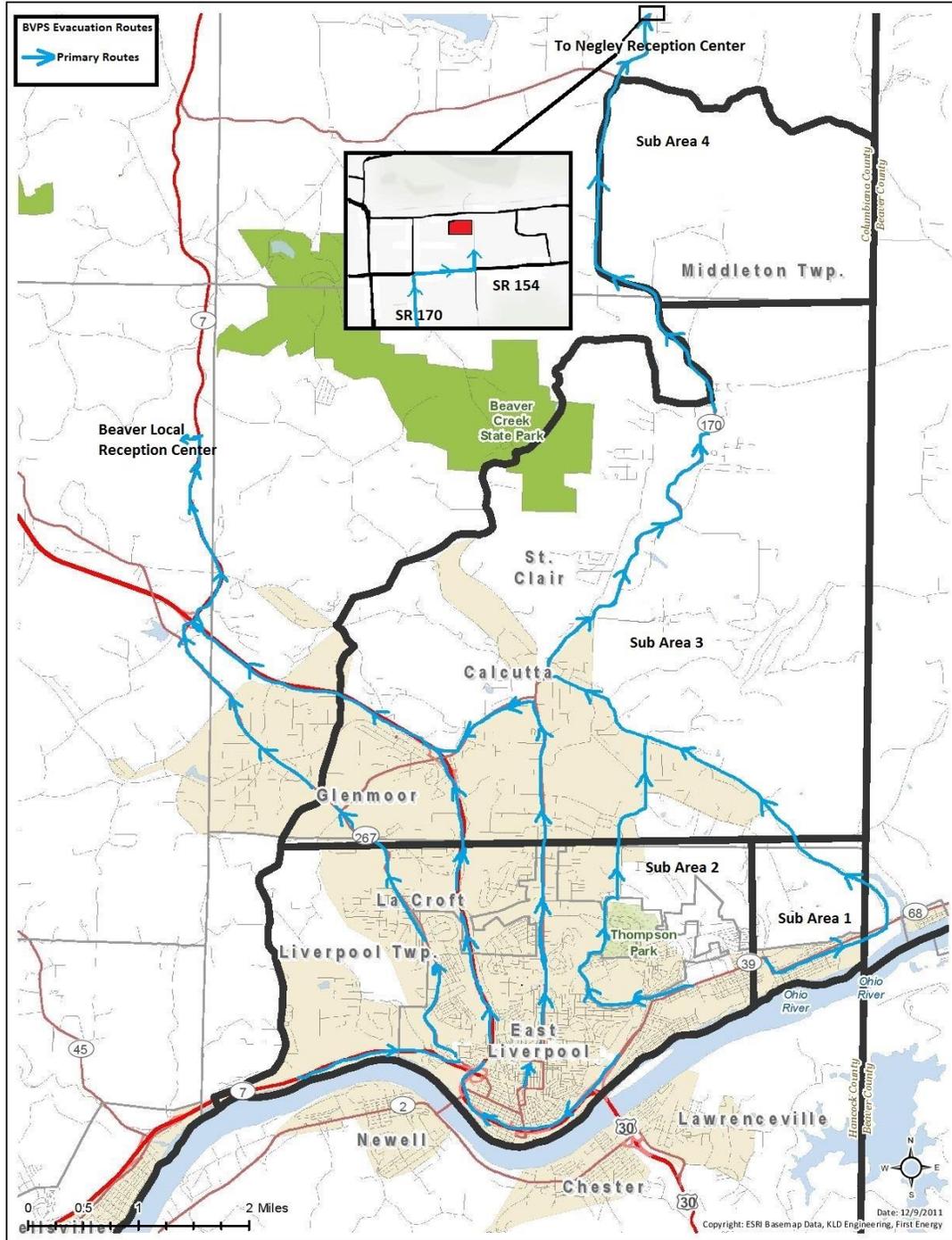
V. ADDITIONAL SUPPORT

- A. Should circumstances dictate a need for additional manpower to operate school buses; provisions for transportation support have been made with the Ohio National Guard. School buses are available for evacuation purposes when a State of Emergency is declared by the state and local governments. The Ohio National Guard (ONG) will receive requested tasks to be conducted from the affected county. The ONG will deploy units based on requested tasks to the staging area as defined by county officials. Dosimetry to include potassium iodide (KI) and training/instructions will be provided by the County RO at the Staging Area. ONG will designate an ONG Dosimetry Coordinator whose purpose is to monitor ONG doses. The ONG Dosimetry Coordinator will work with the County Radiological Officer (RO) to coordinate dose limits and KI as recommended by the Ohio Department of Health.

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Enclosure 1

MAJOR EVACUATION ROUTES
COLUMBIANA COUNTY, OHIO



SECTION II - PART J

Enclosure 1 (Continued)

EVACUATION ROUTES

- I. PRIMARY EVACUATION ROUTES
 - A. Ohio State Route 267 North (Lisbon Rd)
 - B. County Road 435 North (Parkway Rd)
 - C. Ohio State Route 11 North
 - D. Ohio State Route 170 North
 - E. County Road 430 North (Calcutta-Smith Ferry Rd)
 - F. County Road 428 North (Sprucevale-St. Clair Avenue)

- II. ALTERNATE EVACUATION ROUTES
 - A. County Road 447 North (Dresden Avenue)
 - B. Ohio State Route 39 West
 - C. Ohio State Route 7 South

NOTE: For evacuation routes in the city of East Liverpool see Enclosure 12.

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**Enclosure 1
(Continued)**

**Columbiana County
Primary Evacuation Route Capacities**

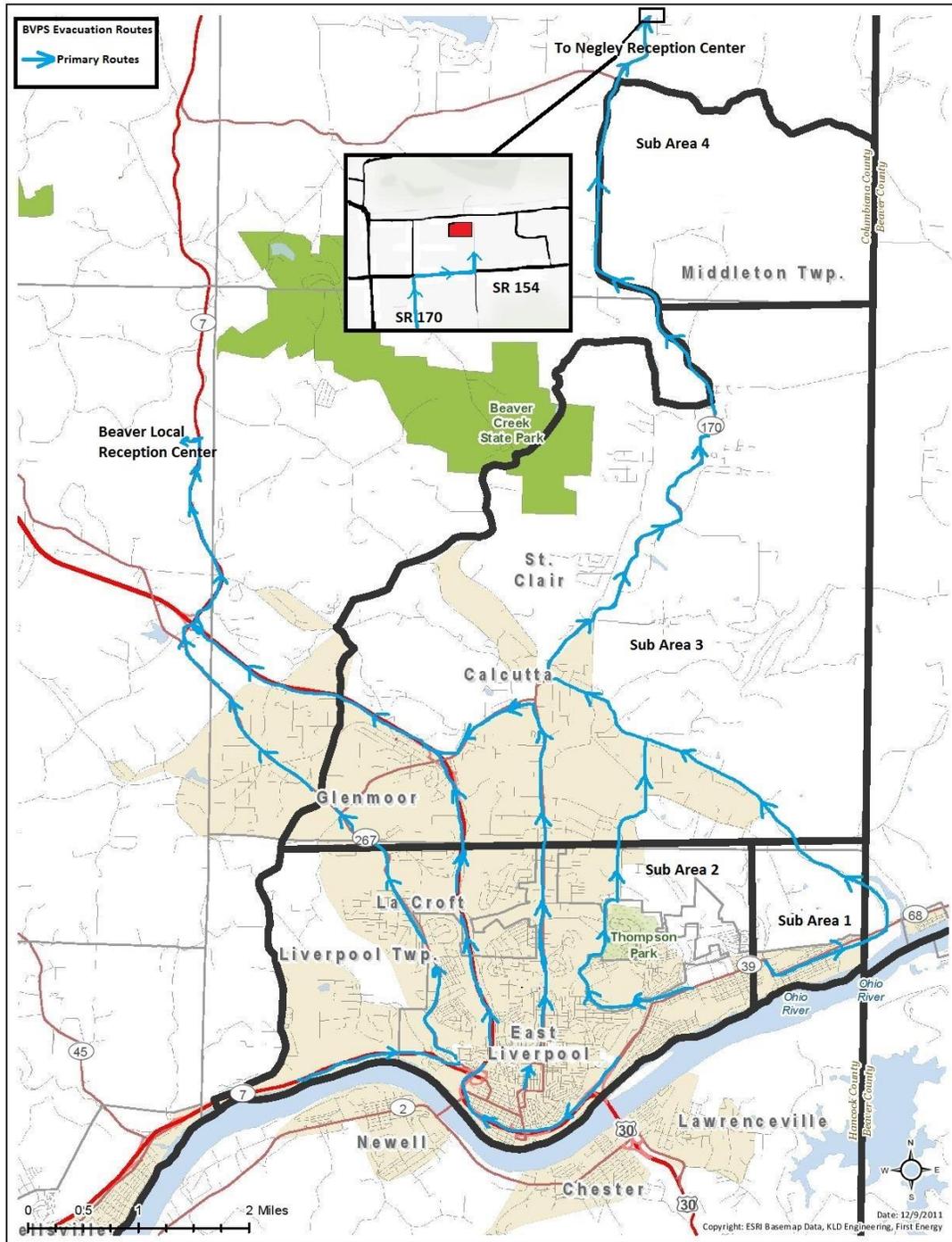
NUMBER OF LANES	HOURLY CAPACITY	ROADWAY IDENTITY *
2	1575	Campground Road
4	1700	OH 7, 11 and 39
4	1700	U.S. 30
2	1700	Sprucevale-St. Clair Ave
2	1350	OH 267
2	1350	Calcutta-Smith Ferry Rd.
2	1350	OH 170
4	2250	ST RT 11

SOURCE: KLD Engineering May 2012 ETE

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Enclosure 2

RECEPTION CENTER LOCATIONS



SECTION II - PART J

Enclosure 2 (Continued)

RECEPTION CENTERS *

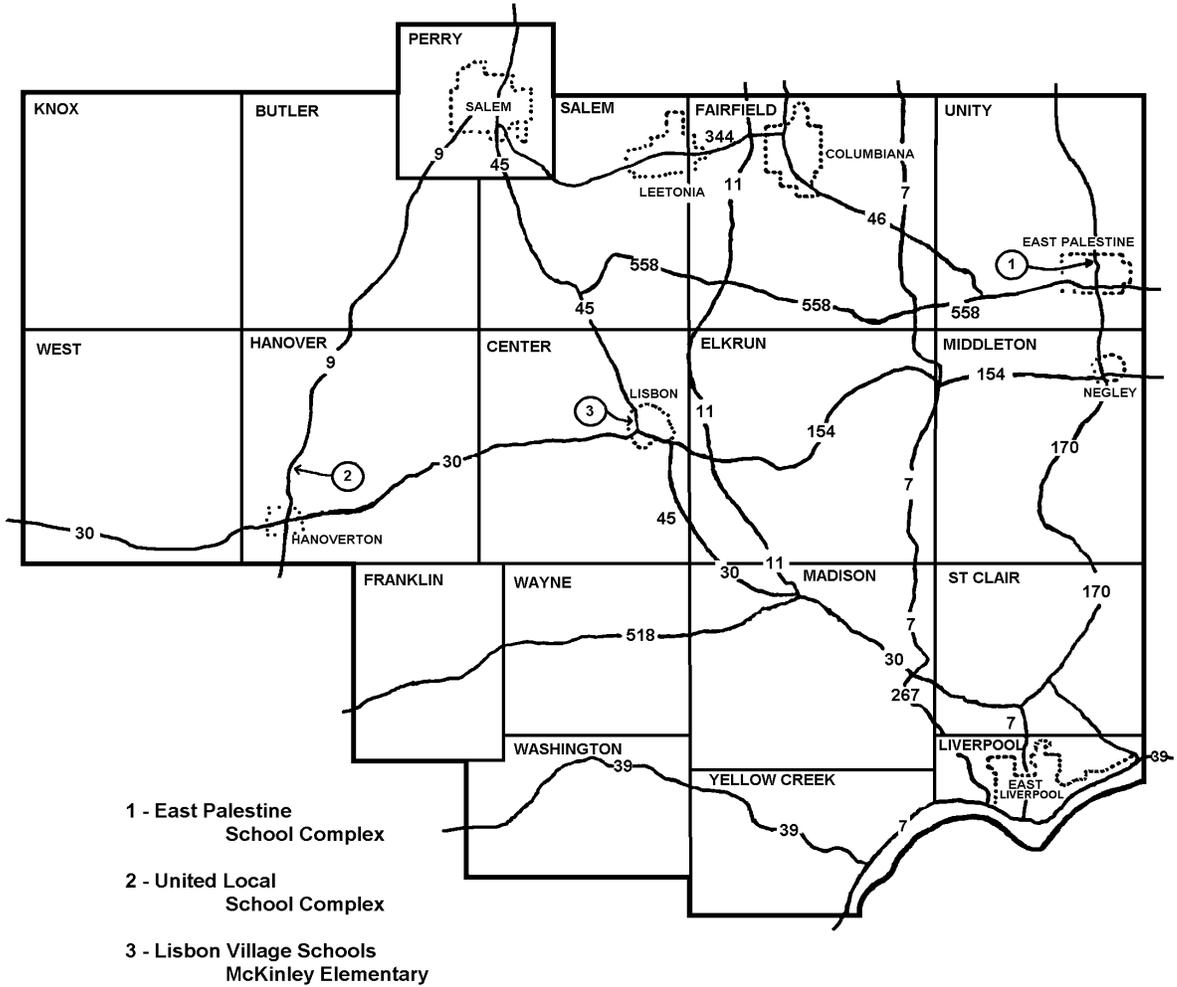
1. Middleton Township Fire and EMS
Richardson Avenue
Negley, Ohio
2. Beaver Local Sports Complex
13187 State Route 7
Lisbon, Ohio 44432

* At Reception Centers evacuees and vehicles will be screened and decontaminated as needed. Directions to the appropriate Care Centers will be provided.

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Enclosure 3

AVAILABLE CARE CENTERS
Columbiana County, Ohio



SECTION II - PART J

**Enclosure 3
(Continued)**

CARE CENTERS CAPACITY

	<u>CAPACITY</u>
1. East Palestine School Complex 360 West Grant Street East Palestine, Ohio	2456
2. United Local School Complex 8143 State Route 9 Hanoverton, Ohio	1559
3. Lisbon McKinley Elementary 441 East Chestnut St Lisbon, Ohio	1113
<hr/>	
Total Capacity in Dedicated Schools	5128

Note:

As per 2010 census:

20556 is the population for the EPZ.

4111 is the 20% planning standard.

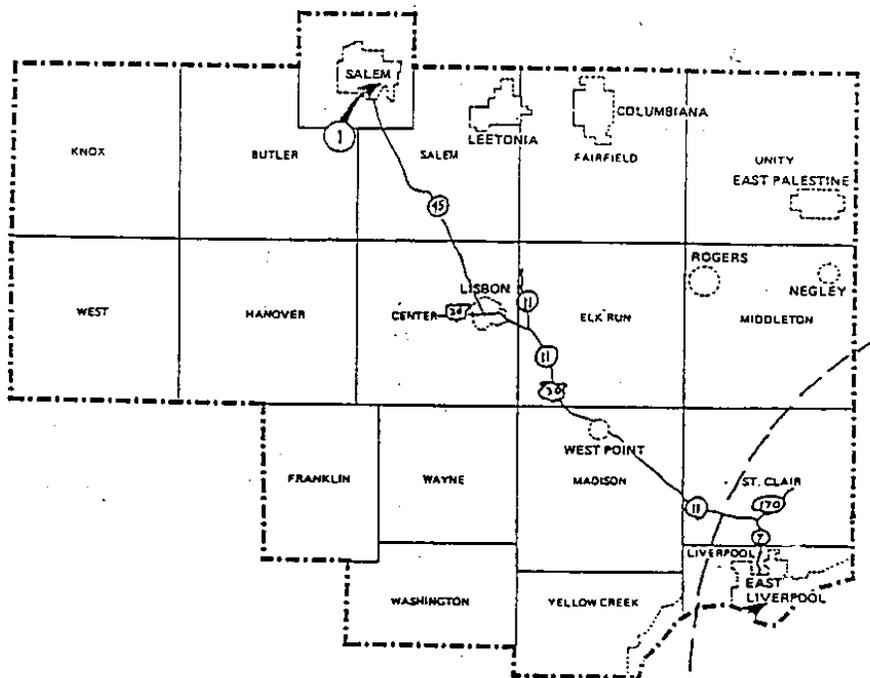
Additional shelters/care centers may be opened as needed by the American Red Cross.

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Enclosure 4

PRIMARY HOSPITAL

COLUMBIANA COUNTY, OHIO



HOSPITAL AND MEDICAL CARE FACILITIES

Primary Salem Regional Medical Center
1995 East State Street
Salem, Ohio
330-332-1551

Back-Up. Weirton Medical Center
601 Colliers Way
Weirton WV, 26062
304-797-6000

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Enclosure 5 - Evacuation Sub Areas and Populations*

Populations 2010 – last US Census

Sub Area 1 - 156

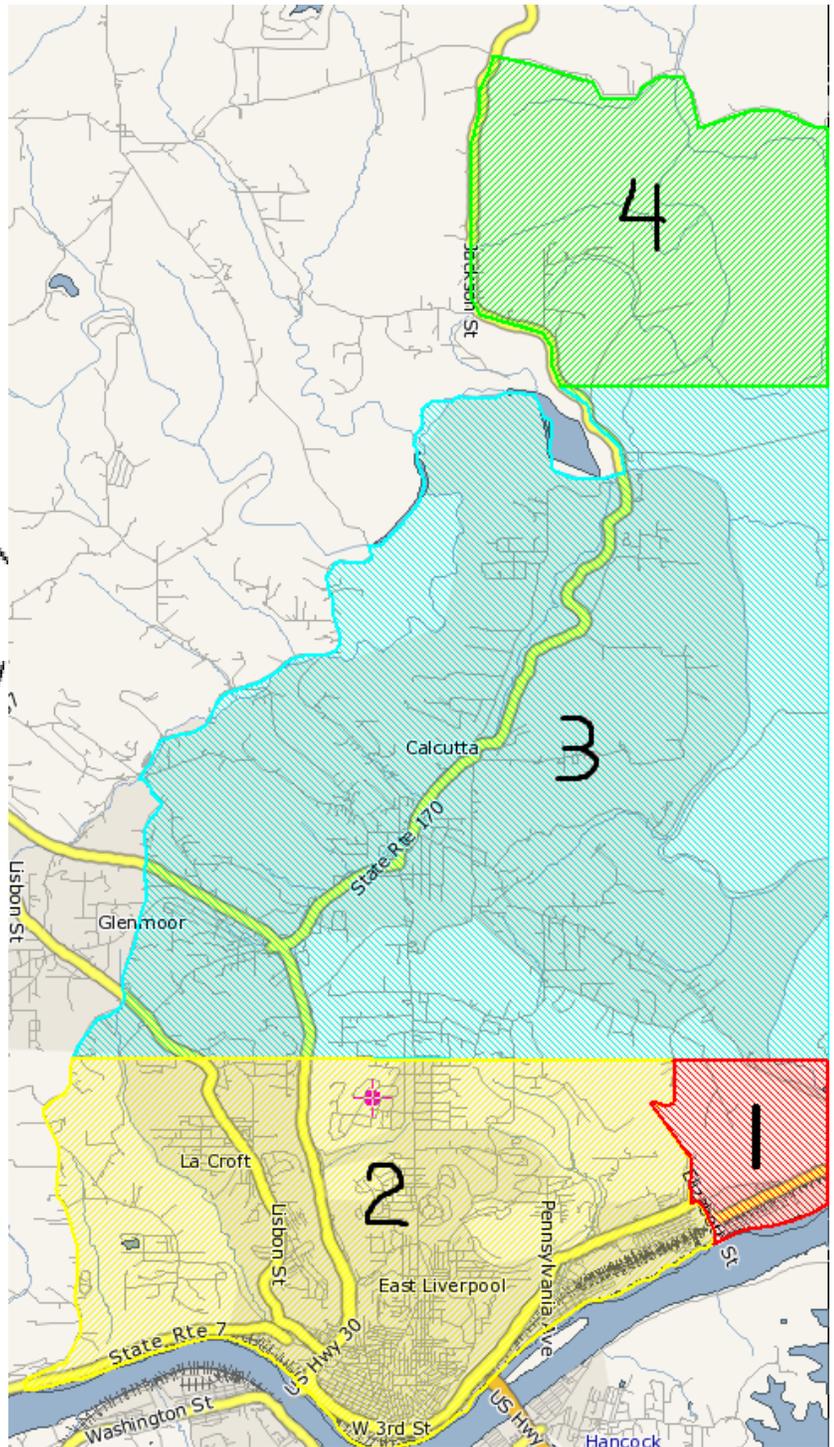
Sub Area 2 – 14,174

Sub Area 3 – 5,428

Sub Area 4 – 156

Total – 20,556

Data is from the 2010 Census.
Populations reflect permanent residents only.
Transient population would increase totals only slightly



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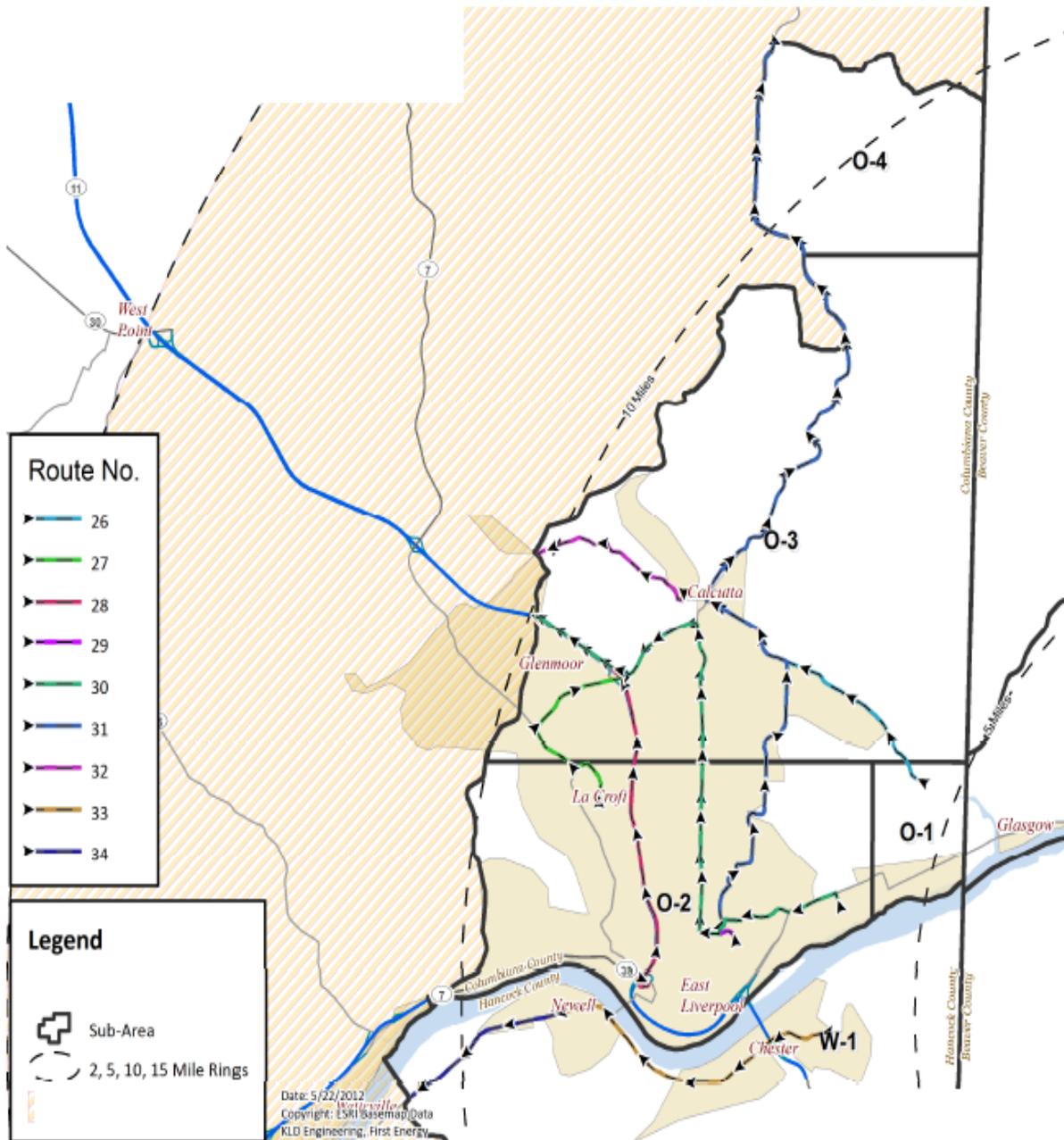
Enclosure 5

	Description of Sub-Area
Sub Area 1	The portion of East Liverpool and Liverpool Twp bounded by: <ul style="list-style-type: none"> • East of Elizabeth St. and Fisher Rd. • South of St. Clair Township. • West of Pennsylvania - Ohio border. • North of the Ohio River.
Sub Area 2	The portion of East Liverpool and Liverpool Twp bounded by: <ul style="list-style-type: none"> • East of Campground Rd. intersecting Annesley Rd. • South of St. Clair Township. • West of Fisher Rd. and Elizabeth St • North of the Ohio River.
Sub Area 3	The portion of St Clair Twp bounded by: <ul style="list-style-type: none"> • East of Annesley Rd. intersecting Cannons Mills Rd. intersecting Sprucevale Rd. intersecting the Little Beaver Creek intersecting State Route 170. • South of Middleton Township. • West of Pennsylvania - Ohio border. • North of Liverpool Township.
Sub Area 4	The portion of Middleton Twp bounded by: <ul style="list-style-type: none"> • East of State Route 170. • South of Pancake-Clarkson Rd. • West of Pennsylvania - Ohio border. • North of St. Clair Township.
Sub Area 1,2	The portion of East Liverpool and Liverpool Twp bounded by: <ul style="list-style-type: none"> • East of Campground Rd. intersecting Annesley Rd. • South of St. Clair Township. • West of Pennsylvania - Ohio border. • North of the Ohio River.
Sub Area 1,2,3	The portion of East Liverpool and Liverpool Twp., and St Clair Twp bounded by: <ul style="list-style-type: none"> • East of Campground Rd. intersecting Annesley Rd. intersecting Cannons Mills Rd. intersecting Sprucevale Rd. intersecting the Little Beaver Creek, intersecting State Route 170. • South of Middleton Township. • West of Pennsylvania - Ohio border. • North of the Ohio River.
Sub Area 1,2,3,4	The portion of East Liverpool and Liverpool Twp., St Clair and Middleton Twp bounded by: <ul style="list-style-type: none"> • East of Campground Rd. intersecting Annesley Rd. intersecting Cannons Mills Rd. intersecting Sprucevale Rd. intersecting the Little Beaver Creek, intersecting State Route 170. • South of Pancake-Clarkson Rd. • West of Pennsylvania - Ohio border. • North of the Ohio River.
Sub Area 2,3,4	The portion of East Liverpool and Liverpool Twp., St Clair and Middleton Twp bounded by: <ul style="list-style-type: none"> • East of Campground Rd. intersecting Annesley Rd. intersecting Cannons Mills Rd. intersecting Sprucevale Rd. intersecting the Little Beaver Creek, intersecting State Route 170. • South of Pancake-Clarkson Rd. • West of Pennsylvania - Ohio border for St Clair and Middleton Twp • West of Fisher Rd. and Elizabeth St for Liverpool Twp. • North of the Ohio River.
Sub Area 3,4	The portion of St Clair and Middleton Twp bounded by: <ul style="list-style-type: none"> • East of Annesley Rd. intersecting Cannons Mills Rd. intersecting Sprucevale Rd. intersecting the Little Beaver Creek, intersecting State Route 170. • South of Pancake-Clarkson Rd. • West of Pennsylvania - Ohio border. • North of Liverpool Township.

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Enclosure 5
(Continued)

ETE
Sub-Area and evacuation map



SECTION II - PART J

Enclosure 6

AGENCIES AND OTHER SOURCES FOR THIS PORTION OF THE PLAN

The following agencies and references served as sources for the information used in the compilation of this document:

1. Columbiana County Emergency Management Agency
2. Columbiana County Planning Commission
3. Columbiana County Engineer
4. Columbiana County Sheriff
5. Lisbon Post, OSHP
6. U.S. Coast Guard
7. U.S. Geological Survey
8. Columbiana County Schools - Boards and Districts
9. Administrators - Salem **Regional Medical Center**
East Liverpool City Hospital
10. City Officials - City of East Liverpool
11. KLD Engineering Evacuation Time Estimate

SECTION II - PART J

Enclosure 7

PROTECTIVE ACTION GUIDES AND ASSIGNMENT OF PROTECTIVE ACTIONS

A. Overview

Protective actions are measures taken to avoid or reduce the projected dose when the benefits derived from such action are sufficient to offset any undesirable features of the protective action. Protective Action Guides are projected doses to individuals in the County which warrant taking action. The guidance of this plan is responsive to the provisions of the USEPA Manual of Protective Action Guides and Protective Actions for Nuclear Incidents.

B. Incidents at nuclear facilities may range from very small or no releases of radioactive material, having no offsite consequences, to relatively large releases, possibly involving action to minimize radiation exposure to offsite populations. The variability of meteorological conditions, including wind patterns, wind speeds and precipitation has a great effect on offsite consequences. The plume exposure pathway Emergency Planning Zone (EPZ) is a conservative estimate of the area in which protective actions would ever be needed in the event of a design basis accident. Planning and implementation of protective actions within the County will be commensurate with the magnitude of the incident and the projected radiation dose. Basic criteria for determining when protective actions may be appropriate are as follows:

1. Protective actions may be recommended for County populace to be taken for incidents involving actual or potential radioactivity releases resulting in projected TEDE less than 1 rem to members of the general public. Some preventative or precautionary measures may be prescribed as determined by the State Radiological Dose Assessment Team.

The protective actions of sheltering-in-place or evacuation under a Site Area Emergency classification are highly unlikely in Ohio since the nearest affected Ohio area is 4.7 miles from the plant. Criteria for a Site Area Emergency classification state that offsite consequences of radioactive releases will be confined to the site or near-site area.

2. Preparations to implement offsite protective measures will commence upon notification by the Beaver Valley Power Station that projected offsite doses exceed 1 rem TEDE to members of the general public.

Offsite protective actions will be based on the plant conditions and/or projected dose for the incident.

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Enclosure 7 (Continued)

PROTECTIVE ACTION GUIDES AND ASSIGNMENT OF PROTECTIVE ACTIONS

C. Emergency Phase

The period addressed by this chapter is denoted as the "early phase". This is somewhat arbitrarily defined as the period beginning at the projected (or actual) initiation of a release and extending to a few days later, when deposition of airborne materials has become available to permit reliable decisions about the need for longer term protection. During the early phase of an incident, doses may accrue both from airborne and from deposited radioactive materials.

For the purpose of planning, it will usually be convenient to assume that the early phase will last for four days -- that is, that the duration of the primary release is less than four days, and that exposure to deposited materials after four days can be addressed through other protective actions, such as relocation, if this is warranted.

D. Exposure Pathways

The PAGs for members of the public refer only to doses incurred during the early phase. These may include external gamma dose and beta dose to the skin from direct exposure to airborne materials and from deposited materials, and the committed dose to internal organs from inhalation of radioactive material.

Individuals exposed to a plume may also be exposed to deposited material over longer periods of time via ingestion, direct external exposure, and inhalation pathways. Because it is usually not practicable, at the time of an incident, to project these long-term doses and because different protective actions may be appropriate, these doses are not included in the dose specified in the PAGs for the early phase.

1. The first exposure pathway from an accidental airborne release of radioactive material will often be direct exposure to an overhead plume of radioactive material carried by winds. The detailed content of such a plume will depend on the source involved and conditions of the incident.
2. A second exposure pathway occurs when people are directly immersed in a radioactive plume, in which case radioactive material is inhaled (and the skin and clothes may also become contaminated), (e.g., when particulate materials or radioiodines are present). When this occurs, internal body organs as well as the skin may be exposed. Although exposure from materials deposited on the skin and clothing could be significant, generally will be less important than that from radioactive material taken into the body through inhalation. This is especially true if early protective actions include washing exposed skin and changing clothing.

SECTION II - PART J

Enclosure 7 (Continued)

PROTECTIVE ACTION GUIDES AND ASSIGNMENT OF PROTECTIVE ACTIONS

3. As the passage of a radioactive plume containing particulate material and/or radioiodine progresses, some of these materials will deposit onto the ground and other surfaces and create a third exposure pathway. People present after the plume has passed will receive exposure from gamma and beta radiation emitted from these deposited materials. If large quantities of radioiodines or gamma-emitting particulate materials are contained in a release, this exposure pathway, over a long period, can be more significant than direct exposure to gamma radiation from the passing plume.

E. The Protective Action Guides

The PAGs for response during the early phase of an incident are summarized in Table 2-1. The PAG for evacuation (or, as an alternative in certain cases, sheltering) is expressed in terms of the projected sum of the effective dose equivalent from external radiation and the committed effective dose equivalent incurred from inhalation of radioactive materials from exposure and intake during the early phase.

The PAG for the administration of stable iodine is specified in terms of the committed dose equivalent to the thyroid from radioiodine. This more complete guidance updates and replaces previous values, expressed in terms of whole-body dose equivalent from external gamma exposure and thyroid dose equivalent from inhalation of radioactive iodine that were recommended in the 1980 edition of this document.

1. Evacuation and Sheltering-in-Place

In summary, this analysis indicates that evacuation of the public will usually be justified when the projected dose to an individual is one rem. The analysis also shows that, at this radiation dose, the risk avoided is usually much greater than the risk from evacuation itself.

Although the PAG is expressed as a range of 1-5 rem, it is emphasized that, under normal conditions, evacuation of members of the general population should be initiated for most incidents at a projected dose of 1 rem.

Sheltering-in-Place may be preferable to evacuation as a protective action in some situations. Because of the higher risk associated with evacuation of some special groups in the population (e.g., those who are not readily mobile), sheltering may be the preferred alternative for such groups as a protective action at projected

SECTION II - PART J

Enclosure 7 (Continued)

PROTECTIVE ACTION GUIDES AND ASSIGNMENT OF PROTECTIVE ACTIONS

doses up to 5 rem. In addition, under unusually hazardous environmental conditions use of sheltering-in-place at projected doses up to 5 rem to the general population (and up to 10 rem to special groups) may become justified. Sheltering-in-Place may also provide protection equal to or greater than evacuation due to the nature of the source term and/or in the presence of temporal or other site-specific conditions. Illustrative examples of situations or groups for which evacuation may not be appropriate at 1 rem include: a) the presence of severe weather, b) competing disasters, c) institutionalized persons who are not readily mobile, and d) local physical factors which impede evacuation. Examples of situations or groups for which evacuation at 1 rem normally would be appropriate include: a) an incident which occurs at night, b) an incident which occurs when children are in school, and c) institutionalized persons who are readily mobile. Evacuation seldom will be justified at less than 1 rem.

In general, sheltering-in-place should be preferred to evacuation whenever it provides equal or greater protection. Sheltering-in-Place should always be implemented in cases when evacuation is not carried out at projected doses of 1 rem or more.

Analyses for some hypothesized accidents, such as short-term releases of transuranic materials, show that sheltering-in-place in residences and other buildings can be highly effective at reducing dose, may provide adequate protection, and may be more effective than evacuation when evacuation cannot be completed before plume arrival (DO-90). However, reliance on large dose reduction factors for sheltering should be accompanied by cautious examination of possible failure mechanisms, and except in very unusual circumstances, should never be relied upon at projected doses greater than 10 rem.

Protective Action	PAG (projected dose)	Comments
Evacuation (or sheltering-in-place) (a)	1-5 rem (b) and/or 5 rem (c)	Evacuation (or, for some situations, sheltering-in-place (a)) should be initiated at 1 rem.
Administration of stable iodine	5 rem (c)	Requires approval of State medical officials.

SECTION II - PART J

Enclosure 7 (Continued)

PROTECTIVE ACTION GUIDES AND ASSIGNMENT OF PROTECTIVE ACTIONS

TABLE 2-1 Continued.

- (a) Sheltering-in-Place may be the preferred protective action when it will provide protection equal to or greater than evacuation, based on consideration of factors such as source term characteristics, and temporal or other site-specific conditions.
- (b) The sum of the effective dose equivalent resulting from exposure to external sources and the committed effective dose equivalent incurred from all significant inhalation pathways during the early phase. Committed dose equivalents to the thyroid and to the skin may be 5 and 50 times larger, respectively.
- (c) Committed dose equivalent to the thyroid from radioiodine.

2. Thyroid and Skin Protection

Since the thyroid is at disproportionately high risk for induction of nonfatal cancer and nodules, compared to other internal organs, additional guidance is provided to limit the risk of these effects (see footnote to Table 2-1). In addition, effective dose, the quantity used to express the PAG, encompasses only the risk of fatal cancer from irradiation of organs within the body, and does not include dose to skin. Guidance is also provided, therefore, to protect against the risk of skin cancer (see Table 2-1, footnote b).

The use of stable iodine to protect against uptake of inhaled radioiodine by the thyroid is recognized as an effective alternative to evacuation for situations involving radioiodine releases when evacuation cannot be implemented, or exposure occurs during evacuation. Stable iodine is most effective when administered immediately prior to exposure to radioiodine. However, significant blockage of the thyroid dose can be provided by administration within one or two hours after uptake of radioiodine. Evacuation and the administration of stable iodine may be considered for exposure situations in which the committed dose equivalent to the child thyroid is 5 rem or greater.

Washing and changing clothing is recommended primarily to provide protection from beta radiation from radioiodine and particulate materials deposited on the skin or clothing. Calculations indicate that dose to skin should seldom, if ever, be a controlling pathway. However, it is good radiation protection practice to recommend these actions, even for alpha-emitting radioactive materials, as soon as practical for persons significantly exposed to a contaminating plume (i.e., when the projected dose from inhalation would have justified evacuation of the public under normal conditions).

SECTION II - PART J

Enclosure 7 (Continued)

PROTECTIVE ACTION GUIDES AND ASSIGNMENT OF PROTECTIVE ACTIONS

F. Dose Projection

The PAGs are expressed in terms of projected dose. However, in the early phase of an incident, parameters other than projected dose may frequently provide a more appropriate basis for decisions to implement protective actions.

Emergency response plans for facilities should make use of Emergency Action Levels (EALs), Emergency Action Levels related to plant conditions at commercial nuclear power plants are discussed in Appendix 1 to NUREG-0654 (NR-80), based on in-plant conditions, to trigger notification of and recommendations to offsite officials to implement prompt evacuation or sheltering in specified areas in the absence of information on actual releases or environmental measurements. Later, when these data become available, dose projections based on measurements may be used, in addition to plant conditions, as the basis for implementing further protective actions.

Doses incurred prior to initiation of a protective action should not normally be included. Similarly, doses that might be received following the early phase should not be included for decisions on whether or not to evacuate or shelter.

In practical applications, dose projection will usually begin at the time of the anticipated (or actual) initiation of a release. For those situations where significant dose has already occurred prior to implementing protective action, the projected dose for comparison to a PAG should not include this prior dose.

SECTION II - PART J

Enclosure 7 (Continued)

PROTECTIVE ACTION GUIDES AND ASSIGNMENT OF PROTECTIVE ACTIONS

G. Guidance for Controlling Doses to Workers under Emergency Conditions

The PAGs for protection of the general population and dose limits for workers performing emergency services are derived under different assumptions. PAGs consider the risks to individuals, themselves, from exposure to radiation, and the risks and costs associated with a specific protective action. On the other hand, workers may receive exposure under a variety of circumstances in order to assure protection of others and of valuable property. These exposures will be justified if the maximum risks permitted to workers are acceptably low, and the risks or costs to others that are avoided by their actions outweigh the risks to which workers are subjected.

Workers who may incur increased levels of exposure under emergency conditions may include those employed in law enforcement, firefighting, radiation protection, civil defense, traffic control, health services, environmental monitoring, transportation services, and animal care. In addition, selected workers at institutional, utility, and industrial facilities and at farms and other agribusiness may be required to protect others, or to protect valuable property during an emergency. The above are examples not designations of workers that may be exposed to radiation under emergency conditions. Occupational dose limits for these individuals for their daily work is set by their individual organizations in accordance with all local, state, and federal regulations.

Guidance on dose limits for workers performing emergency services is summarized in Table 2-2. These limits apply to doses incurred over the duration of an emergency. That is, in contrast to the PAGs, where only the future dose that can be avoided by a specific protective action is considered, all doses received during an emergency are included in the limit. Further, the dose to workers performing emergency services may be treated as a once-in-a-lifetime exposure, and not added to occupational exposure accumulated under non-emergency conditions for the purpose of ascertaining conformance to normal occupational limits, if this is necessary. However, any radiation exposure of workers that is associated with an incident, but accrued during non-emergency operations, should be limited in accordance with relevant occupational limits for normal situations. Federal Radiation Protection Guidance for occupational exposure recommends an upper bound of five rem per year for adults and one tenth this value for minors and the unborn (EP-87). We recommend use of this same value here for the case of exposures during an emergency. To assure adequate protection of minors and the unborn during emergencies, the performance of emergency services should be limited to non-pregnant adults. As in the case of normal occupational exposure, doses received under emergency conditions should also be maintained as low as reasonably achievable (e.g., use of stable iodine, where appropriate, as a prophylaxis to reduce thyroid dose from inhalation of radioiodines and use of rotation of workers). The recommendation for KI administration is for all categories of individuals (i.e., general public, emergency workers and institutionalized) working inside the evacuated sub-area of the 10 mile EPZ, or need to enter the evacuated sub-area to take their potassium iodide (KI) tablets at the same

SECTION II - PART J

Enclosure 7 (Continued)

PROTECTIVE ACTION GUIDES AND ASSIGNMENT OF PROTECTIVE ACTIONS

time and the same sub-areas that are recommended to evacuate or shelter: during the declaration of a nuclear power plant general emergency.

Doses to all workers during emergencies should, to the extent practicable, be limited to 5 rem. There are some emergency situations, however, for which higher exposure limits may be justified. Justification of any such exposure must include the presence of conditions that prevent the rotation of workers or other commonly-used dose reduction methods. Except as noted below, the dose resulting from such emergency exposure should be limited to 10 rem for protecting special property, and to 25 rem for life saving activities and the protection of large populations. In the context of this guidance, exposure of workers that is incurred for the protection of large populations may be considered justified for situations in which the collective dose avoided by the emergency operation is significantly larger than that incurred by the workers involved. All workers are to report and have them recorded every 30 minutes. As workers approach their limits, they will be replaced, if practical. Declared pregnant females and those under 18 years of age will not be permitted to act as emergency workers.

Situations may also rarely occur in which a dose in excess of 25 rem for emergency exposure would be unavoidable in order to carry out a lifesaving operation or to avoid extensive exposure of large populations. It is not possible to prejudge the risk that one should be allowed to take to save the lives of others. However, persons undertaking any emergency operation in which the dose will exceed 25 rem to the whole body should do so only on a voluntary basis and with full awareness of the risks involved, including the numerical levels of dose at which acute effects of radiation will be incurred and numerical estimates of the risk of delayed effects. **In emergency life-saving situations the decision to exceed this dose will be coordinated with the Radiological Officer in the County EOC.**

Some workers performing emergency services will have little or no health physics training, so dose minimization through use of respiratory protective equipment can reduce dose from inhalation, and clothing can reduce beta dose. Stable iodine is also recommended for blocking thyroid uptake of radioiodine in personnel involved in emergency actions where atmospheric releases include radioiodine. The decision to issue stable iodine should include consideration of established State medical procedures, and planning is required to ensure its availability and proper use.

SECTION II - PART J

**Enclosure 7
(Continued)**

PROTECTIVE ACTION GUIDES AND ASSIGNMENT OF PROTECTIVE ACTIONS

Table 2-2 Guidance on Dose Limits For Workers Performing Emergency Services	
Dose Limit (a) (rem)	Function
5	All
10 REM	EWs assigned to the care of special populations (i.e., nursing homes, hospitals, jails) or special facilities (i.e., water treatment facilities) where protective actions are being implemented.
* 25 REM	EWs assigned tasks inside the plume exposure EPZ. (NOTE: Does not apply to field monitoring teams; their limit remains at 5 REM.) (i.e., lifesaving or protection of large populations)
** greater than 25 REM	EWs voluntarily accepting the risk of exceeding the PAG to save lives or protect large populations.

NOTE: During any incident, the Ohio Department of Health (O.D.H.) may decide to lower these exposure limits.

* Exposure limit reverts back to 5 REM following the emergency phase of the incident.

** Trained personnel may exceed the 25 REM limit for the listed functions; however, they SHOULD receive a briefing. ~~from O.D.H. first. Untrained personnel MUST be briefed by O.D.H.~~ Any exposure of 75 REM MUST be reported to O.D.H.

(a) Sum of external effective dose equivalent and committed effective dose equivalent to non-pregnant adults from exposure and intake during an emergency situation. Workers performing services during emergencies should limit dose to the lens of the eye to three times the listed value and doses to any other organ (including skin and body extremities) to ten times the listed value. These limits apply to all doses from an incident, except those received in unrestricted areas as members of the public during the intermediate phase of the incident.

SECTION II - PART J

**Enclosure 7
(Continued)**

EMERGENCY WORKER PROTECTIVE ACTION GUIDELINES (PAG)

EXPOSURE LIMITS

Emergency Worker¹ Dose Limits during the Emergency Phase²			
Activity	Dose Limit (TEDE)³	Dosimeter Limit⁴	Condition
Field Teams	5 rem	1 R	
Outside EPZ	5 rem	5 R	
Protecting valuable property (Special Facilities)	10 rem	2 R	Lower dose not practicable
Lifesaving or protection of large populations (Inside EPZ)	25 rem	5 R	Lower dose not practicable
Lifesaving or protection of large populations	> 25 rem		Only on a voluntary basis to persons fully aware of the risks involved
¹ Emergency Workers are limited to non-pregnant adults performing emergency services. ² The Emergency Phase ends when the release has terminated, the public is evacuated, and valuable property has been protected. ³ Total Effective Dose Equivalent (TEDE) is the sum of external exposures and internal doses, accumulated over the duration of the emergency phase, and treated as a once-in-a-lifetime exposure. Eye lens dose should be limited to three times and skin/extremities dose limited to ten times the listed values. ⁴ Dosimeters record only the external exposure component of TEDE. To reasonably ensure that the TEDE limits are not exceeded due to internal doses from inhalation, ingestion, injection, and absorption, a reduction factor may be applied. These values may be revised as more information, particularly the isotopes involved, becomes available during the incident.			
Administrative Instructions during the Emergency Phase			
<ol style="list-style-type: none"> 1. Direct-Reading Dosimeters (DRDs) and Electronic Personal Dosimeters (EPDs) are to be read at intervals as prescribed by the Ohio Department of Health (ODH), but no less frequently than every 30 minutes. 2. Exposures, in 1R increments, are to be reported by the worker to the organization's designated Safety Officer (SO) (or Dosimeter Coordinator (DC)). Organization SOs (or DCs) report exposures to the County Radiological Officer. County Radiological Officers are to forward reported exposures to ODH in Columbus. State organizations may bypass the County Radiological Officer and report through their chain-of-command. 3. Personnel should not remain in areas exceeding 1 R/hr unless performing lifesaving operations. 4. Emergency Workers, who are willing to voluntarily exceed 25 rem TEDE during lifesaving operations, must have their proposed activities evaluated by ODH to compare the risk versus the benefit. 			
Worker¹ Dose Limits during the Intermediate Phase²			
Activity	Dose Limit (TEDE)³	Dosimeter Limit⁴	Condition
All activities	5 rem	5 R	
¹ Workers are limited to non-pregnant adults performing essential services. ² The Intermediate Phase ends when reliable environmental measurements have become available and additional protective actions are completed. ³ Total Effective Dose Equivalent (TEDE) is the sum of external exposures and internal doses, accumulated over the duration of one year. Intermediate Phase doses are treated separately from any doses accumulated during the Emergency Phase. Eye lens dose should be limited to three (3) times and skin/extremities dose limited to ten (10) times the listed value. ⁴ Dosimeters record only the external exposure component of TEDE. To reasonably ensure that the TEDE limits are not exceeded due to internal doses from inhalation, ingestion, injection, and absorption, a reduction factor may be applied. These values may be revised as more information, particularly the isotopes involved, becomes available during the incident.			
Administrative Instructions during the Intermediate Phase			
<ol style="list-style-type: none"> 1. Direct-Reading Dosimeters (DRDs) and Electronic Personal Dosimeters (EPDs) are to be read at intervals as prescribed by the Ohio Department of Health (ODH), but not less than every 30 minutes. 2. Personnel should not enter areas exceeding 1 R/hr. 			

SECTION II - PART J

Enclosure 8

SIREN LOCATIONS

Siren No.	Location	Municipality
502	Playground, off Orchard Grove	E. Liverpool City
504	Annesley Rd., south of Lisbon Rd. (Rt. 267)	St. Clair Twp.
507	Lindell Rd. at Calcutta V.F.D.	St. Clair Twp.
510	Croxall Rd at Faith Community Church	St. Clair Twp.
511	Stagecoach Rd. and Fisher Ave. (Rt. 1130)	St. Clair Twp.
514	Rt. 170, south of Pancake-Clarkson Rd.	Middleton Twp.

SECTION II - PART J

Enclosure 8

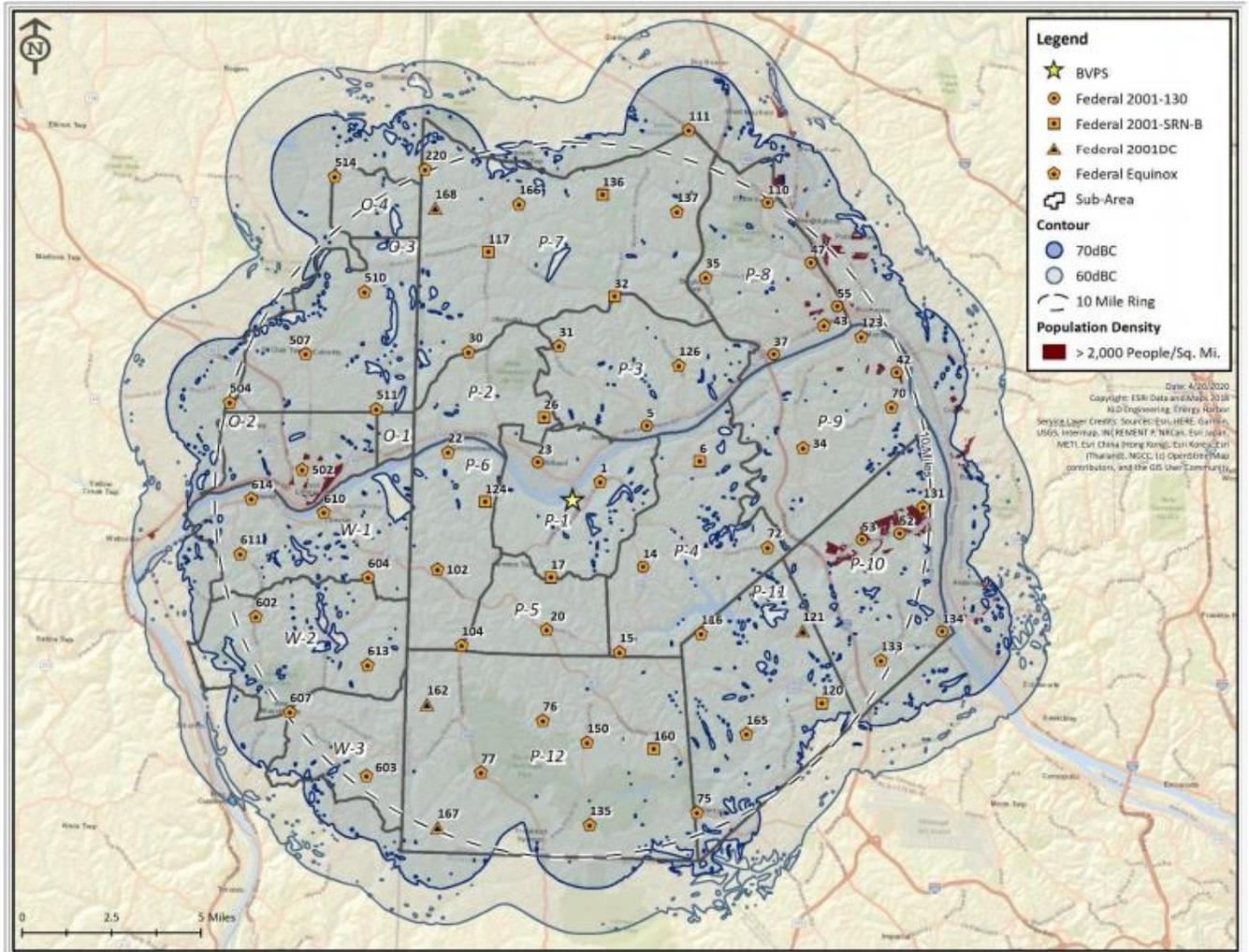


Figure 19. Siren Coverage Map for the BVPS EPZ

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Enclosure 9

EMERGENCY WORKER ASSIGNMENT DOSE

TYPE 1		ASSIST IN EVACUATION / SAVE LARGE ACCUMULATED DOSE	INSIDE EPZ
LIMIT = 25R TURN-BACK = 5R	Police Department	Traffic Control	
	Fire Department	Third Tier Backup Route Alerting	
	Bus Drivers	Evacuation	
	EMS	Evacuation	
	Amateur Radio	School Bus Pick-up Points EL Bus Garage	
TYPE 2		PROTECT SPECIAL PROPERTIES	INSIDE EPZ
LIMIT = 10R TURN-BACK = 2R	Critical Worker	Nursing Home Hospital	
	Utility Worker	Heritage Thermal Services	
	Fire Department	Hospital/Nursing Home Fires	
	Amateur Radio	Nursing Homes	
TYPE 3		EMERGENCY WORKERS (GENERAL)	OUTSIDE EPZ
LIMIT = 5R TURN-BACK = 5R	Fire Department	EWDC Reception Centers Fighting general fire	
	Police Department	Access Control	
	EMS	Evacuation	
	Amateur Radio	Care Center EWDC Reception Center EL City Hall	
	ODOT and CCDOT	Road Work	
	Field Teams	Collecting samples	
		INTERMEDIATE PHASE	INSIDE EPZ
LIMIT = 5R TURN-BACK = 5R	All Recovery / Re-Entry activities All locations		

SECTION II - PART J

Enclosure 10

OHIO ADMINISTRATIVE CODE

RULE 3301-83-16 NON-ROUTINE USE OF SCHOOL BUSES

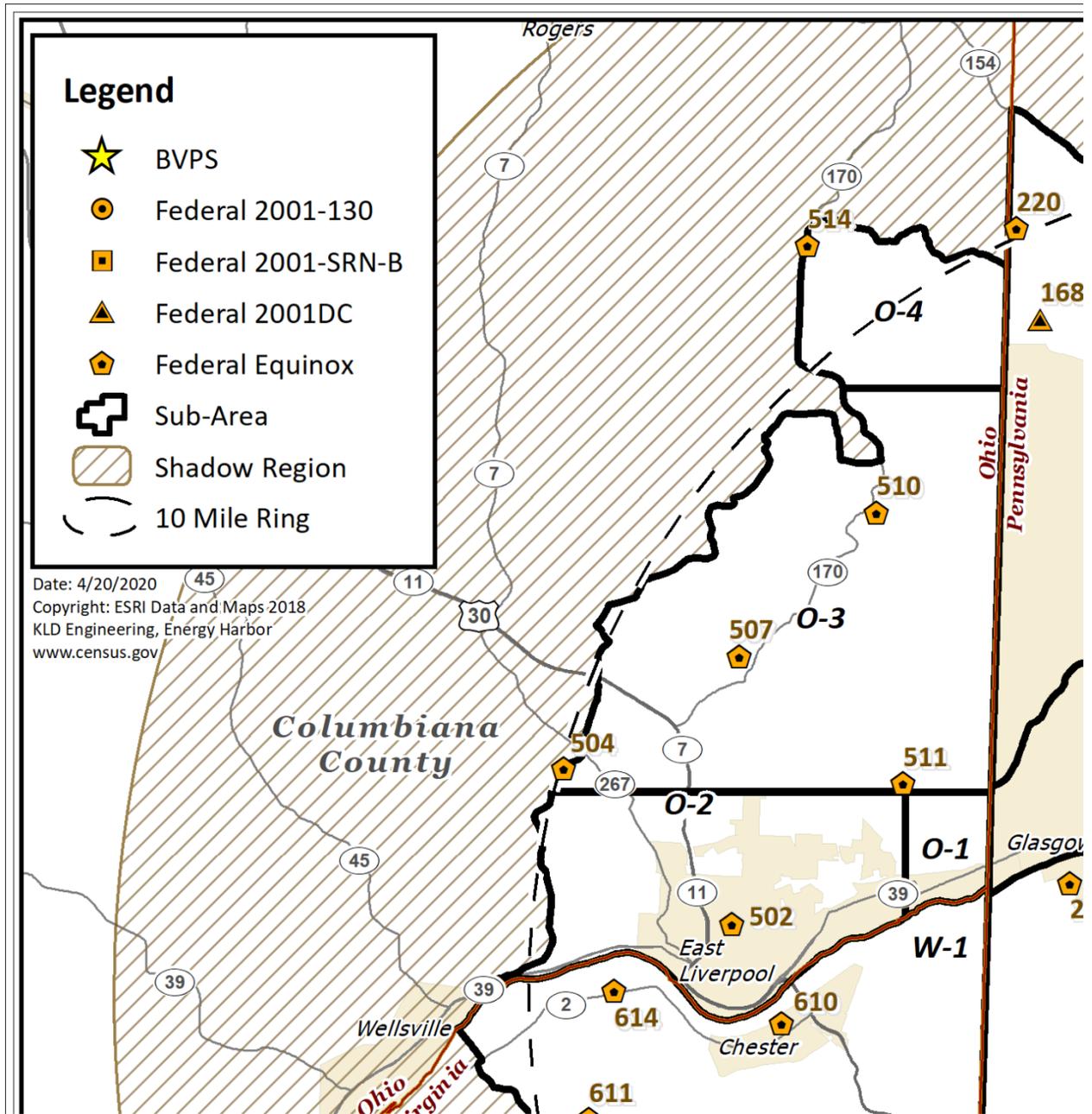
Enclosure Not Necessary – Enclosure Number reserved for future use

- ~~(A) — The regulations governing non-routine use of buses apply to vehicles owned and operated by Boards of Education or under contract to a Board of Education. Such regulations pertain to summer use of buses as well as during the regular school year.~~
- ~~(B) — City, exempted village and local superintendents shall issue a trip permit for each co-curricular use of a school bus. The permit shall provide the following information:
 - ~~(1) — Date of trip;~~
 - ~~(2) — Destination of the trip;~~
 - ~~(3) — Purpose of the trip;~~
 - ~~(4) — Name of the school district;~~
 - ~~(5) — Driver's name;~~
 - ~~(6) — Bus registration number;~~
 - ~~(7) — Total miles of the trip;~~
 - ~~(8) — Superintendent's signature~~~~
- ~~(C) — School buses may be used to transport pupils to and from any event that is a planned part of the classroom or the educational program. Expenses may be paid from the general fund.~~
- ~~(D) — School buses may be used to transport participating pupils to and from any co-curricular activity program approved by the district boards of education. Pupil participants living in the most direct route to the activity from the school may be picked up and discharged as far as is practical. These expenses shall not be paid from the general fund.~~
- ~~(E) — Each event that requires the use of more than five school buses to transport participants to and from a co-curricular activity shall require a resolution by the district board of education.~~
- ~~(F) — School buses shall not be used for pleasure trips.~~
- ~~(G) — School buses shall not be used to transport spectators, either student or adult.~~
- ~~(H) — Adults may be transported to assist the teacher on educational trips, if approved by the superintendent.~~
- ~~(I) — Students may not be transported to observe college or professional games (i.e., football team, band, etc.).~~
- ~~(J) — School buses shall not be used for combination trips such as taking students to a museum in the morning and to view a football contest in the afternoon.~~
- ~~(K) — Board-owned school buses may be used for trips outside the State, provided the entire trip does not exceed 120 miles from the sending school.~~
- ~~(L) — School buses may be used by Ohio governmental agencies during time of civil emergencies. Questionable use should be clarified with assistance of the Department of Education. (Example of a civil emergency—Ohio National Guard Reserves requires transportation to riot threatened area).~~

~~HISTORY: Eff. 9-1-70~~

~~Former EDb-9191-11~~

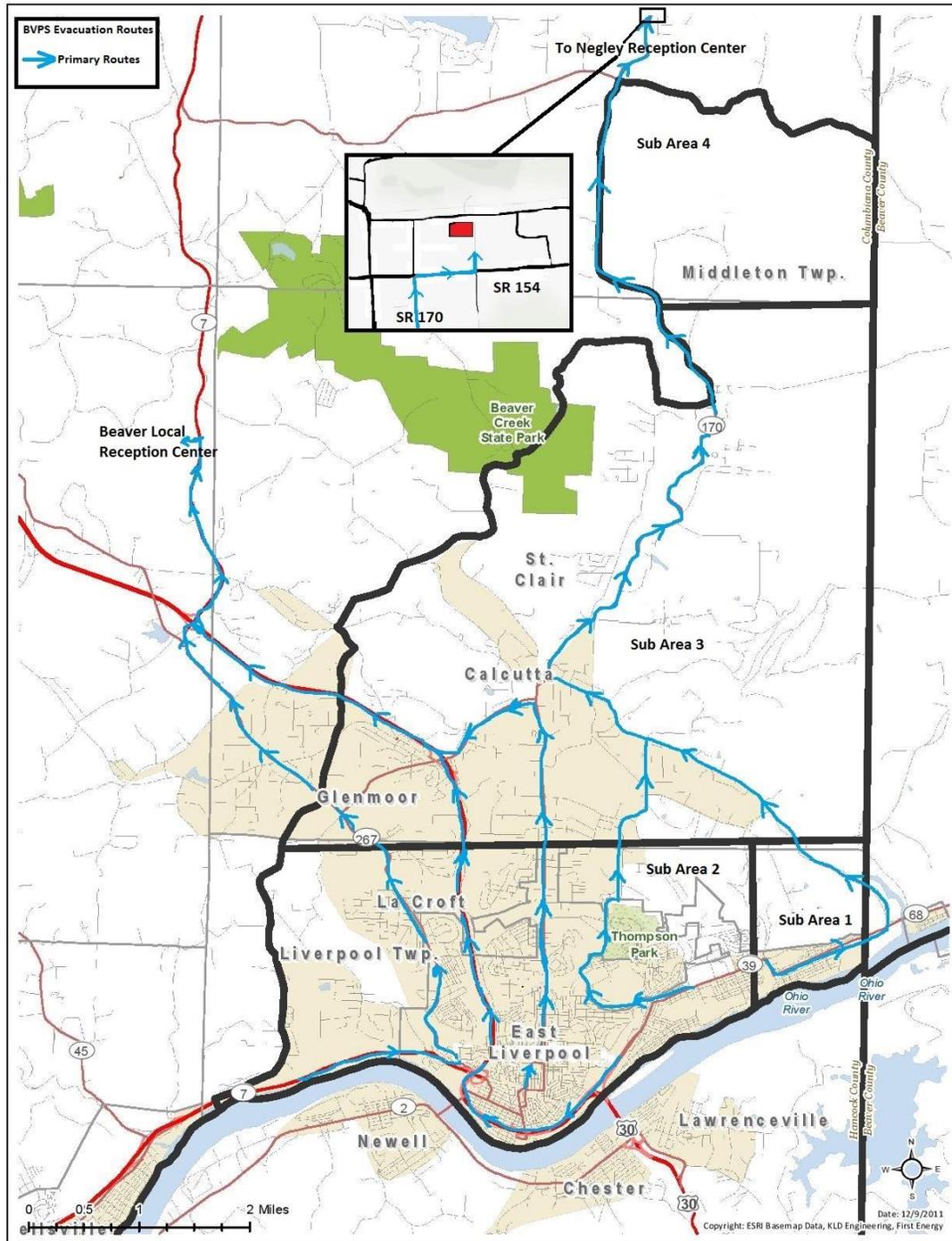
SIREN LOCATION MAP
Columbiana County



SECTION II - PART J

Enclosure 12

TRAFFIC EVACUATION ROUTES



SECTION II - PART J

**Enclosure 12
(Continued)**

TRAFFIC EVACUATION ROUTES

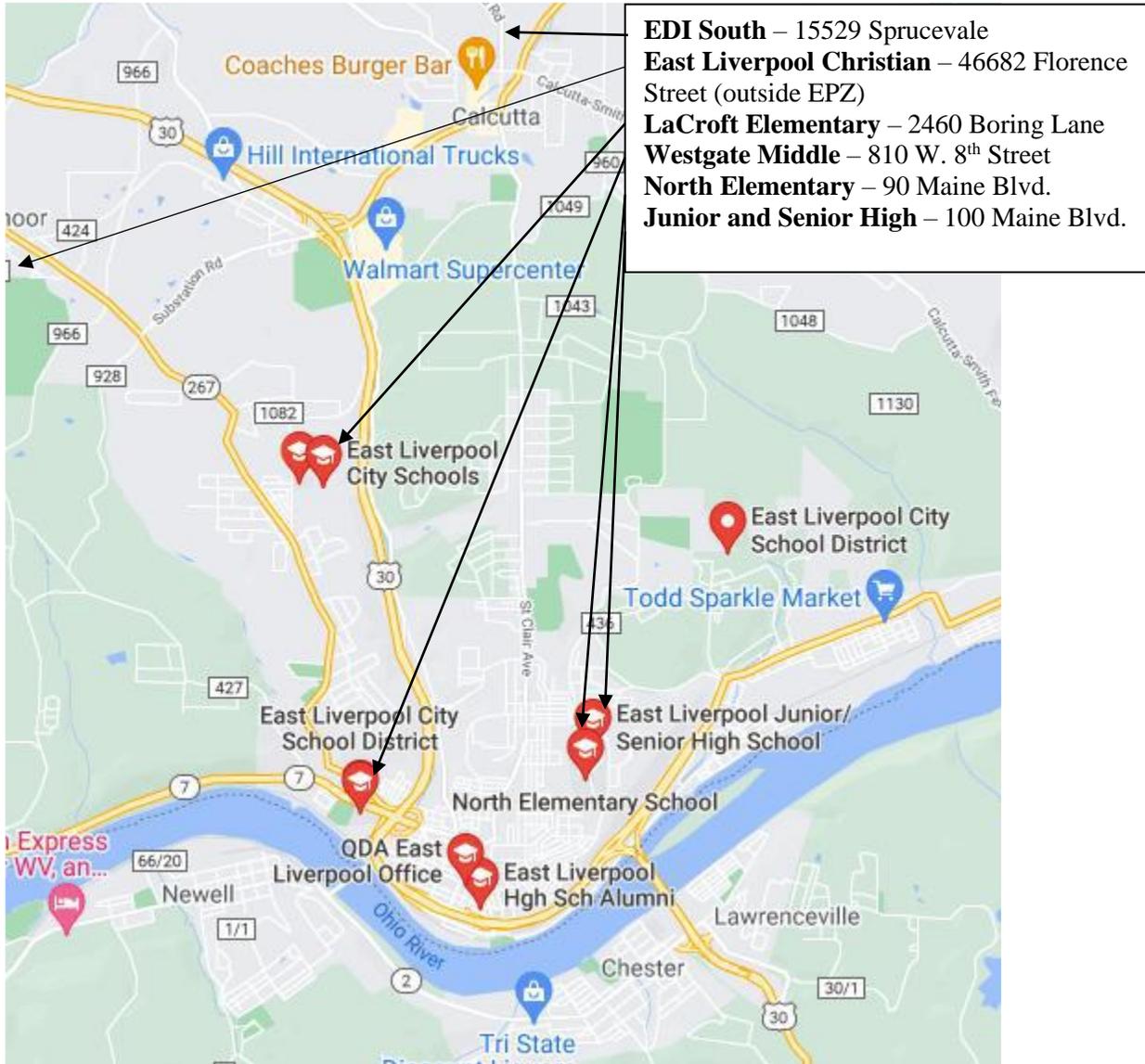
	Location	Directions to Reception Centers
Sub-Area 1	East Liverpool & Liverpool Township	<ul style="list-style-type: none"> • East on State Route 39 to County Road 430 (Calcutta-Smith Ferry); West on County Road 430 (Calcutta-Smith Ferry); to State Route 170; North on State Route 170; to the Reception Center at Middleton Twp. FD/EMS.
Sub-Area 2	East Liverpool & Liverpool Township	<ul style="list-style-type: none"> • North on County Road 435 (Parkway Ave.) to County Road 430 (Calcutta-Smith Ferry Rd.); West on County Road 430 (Calcutta-Smith Ferry Rd.) to State Route 170; North on State Route 170; to Reception Center at Middleton Twp. FD/EMS. • North on St. Clair Ave. to State Route 170; South on State Route 170 to State Route 11; North on State Route 11 to state Route 7; North on State Route 7; to the Reception Center at Beaver Local High School. • North on State Route 11 to state Route 7; North on State Route 7; to the Reception Center at Beaver Local High School. • North on State Route 267 (Lisbon Road); to State Route 7, North on State Route 7; to the Reception Center at Beaver Local High School.
Sub-Area 3	St Clair Township	<ul style="list-style-type: none"> • West on County Route 430 (Calcutta-Smith Ferry Road); to County Road 425 (Liverpool Road) ; West on County Route 425 (Liverpool Road); to State Route 7; North on State Route 7; to the Reception Center at Beaver Local High School.
Sub-Area 4	Middleton Township	<ul style="list-style-type: none"> • North on State Route 170; to the Reception Center at Middleton Twp. FD/EMS.

SECTION II - PART J

Enclosure 13

SCHOOL LOCATIONS

City of East Liverpool



SECTION II - PART J

Enclosure 13 (Continued)

E Liverpool Westgate Middle (PS, Grades 5 & 6)

West 8th St

330-386-8765

Population: 300 students, 50 staff, 14 home rooms

E Liverpool LaCroft Elementary (Grades K to 4)

2460 Boring Lane

330-386-8774

Population: 365 students, 65 staff, 25 home rooms

E Liverpool Junior & Senior High (Grades 7 to 12)

100 Maine Boulevard

330-386-8750

Population: 857 students, 110 staff, 45 home rooms

E Liverpool North Elementary (Grades K to 4)

90 Maine Boulevard

330-386-8772

Population: 418 students, 45 staff, 21 home rooms

East Liverpool Christian (Grades Pre to 12)

46682 Florence

330-385-5588

Population: 147 students, 29 staff, 14 home rooms

Employment Development Inc. South (Adult Clients)

15529 Sprucevale Rd

330-385-2952

Population: 35 clients, 6 staff, 1 room

Totals Students and Staff – 2427

SECTION II - PART J

Enclosure 13 (Continued)

School Evacuation Time Estimate is based on ETE “2012”

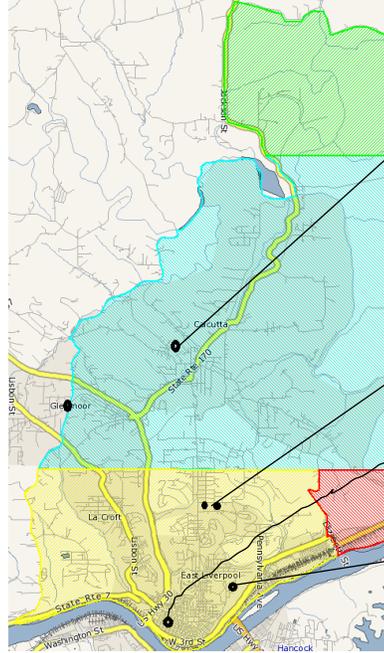
School	Driver Mobilization Time	Loading Time	Distance to EPZ Boundary	Average Speed	Travel time to EPZ Boundary	ETE	EPZ to Host school	Time EPZ to Host school	Evac school to Host school
East Liverpool Christian School	90	15	4.7	45.0	7	1:55	12.6	17	2:10
East Liverpool High School	90	15	5.8	43.2	9	1:55	12.6	17	2:15
East Liverpool Jr. High School	90	15	5.8	43.2	9	1:55	12.5	17	2:15
LaCroft Elementary School	90	15	4.7	11.1	26	2:15	12.4	17	2:30
North Elementary School	90	15	5.5	43.2	8	1:55	12.6	17	2:10
Westgate Middle School	90	15	4.6	45.0	7	1:55	12.6	17	2:10
Employment Development Industry	90	15	2.4	45.0	4	1:50	12.6	17	2:10

SECTION II - PART J

Enclosure 14

HOSPITAL AND NURSING HOME LOCATION
NUMBERS OF PATIENTS/RESIDENTS

FACILITIES INSIDE EPZ



Calcutta Health Care
48444 Bell School Rd
Total Population: **89**
Non-Ambulatory: **30**

The Orchards of E Liverpool
709 Armstrong Lane
Total Population: **29**
Non-Ambulatory: **4**

The Orchards Rehab Suites
701 Armstrong Lane
Total Population: **9**
Non-Ambulatory: **6**

East Liverpool Hospital
W. 5th Street
Total Population: **36**
Non-Ambulatory: **17**
ALS: **12**

Valley Oaks Care
Cent Nursing Home
500 Selfridge St
Total Population: **46**
Non-Ambulatory: **35**

Current as of 12/27/2021

HOST Nursing Homes

Blossom Nursing Home	100 beds	109 Blossom Lane	Salem
Essex of Salem	86 beds	2511 Bentley Drive	Salem
Circle of Care	62 beds	1985 East Pershing	Salem
Brookdale Senior Living	80 beds	1916 S. Lincoln Ave.	Salem

HOST Hospitals

Salem Regional Medical Center	199 beds	1995 E. State Str.	Salem
Mercy Health St. Elizabeth	294 beds	8401 Market Str.	Boardman
Mercy Health St. Elizabeth	626 beds	1044 Belmont Ave.	Youngstown
Northside Medical Center	398 beds	500 Gypsy Lane	Youngstown

Medical Facility	Patient	Mobilization	Loading Time (per person)	Number	Total Loading Time (min)	Travel Time to EPZ Boundary (minutes)	ETE
				People			
Sub-Area-2 City of E Liverpool	Ambulatory	90	1	102	30	7	2:10
	Wheelchair	90	5	56	75	7	2:55
	Bedridden	90	15	17	30	7	2:10
Sub-Area -3 St Clair Township	Ambulatory	90	1	63	30	7	2:10
	Wheelchair	90	5	30	75	7	2:55
	Bedridden	90	15	6	30	7	2:10

SECTION II - PART J

**Enclosure 15
STUDENT RELOCATION RESOURCES**

Transportation needs:

Schools	Teachers & Students
E. Liverpool School District	2210
EDI South	41
E. Liverpool Christian	176
TOTAL Teachers / Students	2427

Transportation resources:

	Full Bus 50 person	Small Bus 11 person	Lift Bus 28 person 2 chairs (capacity)	Vans (capacity)	Lift Van 7 person
E. Liverpool School Buses	26	-	4	2 (8)	-
Community Action Agency	17 (20 per)	28 (w/ lifts)	1	1 (7)	8
CCDD-EDI	8 (w/ lifts)	-	2 (21 per)	2 (7)	1
Columbiana Cnty Ed Serv Cent		-	1 (30) 4 (24)	1 (5)	5 w/ lifts
Beaver Local School Buses	28	-	3	3 (10)	-
Lisbon Schools	6		1 (18)	1 (9)	
TOTAL Vehicles	85	28	16	10	14
Number of Persons	3740	308	410	81	98
TOTAL Number of Seats: 4637					

Note:

- Bus required for evacuation are based on (50 persons / Bus)
- Number of buses required includes Home Room teachers and students.
- Driver’s records maintained by employer and training records by CCEMA.
- Each organization has enough drivers for each vehicle.

Host School:

Host schools are Columbiana County Career & Technical Center, David Anderson High School, all are located in Lisbon.

Total Number of Students and Teachers Relocated from EPZ -- 2427

Space available at designated Host Schools -- -- -- 4800

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**Enclosure 15
(Continued)**

AMBULANCES SERVING COLUMBIANA COUNTY

<u>Ambulances</u>	<u>Phone</u>	<u>No. of Ambulances</u>
PRIMARY:		
East Palestine EMS	426-4341	3
N. Waterford EMS	457-2412	2
Middleton Twp Fire/EMS	426-3703	2
SUPPORT:		
Lifeteam EMS, Inc. East Liverpool	386-5505	2
North Star East Liverpool	386-9111	4
KLG Salem	337-4554	9
West Point Fire	424-7853	1
Columbiana EMS	482-9292	3
Leetonia EMS	427-6745	2
Winona	222-1524	1

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Enclosure 16 (Continued)

BARRICADE AND SIGN LIST

BARRICADES to stop traffic flow:

EAST SIDE

- B-1 On Pancake-Clarkson Road at the state line.
To keep all traffic from crossing the state line.
- B-2 On Midland-Fredericktown Road at the state line.
To keep all traffic from crossing the state line.
- B-3 On Grimms-Bridge Road at the state line.
To keep all traffic from crossing the state line.

SOUTH SIDE

- B-4 On the Ohio side of the Jennings-Randolph Bridge.
To keep all traffic from crossing the state line.
- B-5 On the Ohio side of the Newell Bridge.
To keep all traffic from crossing the state line.
- B-6 On the north bound lane of SR 39/7 at the Campground Road exit,
Stopping all traffic from entering the city of East Liverpool
- B-7 On the northbound lane of Shady Side Rd at Campground Rd intersection,
Stopping traffic from going north on Shady Side Rd.

WEST SIDE

- B-8 On the south bound lane of Hess Rd at Camp Ground Rd intersection,
Stopping all traffic from going south on Hess Rd
- B-9 On the southbound lane of SR 267 at Annesley Rd intersection,
Stopping traffic from going south on SR 267.
- B-10 On the eastbound lane of Y&O Rd at Annesley Rd intersection,
Stopping traffic from going east on Y&O Rd.
- B-11 On the southbound lane of East Liverpool Rd at Annesley Rd intersection,
Stopping traffic from going south on East Liverpool Rd.
- B-12 On the eastbound lane of Calcutta Smith Ferry Rd at East Liverpool Rd intersection,
Stopping traffic from going east on Calcutta Smith Ferry Rd.
- B-13 On the eastbound lane of Cannons Mill Rd at East Liverpool Rd intersection,
Stopping traffic from going east on Cannons Mill Rd.

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B-14 On the southbound lane of East Liverpool Rd at Cannons Mill Rd intersection,
Stopping traffic from going south on East Liverpool Rd.

NORTH SIDE

B-15 On the southbound lane of Bell School Rd at Cannons Mill Rd intersection,
Stopping traffic from going south on Bell School Rd

B-16 On the westbound lane of Cannons Mill Rd at Bell School Rd intersection,
Stopping traffic from going west on Cannons Mill Rd.

B-17 On the southbound lane of Sprucevale Rd at Cannons Mill Rd intersection,
Stopping traffic from going south on Sprucevale Rd.

B-18 On southbound lane of SR 170 at Fredericktown-Clarkson Rd intersection.
Stopping traffic from going south on SR 170.

B-19 On southbound lane of SR 170 at Pancake - Clarkson Rd intersection.
Stopping traffic from going south on SR 170.

B-20 On eastbound lane of Pancake - Clarkson Rd at SR 170 intersection.
Stopping traffic from going east on Pancake - Clarkson Rd.

B-21 On the southbound lane of Sprucevale Rd at Echo Dell Rd intersection,
Stopping traffic from going south on Sprucevale Rd.

B-22 On the eastbound lane of Pancake - Clarkson Rd at Sprucevale Rd intersection,
Stopping traffic from going east on Pancake - Clarkson Rd.

SR11 WEST POINT exit

B-23 On the southbound lane of SR 11 at the exit for SR 30/45.
To ensure all traffic south bound lanes exits SR 11 at the SR30/45 exit.

B-24 On the southbound entrance ramp of SR 11 at the intersection for SR 30/45.
To ensure no southbound traffic on SR 11.

SR11 Rogers Exit

B-25 On the southbound lane of SR 11 at the exit for SR 7.
To ensure all traffic south bound lanes exits SR 11 at the SR 7 exit.

B-26 On the southbound entrance ramps of SR 11 at the intersection of SR 7.
To ensure no southbound traffic on SR 11.

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SIGNS to Reception Centers:

Signs should be placed as needed to direct evacuees to Reception Centers at Beaver Local High School and Middleton Twp Fire/EMS.

On SR 39 northbound before Calcutta Smith Ferry Rd.
Detour north on Calcutta Smith Ferry.

On SR 11 southbound before West Point Exit.
Detour south on SR 45 south to Wellsville.

On SR 11 northbound lane before the Rogers Exit.
To Reception Center take Rogers Exit to Beaver Local High School.

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Enclosure 16 (Continued)

Traffic & Access Control Points for the perimeter of the 10 mile EPZ

STATE ROUTE 39/7 AND CAMPGROUND

To ensure the north bound traffic on SR 39/7 at the Camp Ground Rd exit is turned around and headed back south on SR 39/7

STATE ROUTE 39/7 AND CAMPGROUND

To ensure the south bound traffic on SR 39/7 at the Camp Ground Rd merges with southbound traffic that has been redirected.

STATE ROUTE 11 AT STATE ROUTE 267

To ensure traffic from SR 11 north and SR 267 north merge and continue north on SR 7 to Beaver Local School.

STATE ROUTE 7 AT E LIVERPOOL RD

To ensure traffic from SR 7 and E Liverpool Rd merge and continue north on SR 7 to Beaver Local School.

STATE ROUTE 11 AT STATE ROUTE 30/45

To ensure traffic exiting SR 11 south is routed back onto the entrance of SR 11 north.

Note: Traffic and Access Control locations will be determined and implemented as needed. TCP/ACP locations will be based on the following:

- Sub Areas evacuated
- Road construction
- Time of day
- Weather conditions

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Enclosure 17

EPZ PICKUP POINTS

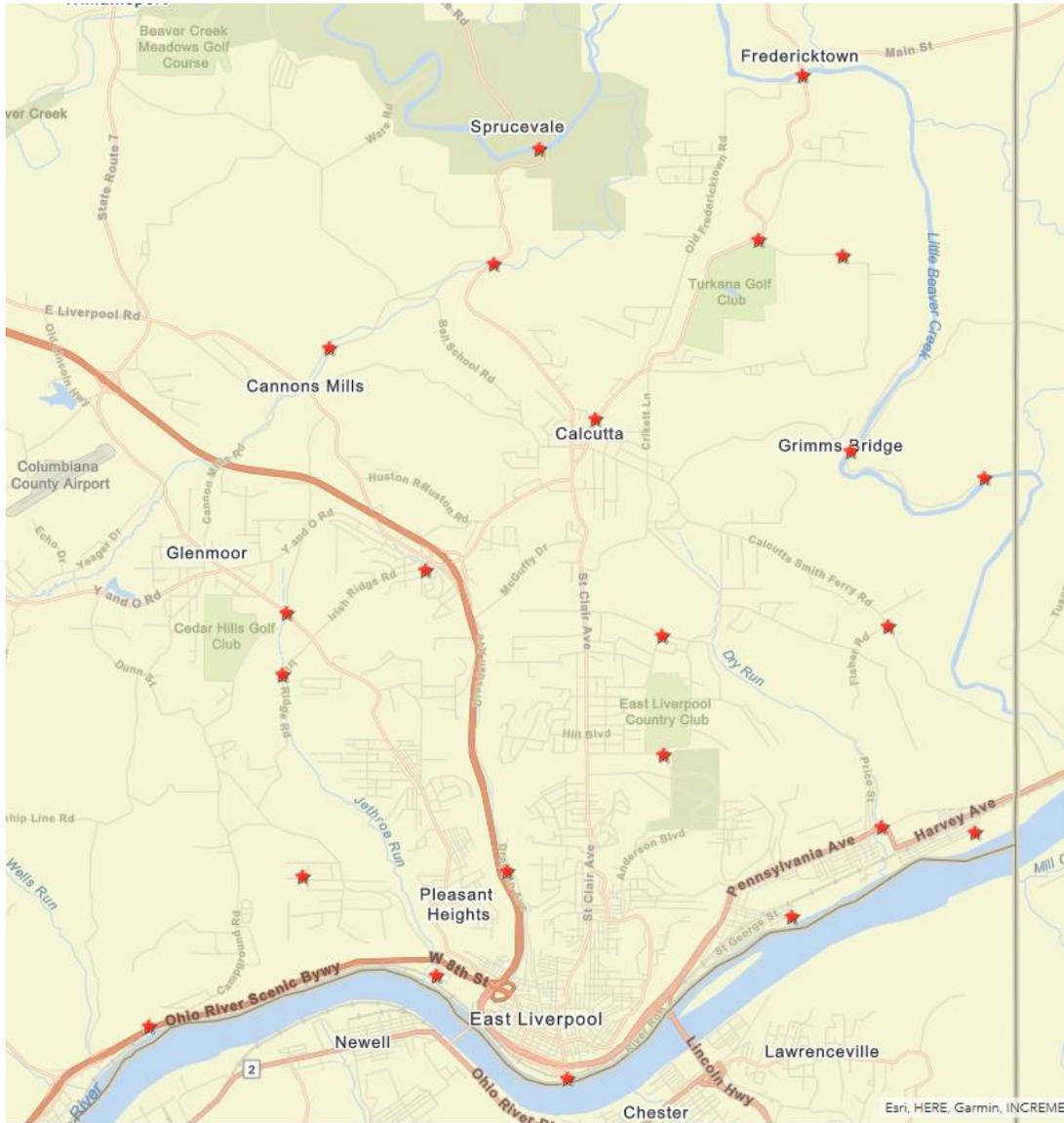
Location		Pick-up Point Locations
Sub-Area 1	East Liverpool & Liverpool Township	Former Hall China 1 Anna Street East Liverpool
Sub-Area 2	East Liverpool & Liverpool Township	Dixonville Fire Department LaCroft Elementary School Westgate Elementary School East Liverpool High School
Sub-Area 3	St Clair Township	Calcutta FD
Sub-Area 4	Middleton Township	None

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Enclosure 18

COLUMBIANA COUNTY 10-MILE EPZ REFERENCE POINTS

FOR STATE RADIOLOGICAL MONITORING TEAMS



SECTION II - PART J

Enclosure 18 (Continued)

BEAVER VALLEY NUCLEAR POWER STATION **STATE MONITORING LOCATIONS**

- N-1 Drive along Ohio Avenue as close to Ohio River as possible to east end of Babbs Island. Go to large factory along river to Puritan Avenue.
- N-2 East Liverpool, at 2nd Street and Broadway at large white storage tanks at river south of railroad tracks.
- N-3 The first street south of Orchard and Parkway on west side of road.
- N-4 Turn south off of State Route 7 by Vista Motel, Edwards Street. Follow road down into ravine, Leonard Street.
- N-5 Pond at Johnny's Landing S.O.I. at west end of Center Street off of Camp Ground Road.
- N-6 At State Route 7 and Kountz Avenue, by the Ohio River.
- P-1 Water works on Ohio or Brink Avenue along Ohio River. Look for electrical substation.
- P-2 Pennsylvania Avenue, at State Route 39 and Bridge Street on north side of road.
- P-3 On County Road 430, .25 mile north of Fisher Avenue.
- P-4 On Grimm's Bridge Road at Little Beaver Creek.
- P-5 On Parkway or Thompson Park Road just north of Armstrong Lane.
- P-6 On McCoy Avenue between County Road 428 and County Road 435.
- P-7 Farm pond on State Route 170, .2 mile north of Calcutta.
- P-8 Off of State Route 11 at corner of County Road 424 and Substation R Ridge Road on south side of road.
- P-9 On Irish Ridge Road, .30 mile south of State Route 267 - Lisbon Street.
- P-10 Corner of State Route 267, Lisbon Street and Long's Run, .35 mile north of County Road 425.
- P-11 Cannons-Mills Road and Long's Run, .35 mile north of County Road 425.

SECTION II - PART J

Enclosure 18 (Continued)

BEAVER VALLEY NUCLEAR POWER STATION MONITORING LOCATIONS

- P-12 County Road 428, .75 miles north of Calcutta where Long's Run crosses, just south of Cannons-Mills Road.
- Q-1 .5 miles southeast of Grimm's Bridge at end of road and Little Beaver Creek.
- Q-2 On Duke Road .6 mile southeast of State Route 170 and Duke Road intersection.
- Q-3 At corner of State Route 170 and Duke Rd., two miles north of Calcutta.
- Q-4 On State Route 170 at Bridge over Little Beaver Creek before entering Fredericktown.
- Q-5 County Road 428 at bridge over Little Beaver Creek, at Gretchen Locks Park Area.
- Q-6 .4 miles off of State Route 170 on Smith Road which is .2 mile north of Fredericktown on right.

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Enclosure 19
KI distribution for Columbiana County

2021-2022

EMERGENCY WORKER					Total number of pills
Expiration: October 31, 2029 Two Pills per Adult Dose "130 MG"					
Special Facility	Patients	Staff	Total		
Calcutta Health	100	50	150		
Valley Oaks	100	50	150		
EL Hospital	150	70	220		
WTI	00	20	20		
			540	Packets of Ten	
Emergency Workers			420	Packets of Ten	
Emergency Worker Extra			380	Packets of Ten	
				1340	13400
				Packets of Ten	
<u>GENERAL PUBLIC / SCHOOLS</u>					Total number of pills
Expiration: October 31, 2029 Two Pills per Adult Dose "130 MG"					
AGENCY	SCHOOL		Number of pills	Sub total Number of pills	
East Liverpool Health Dept			47,640 on hand		
Schools	E Liverpool district		12,000		
	EDI South		360		
	East Liverpool Christian		800		
					60,800
County Health Dept			60,800 on hand		
Salem Health Dept			0		
				60,800	121,600

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Enclosure 20

RECEPTION CENTER MONITORING CALCULATION for 20% of POPULATION

Total EPZ Population (2010 census)	20,556
20% of the EPZ population to be monitored within 12 hours	$20,556 \times 20\% = 4111$
Minutes in 12Hr	$12 \text{ hr} \times 60 \text{ min} = 720 \text{ min}$
Persons per minute	$10 \text{ seconds per person} = 6 \text{ persons/min}$
Each Portal can monitor this many persons in a day	$720 \text{ min/day} \times 6 \text{ person/min} = 4320$
Number of persons that can be monitored in 12 hr at each Reception Center with one monitoring line	4320
Number of Reception Centers	2
Total number of persons monitored in 12 hrs at two Reception Centers	8640

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SECTION II - PART K

RADIOLOGICAL EXPOSURE CONTROL

I. PURPOSE

This section describes the radiological monitoring and exposure control for emergency personnel, contamination and decontamination of personnel and equipment, radioactive material control, and radioactive waste disposal

II. RESPONSIBILITIES

- A. Each emergency response agency that is provided radiological monitoring and dosimetry equipment will provide, maintain, and furnish to the County RO exposure control records for each emergency worker and evacuee that is monitored. Equipment, Potassium Iodide (KI), and necessary record forms (See Enclosure 1 & 4) are provided through the Ohio EMA to the Columbiana County EMA for pre-distribution to designated agencies for their emergency use.
- B. Each emergency worker will wear dosimetry at all times when performing the assigned task. Individuals will be instructed to read their direct-reading dosimetry devices every thirty minutes or as requested. Individuals will read and complete Dosimeter Report Form and read the KI information insert. These forms and dosimeters will be collected by the Supervisor/Exposure Coordinator when the event is ended.
- C. The County Radiological Officer and the State of Ohio will permanently maintain records for each emergency worker to include dosimetry, personnel contamination and decontamination results. Assigned dose will, whenever possible, be determined from the Permanent Record Dosimeter (PRD). Columbiana County uses a Optically Stimulated Luminescence Dosimeters (OSLD) for PRDs. Ohio Dept. of Health will set a dosimeter reduction factor if inhalation dose becomes a factor.
- D. Agencies designated to perform monitoring and decontamination will be provided with survey instruments and necessary personal protective equipment, as well as decontamination supplies and necessary documentation forms. Kits will also contain specific instructions for the care and use of the equipment.
- E. Agencies performing monitoring and decontamination activities will segregate, contain, and identify contaminated items. The OEPA is responsible for ensuring waste material is disposed of properly.

III. DOSIMETRY EQUIPMENT

- A. Dosimetry equipment for Emergency Workers will be pre-distributed to each response agency with emergency responsibilities inside the EPZ and at monitoring/decontamination stations. Agency Supervisor/Exposure Coordinators are responsible for distribution of dosimetry packets to their personnel at the time of an emergency. Each emergency worker will be issued a dosimetry packet which includes: one PRD, one 0-20 Roentgen Direct-Reading Dosimeter (DRD), one 0-200 Roentgen DRD, one Dosimetry Report Form, Potassium Iodide (KI) and a KI Information Sheet.

SECTION II - PART K

Hospital emergency workers **may have a single 0-200 milliRoentgen DRD, and** may also have hospital issued dosimetry.

- B. For information on the use of dosimetry and Dosimetry Report Form, see Enclosure 1, Dosimetry Report Form. All emergency workers will:
 - 1. Read the KI package insert.
 - 2. Place the Dosimetry Report Form, KI Package Insert, PRD, Direct-Reading Dosimeters, and Potassium Iodide (KI) in the Dosimetry Packet, and carry it in an easily accessible location (outermost garment, upper trunk area of body) at all times.
- C. Area dosimetry packets are provided to risk nursing homes, hospitals and Heritage Thermal Services inside the 10-mile EPZ. Each packet contains one PRD, one 0-200 DRD, and one 0-20 DRD. Procedures for zeroing the equipment, records, and attendant forms are similar to the procedures used by emergency workers.

IV. MONITORING EQUIPMENT

- A. Radiation Detection

Radiation survey meters are instruments used to determine the intensity of a radiation field. The Ludlum Model 3 will be used to locate and quantify external radioactive contamination on personnel or equipment, and to measure dose rates in low intensity radiation fields. ~~The CDV-715 will be used to locate and measure high intensity radiation fields.~~ Portal monitors may be used to detect contamination on evacuees.
- B. Special Emergency Exposures

Every effort will be expended to keep exposures as low as reasonably achievable. These efforts will include methods such as rotation of tasks to equalize worker exposure by carefully monitoring individual exposure accumulations. Also, non-radiological related tasks (e.g., data recording, communications) will be performed outside of radiation areas whenever possible. However, there may be emergency situations causing a worker to exceed the recommended dose. (See Part J, Enc 7.G.)
- C. Contamination Monitoring
 - 1. Emergency workers will be monitored for contamination when they have been in potentially contaminated areas, when dosimeters indicate radiation exposure, or when such monitoring is requested by the individual. Monitoring of emergency workers will be performed by fire departments in which contamination monitoring stations are located. See Enclosure 2 for a listing of emergency worker decontamination centers and fire departments responsible for and trained in monitoring and decontamination operations.
 - 2. Monitoring of potentially contaminated vehicles and other equipment leaving the EPZ will be initiated when a radioactive plume release has been confirmed. Emergency worker vehicles and equipment will be monitored at the emergency worker decontamination centers.

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3. Contamination monitoring is performed using calibrated survey meters / portal monitors included in facility monitoring and decontamination kits. Contamination monitoring results are documented using forms similar to those shown in Enclosure 4.
4. Guidelines for acceptable contamination levels and recommended action to be taken when excessive contamination is detected are described in Enclosure 6. Limiting levels and actions described in the figure will be adhered to when contamination monitoring is required.

D. Decontamination

1. All personnel and equipment monitoring facilities are also equipped to decontaminate individuals or equipment found to have contamination levels above the allowable levels. Personnel decontamination can be accomplished using a simple soap and tepid water washing or shower. Equipment decontamination is performed using a wipe down, or detergent and water wash. Individuals performing decontamination are required to wear appropriate protective clothing.
2. Individuals who cannot be successfully decontaminated after two decontamination attempts will be transported to Salem Regional Medical Center Community Hospital, or if unavailable for use, ~~Ellwood City (PA) Hospital or~~ Weirton (WV) City Hospital. Contaminated personal items are retained for decontamination or disposal.
3. Decontamination facilities are located in close proximity to the monitoring stations to minimize the spread of contamination.
4. The training course given to radiological monitors includes sections on personnel and equipment decontamination methods; thus, fire department personnel staffing emergency worker contamination monitoring stations are qualified to perform both radiological monitoring and decontamination activities.

E. Medical Support and Treatment Facility

The Salem Regional Medical Center is the primary treatment facility for contaminated-injured persons. If the primary facility is unavailable for use, ~~Ellwood City or~~ Weirton Hospital will serve as backup.

F. Potassium Iodide (KI)

Use of KI to control internal exposure is discussed in Section II-J of this Plan.

G. Guidelines for Contamination Screening Levels

1. Background levels must be checked and noted in the area used for contamination screening. Using the Ludlum Model 3 if the background is \geq **300 counts per minute (cpm)**, attempts to decon the area or exchange of floor covering should be made. If this is unsuccessful at reducing the

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background, relocate the monitoring and decontamination area and cordon off the old area and post

2. Persons/Belongings/Vehicles/Equipment - Less than 300 cpm above background are considered NOT contaminated. If readings of 300 cpm above background or greater are found, contamination is indicated and should be documented. Persons/Belongings/Vehicles/Equipment should be decontaminated at a designated station. Contaminated clothing should be placed in a radiation disposal bag and marked (See Enclosure 6)
3. If a reading of 3000 cpm or greater in the Breathing Zone (i.e. mouth / nose) a hospital visit is required after decontamination.

V. METHODS OF ACCOMPLISHMENT

- A. Records of radiation exposure measured by direct-reading dosimeters and by PRDs will be maintained by the individual, the issuing agency, the County Radiological Officer, and the Ohio Department of Health (ODH). The issuing agency will maintain an "Emergency Worker Dosimetry Packet Issue and Exposure Log" which will record names of emergency workers, mission, location, time, initial readings, additional readings, and mission total. The individual, upon receipt of dosimetry from the issuing agency, will complete and maintain a "Dosimetry Report Form" which will record name, address, Social Security Number, mission, direct-reading dosimeters and PRD serial numbers, initial reading, ending reading, and mission total reading. The Dosimetry Report Form will be carried by the individual while in possession of dosimetry equipment and completed as necessary (See Enclosure 1). The PRDs will be shipped to the contracted manufacturer/supplier for dose and results sent to the County EMA.
- B. The Chief/**Head** of a locally committed agency, or **their** designated alternate, will assure that personnel will not exceed exposure levels developed by the US EPA or the Ohio Department of Health (See Part J, Enclosure 7).
- C. Emergency Workers will read their dosimeters every HALF HOUR and report readings to their Supervisor or Exposure Coordinator. SUPERVISOR or EXPOSURE COORDINATOR is to record the HALF HOUR reports from the Emergency Workers on the Dosimetry Exposure Log and report any readings above zero to the County Radiological Officer. (Back-up communication may be provided by amateur radio.) Emergency worker decontamination procedures will consist of personnel and monitoring equipment. Radiological monitoring will be performed by designated fire departments at designated facilities located outside the plume exposure pathway EPZ. All contaminations and exposures will be reported to the County and State EOC.
- D. If needed, Emergency crews and equipment leaving the area will be monitored and decontaminated. This will be conducted at local Emergency Worker Decontamination Centers. (See Enclosure 2.)

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- E. Maximum readings (~~CDV-700/~~ Ludlum Mod-3) for contamination should not exceed:
1. Personnel – 300cpm above background
 2. Equipment – 300cpm above background
- F. Public Exposure Control
Relocated citizens of Columbiana County will be directed to designated Reception Centers. Upon arrival at a Reception Center, evacuees will be monitored ~~by county fire department personnel~~ within 12 hours of their arrival. Persons monitored with over 300cpm above background with skin contamination will be decontaminated. If decontamination cannot be accomplished, the evacuees will be sent to the Salem Regional Medical Center. Persons having wounds with contamination levels over 300cpm above background will be sent to the hospital for decontamination. No one, including emergency workers, shall incur exposures in excess of EPA-PAGs (See Part J, Enclosure 7). Evacuees entering the Reception Center will undergo monitoring and decontamination if necessary, the results of which will be kept on a radiological record, (Enclosure 4). If the Ohio Department of Health recommended the taking of KI and the evacuees did not have or take KI, the dosage will be provided at the Reception Center by the county Health Department. Each decontamination facility will have ample volunteers, radiological trained and capable of performing necessary decontamination procedures.
- G. Housing of Evacuees
Upon evaluation, evacuees requiring temporary housing will be sent to appropriate Care Centers. Care Centers consist primarily of schools. The Red Cross will be responsible for the registration (~~See Section II Part A. M~~) of all evacuees staying at these Care Centers. Routine first aid medical treatment will also be available and will be administered by ARC staff nurses and members of local EMS services. Limited supplies of clean clothing will be available. ~~from the American Red Cross.~~
- H. Decontamination Supplies
Decontamination supplies are provided to Reception Centers and Emergency Worker Decontamination Stations. (See Section II-H-enclosure-7)

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VI. GUIDELINES FOR CONTAMINATION SCREENING

Contamination Limits			
SUBJECT	INSTRUMENT	LIMIT	CONDITION / ACTION
Maximum background in monitoring areas	Portal Monitor	per mfg.	as long as no high background alarm active
	Ludlum 3 w/ 44-9 probe	300 cpm.	1 meter above ground
Personnel initial monitoring	Portal Monitor	1 μ Ci	summed detectors
	Ludlum 3 w/ 44-9 probe	300 cpm	above background, 1-3 inches above subject, less than 6 inches per second
	CDV-700 (b)	300 cpm	Above background, ¼-½ inches above subject, less than 4 inches per second
Hospital referral (d)	Ludlum 3 w/ 44-9 probe	3000 cpm	Initial reading in designated areas (c) above this threshold, decontaminate and refer for uptake analysis
	Ludlum 3 w/ 44-9 probe	300 cpm	If reading above this threshold following two decontamination attempts, refer to medical facility
Vehicle/equipment/possession monitoring	Portal Monitor	1 μ Ci	summed detectors
	Ludlum 3 w/ 44-9 probe)	300 cpm	above background, 1 inch above surface, less than 12 inches per second
	CDV-700 (b)	300 cpm	above background, side window open, 1 inch above surface, less than 6 inches per second
Public vehicle/equipment/possession post-decontamination monitoring	Ludlum 3 w/ 44-9 probe	300 cpm	impound
Emergency vehicle/equipment/possession post-decontamination monitoring	Ludlum 3 w/ 44-9 probe	300 cpm	cover with plastic, mark, release for service
	Ludlum 3 w/ 44-9 probe	30,000 cpm	impound if contaminated surface in contact with personnel
Decontamination areas	Ludlum 3 w/ 44-9 probe	30,000 cpm	Decontaminate to reduce count rate, otherwise secure area, post warning, and relocate to another area

- a. Survey may be performed with an equivalent instrument provided that the probe is a thin window GM tube (pancake probe) and the instrument can provide a reading in counts per minute. Examples: Ludlum model 2241-3 with a 44-9 probe, Eberline E-140 with a HP-210 probe.
- b. A CDV-700 may be used as a backup to the Ludlum Model 3 for contamination surveys. Due to the decreased sensitivity, a slower rate of movement, as well as holding the probe closer to the surface is required.
- c. Designated areas are the head, face, chest, and neck due to the likelihood of ingestion if contamination is found in those areas.
- d. Thyroid monitoring for emergency workers, per FEMA REP-2, is addressed by the requirement that all emergency workers exposed to the plume are required to undergo bioassay following their final mission and all emergency workers are provided with KI prior to their first mission. Thyroid monitoring for the public is addressed by the requirement that if their initial survey in the head, face, neck, and chest area are greater than 3000 cpm above background, they are decontaminated and sent to a medical facility for bioassay.

Note: For detailed surveys and decontamination, and making a determination between loose surface and fixed contamination, see FEMA REP-22 / October 2002 for further guidance. The counts per minute equivalents were determined using FEMA REP-22 guidance, and calibration data for specific CDV instruments, where measuring beta-gamma contamination gives an equivalent 0.1 mR/hr. = 300 cpm. Where qualitative measurements are needed, such as measuring maximum background levels, or determining internal contamination, such as Thyroid measurements, the more restrictive calibration data for the specific instruments are used for equivalents.

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VII. Threshold doses for health effects

Table 1C. Acute Radiation Syndrome*

Feature or Illness	Effects of Whole-Body Absorbed Dose, from external radiation or internal absorption, by dose range in rad				
	0-100	100-200	200-600	600-800	>800
Nausea, vomiting	None	5-50%	50-100%	75-100%	90-100%
Time of onset		3-6 h	2-4 h	1-2 h	<1 h to minutes
Duration		<24 h	<24 h	<48 h	<48 h
Lymphocyte count	Unaffected	Minimally decreased	<1000 at 24 h	<500 at 24 h	Decreases within hours
Central Nervous System function	No Impairment	No Impairment	Cognitive impairment for 6-20 h	Cognitive impairment for >20 h	Rapid incapacitation
Mortality	None	Minimal	Low with aggressive therapy	High	Very High; Significant neurological symptoms indicate lethal dose

*Prompt health effects with whole-body absorbed doses received within a few hours.

Source: Medical Management of Radiological Casualties, Second Edition, Armed Forces Radiobiology Research Institute, Bethesda, MD, April 2003.

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**Enclosure 1 SAMPLE
DOSIMETER REPORT FORM
(Must be completed by anyone receiving dosimetry)**

PERSONAL IDENTIFICATION (Please Print)					
Name (Last, First, MI)			Emergency response Organization		
Employee ID or SSN	DOB (mm/dd/yyyy)	Sex	Job Title		
Home Mailing Address			Work Mailing Address		
Home City/State/Zip			Work City/State/Zip		
Home/Cell Phone Number	Home E-Mail Address		Work Phone Number	Work E-Mail Address	
MISSION ASSIGNMENT					
DATE	TIME	ACTIVITY / LOCATION		TEDE Dose Limit (rem)	Initial/revised Dosimeter Limit (R)

DOSIMETER RECORD							
Permanent Record Dosimeter (TLD/PRD)		Date Issued	Time Issued	Date Returned	Time Returned	Date of Reading	Final Reading
Serial							
Direct Reading Dosimeter		Date Issued	Time Issued	Date Returned	Time Returned	Return Reading	Mission Total
Range	0-200 R						
Serial							
Range	0-20 R						
Serial							
Range	0-200 mR*						
Serial							
Range	Electronic Dosimeter						
Serial							

*Few individuals will be issued these low range dosimeters.

RUNNING TOTAL OF EXPOSURE for current radiological incident				
Previous Running Total of Exposure	+	Current Mission Total	=	Running Total of Exposure
	+		=	

RECORD OF POTASSIUM IODIDE ADMINISTRATION					
DOSE	1	2	3	4	5
Date:					
Time:					

I have read the warning and instructions for administration of KI and understand the rationale for its use as well as the potential side effects that may occur from its administration.

This record is correct and complete to the best of my knowledge.

_____ Signature _____ Date

NOTE: WHEN COMPLETED THIS FORM CONTAINS PRIVACY ACT INFORMATION.

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Enclosure 1 (Continued)

DOSIMETER REPORT FORM INSTRUCTIONS

CAUTION: Emergency Workers shall be volunteers that have received information concerning the risks of radiation exposure, be at least 18 years of age, healthy, non-pregnant, and not allergic to iodine.

PRE-WORK INSTRUCTIONS:

1. Enter all your information in the Personal Identification section..
2. Enter the following information in the Dosimeter Record section; serial number, date issued for all dosimeters.
3. Record the applicable information in the Mission Assignment section.

Administrative Early-Phase Emergency Worker Dose and Dosimeter Limits		
Inside Emergency Planning Zone *County Response – Verify your limits per your SOG	TEDE Dose Limit	Initial/Default Dosimeter Limit
Standard Response Functions	5 rem	1 R*
Protecting valuable property	10 rem	2 R*
Lifesaving or protection of large populations	25 rem	5 R*
Outside Emergency Planning Zone:		
All activities	5 rem	5 R
Intermediate-Phase Dose and Dosimeter Limits		
Inside & Outside of the Restricted Zone:		
All activities	5 rem	5 R

4. Read the Potassium Iodide (KI) information sheet accompanying the tablets and check the box indicating this has been completed.
5. Ensure your dosimeters have been zeroed.
6. Record any exposures from previous pages, if applicable, in the Running Total of Exposure section.
7. Place dosimeters and TLD in chest area outside of clothing. Place KI and Dosimetry Report Form inside Dosimetry Packet and carry the packet with you.

DURING MISSION OR SHIFT INSTRUCTION:

2. Listen for instructions concerning the following: dosimeter reading time intervals, changes to the dosimeter value, and directions to take KI.
3. Read your dosimeters at the time interval directed or at least every 30 minutes.
4. Record any revision to your Dosimeter Limit Value in the appropriate block of the Mission Assignment section.
5. If applicable, record the date and time directed to take KI on your Record of Potassium Iodide Administration.
6. Report readings or discrepancies between dosimeters to your organization's Dosimetry Coordinator.
7. Do not exceed your Dosimeter Limit Value unless authorized by your organization's Dosimetry Coordinator.

UPON COMPLETION OF MISSION, SHIFT or TERMINATION OF INCIDENT INSTRUCTION:

1. Report to an Emergency Worker Monitoring and Decontamination Station.
2. Read your dosimeters and record information in the Dosimeter Record section:
 - a. Date and time returned and ending reading.
 - b. Calculate mission total (ending reading minus initial reading).
3. Record information in the Running Total of Exposure (previous running total of exposure plus this mission total).
4. Sign and Date bottom of form and return all contents to your Dosimetry Coordinator.
5. Obtain the same packet for your next shift/mission & start a new Dosimetry Report Form.
6. If assigned a different coordinator, you are to take your running total with you.

SECTION II - PART K

**Enclosure 1
(Continued)**

Dose Record Form

EMERGENCY WORKER EXPOSURE DOSIMETRY LOG

Page _____ of _____

Organization _____ Your Location _____

Date _____

Dosimetry Coordinator (your name) _____

KI

recommendation time: _____

				INITIAL READING	Dose Readings and Time KI was taken recorded throughout mission					Mission Total (final minus initial reading)	Exposure to date = Mission Total + Previous
Name	Packet #	Previous Exposure		TIME							
				0-20 R							
Activity/Location		Dosimeter Limit	TEDE Limit	0-200 R							
				KI							
Name	Packet #	Previous Exposure		TIME							
				0-20 R							
Activity/Location		Dosimeter Limit	TEDE Limit	0-200 R							
				KI							
Name	Packet #	Previous Exposure		TIME							
				0-20 R							
Activity/Location		Dosimeter Limit	TEDE Limit	0-200 R							
				KI							
Name	Packet #	Previous Exposure		TIME							
				0-20 R							
Activity/Location		Dosimeter Limit	TEDE Limit	0-200 R							
				KI							
Name	Packet #	Previous Exposure		TIME							
				0-20 R							
Activity/Location		Dosimeter Limit	TEDE Limit	0-200 R							
				KI							

KI PACKAGE INSERT

ThyroSafe®
(Potassium Iodide Tablets USP, 65 mg)
(Abbreviated KI)

Take potassium iodide (KI) only when public officials tell you. In a nuclear radiation emergency, radioactive iodine could be released into the air. KI protects only the thyroid gland from uptake of radioactive iodine. Therefore, KI should be used along with other emergency measures that will be recommended to you by public officials. If you are told to take this medicine, take it 1 time every 24 hours. Do not take it more often. More KI will not help you. Too much KI may increase the chances of side effects. Do not take this medicine if you know you are allergic to iodine (see SIDE EFFECTS below).

DESCRIPTION

Each white, round, cross-scored ThyroSafe® tablet contains 65 mg of potassium iodide.

INDICATIONS

ThyroSafe® (Potassium Iodide Tablets, USP) is a thyroid blocking medicine that is used in a nuclear radiation emergency only.

DIRECTIONS FOR USE

Use only as directed by public officials if a nuclear radiation emergency happens.

Dose:

Adults over 18 years	2 tablets (whole or crushed) every day (130 mg)
Children over 12 years to 18 years who weigh at least 150 pounds	2 tablets (whole or crushed) every day (130 mg)
Children over 12 years to 18 years who weigh less than 150 pounds	1 tablet (whole or crushed) or 8 teaspoons every day (65 mg)
Children over 3 years to 12 years	1 tablet (whole or crushed) or 8 teaspoons every day (65 mg)
Children over 1 month to 3 years	4 teaspoons every day (32.5 mg)
Babies at birth to 1 month	2 teaspoons every day (16.25 mg)

Tablets can be crushed and mixed in many liquids. To take the tablet in liquid solution, use dosing directions under Making a Potassium Iodide Liquid Mixture.

Take KI every day (every 24 hours) as directed by public officials. Do not take more than 1 dose in 24 hours. More KI will not help you. Too much medicine may increase the chances of side effects.

Making a Potassium Iodide Liquid Mixture:

- Put one 65 mg KI tablet into a small bowl and grind it into a fine powder using the back of a metal teaspoon against the inside of the bowl. The powder should not have any large pieces.
- Add 4 teaspoons of water to the crushed KI powder in the bowl and mix until the KI powder is dissolved in the water.
- Take the KI water mixture solution made in step 2 and mix it with 4 teaspoons of low fat white or chocolate milk, orange juice, fat soda, raspberry syrup, or infant formula.
- The KI liquid mixture will keep for up to 7 days in the refrigerator. It is recommended that the KI liquid mixtures be prepared weekly. Throw away unused portions.

The amount of KI (65 mg tablet) in the drink when mixed as described above is 8.125 mg per teaspoon. The number of teaspoons of the drink to give your child depends on your child's age as described in the following table:

Child's Age	Give your child this amount in teaspoons
Over 12 to 18 years old who weigh less than 150 pounds	8 teaspoons will give you a 65 mg dose
Over 3 to 12 years old	8 teaspoons will give you a 65 mg dose
Over 1 month to 3 years old	4 teaspoons will give you a 32.5 mg dose
Birth to 1 month	2 teaspoons will give you a 16.25 mg dose

Note: This is the amount to give your child for one single dose in teaspoons (not tablespoons). You should give your child one dose each day as recommended by the public officials.

Pregnant or breastfeeding women or babies under 1 month of age: Take as directed above and call a doctor as soon as possible. Repeat dosing should be avoided. It is recommended that thyroid function be checked in babies less than 1 month of age that take KI. Women who are pregnant or breastfeeding should also be checked by a doctor if repeat dosing is necessary. Although these precautions should be taken, the benefits of short-term use of KI to block uptake of radioactive iodine by the thyroid gland far exceed its chances of side effects.

Patients with thyroid disease: If you have both a nodular thyroid condition such as multinodular goiter with heart disease, you should not take KI. Patients with other thyroid conditions may take KI as directed above, but call a doctor if you need to take KI for more than a few days.

WARNING

People who are allergic to iodine, have dermatitis herpetiformis or hypocomplementemic vasculitis, or have nodular thyroid disease with heart disease should not take KI. Keep out of the reach of children. In case of an allergic reaction (difficulty breathing, speaking or swallowing, wheezing, shortness of breath or swelling of the mouth or throat), call 911 or get medical care right away. In case of overdose, get medical help or call a Poison Control Center right away.

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 onto a certain amount of iodine. In a nuclear radiation emergency, radioactive iodine may be released in the air. This material may be inhaled 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 KI, it will block or reduce the chances that radioactive iodine will enter your thyroid gland.

WHO SHOULD NOT TAKE POTASSIUM IODIDE

People should avoid KI if they are allergic to iodine, have dermatitis herpetiformis or hypocomplementemic vasculitis, or have nodular thyroid disease with heart disease, because these conditions may increase the chances of side effects to iodine.

HOW AND WHEN TO TAKE POTASSIUM IODIDE

KI should be taken as soon as possible after public officials tell you. If you are told to repeat the dose, you should take the second dose 24 hours after the first dose. Do not take it sooner. More KI will not help you. Public officials will tell you only certain amounts of iodine. Taking more than 1 dose per day will increase the chances of side effects. The public officials will tell you how many days to take KI. You should take KI until the chances of major exposure to radioactive iodine by breathing or swallowing stops.

SIDE EFFECTS

Short-term use of KI at the recommended dose is safe. You should not take this drug for longer than you are told. Possible side effects include: swelling of the salivary glands, nausea, vomiting, diarrhea, stomach ache, fever, headache, metallic taste, and allergic reactions. Allergic reactions can include:

- skin rashes such as hives
- swelling of various parts of the body such as the face, lips, tongue, throat, hands or feet
- fever with joint pain
- trouble breathing, speaking or swallowing
- wheezing or shortness of breath

Get medical attention right away if you have trouble breathing, speaking or swallowing, wheezing, shortness of breath, or swelling of the face, mouth, tongue, or throat.

Taking iodide in large doses, may cause over activity of the thyroid gland, underactivity of the thyroid gland, or enlargement of the thyroid gland (goiter). Symptoms of an overactive thyroid gland may include an irregular heart beat and chest pain. Symptoms of an underactive thyroid gland are more likely to get these side effects. Babies under 1 month of age are more likely to get an underactive thyroid gland (hypothyroidism).

WHAT TO DO IF SIDE EFFECTS OCCUR

Stopping KI and calling a doctor if you have one or more of the following symptoms:

- swelling of the face, mouth, feet
- fever and joint pain
- skin rash
- trouble breathing, speaking or swallowing
- shortness of breath or wheezing
- swelling of the lips, tongue or throat
- irregular heart beat or chest pain

Stop taking KI and get medical help right away if you have one or more of the following symptoms:

- trouble breathing, speaking or swallowing
- shortness of breath or wheezing
- swelling of the lips, tongue or throat
- irregular heart beat or chest pain

HOW SUPPLIED

ThyroSafe® potassium iodide, USP tablets. Packages of 10 and 20 tablets. Each white, round, cross-scored tablet contains 65 mg potassium iodide. Store at 20-25°C (68-77°F). Keep dry and foil intact. Manufactured by Reciplarm Stockholm AB, Sweden, for Reciplarm Inc, USA, 1-866-849-7672. www.thyrosafe.com

Revised 2008-10-07

SECTION II - PART K

Enclosure 2

EMERGENCY WORKER DECONTAMINATION STATIONS

The following facilities are to be utilized as decontamination sites in the event of an offsite release at the BVPS.

	<u>Facilities</u>	<u>Affected Areas</u>
1.	Middleton Township Fire/EMS Station Richardson Avenue Negley, OH	Middleton Township St. Clair Township
2.	Beaver Local High School Complex 13187 State Route 7 Lisbon, OH 44432	Liverpool Township

All personnel and equipment utilized in each Township/City should report to that area assigned decontamination facility for monitoring/decontamination should the need arise for such action.

SECTION II - PART K

Enclosure 3

EVACUEE REGISTRATION FORM

SAMPLE

**AMERICAN RED CROSS
SHELTER REGISTRATION FORM**
Please print all sections

Incident / DR number & Name: _____
Shelter Name: _____
Shelter City, County, State: _____

Family Name: (Last Name)		Total family members registered: _____ sheltered: _____
Pre-Disaster Address:	Post-Disaster Address (if different):	Identification verified by: (Record Document I.D. number and type)
City/State/Zip:	City/State/Zip:	Primary language:
Home phone:	Cell phone/Other::	If primary language is not English, does anyone speak English? (Who?)
Method of Transportation: If personal vehicle-plate #/State: (for security purposes only)		

INFORMATION ABOUT INDIVIDUAL FAMILY MEMBERS

Name: Last, First	Age	Gender (M/F)	Rm./Cot #	Arrival Date	Departure Date	Departing? Relocation address and phone

Are there members of your family who currently need medical attention or are taking medication? No Yes – who? Referral to DHS: Y N

Are there other evacuated members of your family who are staying elsewhere? Referral to DMH: Y N

Please list contact information if known: _____

Special dietary needs: _____

Special accommodations required: _____

Housing needs are: Permanent Temporary Unknown at this time Is Home insured? Y N

How is family affected? Home Damaged Home Destroyed Home Inaccessible Evacuated from area

Notes: _____

I have read / been read and understand the Red Cross shelter rules and agree to abide by them.

Family Member Signature (print and sign) _____ Date _____

ARC Worker Name (print and sign) _____ Date _____

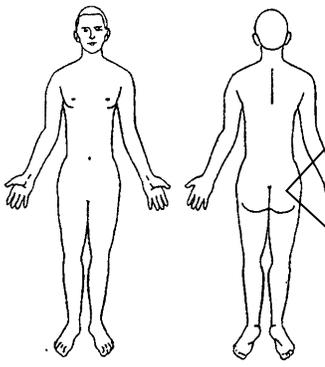
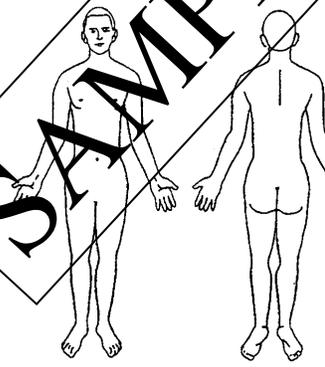
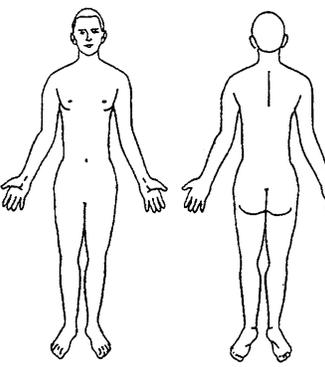
For ARC purposes only:		
Release of confidential information form: <input type="checkbox"/> Signed & attached <input type="checkbox"/> Refused	Date:	_____
Copies Separated and distributed by:	Date:	_____
Data entry completed by:	Date:	_____

Copy Distribution
1. Shelter registration on-site file - Mass Care 2. Information Management (Data Entry) 3. DWI 4. Client (if requested)

SECTION II - PART K

Enclosure 4

PERSONNEL MONITORING RECORD

MONITORING STATION					
PERSONAL INFORMATION					
NAME				DATE OF BIRTH	
ADDRESS				SEX (M/F)	
CITY, STATE, ZIP				TELEPHONE NUMBER ()	
INJURIES/EXTERNAL CONTAMINATION					
1st MONITORING		2nd MONITORING		3rd MONITORING	
DATE	TIME	DATE	TIME	DATE	TIME
PORTAL MODEL	PORTAL SERIAL #	<input type="checkbox"/> REMOVE CLOTHING <input type="checkbox"/> WASH AT SINK <input type="checkbox"/> SHOWER		<input type="checkbox"/> REMOVE CLOTHING <input type="checkbox"/> WASH AT SINK <input type="checkbox"/> SHOWER	
PORTAL READING					
MONITOR'S NAME					
METER MODEL	METER SERIAL	METER MODEL	METER SERIAL	METER MODEL	METER SERIAL
BACKGROUND READING		BACKGROUND READING		BACKGROUND READING	
MONITOR'S NAME		MONITOR'S NAME		MONITOR'S NAME	
					
THYROID MONITORING					
Thyroid monitoring: If the Initial Survey (1 st Monitoring) of the head, face, neck, or chest area is greater than 3,000 cpm above background, the individual is decontaminated and referred to a medical facility for follow-up.					
DISTRIBUTION					
Copy 1 – Individual		Copy 2 – State (ODH)		Copy 3 – Monitoring Station	

Rev. 7/2008

SECTION II - PART K

**Enclosure 4
(Continued)**

EQUIPMENT DECONTAMINATION RECORD

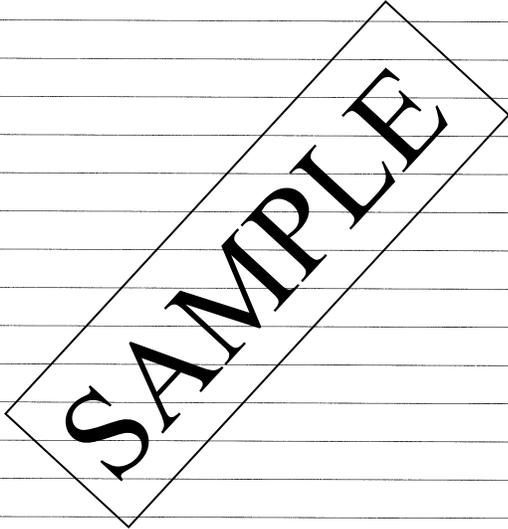
MONITORING STATION		DATE	TIME
EQUIPMENT INFORMATION			
EQUIPMENT DESCRIPTION (Include serial number, VIN Number, or unique identifier as applicable)			
OWNER'S NAME	<input type="checkbox"/> PUBLICLY OWNED	<input type="checkbox"/> PRIVATELY OWNED	<input type="checkbox"/> COMMERCIAL OWNED
ORGANIZATION (If Applicable)	TELEPHONE NUMBER ()		
ADDRESS	CITY, STATE, ZIP		
CONTAMINATION DETECTED			
EQUIPMENT DIAGRAM			
SAMPLE			
CONTAMINATION			
METER MODEL	METER SERIAL #	BACKGROUND	MONITOR'S NAME
LOCATION		INITIAL READING	AFTER 1 ST DECON
			AFTER 2 ND DECON
FINAL DISPOSITION			
<input type="checkbox"/> Decontaminated and released	<input type="checkbox"/> Impounded		<input type="checkbox"/> Contaminated, but released for emergency service
DISTRIBUTION			
Copy 1 - Owner Copy 2 - Attach to Equip Copy 3 - State(ODH) Copy 4 - Monitoring Station			

SECTION II - PART K

Enclosure 4

(Continued)

PROPERTY RECEIPT FORM

MONITORING STATION		DATE	TIME
PROPERTY INFORMATION			
OWNER'S NAME		<input type="checkbox"/> PUBLICLY OWNED	<input type="checkbox"/> PRIVATELY OWNED
ORGANIZATION (IF APPLICABLE)		<input type="checkbox"/> COMMERCIALY OWNED	
ADDRESS		TELEPHONE NUMBER ()	
		CITY, STATE, ZIP	
ARTICLE DESCRIPTION			
Note: Include serial numbers or unique identifiers if applicable. Estimate a replacement value if possible.			
			
DISPOSITION			
STORAGE LOCATION		RECEIVED BY	
DISTRIBUTION			
Copy 1 – Owner Copy 2 – Attach to Item Copy 3 – State(EMA) Copy 4 – Monitoring Station			

SECTION II - PART K

Enclosure 5

EXPOSURE CONTROL AND MONITORING EQUIPMENT

DOSIMETER CHARGER

BASIC OPERATION

The CDV 750 model 6 dosimeter charger (fig. 1) is used to zero all direct reading dosimeters. The charger is self-powered, requiring no batteries. The voltage necessary to charge a dosimeter is generated by squeezing the generator lever. A discharge button allows the operator to set a dosimeter exactly on zero. The clamp trigger pulls back on the clamp to allow a dosimeter to be positioned on the charger or be removed from the charger. The charger controls the movement of the hairline fiber inside the dosimeter. When the fiber is on zero, the dosimeter is said to be "zeroed".

CHARGING THE DOSIMETER

1. Hold the charger upright as shown in Fig. 1. Lift the clamp and pull it back to its maximum length. Place the dosimeter in the clamp and fit the dosimeter recess (opposite end from the lens) over the charging contact.

2. Squeeze the clamp trigger. Push the clamp forward until the end is against the eyepiece of the dosimeter.

3. Release the trigger. Check that the position of the dosimeter provides a good view through the lens. Refer to fig. 2.

4. With the dosimeter locked in place and lens facing you, point towards a suitable light source, such as a light fixture, window, candle, etc. as shown in fig. 2.

5. Look through the lens and observe the horizontal scale. Squeeze the generator lever and release lightly a few times. NOTE: If the dosimeter is not responding, you may need to apply more pressure with the clamp by gently pushing forward on the clamp against the end of the dosimeter. DO NOT PUSH TOO HARD. You can damage the dosimeter. Watch for movement of the fiber from the right of the scale towards ZERO. Squeeze the lever again if needed to zero the dosimeter. NOTE: if the fiber has traveled to the left of the zero but is still visible, push the discharge button and watch the fiber move to the right. If the fiber is not visible, repeat Step 5.

6. To remove the dosimeter, pull clamp trigger, lift dosimeter to just above the end of clamp and pull dosimeter straight back to disengage it from the charging contact. The length of the clamp will not change unless the clamp is manually adjusted.

7. Record the serial numbers and the initial readings on the Dosimetry Report Form. (Form 1)

8. Place Dosimeters in the Dosimeter Packet, and keep the packet with you as instructed.

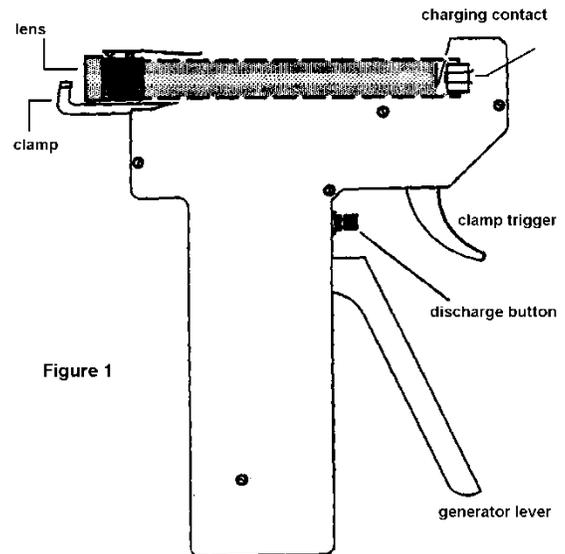


Figure 1

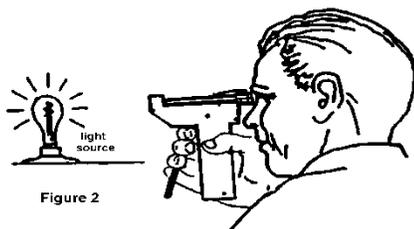
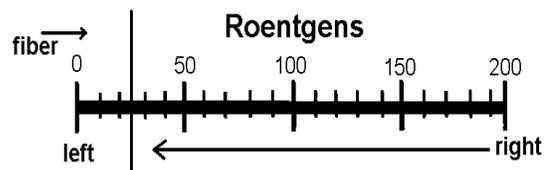


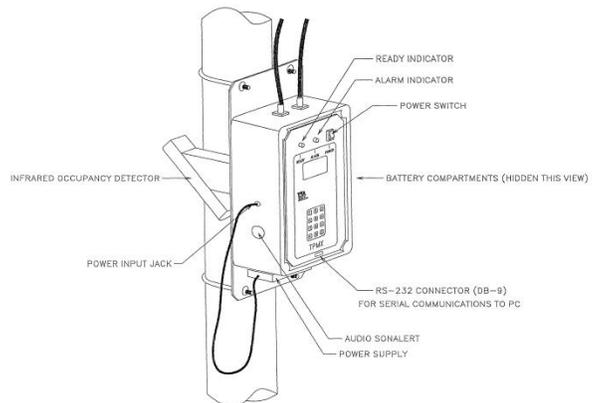
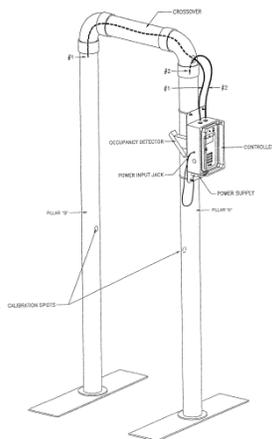
Figure 2



SECTION II - PART K

THERMO FISHER TPM-903 PORTAL PEDESTRIANS

1. Unlatch the hard case and remove the pieces. There will be two vertical pillars, two-foot plates, and a crosspiece.
2. Check the calibration date. If past due date, **DO NOT USE**.
3. Attach the vertical pillars to the footplates with the wing-nuts.
4. At the location designated in the floor plan (Att-7), stand the two vertical pillars upright, approximately 32" apart. Orient the pillars so that the yellow dots are facing each other. The control box is to be on the right side when entering the portal.
5. Feed the two shorter coaxial cables through the crossover tube and out the small hole below the elbow on the control box pillar.
6. Align the vertical pillars with the crosspiece and slide the cross piece down onto the vertical pillars until it is firmly seated.
7. The two sides of the crosspiece are marked and should be verified that the letters or numbers correspond with the vertical pillars, and connect the MHV connectors to the mating connectors on the vertical pillars.
8. Connect the two coaxial cables to the connectors marked with the corresponding letters or numbers on the controller.
9. Verify that the power switch is in the "Off" position. If the system is to be operated on batteries, install a fresh set of "D" cells at this time. Otherwise, make sure an AC power source is available, connect the power supply, and plug in the power supply.
10. Turn unit on and allow the portal to conduct the self-test and the background test, if a **fault** message is displayed the system **cannot** be placed in service.
11. Adjust the motion sensor to "see" the evacuee about 5 ft away from the portal - the adjustable side flaps (if present) may be positioned to eliminate lateral interference.
12. Walk through the portal **without** a 1 μ Ci Cesium check source; portal should **not alarm**. Walk through the portal **with** a check source at foot height, belt height, and head height; portal **should alarm**. If this test fails the portal **cannot** be placed in service.



SECTION II - PART K

SURVEY METERS: Ludlum Model - 3

- A. Before using the **Model - 3** for surveying perform the operational check:
1. Check the calibration sticker. If calibration is past due – do not use.
 2. Turn the Range Selector switch to off.
 2. Open the battery lid by pushing down and turning the quarter-turn thumbscrew counterclockwise $\frac{1}{4}$ turn.
 3. Install the batteries observing polarity marked inside the battery door.
 4. Close the instrument by reversing the procedure in step 2.
 5. The Meter and Pancake Probe are calibrated together. Do not exchange probes with other meter sets. Attach the cable to meter and probe.
 6. Move the range switch to the “BAT” position. The meter needle should move to the Battery portion of the meter face, if it does not replace the batteries.
 7. Turn the Range Selector Switch to the appropriate setting (x1 or x10).
 8. Place the “AUD” switch in the ON position.
 9. Place the Speed switch in the “F” “Rabbit” position.
 10. Remove the plastic cover from the Pancake Probe and set it aside.
 11. On the side of the meter find the Check Source and slide open the door.
 12. Place the exposed window of the probe directly on the Check Source.
 11. The amount of clicks from the speaker will increase.
 12. On the Counts per Minute scale the meter needle should move to a point within the listed range for the “**Check Source**” on the calibration sticker.
- IF THE METER IS NOT READING WITHIN THE RANGE LISTED,
DO NOT USE THIS METER..**
- B. Place the probe in a light plastic bag, or cover with lightweight material to prevent contamination of the probe.
- C. Place the Range Selector in the X 0.1 position.
- D. When monitoring persons or equipment determine the Background reading in the area where the monitoring will take place.
- E. The presence of radiation will be indicated by a sustained increase in the number of clicks heard and an increase in the meter reading. Determine the location of the greatest number of clicks. The probe should be held stationary over the area for 4 seconds for maximum meter response, read the meter.

SECTION II - PART K

Enclosure 6

SURVEYING AND DECONTAMINATION PROCEDURES Reception / Emergency Worker Decontamination Center

I. PURPOSE

- A. The purpose of a radiological survey is to determine if a person, domesticated pet / service animal, equipment or vehicle has become contaminated with radioactive materials and to what degree.
- B. The purpose of decontamination is to prevent / limit the spread of contamination onto / into uncontaminated areas. In addition, timely decontamination will prevent the contamination from entering body openings. Contamination should be removed as soon as possible.

II. GENERAL STATEMENT OF OPERATION:

Reception Center operations are to include monitoring / decontamination of evacuees and vehicles

Emergency Worker Decontamination Center operations are to include the monitoring and decontamination of emergency response persons & equipment that have responded to or have been contaminated by a radioactive material accident.

III. PREPARATION OF A MONITORING AND DECONTAMINATION CENTER

- A. The Monitoring and Decontamination Station should be planned in such a way as to limit the flow of potentially contaminated personnel and vehicles through uncontaminated areas.
- B. Monitoring and decontamination personnel should ensure that sufficient equipment; supplies, records and forms are available.
- C. Radioactive waste that has been collected must be kept in a secured room until picked up by a qualified agent.
- D. Ensure Supervisor/Exposure Coordinator Procedures are followed.
- E. Perform an operational check of the monitoring equipment.
- F. Determine the level of background radiation in the screening/monitoring area. This reading should be recorded on a poster in the area of use.
- G Personnel Protective Equipment:
 - Vehicle Monitor/Decon: Turn out-gear with rubber gloves.
 - Scribe: Rubber gloves, Rubber boots
 - Helpers: Rubber gloves, Rubber boots
 - Personnel Monitor/Decon: Tyvex suits, Rubber gloves, and Paper boots
 - Scribe: Rubber gloves, Paper boots
 - Helpers: Rubber gloves, Paper boots

SECTION II - PART K

- H. Notify the County Fire Services Officer when you start receiving contaminated persons and / or vehicles. 424-9049

IV. Initial Personnel Contamination Survey with TPM-903 Portal:

- A. Turn the portal on and allow it to perform the self-check.
- B. Individuals should stop about 10 feet from the portal and wait until instructed to proceed into the portal.
- C. Individuals will be directed to the portal monitor one at a time, about (1) one every (10) ten seconds.
- D. Evacuees should walk through the portal at a normal rate without stopping.
 - 1. If the **alarm sounds** direct the evacuee to the appropriate locker room for decontamination.
 - 2. If **no alarm sounds** mark as clean and direct the evacuee to the registration area, KI will be distributed if needed.

NOTE: **Personal vehicles** will be impounded if the vehicle occupants cause the portal to alarm.

Emergency Worker vehicles will be directed to decontamination if the occupants cause the portal to alarm.

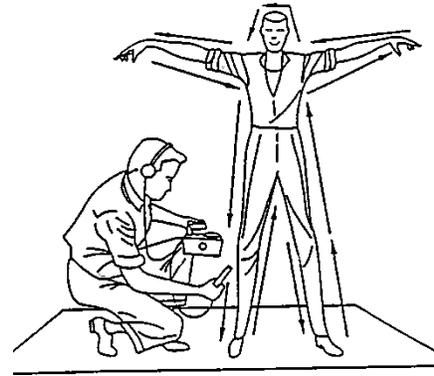
- E. After a contaminated individual departs the portal, wait 20 seconds before allowing the next evacuee to pass through the portal.
- F. If the portal indicates high background you must attempt to clean the monitoring area, if unsuccessful move the monitoring location.

SECTION II - PART K

V. Initial Personnel Contamination Survey with the Ludlum - 3: To be used if the Portal Monitor is not available.

- A. Perform an operational check of the Ludlum - 3 Survey Meter.
- B. Perform background check in the area of use and record.
- C. The Range Selector switch should be placed in the X0.1 position.
- D. Direct person to the first monitoring station. Begin a Personnel Monitoring Record for all persons reporting to the Monitoring Area.
- E. Persons being monitored (**approximately 3.9 minutes**) should stand with arms and legs spread slightly apart.

1. The monitor should hold the protected probe, open window, facing the body approximately 1-3 inch and move approximately (6) inches per second over the entire body, moving the probe downward on one side of the neck, the collar, the shoulder, arm, wrist, hand, underarm, armpit, side of body, side of leg, around the cuff and shoe, including the sole of the shoe. The inside of the leg from the cuff to the groin will be surveyed and the procedure will continue on the other side of the body, front and back.



2. Measurements on clothing or skin **less than 300 cpm above background** radiation are considered clean and that individual may leave, or proceed to the Red Cross Station for registration/housing.
3. The presence of contamination will be indicated by a reading of **300 cpm above background or higher** on the meter, as well as by an increase in the number of clicks from the speaker. The audible response will make it possible to pinpoint any "hot spots" on the person being surveyed. For maximum meter response, hold probe stationary for 4 seconds. If a reading of 300 cpm above background or higher is indicated, relay the results to the scribe to be recorded, decontamination is required and the monitor must: notify the County Fire Services Officer 424-9049.
4. If a reading of **3000 cpm** or greater is found in the area of the head, face, neck, or chest a hospital visit is required after decontamination.
5. The contaminated person should then be advised to proceed to the Decontamination Area.
6. A completed Personnel Monitoring Record (Form 4) should be forwarded to the monitor in the Decon Area, so decon information can be added.

SECTION II - PART K

VI. Secondary Monitoring and Decontamination after using the TPM 903 Portal:

- A. Conduct an Initial Contamination Survey as outlined on page 3 of this attachment.
- B. Follow instructions listed below.

Secondary Monitoring and Decontamination after using the Ludlum-3:

- A. Review the Personnel Monitoring Record. (Form 4)
- B. The person is requested to remove any contaminated clothing and place them into a radiation disposal bag. The storage area for the bag must be secured.
- C. A Property Receipt Form (Form 5) will be issued to any person who must leave any contaminated clothing or equipment.
- D. If the evacuee is found contaminated (**300 cpm above background or higher**), direct the person to the washing stations for decontamination (hand sink or shower).
- E. Wash using mild soap and tepid water.
- F. Wash the most contaminated area first and work toward the least contaminated.
- G. Avoid spreading the contamination to body openings and the eyes.
- H. Dry off.
- I. Resurvey contaminated area(s) with Ludlum - 3 and record the results.
- J. If all previously contaminated areas are found clean (**less than 300 cpm above background**), proceed to the Registration area.
- K. If the person is still contaminated (**300 cpm above background or higher**), wash again and be re-surveyed.
- L. Give individual a copy of Personnel Monitoring Record. (See Form 4) and instruct the evacuee to proceed to registration / instruct the emergency worker he/she is to return DOSIMETRY to their supervisor.
- M. Be sure evacuees having suitable clothing to replace what was taken away. Contact the Red Cross or Salvation Army for needed items.
- N. If the person is still contaminated after the second washing, the Monitor will notify the County Radiological Officer and have the person transported to the Salem Regional Medical Center in Salem Ohio.

SECTION II - PART K

VII. Monitoring of Domesticated pets and Service Animals

This process excludes animals classified as livestock, birds, reptiles, amphibians, fish, and arthropods.

It is likely that pets will be decontaminated to levels preventing the spread of contamination to humans and the environment; they will then be allowed to return to background levels by natural processes.

- a. All pets will be under the control of their owners at all times. Any animal entering the Reception Center will be penned or on a leash. Under no circumstances should animals be allowed to run freely while at Reception Center.
- b. Owners will be monitored prior to their animal, if the owner is determined to be contaminated, and then the animal will automatically be assumed to be contaminated as well.
- c. Monitoring for animals can be accomplished using portal monitors or hand-held portable survey instruments. "See section IV and V of this attachment"
- d. For pets requiring decontamination; pet owners will be issued rubber gloves and given instructions on proper decontamination techniques. Decontamination of pets will include washing them with soap & water, and then simply rinsing.
- e. Hair, excreta, and any other potentially contaminated materials should be collected and held for proper storage and disposal.
- f. Personnel monitoring forms will be completed for any animals monitored/decontaminated. Forms will be maintained as prescribed by the existing county radiological plan.
- g. Owners will be advised of existing Red Cross policy regarding animals at Care Centers prior to departing the facility.

SECTION II - PART K

VIII. General Public Vehicle Monitoring and Decontamination Procedure POST ACCIDENT

NOTE: If the driver or passengers are found contaminated during personnel monitoring, insure the vehicle is **IMPOUNDED**.

- A. General Public vehicles may be monitored / decontaminated as time / resources permits using the following procedure.
- B. Perform an operational check of the Ludlum - 3 Survey Meter (~~Att-3~~).
- C. Perform background check in the area of use and record. (~~See Att-6~~).
- D. The Range Selector switch should be placed in the X0.1 position
- E. The interior of vehicles should be surveyed before decontamination is attempted. Hold the probe approximately 1 inch from the surface and move at approximately 6 inches per second paying particular attention to the door handles, steering wheel, seats, and floor. If any contamination is present (**300 cpm** or greater above background), **IMPOUND** the vehicle

NOTE: DO NOT ATTEMPT TO DECONTAMINATE VEHICLES
THAT HAVE THEIR INTERIOR CONTAMINATED

- F. The radiological monitor should monitor the vehicle by positioning the probe to survey the door handles, grill, bumpers, tires, and wheel wells. Hold the probe approximately 1 inch from the surface and move at approximately 6 inches per second.
- G. Document your findings on an Equipment Decontamination Record (Form-3)
- H. Working upwind to avoid spray hose down the exterior of the car with water at an optimum distance of 15 to 20 feet.
- I. Wash with soap and water using sponge or brush, spray surfaces with water to rinse so contaminated water does not splash onto your body.
- J. Work from the roof to the bottom of the vehicle to avoid recontamination.
- K. Re-survey the vehicle for contamination (**300 cpm or higher** above background). If the vehicle is still contaminated move it to a secured isolation area and lock it.

SECTION II - PART K

IX. Procedures for Emergency Vehicle Monitoring / Decontamination

- A. Perform an operational check of the Ludlum - 3 Survey Meter (~~Att - 3~~).
- B. Perform background check in the area of use and record. (~~See Att - 6~~).
- C. The Range Selector switch should be placed in the X0.1 position
- D. The interior of vehicles should be surveyed before decontamination is attempted. Hold the probe approximately 1 inch from the surface and move at approximately 6 inches per second paying particular attention to the door handles, steering wheel, seats, and floor.
- E. Passengers are directed to the Personnel Monitoring/Decon Area.
- F. If the occupants cause the portal to alarm. The interior will be monitored and decontaminated.
- G. The radiological monitor should monitor the outside of the vehicle by positioning the probe to survey the door handles, grill, bumpers, tires, and wheel wells. Hold the probe approximately 1 inch from the surface and move at approximately 6 inches per second.
- H. If any contamination is present (**300 cpm** or greater above background), note this on the Equipment Decontamination Record (Form-3).
- I. Vehicles that **are found to be contaminated (reading of 300 cpm or greater above background)** will be directed to the appropriate Decontamination Area where the vehicle will be decontaminated.
- J. The equipment operator should drive the vehicles to the Vehicle Decontamination Area.
- K. Work upwind to avoid spray, hose down the exterior of the car with water at an optimum distance of 15 to 20 feet.
- L. Wash with soap and water using sponge or brush, spray surfaces with water to rinse so contaminated water does not splash onto your body.
- M. Work from the roof to the bottom of the vehicle to avoid recontamination

SECTION II - PART K

- N. If the interior is contaminated and depending on the need for that vehicle's immediate use you may try;
- Wiping down the area inside the vehicle with moist towels (Handy wipe).
 - Using masking tape sticky side out to blot up the material
- O. After decontamination re-survey the vehicle (inside and outside) for remaining hot spots (**300 cpm to 30,000 cpm** above background) this is considered fixed contamination. The interior hot spots that may come in contact with occupants will be covered with plastic and the area marked. The vehicle may then be released for service inside the EPZ, this decision depends upon the need for its immediate use.
- P. Upon completion, the unit will be released to the vehicle staging area, which is located at the Columbiana County Career & Technical Center or put back in service.
- Q. If the reading is **30,000 cpm or greater** anywhere the vehicle must be impounded
- R. Issue a Property Receipt Form (Form- 5) to the owners of impounded vehicles and/or property

X. INSTRUCTIONS FOR THE USE OF THE CDV-700 AS BACKUP

INSTRUMENTATION SHOULD THE LUDLUM-3 FAIL.

1. The operation of the CDV-700 is different from the Ludlum-3, the differences are listed:
2. Perform an operational check of the CDV-700 survey meter.
3. Must allow the meter to warm up for two minutes.
4. Headphones must always be used.
5. The detection probe must always be kept in the open position
6. When persons / vehicles are being monitored hold the protected probe, open window, facing the body approximately 1/2 inch and move approximately (4) inches per second over the entire body. (Should take **approximately 19 minutes**)
7. The presence of contamination will be indicated by a reading of **300 cpm above background or higher** on the meter, as well as by an increase in the audible indication from the headphone.
8. The audible response will make it possible to pinpoint any "hot spots" during the survey, hold probe stationary for 15 seconds.

SECTION II - PART K

XI. VEHICLE SCREENING GUIDANCE

GENERAL PUBLIC VEHICLES

- General Public vehicles found with external contamination will be impounded.
- When a vehicle is screened and the exterior is found to be clean, the interior is assumed clean pending the screening of the occupants.
- If the occupant of a General Public vehicle is found contaminated the vehicle is impounded.

EMERGENCY WORKER VEHICLES

- Emergency Vehicles found to have external contamination will be monitored and decontaminated.
- After decontamination Emergency Vehicles with fixed areas of contamination up to 30,000 cpm may be placed back into service depending upon the need for the vehicle.
- Emergency Vehicles with fixed contamination over 30,000 cpm must be impounded.

SECTION II - PART L

MEDICAL AND PUBLIC HEALTH SUPPORT

I. PURPOSE

This section will provide for the medical services of contaminated persons.

II. MEDICAL FACILITIES

A. **Salem Regional Medical Center** - Salem, Ohio

1. Serves as the primary care facility to receive and treat persons exposed, contaminated, or injured as a result of a radiological incident at Beaver Valley Power Station (BVPS). The hospital has a 199-bed capacity.
2. Upon discharge of 50% of ambulatory patients, the facility can accommodate 125 patients.
3. In the event of evacuation of East Liverpool, the City Hospital will be evacuated to the Salem Regional, ~~Ellwood City~~, or Weirton Hospital
4. Lists of trained individuals is retained at Columbiana County Emergency Management Agency and Salem Regional Medical Center. The total number of trained individuals varies with normal turnover and staffing requirements.

B. **Weirton Hospital** – Weirton WV.

1. Serves as the backup for the primary medical facility in the treatment of contaminated/injured individuals. The hospital has a 235-bed capacity.
2. Upon discharge of 50% of ambulatory patients, the facility can accommodate 117 patients.
3. Hospital personnel receive training in handling radiological victims. Records kept by local authorities.

C. For backup hospitals in the event of an overflow, see **Ohio REP Operations Manual, XI. NUREG-0654 Criteria L.**

D. Emergency response staffing rosters are maintained by each hospital department.

E. Salem Regional Medical Center guidance is referenced in Sec VI – I

Note: Health – Medical Officer in the county EOC is responsible for coordinating the evacuation of nursing homes and hospitals in the EPZ.

SECTION II - PART L

III. EVALUATION OF RADIATION EXPOSURE

- A. Salem Regional Medical Center will provide diagnostic evaluation services for individuals with an uptake of radiological materials. Facilities may also seek assistance from the Radiation Emergency Assistance Center/Training Site (REAC/TS) Department of Energy, in the performance of these services.

IV. TRANSPORTATION

- A. Local ambulance and medical services will provide transportation of patients. Radiological training is offered for medical and transportation emergency resources personnel who provide transportation to medical facilities for contaminated, injured persons of the public and emergency response organizations.
- B. If local public and private transportation is not sufficient for complete evacuation, Columbiana County EMA will request additional support through Ohio EMA.
- C. Transport crews in Columbiana County do not perform monitoring or decontamination of patents.

V. SPECIAL FACILITIES / NURSING HOMES AND HEALTH CARE

- A. Nursing homes and health care facilities located within the EPZ shall be safely evacuated to ~~Salem Regional Medical Center~~ or a health care facility of an equal level of care to provide a safe area for those patients who must be sheltered in place. Those patients, whose conditions permit, may be temporarily sent to stay with relatives. **Nursing Homes and Health Care Facilities are required to have internal plans and agreements with other facilities in the event that evacuation is necessary.**
- B. Receiving hospitals and health care facilities outlined in the paragraph above shall be prepared for augmentation of personnel, patients and resources of nursing homes and health care facilities evacuating from the EPZ. Receiving facilities shall accept nursing home residents or homebound individuals and provide for their continued and uninterrupted health and medical services dependent upon the availability of personnel, beds, and equipment.

SECTION II - PART M

RE-ENTRY / RECOVERY AND POST- ACCIDENT OPERATIONS

I. PURPOSE

This section identifies general plans for recovery, re-entry, relocation and return following a release of radioactive material from the Beaver Valley Power Station (BVPS), which results in evacuation or sheltering of an affected area.

II. OVERVIEW

- A. Columbiana County Commissioners will initiate termination of the emergency response and entry into the recovery phase based upon advice from staff assembled at the Emergency Operations Center (EOC) and recommendations from State and Federal agencies and the utility.
- B. The emergency response effort will shift from an emergency phase to recovery only after the following conditions are satisfied:
1. BVPS officials inform the County Commissioners that releases of radioactive material from the power station to the environment are within acceptable levels or have ceased; the plant is in a stable condition; there will be no further releases of radioactive material; and the utility declares the emergency terminated.
 2. State and Federal field monitoring teams verify that releases have ceased. Continue monitoring and sample analysis to refine and specifically define contaminated areas and hot spots.
 3. Contaminated areas in the county have been identified to prevent inadvertent entry. Boundary may be adjusted depending on natural or man-made barriers which are near the contaminated area and which lend themselves to effective control of access.
 4. The State makes the recommendation to relax protective measures in accordance with the **Ohio REP Operations Manual and State Agency Procedures**. Boundary may also include a buffer zone to prevent contaminated drift through wind or water runoff.
- C. The Columbiana County Emergency Management Agency **Director** will be responsible for convening and chairing the Columbiana County Post Accident Operations Committee (PAOC) comprised of key EOC staff to include:
1. Columbiana County EMA **Director** (lead)
 2. Columbiana County Commissioners
 3. County Engineer
 4. Columbiana County Sheriff
 5. Radiological Officer
 6. Ohio EMA Resident Radiological Analyst
 7. Fire/EMS Liaison
 8. Department of Health Representatives
 9. Ohio State University Extension Agent
 10. Columbiana County Schools Representative
 11. Public Information Officer
 12. BVPS Technical Liaison
 13. **Local Elected Officials**

SECTION II - PART M

- D. The PAOC will monitor various State, Federal and Utility activities relating to recovery, reentry, relocation and return including:
1. Radiological assessment of milk, food and water.
 2. Decontamination.
 3. Disposal of radioactive waste.
 4. Establishment of long-term radiological monitoring program.
 5. Recommendations regarding protective actions.
- E. The PAOC will implement applicable procedures including:
1. Continued provision for care of evacuees at care centers.
 2. Transportation assistance for evacuees.
 3. Restoration of all essential services.
 4. Security control throughout the **recovery** period.
 5. Informing all County Departments of the progress of the recovery through periodic updates.
- F. Federal, State and local resources will be available to support post-accident operations determined to be necessary. The Ohio EMA will advise the county on available sources of Federal and State financial assistance, and will assist the County in applying for such assistance if it is needed.

III. RELOCATION, RE-ENTRY, RETURN

- A. The PAOC will coordinate with the State Dose Assessment Team to conduct the following:
- Establish the Restricted Zone
Monitoring teams have determined the actual deposition of radioactive material. The State Ingestion Zone Recovery and Re-entry Advisory Group (IZRRAG) will develop a map showing actual deposition levels. The County may add a Buffer Zone and identifiable and easily secured boundaries.
 - Relocating residents residing inside of the Restricted Zone not already evacuated during the Plume Phase with priorities established in procedures or as the situation requires.
 - Reentering the evacuated zone to provide vital services. New access control points must be established while still maintaining access control points and security for the total initial evacuation zone. The notification of local officials in order to facilitate the re-establishment of essential public services. Persons reentering the Restricted Zone will receive an exposure control briefing, will be issued Dosimetry, and report to Monitoring and Decontamination upon exit. Monitoring and Decontamination will follow same guidelines as during the Emergency Phase.
 - Return evacuees back to homes not affected by ground deposition
1. The return area, if the size of it warrants, may be divided into sub-areas in order to return the population one or two sub-areas at a time to ensure more efficient use of public service resources and manpower.

SECTION II - PART M

2. The notification of the Red Cross and any other organization with responsibilities in the care of evacuees, in order to inform the people in their care of the return and to make any special arrangements, as in the case of people with special needs or hospitals.
 3. The general public will be informed of those areas for return and any advisories in place through the Joint **Public** Information Center (**JPIC**).
- B. Redefinition of the Restricted Zone will result over time due to the decay of radioactivity, weathering and/or recovery efforts.
- C. Recovery
The Columbiana County EMA **Director** will be responsible for convening and chairing a Recovery Sub-committee comprised of key EOC staff to include key PAOC members:
- County Commissioners
 - County Engineer
 - County Law Enforcement
 - Radiological Officer
 - OEMA Resident Radiological Analyst
 - Health Department Representative
 - Fire/EMS Liaison
 - Agriculture Service Agent
 - Public Information Officer
 - Local Government Liaisons (as appropriate)
 - Additional EOC staff as necessary
1. The Recovery Sub-committee will monitor various State, Federal and Utility activities relating to recovery and cleanup and will implement applicable procedures and provide assistance as appropriate.
 2. Recovery efforts will include pertinent responses to: cleanup, return of business, return of residents, financial rebuilding and reimbursements, long term responses, long term isolation of areas, and all other issues that may arise.

SECTION II - PART M

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SECTION II - PART N

EXERCISES AND DRILLS

I. PURPOSE

The purpose of this section is to provide for exercises and drills of the Columbiana County Radiological Emergency Response Plan, which will help identify deficiencies in the plan and improve emergency response capabilities.

II. CRITERIA

- A. An exercise will be conducted on a biennial basis in conjunction with the Beaver Valley Power Station (BVPS) and the State of Ohio. (See Enclosure 3). This exercise will include local and State agencies in order to assess their resources and capability to respond to a nuclear emergency. A scenario will be developed and the actual physical performance of County, local and State agencies and departments will be demonstrated. (See Enclosure 1).
- B. Additional exercises may be conducted by any agency having a response role for an incident at the BVPS. This exercise or drill may be locally devised and may involve one or more agencies, which will strive to improve operations through the exercise process. Exercises may be operational exercises or tabletop exercises.
- C. At least three months prior to the biennial BVPS exercise, BVPS, Columbiana County, and Ohio EMA officials will develop a scenario. Scenarios used in exercises are to be drafted in such a manner as to reflect a realistic series of events, which may serve to develop, or evaluate, the professional response capabilities of the agency or agencies under evaluation. Scenarios should include the following major criteria in order to achieve exercise goals and objectives: (See Enclosure 2).
 1. The objective(s) of the drill or exercise.
 2. Dates, times, sites for scheduled activity, and participating agencies.
 3. The simulated event or events in chronological order.
 4. A timetable of real and simulated initiating events.
 5. A narrative summary describing the conduct of the exercise or drill.
 6. Observation and critique schedule.
- D. The major scenario will be varied from exercise to exercise so that all major elements of the plan and preparedness organizations are tested within an ~~six (6)~~ ~~to~~ eight (8) year period or as suggest in the FEMA REP Program Manual. The County will work with the State and BVPS to ensure the scenario drives necessary responses. If not, County will plan drill accordingly to meet all objectives.
- E. Coordination of the exercise date with the NRC and FEMA will be arranged so that evaluation teams can be present and participation by Federal response organizations is possible. This includes providing advance-supporting materials.
- F. REP exercises will be conducted with appropriate number of responders and in accordance with FEMA and NRC policies and exercise methodology.

SECTION II - PART N

- G. All major elements of the plans/procedures will be tested at minimum at the frequency specified by the REP Program Manual. Scenarios for exercises will be varied from exercise to exercise and include all required scenario variations during the exercise cycle.

III. DRILLS

A. Communications Drills

1. BVPS conducts a radio test daily by contacting the Columbiana County Sheriff's Office.
2. The Sheriff tests his communications capability by contacting police units through normal dispatch procedures.
3. Testing of the siren system is coordinated by BVPS and is implemented as follows: Silent test weekly, Growl test quarterly, Full Cycle **once** per year.
4. Tests of the Initial Notification systems and Gold Executive Conference are performed monthly, with content checks performed. The tests are initiated by BVPS. Backup radio checks are performed quarterly with content messages.
5. Ohio EMA tests radio systems between the State and County EOC's on a weekly basis.
6. Local response organizations use notification systems on a daily basis to conduct normal operations.

B. Medical Emergency Drill

A medical emergency drill with a simulated radiologically contaminated injured and/or exposed individual will be conducted annually. This drill will involve resource integration from EMS units and a primary or alternate hospital as listed in Section L-II.

C. Radiological Monitoring Drill

A radiological monitoring drill involves the collection and simulated analyses of sample media such as water, soil, vegetation, and air, as well as provisions for communications and record keeping.

Ohio EMA, in conjunction with BVPS, has the primary responsibility for conducting such drills annually. Columbiana County does not perform field radiological monitoring; however, they will support the State and Utility during these drills.

D. Ingestion Pathway Drill

Ingestion Pathway Drills will be conducted biennially. Evaluated drills are required once in the eight-year cycle and is primarily a function of the State. Columbiana County will conduct a drill biennially on the County's portion of the Intermediate Phase response.

- E. The County will consider alternatives to drills to meet capabilities. Such alternatives could be real-world emergencies, non-power plant drills, out of sequence events, etc.

SECTION II - PART N

IV. EVALUATION

- A. A critique by appropriate local, State, and Federal observers will be held as soon as possible after the exercise or drill in accordance with FEMA Guidance.

- B. It is the responsibility of Ohio EMA and Columbiana County EMA to ensure that all emergency plan and procedure short comings identified by participants or observers during drills, exercises and plan reviews are corrected. The Ohio EMA and the Columbiana County EMA will assist the participants with any revisions necessary to improve response. Findings identified by Federal agencies will be addressed to the Executive Director of the Ohio EMA through FEMA, Region V, and Regional Assistance Committee Chairman. It is the responsibility of the Executive Director of the Ohio EMA to ensure a timely response to such correspondence.

SECTION II - PART N

Enclosure 1

TEST EXERCISE CHECKLIST

The purpose of this table is to evaluate the procedures established to respond to a nuclear incident.

A. COLUMBIANA COUNTY SHERIFF

1. Time notified of incident? _____
2. Did he contact all personnel on his notification list? _____
3. Was proper confirmation of emergency procedures followed? _____
4. Were roadblock sites designated? _____

B. SCHOOL SERVICES OFFICER

1. Alert all schools of incident during session? _____
2. Notify schools to be used as Care Centers? _____
3. Make arrangements for use of school buses? _____

C. COUNTY ENGINEER

1. Were arrangements for roadblocks made with the Sheriff? _____
2. Were personnel alerted to report? _____
3. Was aid requested form State Highway Department? _____
4. Were plans made for re-entry? _____

D. AMERICAN RED CROSS

1. Were notifications made to shelter managers? _____
2. Were County Chapters of the ARC notified? _____
3. Were arrangements made for mobile kitchens and food? _____

E. FIRE DEPARTMENTS

1. Time notified of incident? _____
2. Did volunteers respond? _____
3. Was coordination made with adjacent fire departments? _____

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F. COLUMBIANA COUNTY EMA

1. Was the County Agriculture Extension Service Notified? ___ Time? _____
2. Was the County Health Department Notified? ___ Time? _____
3. Was the American Red Cross notified? ___ Time? _____
4. Were Care Centers alerted? _____
5. Were arrangements made to support evacuees? _____
6. Was coordination with other County agents made? _____

G. COLUMBIANA COUNTY HEALTH DEPARTMENT

1. Was the Health Department notified of the incident? _____
2. Were preparations for sanitation facilities made? _____
3. Was assistance requested from the Ohio Health Department? _____

H. OHIO STATE HIGHWAY PATROL

1. Was the Highway Patrol notified? ___ Time? _____
2. Were officers notified in accordance with SOP's? _____
3. Were roadblock sites designated? _____

SECTION II - PART N

Enclosure 2

TEST EXERCISE SCENARIO (OUTLINE) **(To be considered as a Sample Format)**

All participants in an exercise, or drill, for the validation of a Radiological Emergency Response Plan will incorporate the following features into the scenario:

- a. The basic objective(s) of each drill and exercise and appropriate evaluation criteria;
- b. The date(s), time period, place(s), and participating organizations;
- c. The simulated events;
- d. A time schedule of real and simulated initiating events;
- e. A narrative summary describing the conduct of the exercise or drill to include such things as simulated casualties, offsite fire department, rescue of personnel, use of protective clothing, deployment of radiological monitoring teams, and public information activities;
- f. A description of the arrangements for and advance materials to be provided to official observers.

SECTION II - PART N

Enclosure 3

FEDERAL EVALUATED DRILL REQUIREMENTS
SCHEDULED EXERCISES/DRILLS

EXERCISE/DRILL	FREQUENCY
POWER PLANT EXERCISES:	
A. Partial Participation (Mini Drills)	Annually
B. Full Participation	Biennially
COMMUNICATION DRILLS:	
State/Local Government	Weekly
MEDICAL DRILLS	
Conducted annually and evaluated biennially	

DRILL TABLE

2021	2022	2023	2024	2025	2026	2027	2028
MS-1	PP 6/7	MS-1	FP RRR HAB 6/11	MS-1	PP ING 6/9	MS-1	FP ING 6/6

LEGEND:

- FP = Full Participation Plume Phase
- HAB = Hostile Action Basis
- RRR = Relocate/Reentry/Return
- ING = Ingestion Zone (This is a State Function)
- MS-1 = Medical Services

SECTION II - PART N

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SECTION II - PART O

RADIOLOGICAL RESPONSE TRAINING

I. PURPOSE

The purpose of this section is to describe the training provided to emergency personnel in Columbiana County who may be called upon to respond to an emergency at the Beaver Valley Power Station (BVPS).

II. TASKS AND RESPONSIBILITIES

A. County EMA Director

1. The establishment and maintenance of training needs and requirements within the jurisdiction for:
 - a. Radiological monitors (including Decontamination Teams).
 - b. Radiological monitor instructors.
 - c. Specific emergency response training.
2. The scheduling and conduct of initial training and annual retraining programs for response personnel.
 - a. Reference: Ohio State REP **Operations Manual**.
 - b. Reference: See Enclosure 1.
3. To assist in the conduct of training in Columbiana County by Ohio EMA personnel.
4. Coordination of training requests and activities.

III. PROCEDURES

- A. The EMA Director will work to ensure the availability of radiological response training for involved agencies and personnel within their jurisdiction.
- B. Priorities of training will be established and met in accordance with **XIV. NUREG Criteria O, State REP Operations Manual**.
- C. Authorities for scheduling and performance – Ref; **XIV. NUREG Criteria O, State REP Operations Manual**.
- D. General review of training records will be conducted on an annual basis and maintained at the County level to show:
 1. Courses scheduled.
 2. In-course reviews and comments.
 3. Courses completed.
 4. Attendees.
- E. All reports for training will be submitted through the EMA Director or as directed in **XIV. NUREG Criteria O, State REP Operations Manual**.

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IV. STATE TRAINING PROGRAMS

- A. The Ohio EMA is responsible for providing radiological related training programs for local government and private agencies in Ohio.
- B. The Ohio EMA will conduct training for health professional personnel in health effects of ionizing radiation exposure and in the monitoring, decontamination and treatment of exposed persons.
- C. The Ohio Emergency Management Agency (Ohio EMA) will ensure that radiological response training is conducted for State and local agencies requesting such training. The Ohio EMA has the authority to schedule and perform such training as outlined in Section **XIV. NUREG Criteria O.1.B of the State REP Operations Manual.**

V. COLUMBIANA COUNTY TRAINING PROGRAMS

- A. CCEMA will conduct joint training sessions for its own personnel and State and local agencies:
 - 1. Monitoring
 - 2. Evacuation implementation
 - 3. Public notification and protective action recommendations
 - 4. Communications
 - 5. Federal interface
 - 6. Press relations
 - 7. EOC operations
 - 8. Director, Dept. Director
- B. Coordination training for local services personnel is conducted annually to ensure that the response agreed upon is workable and/or to provide for improvements.
- C. Training of mutual aid organizations will be conducted as necessary per LOA.

VI. TYPES OF TRAINING

- A. Introduction to Emergency Planning
This course provides an overview of the Columbiana County Emergency Plan, accident classification levels, protective action recommendations, functions of the BVPS Joint Public Information Center, communications between the county and the utility, procedures for notification of response agencies and the public and basic EPZ concepts. This course is applicable to all emergency response personnel.
- B. Suggested Operational Guidance (SOG) Training
These courses provide in-depth training on the specific responses and actions required by an agency or organization as outlined in its SOG. It includes notification of the agency or organization, notification of emergency personnel, and major responsibilities for key responders within each organization. SOG training is applicable to all emergency personnel or individuals with SOG's.
- C. Practical

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Some SOG courses will include practical or walk-throughs of the specific actions or functions discussed in the SOG course. Staff practical will be provided to emergency personnel within an organization to provide them with experience in performing specific tasks. EOC practical's will be provided to persons managing or directing a specific task or function from the EOC.

D. Radiological Training

Several radiological courses will be provided, including the following:

1. Radiological Exposure Control

This course includes an explanation and hands-on use of dosimetry and Potassium Iodide (KI). This course is for most emergency workers.

2. Radiological Monitoring (RM)

This course includes an explanation of radiation and radioactive materials, biological effects of radiation, use of survey instruments, portal monitors, KI, dosimeters, monitoring for contamination, decontamination procedures and an overview of basic principles of nuclear power generation. This course, offered by Ohio EMA, is applicable to selected emergency personnel.

3. Radiological Monitoring and Decontamination

This course provides advanced training in the use of survey instruments, portal monitors, and decontamination. This course, offered by Ohio EMA, is applicable to emergency personnel who will perform monitoring and decontamination of people and vehicles.

E. Emergency Operations Center (EOC Training)

This course provides an overview of EOC operations including notification of EOC personnel, tasks of specific groups in the EOC, purpose and location of EOC equipment, message and information flow in the EOC. "See SOG – 1"

F. Briefings

In addition to formal training, Columbiana County Emergency Management Agency (EMA) and Ohio EMA also provide familiarization briefings periodically on items of interest to the response agency/group.

G. Frequency of Training

Initial training will be scheduled expeditiously for all newly assigned emergency personnel. Retraining and refresher training will be offered at least annually thereafter.

1. All requests from local agencies for training conducted by State or Federal agencies will be submitted through or coordinated with the Columbiana County EMA. The State REP **Operations Manual** contains a listing of available State and Federal courses.
2. The Columbiana County EMA will maintain a listing of trained personnel and emergency assignments.
3. Columbiana County EMA will coordinate training with primary and secondary responders.
4. Just in time training will be provided as the need arises.

SECTION II - PART O

H. Additional training is available from Energy Harbor and FEMA as requested.

Enclosure 1

TRAINING REQUIREMENTS

EMERGENCY RESPONSE PERSONNEL TRAINING MATRIX

	INTRO TO EP	EOC	SOG	RADIOLOGICAL EXPOSURE CONTROL	MON/DECON	RM
COLUMBIANA COUNTY						
Commissioners	X	X	X			
EMA Director	X	X	X	X	X	X
EOC Operation	X	X	X			
Engineer	X	X	X	X		
Engineer's Liaison	X	X	X	X		
Sheriff	X	X	X	X		
Sheriff's Liaison	X	X	X	X		
Sheriff's Dispatcher	X		X	X		
Health/Medical Coordinator	X	X	X			
General Health District Liaison	X	X	X			
Radiological Officer	X	X	X	X	X	X
ARC Representative	X	X	X			
Human Services Rep.	X	X	X			
Public Info. Officer	X	X	X			
Public Info. Ass't.	X	X	X			
Public Inquiry Controller	X	X	X			
Message Controller	X	X	X			
Message Logger	X	X	X			
Messengers	X	X	X			
Status Board Keeper	X	X	X			
Coop. Extension Agent	X	X	X			
Fire/EMS Liaison	X	X	X	X		
County School Sup't.	X	X	X	X		
ARES Representative	X	X	X	X		
LOCAL						
Fire/EMS Chiefs	X		X	X		X
Fire/EMS Personnel	X		X	X		X
Mon/Decon Teams	X		X	X	X	X
Dosimetry Coordinators	X		X	X		X
Route Verification Teams	X		X	X		X
Police Chiefs	X		X	X		
Police Dept. Personnel	X		X	X		
School Sup'ts.	X		X	X		
Transportation Directors	X		X	X		
Bus Drivers	X		X	X		
Critical Worker	X		X	X		
Amateur Radio Operators	X		X	X		
Sheriff Deputy	X		X	X		
STATE						
ODOT	X	X	X	X		

SECTION II - PART O

Training Modules Ohio EMA

- 1 – Basic Principles of Radiation
- 2A – Biological Effects – general
- 2B – Biological Effects – Medical Personnel
- 3 – Contamination Pathways
- 4 – Exposure Control
- 5 – Basic Radiological Emergency Response
- 6A – Instrumentation Dosimetry
- 6B – Instrumentation – Survey Instruments
- 6C – Instrumentation – Portal Monitors
- 6D – Instrumentation – Survey Instruments – General
- 6E – Instrumentation – UltraRadiac
- 7A – Personal Protective Equipment – Medical Personnel
- 7B - Personal Protective Equipment – Fire/Police/EMS
- 7C - Personal Protective Equipment – Field Monitoring Teams
- 7D - Personal Protective Equipment – Monitoring and Decontamination Facility
- 8A – Sampling Techniques – Early Phase
- 8B – Sampling Techniques – Intermediate Phase: EPA
- 8C – Sampling Techniques – Intermediate Phase: ODA
- 8D – Sampling Techniques – Intermediate Phase: ODNR
- 9A – Radiological Monitoring & Decontamination – Personnel (Monitoring)
- 9B – Radiological Monitoring & Decontamination – Personnel (Decontamination)
- 9C – Radiological Monitoring & Decontamination – Vehicles/Equipment (Monitoring)
- 9D – Radiological Monitoring & Decontamination – Public Vehicles (Decontamination)
- 9E – Radiological Monitoring & Decontamination – Emergency Vehicles/Equipment (Decontamination)
- 10 – Medical Transport
- 11 – Hospital Radiation Exclusion Area
- 12 – Potassium Iodide (KI)
- 13A – Protective Actions – Early Phase
- 13B – Protective Actions – Intermediate Phase
- 14A – Early Phase Dose Assessment Overview – Non RAD personnel
- 14B – Early Phase Dose Assessment Overview–RAD personnel
- 15A – Intermediate Phase Dose Assessment Overview– Non RAD personnel
- 15B – Intermediate Phase Dose Assessment Overview–RAD personnel
- 16 – IZRRAG Training
- 17 – Basic: Plant

SECTION II - PART O

Area	Example(s)	Target Audience	Modules
Critical Facility Worker	Special Facility	Nursing Home, Hospitals, Jail, water treatment plants	1, 2, 3, 4, 5, 6, 13
Monitor / Decontamination	Emergency Workers and General Public	Fire Department, EMS,	1, 2, 3, 4, 5, 6, 7, 9, 13
Evacuee Support	Reception / Care Center	Red Cross, NGOs, Job & Family Services	1
		Health Dept.	1, 13
Medical Services	Hospital	Radiology, ED, security, housekeeping	1, 2, 3, 4, 5, 6, 7, 12, 13
Med. Transport	EMS	EMS (Medical Transport cont. persons)	1, 2, 3, 4, 5, 6, 7, 10, 13
School Admin	Risk School	Administration	1
Transport in EPZ	Transportation	Transportation Staff	1, 2, 3, 4, 5, 6, 13
Communication	Initial Notification / 2 way	Amateur, Communicator, EOC, Dispatchers	1
Emergency Operation Center		Executive. Operations, Public Information	1, 14a
Support Organizations	Backup Route, TCP/ACP, EMS (normal transport), Support Personnel	Fire / Police Departments; State, County, Twp., City, Ambulance Co, Park Lands, Coast Guard, Div of Watercraft	1, 2, 3, 4, 5, 6, 13,
Risk Facilities	Requiring Notification	Head Start, Day Care, Adult Care, Housing Authorities, General Public interest groups	1
Field Assessment	Field Monitoring Teams Field Sampling Teams	County & State	1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 13, 14a, 14b
Auxiliary Organizations		Host Schools	1

Initial and refresher training courses will be counted in the same functional area. The material presented in the courses covers the same topic, but in different formats.

Utility sponsored Emergency Action Level (EAL) training will still be documented in the Annual Letter of Certification (ALC), but not included as a state functional training area.

All functional areas will meet ALC requirements to state 1) Scope and purpose, 2) Date(s) held, 3) Number of participants, 4) Agency/organizations represented, 5) Sponsor Organization

Auxiliary Organizations is a catch all category for those organizations which do not fit into the other functional areas.

SECTION II - PART P

RESPONSIBILITY FOR THE PLANNING EFFORT:

I. PURPOSE

The purpose of this section is to assure that responsibilities for plan development, review and distribution are properly established and implemented.

II. AUTHORITY

Chapter 5502.21 through 5502.51, ORC, and Governor's Executive Order of 1978.

III. RESPONSIBILITY

The Columbiana County Emergency Management Agency under direction from the County Commissioner's Office is charged with the coordination of all activities of the agencies associated with Emergency Management within the County.

IV. ORGANIZATION FOR EMERGENCY RESPONSE PLANNERS

- A. The Director of the Columbiana County Emergency Management Agency is the individual with the overall responsibility for coordinating radiological emergency response planning in the County.
- B. The Columbiana County Board of Commissioners will assign the County Emergency Management Agency Director to the position of Emergency Planning Coordinator as an additional duty. The Coordinator is, in turn, responsible for coordinating and updating emergency plans in conjunction with other response organizations.

V. PLAN UPDATE AND DISTRIBUTION

- A. Update
 - 1. The Emergency Management Director will update the County Plan including maps in conjunction with the State and Utility Company operating plans, taking into account any changes identified through drills, exercises, and FEMA reviews. This shall be done as often as necessary, as but not less than once a year, and with State approval.
 - 2. Once updated, changes will be furnished and verified to every holder based upon original and subsequent distribution. In the event there is no change during the annual review, a letter of certification to this effect will be furnished to every plan holder. Approved revised pages will be dated and marked to indicate clearly where changes have been made.
 - 3. The County Resource Manual will be updated annually.
 - 4. Revision bars or red lettering will be used to mark changes, and a list of changes will be include with the plan revision.
- B. Distribution of the Radiological Emergency Plan is made to all public, private and quasi-private entities having a response role. Distribution list is Enclosure 1. **Electronic distribution includes read receipts and request for acknowledgement.**
- C. **Radiological Emergency Response Plan will also be posted on Columbiana County Emergency Management website.**

SECTION II - PART P

VI. TRAINING OF PLANNER PERSONNEL

The training of the Emergency Management Agency Director and response personnel will consist of conferences, lectures, seminars, formal in-house and on-the-job training. Personnel may also attend/take FEMA-sponsored planning training.

SECTION II - PART P

**Enclosure 1
DISTRIBUTION LIST**

1. The following agencies and jurisdictions are scheduled to receive the Columbiana County Radiological Emergency Response Plan for the Beaver Valley Power Station:

AGENCY	Title	CD or E-copy	Paper
OHIO EMA	Ohio EMA Rad Branch Columbus	X	
	BVPS Resident Radiological Analyst County	X	X
OHIO NATIONAL GUARD	Military Support To Civil Authorities Columbus	X	
OHIO DEPARTMENT OF AG	Director Columbus	X	
AMERICAN RED CROSS	Disaster Director Columbus	X	
	Disaster Director Lisbon	X	
OHIO EPA	Radiological Response Coordinator Columbus	X	
	NE District Field Team Leader (Twinsburg)	X	
OHIO DEPARTMENT OF HEALTH	Rad Health Library Columbus	X	
OHIO STATE HIGHWAY PATROL	Field Operations Columbus	X	
OHIO DEPARTMENT OF JOB & FAMILY SERVICES	Director Columbus	X	
OHIO DEPARTMENT OF NATURAL RESOURCES	Director Columbus	X	
OHIO STATE UNIVERSITY EXTENSION	Director Of Extension Columbus	X	
PUBLIC UTILITIES COMMISSION OF OHIO	Nuclear Division Columbus	X	
OHIO DEPARTMENT OF TRANSPORTATION	Emergency Coordinator Columbus	X	
Out Of STATE / Out Of County AGENCIES	OTTAWA COUNTY EMA	X	
	LUCAS COUNTY EMA	X	
	ASHTABULA COUNTY EMA	X	
	GEAUGA COUNTY EMA	X	
	LAKE COUNTY EMA	X	
	HANCOCK COUNTY OES	X	
	BEAVER COUNTY EMA	X	
	WEST VIRGINIA OES	X	
PENNSYLVANIA EMA	X		

SECTION II - PART P

AGENCY	Title	Cd or E copy	Paper
FEDERAL EMERGENCY MANAGEMENT AGENCY, REGION V	RAC	X	
U.S. NUCLEAR REGULATORY COMMISSION	Incident Response Branch	X	
	Division Of Licensing	X	
U.S.D.A. - FARM SERVICE AGENCY	State Executive Director	X	
BEAVER VALLEY POWER STATION	Liasion	X	
COUNTY GOVERNMENT	COMMISSIONERS OFFICE		X
	SHERIFF DEPT.		X
EOC POSITIONS	OPERATIONS ROOM		X
	EXEC ROOM		3

SECTION III - LETTERS OF AGREEMENT

The following is an Index of agreement letters with multiple organizations and agencies in and around Columbiana County, Ohio.

The letters are written to ensure ample resources and a coordinated response for emergencies in Columbiana County.

Organizations and/or agencies may be called upon to provide assistance for all types of emergencies, which may include Weapons of Mass Destruction/Terrorism, Beaver Valley Power Station, Heritage Thermal WTI, and other natural or technological events or hazards.

The Letters of Agreement are compliant with REP Program Manual Criterion A.4 and have been submitted to the Federal Emergency Management Agency (FEMA) in the State of Ohio Annual Letter of Certification. Letters are reviewed annually and reissued every two years. If significant changes are made to the content of these Agreements, updates will be forwarded to FEMA.

A review of a specific Letter of Agreement is available upon request at the Columbiana County EOC office.

SECTION III - LETTERS OF AGREEMENT

<u>Enclosure</u>	<u>Response Agency</u>
1	Private Fire Departments
2	Educational Facilities
3	Red Cross
4	County Agencies
5	Health Care Facilities
6	Private EMS
7	Hospital
8	Townships
9	Amateur Radio
10	Emergency Alert Radio Stations
11	Cities / Villages
12	State Agencies
13	Private Agencies

SECTION III - LETTERS OF AGREEMENT

Enclosure 4

COUNTY AGENCIES

Dog Warden
Sheriff's Office
Soil and Water Conservation
Prosecuting Attorney
Health Dept.
Job and Family Services
Engineers Office
Mental Health and Recovery Services Bd.
Coroner's Office
Community Action Agency
County Airport
Buckeye Water District
Voluntary Organization Active in Disasters

Enclosure 5

HEALTH CARE FACILITIES

Valley Oaks Care Center
Orchards of East Liverpool
Calcutta Health Care
~~Essex I - II - III~~
Circle of Care
Parkside
~~Pleasant View~~
Blossom Nursing
~~Vista Center~~
Cross Roads
Salem West and North
Covington

Enclosure 6

PRIVATE EMS

~~Rural/Metro Ambulance Service~~
Lifeteam EMS
~~Tri County EMS~~
~~EMT~~
North Star
KLG
~~Clemente~~

SECTION III - LETTERS OF AGREEMENT

Enclosure 7

HOSPITAL

East Liverpool

~~Trinity~~

Salem

~~St Elizabeth~~

Enclosure 8

TOWNSHIPS

St Clair

Liverpool

Middleton

Knox

Butler

Salem

Fairfield

Unity

Elkrun

Center

Hanover

West

Franklin

Wayne

Madison

Yellow Creek

Washington

Perry

SECTION III - LETTERS OF AGREEMENT

Enclosure 9

AMATEUR RADIO

Lisbon Area Amateur Radio Assoc.
~~Triangle Amateur Radio Club~~
East Palestine Amateur Radio Club
Salem Area Amateur Radio Club

Enclosure 10

EMERGENCY ALERT RADIO SYSTEM

~~WMXY~~
WYSU
~~WOHI~~

Enclosure 11

CITIES / VILLAGES

East Liverpool
Salem
East Palestine
New Waterford
Leetonia
Lisbon
Columbiana
Salineville
~~Washingtonville~~
Wellsville
~~Hanoverton~~
Rogers
Summitville
Minerva

Enclosure 12

STATE AGENCIES

Ohio Highway Patrol

Enclosure 13

PRIVATE AGENCIES

Lake Tomahawk
Beaver Valley Power Station

SECTION IV - COUNTY AGENCY SUMMARY

COLUMBIANA COUNTY AGENCY SUMMARY

- A. A **summary** of specific responsibilities for each county agency is provided for quick reference as to agency functions.
- B. The county, in developing an Emergency Plan for Response to Radiological incidents involving nuclear facilities, hereby assigns the following tasks and responsibilities to the County Department and agencies.
1. County Emergency Management Agency
 - a. To coordinate emergency planning with county agencies to ensure an integrated effort.
 - b. Ensure that a sufficient degree of preparatory training courses are available for radiological monitoring and decontamination procedures for offsite response organizations.
 - c. Identify Reception Area and Care Centers in the jurisdiction and assist the ARC in preparing these centers for receiving evacuees.
 - d. Determine that a sufficient number of shelter facilities are available.
 - e. Make prior arrangements with the ARC, County School Boards, Job and Family Services, and Health Department for support of evacuees in the Care Centers.
 - f. Assist local authorities in the evacuation of residents within the 5-10 mile radius of the plant.
 - g. Distribute Emergency Public Information to residents in the 10-mile EPZ to ensure that an evacuation program is available for residents affected by an incident at BVPS.
 - h. Work with state and local authorities to **ensure** countywide emergency warning system.
 - i. Assist local agencies in procuring supplies of new equipment needed.
 - j. Determine availability of Care Centers.
 - k. Ensure availability of information documents to local residents, transients and summer residents.
 - l. Maintain contact with BVPS representative.
 2. Columbiana County Sheriff's Department
 - a. Provide 24-hour operation to serve as notification point of contact by BVPS to receive warning relative to radiological incidents.
 - b. Provide required notification and warning.
 - c. Assist in rescue activities, if required.
 - d. Staff traffic/Access Control Points.
 - e. Provide security in evacuated area.
 3. County Engineer
 - a. Support the evacuation of residents of the affected areas of the county by providing barriers and signs for controlling access to affected areas.

SECTION IV - COUNTY AGENCY SUMMARY

- b. Furnish equipment and manpower, as available, to assist in emergency conditions.
 - c. Coordinate with the County Sheriff on reentry control to affected areas.
 - d. Make recommendations to the Sheriff pertaining to the use of roadways, routes, bridges and service areas based upon assessment of trafficability, capacities and weather conditions.
 - e. Assist County officials in evaluation of information received concerning the situation as it pertains to engineering problems.
 - f. Provide input to Executive Group decisions.
 - g. Familiar with protective measures to be observed while operating within the controlled area.
4. Ohio State University Extension/County Soil and Water Conservation
- a. To provide information to the agricultural community on:
 - 1) Immediate actions for the protection of livestock and crops.
 - 2) Possible agricultural problems, which may occur in the county to include animal feed availability and donor programs.
 - b. Make recommendations consistent with State and Federal emergency preparedness planning and guidance to local authorities concerning the agricultural aspects of a radiological emergency.
5. County Job and Family Services
- a. Assist Red Cross in the operations of Care Centers.
 - b. Plan for long-range assistance to disaster victims.
 - c. Assist the Red Cross in providing shelter, clothing and meals for evacuees.
 - d. Assist the County Mental Health **and Recovery Board** in providing counseling services.
 - e. Assist the General Health District in providing nursing services.
 - f. Assist in finding housing for evacuees.
 - g. Provide financial assistance.
 - h. Operate from the County EOC, as required.
6. County Commissioners
- a. Serve as members of the Executive Group.
 - b. Declare a "State of Emergency" for the county when local resources have been exhausted or upon declaration of a SAE.
 - c. Manage all government activities.
 - d. Approve protective actions, if necessary.
 - e. Provide for continuity of government.
 - f. Authorize the issuance of all incident-related information.
 - g. Establish curfews, policies and other controls.
 - h. Request necessary assistance from State government.
 - ~~i. Request military support assistance.~~

SECTION IV - COUNTY AGENCY SUMMARY

7. City of East Liverpool

- a. Manage all city government activities.
- b. Evaluate curfews, policies, and other controls.
- c. Evaluate all emergency related data.
- d. Determine necessary assistance from county government.
- e. Monitor mobilization and deployment of appropriate service elements.
- f. Coordination of rescue activities.
- g. Provide traffic control for evacuating residents.
- h. Will assure that individuals and volunteers falling under City Operation Jurisdiction are:
 - 1) Familiar with hazards and risks of radiation exposure.
 - 2) Familiar with protective measures to be observed while operating within the controlled area.

8. General Health District

- a. The General Health District may be represented in the EOC.
- b. Provide health advisory to the general public on non-radiological measures of health, safety, and evacuation procedures.
- c. All information will be released by the County Public Information Officer.
- d. Perform sanitary surveys to determine adequate environments for health protection in the evacuation centers.
- e. Coordinate public health services with surrounding counties receiving evacuated persons if required.
- f. Will provide Potassium Iodine (KI) to Institutionalized, Emergency Workers and the General Public.
- g. Will store, transport, and administer KI to the evacuees at Care Centers as needed.

9. Fire Department

Fire Services Officer will represent County Fire Departments at the County EOC. Tasks and responsibilities assigned to the Fire Services Officer include:

- a. Notification of County Fire Departments of an incident at the BVPS.
- b. Relay of information to County Fire Departments.
- c. Contact point for County Fire Departments reporting personnel or equipment shortages.

10. American Red Cross

- a. The Director or designee of the American Red Cross will report to the County EOC and will function as the Red Cross Representative.
- b. The Red Cross Representative will develop and maintain plans and procedures for the activation and operation of Care Centers.
- c. The Red Cross Representative will provide Care Center managers and sufficient support staff to operate the Care Centers.
- d. The Red Cross Representative will coordinate with the General Health District and Job and Family Services in the operation of Care Centers.

SECTION IV - COUNTY AGENCY SUMMARY

11. Educational Service Center

- a. The ESC Superintendent, or Alternate, will report to the County EOC and will function as the School Services Officer.
- b. The County School Services Officer will coordinate extensively with the East Liverpool City School Superintendent and the Beaver Local School Superintendent.
- c. The County School Services Officer will maintain a resource list of school buses available in the county and will coordinate the provision of school buses with the Transportation Officer should the evacuation of school students and/or the general public is required.

**SECTION V - CROSS REFERENCE INDEX
NUREG-0654 REFERENCE**

A.1.i	A description of all Federal, state, local, tribal, and private-sector organizations comprising the overall offsite response; and	Section II Part A II-IV	
A.1.ii	A list of all principal and supporting organizations.	Section II Part A Enc. 1	
A.1.a.i	A description of each organization's operational role in an emergency and their relationship to the overall response effort.	Section II Part A II-IV	
A.1.b.i	An illustration of each organization and its relationship to the total emergency response effort. ¹ ¹ For a sample Incident Command System organization chart, see ICS Form 207, Organizational Chart.	Section II Part A Enc. 1&2	
A.1.c.i	The individual, by title/position, in charge of the emergency response; and	Section I E.3.b	
A.1.c.ii	The individual, by title/position, coordinating response activities under the authority of the individual in charge.	Section I E.2.d	
A.2.i	The legal authority to assign lead responsibility for emergency preparedness to a particular agency;	Section I F	
A.2.ii	The legal authority to delegate responsibility and authority for preparedness and response; and	Section I E.2.d Section I F.4	
A.2.iii	The legal authority to declare a "state of emergency" (or "state of disaster emergency") and what special powers may ensue.	Section I F.3-4 Section II Part A F.1.b	
A.3.i	Identification of key individuals, by title/position, with emergency response roles;	Section II Part II-IV Section II Part H II.B Section III SOG 1 III A-T	
A.3.ii	A description of the identified key individuals' assigned functions by functional areas; and	Section II Part H II.B Section II Part A Enc. 1	

**SECTION V - CROSS REFERENCE INDEX
NUREG-0654 REFERENCE**

A.3.iii	A visual representation of individuals' assigned functions by functional area.	Section II Part A Enc. 1	
A.4.i	A list of support organizations and the type of assistance, including capabilities and resources they will provide;	Section II Part A II-IV Section II Part A Enc. 1	
A.4.ii	(Or reference) Applicable written agreements between the licensee and ORO, including arrangements for NPP site access, if appropriate;	Section III Enc. 1-13	
A.4.iii	Written agreements annotate the services to be provided through the agreement and how those services will be activated;	Section III	
A.4.iv	Written agreements by reference or in a suitable appendix; and	Section III Enc. 1-13	
A.4.v	A statement that written agreements are reviewed annually to verify their validity, including developing new written agreements and updating signatories as necessary.	Section III	
A.5.i	The individual(s), by title/position, responsible for ensuring continuity of resources in support of 24-hour operations;	Section II Part A II.A.1.a County Resource Manual	
A.5.ii	A reference to a roster that identifies at least two shifts of key staff, by title/position;	Section II Part A II.A.1.a County Resource Manual	
A.5.iii	The individual(s), by title/position, responsible for maintaining the roster, how it will be maintained, and where the roster is located; and	Section II Part A II.A.1.a County Resource Manual	

**SECTION V - CROSS REFERENCE INDEX
NUREG-0654 REFERENCE**

<p>A.5.iv</p>	<p>The shift period and provisions for outgoing staff to brief the incoming staff on the status of the emergency and response activities occurring.</p>	<p>Section II Part H II.B.4.a Section II Part A II.A.1.a County Resource Manual</p>	
<p>C.1.i</p>	<p>Whether an ORO liaison(s) will be provided to the licensee’s emergency operations facility (EOF), and if so, the individual(s), by title/position, that would be dispatched;</p>	<p>Section II Part C V Primarily a State Function</p>	
<p>C.1.ii</p>	<p>The emergency response support role the liaison(s) will be fulfilling while at EOF; and</p>	<p>Section II Part C V Primarily a State Function</p>	
<p>C.1.iii</p>	<p>The resources, if any, the OROs will provide to the licensee’s EOF.</p>	<p>Section II Part C V Primarily a State Function</p>	
<p>C.2</p>	<p>Provisions made for additional emergency response support and resources are described and include the following:</p>	<p>Section II Part C II</p>	
<p>C.2.a.i</p>	<p>The individual(s), by title/position, authorized to request emergency response support and resources.</p>	<p>Section II Part C II & IV</p>	
<p>C.2.b.i</p>	<p>A process for identifying potential shortfalls in capabilities and resources;</p>	<p>Section II Part C IV</p>	
<p>C.2.b.ii</p>	<p>The organization(s) from which emergency response support and/or resources may be requested;</p>	<p>Section II Part C IV</p>	
<p>C.2.b.iii</p>	<p>Circumstances under which the emergency response support and/or resources would be needed;</p>	<p>Section II Part C IV</p>	

**SECTION V - CROSS REFERENCE INDEX
NUREG-0654 REFERENCE**

C.2.b.iv	The process for requesting needed emergency response support and/or resources;	Section II Part C IV	
C.2.b.v	Categories of capabilities and/or resources expected to be provided;	Section II Part C II & III	
C.2.b.vi	The amount of time expected for emergency response support and/or resources to be available once requested; and	Section II Part C III	
C.2.b.vii	How incoming emergency response support and/or resources will integrate with response efforts.	Section II Part A I	
C.2.c.i	Provisions to allow ORO organizations, including mutual aid/supplemental support and resources, access to the NPP;	NA – Licensee not in County jurisdiction	
C.2.c.ii	Identification of means for granting access to personnel from each organization who are authorized site access resources; and	NA – Licensee not in County jurisdiction	
C.2.c.iii	Provisions for coordination between in-bound response resources and evacuation efforts.	NA – Licensee not in County jurisdiction	
C.2.d.i	A list of external organizations that have agreed to provide requested emergency response support to the NPP, as well as the type of support they will provide.	NA – Licensee not in County jurisdiction	
C.3.i	Identification of principal organizations;	Section II Part A Enc. 1	

**SECTION V - CROSS REFERENCE INDEX
NUREG-0654 REFERENCE**

C.3.ii	Roles and responsibilities of principal organizations based on their authorities;	Section II Part A	
C.3.iii	A description of how coordination and integration between principal organizations will occur; and	Section II Part A II.A.1-4 Multiple SOGs	
C.3.iv	Whether a representative(s) from another organization will be provided to ORO operational centers (e.g., a county emergency operations center [EOC]) to act as a liaison(s), and if so, identification of the individual(s), by title/position, that would be dispatched.	Section II Part H II.4.I SOG 1 Section IV.T	
C.4.i	The laboratories qualified to analyze samples of potentially contaminated materials;	NA – State Responsibility	
C.4.ii	A description of the radiochemical and analytical capabilities of each laboratory;	NA – State Responsibility	
C.4.iii	The laboratories’ locations and expected availability of each laboratory to provide services; and	NA – State Responsibility	
C.4.iv	The number of samples the laboratories would be able to process in a given period.	NA – State Responsibility	
D.1.b.i	Reference the standard ECLs;	Section I E.3.e Section II Part D II.A-D	
D.1.b.ii	Acknowledgment that the ECL system will form the basis for determining the level of response to an incident that will be coordinated with the licensee; and	Section I E.3.e Section II Part D II.A-D	

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D.1.b.iii	Agreement on the initial ECL scheme and an annual review of the scheme.	Section I E.3.e	
D.4.i	The minimum emergency response measures to be taken to protect the public at each ECL, given the offsite conditions at the time of the emergency.	Section I E.3.e Section II Part D IV Table	
E.1.i	The agreed upon process for direct and prompt notification to both response organizations and the designated offsite 24-hour warning point;	Section I E.1.a Section I E.2.c Section I E.2.b	
E.1.ii	A statement that the agreed upon notification process is aligned with the emergency classification and action level scheme as described in D.1.b;	Section II Part E I	
E.1.iii	The process for when the initial notification originates from an entity other than the licensee; and	Section II Part E I	
E.1.iv	The agreed upon process for disseminating subsequent notifications from the licensee and/or ORO to other offsite organizations.	Section II Part E III.D	
E.1.a.i	Method for verifying the initial notification from the licensee to the 24-hour warning point, if applicable;	Section II Part E II.B	
E.1.a.ii	Provisions for notifying all appropriate response organizations, including specific notifications made at each ECL;	Section II Part E III.D SOG 1 Annex 2 V.B	
E.1.a.iii	The individual(s), by title/position, responsible for notifying emergency response personnel within their organization; and	Section I Part E 1.a	
E.1.a.iv	Individual(s), by title/position, responsible for disseminating subsequent notifications.	Section II Part E III.D	

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E.2.i	A statement that the ANS is capable of meeting the 15-minute design objective;	Section II Part E IV.B	
E.2.ii	A description of the physical means of alert and notification, including the system(s) used to alert and notify the general public, persons with disabilities and access/functional needs, and exception areas (if applicable), and their respective point(s) of activation;	Section II Part E IV SOG 1 Annex 4 SOG 5 V Section II Part N III.A.3	
E.2.iii	A description of the administrative means of alert and notification, including(:)	Section II Part E II-IV	
E.2.iii (a)	Title of the organizations or individuals responsible for: (1) making the decision to activate the ANS and (2) activating the system; and	Section II Part E IV.H	
E.2.iii (b)	ANS activation procedures and associated time needed to implement these procedures.	SOG 1 Annex 4 SOG 3a	
E.2.iv	List of broadcast stations and/or other systems (e.g., Integrated Public Alert and Warning System [IPAWS], National Weather Service (NWS), tone alert radios, route alerting) used to provide emergency instructions to the public;	Section II Part E IV.F & G Section III Encl. 10 SOG 1 Annex 4 SOG 3a	
E.2.v	Describe the broadcast stations' or systems' capability to participate in the public notification process;	Section II Part E IV.B&C	
E.2.vi	If broadcast stations are used to activate the system, a description of individual responsibilities from each broadcast station and system, and documentation agreed upon commitments (e.g., MOUs and/or LOAs) to honor their responsibilities in a radiological incident;	Section II Part E IV.B Section III Enc. 10 - LOA	

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E.2.vii	Identification of the broadcast station and system points of contact, by title/position, who are accessible 24 hours a day, 7 days a week and identification of an alternate station if the selected station does not have backup power supply;	Section II Part E IV.B&C	
E.2.viii	Provisions for special news broadcasts to disseminate supplemental information to the emergency alert system (EAS) message; and	Section II Part E VI.E Section II Part G III.F	
E.2.ix	The interval for broadcasting official information statements.	Section II Part E IV.A-D Section II Part E Enc. 4	
E.3.i	Initial notification templates to capture the ECL, whether a release is taking place, any populations and areas that may potentially be affected, and whether protective measures may be necessary; and	Section II Part E Enc 1	
E.3.ii	Provisions as to what information is to be included in follow-up notifications from the NPP to offsite authorities.	Section II Part E Enc 2	
E.4.i	EAS message templates that would be modified as necessary and sent to the EAS station(s) for broadcast;	Section II Part E Enc 4	
E.4.ii	The process for selecting, modifying, approving, and releasing EAS messages;	Section II Part E IV.D SOG 1 Annex 4	
E.4.iii	The methodology for EAS message rebroadcast, along with the frequency (how many times and at what interval, such as every 15 minutes);	Section II Part E IV.A-D Section II Part E Enc. 4	
E.4.iv	Provisions for follow-up messages; and	Section II Part E IV.A-D	

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E.4.v	Provisions for foreign language translations of EAS messages and special news broadcasts, if required.	Section II Part E VI.E Note	
E.5.i	A description of how supplemental information is provided periodically to inform the public throughout an incident;	Section II Part E VI.E Section II Part G III.F	
E.5.ii	A description of supplemental topics/messages that may be disseminated; and	Section II Part E VI.E Section II Part G III.E-H	
E.5.iii	A description of the method for disseminating supplemental information.	Section II Part E VI.E Section II Part G III	
F.1	Each principal response organization establishes redundant means of communication and addresses the following responses:	Section I E.c.2 Section II Part F II.B.1	
F.1.a.i	A description of the system used to ensure continuous availability to receive and transmit notifications; and	Section II Part E III.D Section II Part F III & IV Section II Part F IV Enc. 1&2	
F.1.a.ii	A description of the equipment used for notifying and communicating with the organization's personnel and other response organizations. The equipment described must include at least two independent communication links.	Section II Part F II - IV	
F.1.b.i	Provisions for a minimum of two independent communication methods between all applicable organizations requiring communications within the plume and ingestion exposure pathway EPZs; and	Section II Part F III and VI	
F.1.b.ii	Organizational titles and alternates for both ends of the communication links.	Section II Part F XI.E	

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F.1.c.i	A general description of how emergency personnel are alerted and activated; and	Section II Part E II & III SOG 1 Annex 1 IV & V	
F.1.c.ii	Lists of names and contact information of emergency personnel to alert or activate based on the ECL.	SOG 1 Annex 1 IV County Resource Manual	
F.2.i	A description of at least two independent communication methods among the fixed and mobile medical support facilities, applicable EOCs, and the licensee.	Section II Part F XII	
F.3.i	A description of the test method and periodicity (e.g., monthly, quarterly or annually) for each communication system used for the functions identified in evaluation criteria E.2, F.1, and F.2.	Section II Part F IX Section II Part F II.C.2 Section II Part N III.A Section II Part N Enc. 3	
G.1.i	A description of public information material(s) (e.g., brochure, utility bill insert, current technology used for disseminating public information) distributed annually to the general public within the plume exposure pathway EPZ, including the dissemination method(s) used to reach all residences;	Section II Part G VI.C Section II Part G Enc. 1 & 2	
G.1.ii	Provisions for identifying individuals who need evacuation assistance and how personally identifiable information (PII) will be protected;	Section II Part G VI.C	
G.1.iii	A description of public information material(s) (e.g., visitor brochure) targeted to transient populations, including dissemination method(s);	Section II Part G Enc. 2	

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G.1.iv	Provisions for providing accessible public information for those with access and functional needs within the plume exposure pathway EPZ; and	Section II Part G VI.B & C	
G.1.v	Mechanisms for translating public information for non-English speaking populations within plume exposure pathway EPZ.	Section II Part G VI.J	
G.2.i	The physical location(s) for briefing and interacting with the media;	Section II Part G IV.B & C Section II Part G III.B	
G.2.ii	A physical description of the media briefing facility(ies);	Section II Part G IV.B & C	
G.2.iii	A description of the organization's capability to answer media telephone inquiries; and	Section II Part G IV.D SOG 2 III.A.3 SOG 2 IV.C.3 SOG 2 VI	
G.2.iv	The mechanism for coordination between the team of personnel designated to answer media calls and the organization's spokesperson(s)/Public Information Officer(s) (PIO(s)), as well as POCs located at other facilities supporting the joint information center (JIC).	Section II Part G IV.D SOG 2 III.A.3 SOG 2 III.B SOG 2 IV.C.3 SOG 2 VI	
G.3.i	Identification of the individual(s), by title/position, to serve as news media point(s) of contact and spokesperson(s)/PIO(s) at designated media briefing location(s);	Section II Part G II	
G.3.ii	If operating remotely from the EOC, a description of how the exchange of information between the EOC and other media briefing location(s) will be coordinated;	Section II Part G III.C Section II Part G IV.A Section II Part G V	

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G.3.iii	The process for identified individual(s) to obtain, verify, and coordinate approval in advance of disseminating information to the public and/or media; and	Section II Part G V SOG 2 V.A.2.c	
G.3.iv	Procedures for control and authorization of releasing sensitive information.	Section II Part G V Section II Part G IV.C.2.b	
G.3.a.i	Provisions for the timely exchange, discussion, and coordination of information among all designated spokespersons/PIOs, including those at different locations.	Section II Part G I Section II Part G III.A-D SOG 2 III, IV & V	
G.4.i	A description of the capability to effectively receive and manage numerous, simultaneous responses to public inquiries, and address inaccurate information;	Section II Part G VI.D	
G.4.ii	The method(s) for publicizing all the available communication channels, including dedicated telephone number(s) and other platforms, for public inquiries;	Section II Part G VI.D SOG 2 III.A.3 Section II Part E Enc. 4	
G.4.iii	Provisions for monitoring public inquiries and media messaging to identify incomplete, inaccurate, or ambiguous information related to the emergency in the public domain; and	Section II Part G VI.D	
G.4.iv	If an ORO sends a delegate or relies on another organization to answer public inquiries, identify which organization provides or coordinates the public inquiries and the method for contacting that organization.	Section II Part G VI.D	

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G.5.i	Provisions for an annual media briefing or other information exchange means to acquaint news media with emergency plans, the media's role during an incident response, and other radiological incident response topics;	Section II Part G VI.I	
G.5.ii	A description of each informational item provided in the media kits; and	Section II Part G VI.I	
G.5.iii	Means of distributing media kits.	Section II Part G VI.I	
H.6.i	A description of, or reference to, the location and layout of the EOC;	Section I E.2.b Section II Part H II.A.1 Section II Part H II Enc. 1	
H.6.ii	The organization and official, by title/position, responsible for maintaining the operational readiness of the EOC;	Section II Part A II.A.1.a Section II Part H II.B.1.b	
H.6.iii	A list of facility equipment necessary to support EOC operations;	Section II Part H II Enc. 6	
H.6.iv	Access control details into the facility;	Section II Part H II.B.1.c	
H.6.v	Backup power capability to the facility, if available; and	Section II Part H II Enc. 6 B.7	
H.6.vi	A description of, or reference to, the location and layout of the alternate EOC, if applicable.	Section II Part H II.B Section II Part H II Enc. 6	
H.9.i	A description of radiological monitoring equipment, by type and amount, that is located at or stored near the NPP, or will be brought in by the ORO; and	Section II Part H III Section II Part H Enc. 3	

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H.9.ii	A list of fixed radiological monitoring stations near the NPP.	Section II Part H III.C NA for County	
H.11.i	Quantities of instruments, equipment, and supplies necessary to ensure that procedures in the plan can be performed; and	Section II Part H III.A & B	
H.11.ii	Backup emergency equipment and supply reserves/replacements.	Section II Part H III.B Section II Part H Enc. 3	
H.11.a.i	The organization(s) responsible for testing and maintenance of all emergency equipment.	Section II Part H III.B	
H.11.b.i	Specifics for maintaining and conducting calibration and operational checks of emergency equipment;	Section II Part H III.B	
H.11.b.ii	Tests to be performed on each type of equipment and who will complete those tests; and	Section II Part H III.B	
H.11.b.iii	Documentation methods for all testing and maintenance procedures performed.	Calibration records retained at State Calibration Lab Section II Part H III.B	
H.12.i	The number and contents of emergency kits by location and general category; and	Section II Part H III Enc. 3	
H.12.ii	The quantity of each item per kit.	Section II Part H III Enc. 3	
H.13.i	Organization(s) responsible for assessing radiological data;	Section II Part A III.A.1 Section II Part A III.C Section II Part A III.D	

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H.13.ii	The location(s) for the receipt and analysis for compiling and analyzing all field monitoring data, including the means used by FMTs to relay information to the identified location(s); and	NA – State Function	
H.13.iii	The coordination and analysis of sample media, including procedures for transporting samples and transferring the data from the laboratory to the identified location(s).	NA – State Function	
I.2.i	Methods and locations for sampling drinking water; and	NA – State Function	
I.2.ii	Supporting laboratory procedures that demonstrate the capability to detect radioisotopes at derived response levels (DRLs) for the most sensitive population.	NA - State Function	
I.5.i	The organizations responsible for FMT activities; and	Section II Part A III.A.1 Section II Part H II.A.2 Section II Part I	
I.5.ii	The capabilities and resources of FMTs.	NA – State Function	
I.6.i	The process for activating and notifying FMTs;	NA – State Function	
I.6.ii	The composition of FMTs (e.g., organizations involved, number of teams [two or more], number of members on each team);	NA – State Function	
I.6.iii	Means of transportation available for FMTs (e.g., four-wheel drive vehicles);	NA – State Function	

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I.6.iv	Estimated deployment times to reach monitoring or sampling locations, if applicable;	NA – State Function	
I.6.v	Staging area location(s) that may be used as initial deployment points for FMTs;	Section II Part H II.A.1 State Function	
I.6.vi	The individual, by title/position, responsible for directing FMTs to proper locations for monitoring and air sampling;	NA – State Function	
I.6.vii	The process for obtaining centerline and plume-edge measurements;	NA – State Function	
I.6.viii	Monitoring, sampling, and communications equipment used by FMTs;	NA – State Function	
I.6.ix	Procedures for field monitoring, sample collection, and field sample analysis and the calculations to be used to characterize the plume, specifically those used to determine radioiodine concentrations;	NA – State Function	
I.6.x	The laboratories designated to analyze specific samples (specific radioisotopes), including associated estimated delivery and analysis times, transportation and temporary storage arrangements, and procedures for chain-of-custody records; and	NA – State Function	
I.6.xi	Requirements for FMT members' radiological exposure control.	NA – State Function	
I.7.i	The capability to collect air samples within the plume exposure pathway EPZ and perform analysis that will detect radioiodine concentrations as low as 10-7 μ Ci/cc under field conditions;	Section II Part I NA – State Function	

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I.7.ii	The process used for collecting air samples, including location of sampling points, timing of sample collection, and techniques used to collect and count; and	NA – State Function	
I.8.i	A description of personnel and equipment that will be involved in dose assessment;	Section II Part I III.B.3 & 4 State Function	
I.8.ii	A description of dose assessment computer software, including documentation and data input procedures, that will be used;	NA – State Function	
I.8.iii	Alternate calculation methods that may be used (e.g., hand calculations);	NA – State Function	
I.8.iv	Information/variables to run the model, including proper units of measure;	NA – State/Licensee Function	
I.8.v	Means for obtaining initial information (e.g., from licensee monitors or inventory estimates);	NA – State/Licensee Function	
I.8.vi	A description of how field data will verify and modify model results; and	NA – State Function	
I.8.vii	Procedures for comparing dose results with those of other organizations that perform dose assessments.	Section II Part I III.B.3 & 4 State Function	
I.9.i	Planned use of outside resources, to locate and track the plume, including taking measurements and collecting air samples from or near the plume's peak concentration, if applicable.	NA – State Function	

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I.10.i	Methods of integrating monitoring and analytical augmentation and support from other state, licensee, educational and research facilities, and government and private organizations; and	NA – State Function	
I.10.ii	Procedures and responsibilities for integrating Federal agency monitoring, analysis, and data management support.	NA – State Function	
J.2.i	A description of assistance provided to licensees during an onsite evacuation or a statement that no assistance is required;	Section II Part J III.K NA not a Columbiana County Function	
J.2.ii	The offsite location where onsite individuals will be transported;	Section II Part J III.K NA not a Columbiana County Function	
J.2.iii	Alternative offsite location(s) and evacuation route(s) for use during inclement weather, when there is high traffic density, and/or during potential radiological conditions; and	Section II Part J III.K NA not a Columbiana County Function	
J.2.iv	Provisions for coordinating arrangements with other OROs to expedite evacuation of onsite personnel.	Section II Part J III.K NA not a Columbiana County Function	
J.6.i	The rationales used to make initial and subsequent PARs;	Section II Part J Enc. 7 A	
J.6.ii	The basis and methodology used in developing PARs, including references to applicable Federal guidance; and	Section II Part J Enc. 7	
J.6.iii	The basis and methodology used in developing PARs involving radioprotective drugs, including references to applicable Federal guidance.	Section II Part J Enc. 7 A Section II Part J Enc. 7 E.2 Section II Part J Enc. 7 G	

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J.7.i	A site-specific protective action strategy or decision-making process that is coordinated between the licensee and OROs;	Section II Part J II & III Section II Part J Enc. 7	
J.7.ii	References to current Federal guidance and methodologies used in developing the protective action strategy or decision-making process; and	Section II Part J II & III Section II Part J Enc. 7	
J.7.iii	Specific information from the evacuation time estimate (ETE) study used to develop protective action strategies.	Section II Part J III.E Section II Part J III.S	
J.8.i	The latest ETE information to plan for an evacuation.	Section II Part J III.S	
J.8.b.i	A reference or summary of the latest ETE analysis used for evacuation planning;	Section II Part J III.S	
J.8.b.ii	Time estimates for evacuation of various sectors or evacuation areas;	Section II Part J III.S	
J.8.b.iii	Time estimates for movement of populations in specific areas, particularly for individuals with access and functional needs;	Section II Part J III.Q Section II Part J Enc. 13 & 14	
J.8.b.iv	Evacuation routes and traffic capacities of evacuation routes; and	Section II Part J Enc. 1	
J.8.b.v	Potential use of alternate evacuation routes.	Section II Part J III.U	
J.9.i	Process for communicating PARs to designated OROs responsible for making PADs.	Section II Part J III.B.5 Section II Part E III.A&D	

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J.10.i	Clear and legible maps, charts, and other pertinent plume exposure pathway EPZ information necessary to support emergency response.	Section II Part J Enc. 1-3,5	
J.10.a.i	Clear, legible maps of all evacuation routes, evacuation areas, reception/relocation centers in host jurisdictions, and shelter areas/congregate care centers.	Section II Part J Enc. 1-3	
J.10.b.i	Clear, legible maps, charts, or other information showing population distribution around the NPP site by evacuation areas.	Section II Part J Enc. 5	
J.11.i	The process for considering PARs provided;	Section II Part J III.B Section II Part J Enc. 7	
J.11.ii	Procedures for making PADs and the rationale for initial and subsequent PADs;	Section II Part J III SOG 1 Annex 3	
J.11.iii	Procedures for implementing protective actions based upon PAGs that are consistent with EPA recommendations; and	Section II Part J Enc. 7 SOG 1 Annex 3	
J.11.iv	The process to ensure coordination of PADs with all appropriate jurisdictions.	Section II Part J II SOG Annex 3 III.C Section II Part F III.A	
J.11.a.i	The means to protect those with impaired mobility because of institutionalization or other confinement (e.g., children in schools or licensed day cares and persons in nursing homes, hospitals, and correctional facilities);	Section II Part J III.F SOG 5 IV.A.2-5	
J.11.a.ii	Methods for determining the number and location, by evacuation area, of residents, in the plume exposure pathway EPZ who may need assistance, including the type of assistance required;	Section II Part G VI.C SOG 5 IV.A.4 SOG 5 IV.B.2&3	

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J.11.a.iii	The means for notifying residents needing assistance;	Section II Part E IV SOG 5 IV.B.2.b SOG 5 IV.B.3.c	
J.11.a.iv	Reference lists of documented individuals requiring assistance in an evacuation of the plume exposure pathway EPZ and process for keeping the list(s) up-to-date;	Section II Part A II.H.1.c Section II Part G VI.C	
J.11.a.v	Process for evacuating identified residents and for sheltering those who cannot be moved; and	Section II Part J IV.A.4 Section II Part J IV.B.3-6	
J.11.a.vi	Transportation needs or resources for these groups, including types and quantities of vehicles.	Section II Part J Enc. 14 & 15	
J.11.b.i	The individual(s), by title/position, with the authority to make decisions regarding the use of radioprotective drugs during an emergency;	Section II Part A III.C	
J.11.b.ii	The criteria and decision-making processes for recommending the use of radioprotective drugs;	NA – State Function SOG 1 V.B.4.i	
J.11.b.iii	Groups who may be advised to take radioprotective drugs;	Section II Part J Enc. 7 E.2 Section II Part J Enc. 7 G Section II Part J Enc. 19	
J.11.b.iv	A description of the adequate supply of radioprotective drugs for each individual in the plume exposure pathway EPZ, including quantities, storage locations, and means of distribution;	Section II Part J Enc. 19 Section II Part K II.A	
J.11.b.v	A description of the adequate maintenance, shelf life extensions, and timely replacement of radioprotective drugs; and	Section II Part J III.G Section II Part A III.C	

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J.11.b.vi	Means for communicating a recommendation to take radioprotective drugs to emergency workers, institutionalized persons, and (if included as an option in the plans/procedures) the general public.	Section II Part E Enc. 4 Section II Part F VII & XI SOG 10 V.B.4.b	
J.11.c.i	A statement identifying which version of the ETE study the evacuation plan and procedures are based on;	Section II Part J III.N-O, S	
J.11.c.ii	Means for controlling traffic to assure a safe and efficient evacuation; and	Section II Part J IV.E Section II Part J Enc. 16	
J.11.c.iii	The resources and equipment necessary to control traffic control.	Section II Part J Enc. 15&16 SOG 4 IV.F.2 SOG 6 III.E	
J.11.d.i	Locations of all reception centers and host schools for evacuees and students by name and address;	Section II Part J Enc. 1 & 2	
J.11.d.ii	Organizations responsible for managing reception centers and staffing requirements for each center;	Section II Part A II.I.2	
J.11.d.iii	Provisions and arrangements for the radiological monitoring of evacuees, service animals, pets, and evacuee vehicles;	Section II Part J IV.B.8 Section II Part J IV.B.10 Section II Part K V.F	
J.11.d.iv	Arrangements for managing students at reception centers and/or host schools;	Section II Part C.III.D SOG 7, 24-25, 27-30	
J.11.d.v	Identified hospitals, correctional facilities, and nursing homes that will receive evacuees; and	Section II Part J Enc. 14	
J.11.d.vi	Arrangements for congregate care based on historical need.	Section II Part J IV.B.7	

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J.11.e.i	Means for initial and ongoing control of access to evacuated areas;	Section II Part J IV.E SOG 4, 4a, & 4b	
J.11.e.ii	Organization(s) responsible for providing access control and staffing TCPs and ACPs;	Section II Part J IV.E Section II Part A II.B.1.d Section II Part A III.A.2	
J.11.e.iii	Maps identifying pre-selected TCPs/ACPs (may be incorporated by reference);	Section II Part J Enc. 12 & 16	
J.11.e.iv	Equipment and resources needed (e.g., cones or barricades);	Section II Part A II.C SOG 4a Att 20	
J.11.e.v	Procedures and responsibilities for controlling ingress and egress to other areas affected by an incident; and	Section II Part J III.J SOG 4 IV.a.3&4	
J.11.e.vi	Procedures for providing TCP/ACP staff with the status of emergency response activities.	Section II Part A II.B.1.g.3 SOG 4b I.4, II.2, & III.3	
J.11.f.i	Resources available (e.g., personnel and equipment) to clear impediments to use of evacuation routes and emergency response in areas affected by incidents;	Section II Part J IV.E SOG 4 V.2.e SOG 6 III.5	
J.11.f.ii	The potential need to use alternate routes because of traffic impediments, including procedures for implementing alternate evacuation routes; and	Section II Part J IV.E SOG 4 V.2.e	
J.11.f.iii	The individual(s), by title/position, responsible for directing resources and rerouting traffic.	Section II Part J IV.E SOG 4 V.2.e	
J.11.g.i	Precautionary protective actions that may be taken;	SOG 1 Annex 3 V.B.2.f SOG 1 Annex 3 V.B.3.c & d	

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J.11.g.ii	The ECLs at which a precautionary protective action may be taken; and	SOG 1 Annex 3 V.B.2.f SOG 1 Annex 3 V.B.3.c & d	
J.11.g.iii	Methods used to implement precautionary protective actions.	SOG 7 V SOG 24-25 & 27-30	
J.12.i	The organization and individual(s), by title/position, with the authority to make decisions in the ingestion exposure pathway EPZ;	Section II Part J IV.G State Function	
J.12.ii	Planned ingestion protective actions and the rationale for the selection of actions;	NA - State Function	
J.12.iii	The methodology used to designate the areas of concern where monitoring and sampling will be implemented;	NA - State Function SOG 21 Appendix J	
J.12.iv	The methodology for collecting agricultural samples, including identifying field team members, providing necessary supplies, names and addresses of points of contact to obtain permission to collect samples, and chain of custody procedures;	NA - State Function	
J.12.v	The analytical laboratory capability to analyze various samples and the procedure for reporting analytical results to the appropriate organization;	NA - State Function	
J.12.vi	The location and means of obtaining up-to-date information on licensed agribusiness facilities within the ingestion exposure pathway EPZ;	NA - State Function SOG 21 Appendix J	

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<p>J.12.vii</p>	<p>The ability to obtain information on facilities outside the ingestion exposure pathway EPZ at risk for receiving potentially contaminated products, including names and telephone numbers for points of contact;</p>	<p>NA - State Function</p>	
<p>J.12.viii</p>	<p>The location and means of obtaining up-to-date information on land use (i.e., which crops are being grown in which areas), including the status of harvesting;</p>	<p>NA - State Function SOG 21 Appendix J</p>	
<p>J.12.ix</p>	<p>The DILs that would warrant implementation of protective actions and the rationale and assumptions used to develop the DILs;</p>	<p>NA - State Function</p>	
<p>J.12.x</p>	<p>The availability of suitable maps, including GIS maps, for recording various data; and</p>	<p>NA - State Function</p>	
<p>J.12.xi</p>	<p>The means by which the agribusiness will be notified of a PAD that would affect the ability to sell or move foodstuffs or agricultural products.</p>	<p>NA - State Function</p>	
<p>J.13.i</p>	<p>The radiological capabilities to monitor evacuees, service animals, vehicles, and possessions;</p>	<p>Section II Part J IV.B.8 & 10 SOG 3b</p>	
<p>J.13.ii</p>	<p>Decontamination procedures, including the triggers/action levels that indicate the need for decontamination activities and procedures for medical attention referral;</p>	<p>Section II Part K IV.G Section II Part K Enc. 6 V SOG 3b</p>	
<p>J.13.iii</p>	<p>Contamination control measures, such as safety requirements, decontamination site layout, and decontamination protocol;</p>	<p>Section II Part K II.E Section II Part K V.C,D,& H Section II Part K III.A&G SOG 3b</p>	

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J.13.iv	The physical layout of the area, with diagrams that show the flow and layout of operations, including a description of the means for separating contaminated, uncontaminated, and unscreened individuals, vehicles, service animals, and pets; and	SOG 3b Att 7 Section II Part K Enc. 6 III Section II Part K Enc. 6 VII	
J.13.v	The processes for registering evacuees, service animals, and pets in host/support jurisdictions, including documentation of monitoring for referral to temporary care facilities.	Section II Part K Enc. 3 & 4 Section II Part A II.M.1.e SOG 3b V.B.4.f.6	
J.14.i	General plans for the removal or continued exclusion of individuals from restricted areas; and	Section II Part M III.A SOG 21 II - Relocation	
J.14.ii	Relocation plans are developed when the decision for removal or continued exclusion of individuals from restricted areas.	Section II Part M III.A SOG 21 III.B	
J.14.a.i	Organization(s) with the responsibility for making decisions on relocation;	Section II Part M II.C & E SOG 21 I	
J.14.a.ii	The rationale used to determine areas for relocation; and	Section II Part M III.A SOG 21 III.A	
J.14.a.iii	The process for notifying individuals who are being relocated.	Section II Part E IV SOG 21 III.B	
J.14.b.i	The process used to identify areas where the projected first-year dose will exceed the 2 rem relocation PAG; and	NA – State Function	
J.14.b.ii	The process for identifying the need for buffer zones, as well as their establishment when warranted.	Section II Part M III.A SOG 21 III.A	
J.14.c.i	Priorities for relocation; and	Section II Part M III.A SOG 21 III.B	

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J.14.c.ii	Designation of intervals to continually assess projected doses from the relocation areas.	NA – State Function	
J.14.d.i	Establishment of access control/check points around the relocation area;	Section II Part M III.A SOG 21 III.A SOG 21 Appendix B	
J.14.d.ii	Processes for identifying those who are authorized to enter relocation areas;	Section II Part M III.A SOG 21 III.C SOG 21 Att 1	
J.14.d.iii	Methods to provide exposure and contamination control to those authorized to enter relocation areas; and	Section II Part M III.A SOG 21 III.C SOG 21 Appendix H	
J.14.d.iv	Establishment of monitoring and decontamination stations at points of egress in the buffer zone around relocation areas.	Section II Part M III.A SOG 21 III.C SOG 21 Appendix H	
J.14.e.i	Methods for monitoring and decontamination of individuals who are being relocated from areas not previously evacuated.	Section II Part M III.A Section II Part K IV.G Section II Part K Enc. 6 V SOG 3b	
J.14.f.i	Physical and economic assistance for those who are relocated; and	Section II Part M II.F SOG 21 III.B SOG 21 Appendix I	
J.14.f.ii	Provisions for physical, economic, and financial assistance of individuals being relocated.	Section II Part M II.F SOG 21 III.B SOG 21 Appendix I	
K.2.i	(Or reference) The occupational dose limits in accordance with the regulation applicable to their organization;	Section II Part J Enc. 7 G	
K.2.ii	The individual(s), by title/position, who can authorize radiation doses in excess of occupational limits; and	Section II Part K IV.B Section II Part J IV.C Section II Part J Enc. 7 G Section II Part K V.B	

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K.2.iii	Processes for authorizing and documenting personnel to exceed occupational dose limits.	Section II Part J IV.C	
K.2.b.i	Emergency worker dose limits;	Section II Part J Enc. 7 Table 2-2	
K.2.b.ii	Process for when emergency worker dose limits are reached and subsequently exceeded;	Section II Part J Enc. 7 G	
K.2.b.iii	Authorization and documentation processes for authorizing emergency workers to exceed dose limits, including exceeding limits identified in current Federal guidance;	Section II Part J IV.C	
K.2.b.iv	Briefing and documentation processes for communicating risks involved for incurring excessive dose; and	Section II Part J Enc. 7 G	
K.2.b.v	Any special conditions requiring additional limitations.	Section II Part J Enc. 7 G	
K.3.i	Types and quantities of dosimeters (and dosimeter chargers, when applicable) available per location and the number of emergency workers requiring dosimetry devices;	Section II Part H Enc. 3	
K.3.ii	Dosimetry storage locations;	Section II Part H Enc. 3	
K.3.iii	Process for distributing dosimeters to all emergency workers;	Section II Part K III.A	
K.3.iv	Exposure control methods for emergency workers, including exposure from inhalation;	Section II Part K II.A Section II Part K II.D	

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K.3.v	Process for reading DRDs and any early reading of PRDs; and	Section II Part K V.A Section II Part K Enc. 5	
K.3.vi	Specific dosimetry instructions, including record keeping of dosimeter readings and return of dosimeters.	Section II Part K V.A Section II Part K Enc. 5	
K.3.a.i	Designated time intervals for reading DRDs;	Section II Part K V.C	
K.3.a.ii	The method for emergency workers to record and report DRD readings;	Section II Part K V.C Section II Part K Enc. 1	
K.3.a.iii	The methods for obtaining and recording dose readings from emergency workers;	Section II Part K V.C Section II Part K Enc. 1	
K.3.a.iv	The method for maintaining dose records for emergency workers; and	Section II Part K V.A Section II Part K V.C	
K.3.a.v	Appropriate reporting if administrative limits have been reached or exceeded.	Section II Part K V.B SOGs – Dosimeter Briefings	
K.4.i	A description of facilities for monitoring and decontaminating emergency workers, equipment, and vehicles;	Section II Part K Enc. 6 SOG 3b Att. 7	
K.4.ii	A description of facilities for monitoring and decontaminating general public, personal possessions, and vehicles;	Section II Part K Enc. 6 SOG 3b Att. 7	
K.4.iii	Locations of monitoring and decontamination facilities (facilities for the public should be located outside the plume EPZ);	Section II Part K Enc. 2	

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K.4.iv	Number of people needed to perform monitoring and decontamination operations;	SOG 3b	
K.4.v	Survey instruments (i.e., specific appropriate equipment and sensitivity, including radiation type) used to monitor emergency workers, equipment, and vehicles;	Section II Part K IV.A SOG 3b	
K.4.vi	Other supplies and equipment needed for monitoring and decontamination;	Section II Part H Enc. 7	
K.4.vii	Methods for controlling the spread of contamination at the emergency worker and general public monitoring facilities;	Section II Part K II.E SOG 3b Att. 7 SOG 3b Att. 6 A.8	
K.4.viii	The process for handling contaminated waste collection, handling, and storage;	Section II Part K II.E	
K.4.ix	Radioactive contamination levels that will trigger decontamination procedures, expressed in applicable units;	Section II Part K V.E	
K.4.x	The process for re-monitoring individuals, equipment, vehicles, and personal possessions, and recording the results; and	SOG 3b Att. 4 IV.I-N SOG 3b Att. 4 VII.O-R	
K.4.xi	Criteria for sending individuals with fixed contamination for medical attention.	SOG 3b Att. 4 III.E.4 SOG 3b Att. 4 IV..N	
L.1.i	A list of primary and backup hospitals/medical facilities to treat potentially contaminated, injured, and/or exposed individuals;	Section II Part L II.A & B	

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L.1.ii	Individual facility capabilities to evaluate radiation exposure and uptake, including the number of radiologically trained medical personnel and support staff;	Section II Part L II.A, B, & D	
L.1.iii	A description of hospital/medical facility and support service capabilities to treat potentially contaminated, injured, and/or exposed individuals; and	Section II Part L II.A & B	
L.1.iv	A description of dosimetry procedures, including record-keeping and final receipt for processing.	Section II Part L III SOG 23 Appendix B, C & D	
L.3.i	Supplemental lists of additional hospitals/medical facilities capable of providing medical support for contaminated, injured individuals. The list includes any special radiological capabilities.	Section II Part L II.C	
L.4.i	The individual(s), by title/position, responsible for determining an appropriate hospital/medical facility and the determination process;	Section II Part A II.Q.2.b	
L.4.ii	Means of transporting individuals;	Section II Part L IV.A Section II Part A II.Q.1.b	
L.4.iii	How to request additional emergency medical transport services;	Section II Part L IV.B	
L.4.iv	Process for maintaining communications between the transport crew and hospital/medical facility staff;	Section II Part F VII	
L.4.v	Specifics of radiological monitoring and contamination control measures during transport;	Section II Part L IV.C	

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L.4.vi	Decontamination techniques, including trigger/action levels; and	Section II Part L III SOG 23 Section III	
L.4.vii	Dosimetry for the transport crew.	Section II Part K III.A SOG 22a Att. 5	
M.1.i	Planned recovery efforts, including a list of recovery-specific actions and organizations responsible for carrying them out;	Section II Part M III.C	
M.1.ii	The process for public reentry into restricted areas; ¹⁸	Section II Part M III.A SOG 21 III.C	
M.1.iii	The process for establishing restricted areas; and	Section II Part M III.A SOG 21 III.A	
M.1.iv	The process for establishing reoccupancy decisions.	Section II Part M III.A SOG 21 III.D	
M.1.b.i	The process for authorizing reentry, including the individual(s), by title/position, authorized to grant access into a restricted area;	Section II Part M III.A SOG 21 III.C	
M.1.b.ii	The evaluation criteria/method for approving reentry requests;	Section II Part M III.A SOG 21 III.C	
M.1.b.iii	The access control process for reentry, including the authorization verification method by access control/check point officials;	SOG 21 III.C SOG 21 App. B, C, & D	
M.1.b.iv	Provisions for exposure control of those authorized reentry;	Section II Part M III.A SOG 21 III.C SOG 21 App. C SOG 21 Att. 1	
M.1.b.v	Contamination control practices within a restricted area; and	Section II Part M III.A SOG 21 III.C SOG 21 App. C SOG 21 Att. 1	

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M.1.b.vi	Methods and resources for monitoring and decontamination of individuals exiting a restricted area.	Section II Part M III.A SOG 21 III.C SOG 3b	
M.4.i	The process for initiating recovery actions;	Section II Part M II	
M.4.ii	Provisions for continuity during transfer of responsibility from the emergency phase to the recovery phase;	Section II Part M II	
M.4.iii	Changes that may take place in the organizational structure, to include the chain of command; and	Section II Part M II	
M.4.iv	The means to keep all involved response organizations informed of the recovery efforts.	Section II Part M II.E.5	
M.5.i	Criteria for relaxing protective actions and allowing for public return;	Section II Part M II.B.4 Section II Part M III.B	
M.5.ii	The process for allowing public return into a previously restricted area; and	Section II Part M III.A SOG 21 III.D	
M.5.iii	A process for establishing priorities in restoring vital services and facilities to areas where return is permitted.	Section II Part M III.A SOG 21 III.D	
M.6.i	The appropriate local, state, tribal or Federal organization(s) responsible for cleanup operations; and	Section II Part M III.C.1 State determination Licensee responsibility in OH	
M.6.ii	Resources that may be needed to conduct cleanup efforts.	Section II Part M III.C.1 Licensee responsibility in OH	

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M.7.i	The process for developing and modifying sampling plans;	NA – State Function	
M.7.ii	Identification of laboratories to process samples; and	NA – State Function	
M.7.iii	A description of each identified laboratory’s sampling capability and capacity.	NA – State Function	
M.8.i	The agencies responsible for, and involved in, long-term dose assessment activities post-incident; and	Section II Part M II.B.4 State Responsibility	
M.8.ii	The method for periodically conducting radiological assessments of public exposure, including estimation of the health impacts.	NA – State Function	
N.1.i	Exercises are conducted in accordance with NRC and FEMA regulations and guidance.	Section II Part N II.F	
N.1.a.i	The process to critique and evaluate exercises and drills utilizes FEMA REP’s assessment methodology.	Section II Part N II.E Section II Part N IV.A	
N.1.b.i	A description of the process for tracking identified findings and any associated corrective actions from identification through resolution.	Section II Part N IV.B	
N.2.i	All major elements of plans/procedures are tested at the minimum frequency specified.	Section II Part N II.G	

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N.2.a.i	Capabilities are exercised at least biennially in response to a plume exposure pathway scenario; and	Section II Part N Enc. 3	
N.2.a.ii	Exercise scenarios include a radioactive release of such a magnitude that it drives accomplishment of the exercise objectives.	Section II Part N II.D	
N.2.b.i	Capabilities are exercised at least once every eight years in response to an ingestion exposure pathway scenario;	Section II Part N II.D & G Section II Part N Enc. 3	
N.2.b.ii	The numbers and types of personnel participating in an ingestion exposure pathway exercise will be sufficient for demonstrating capabilities required by the plans/procedures; and	Section II Part N II.F	
N.2.b.iii	OROs within the 50-mile ingestion exposure pathway EPZ that are not part of the full participation ingestion exercise with the state, participate in an ingestion TTX or other ingestion pathway training activity at least once during each eight-year exercise cycle.	NA – State Function	
N.3.i	Scenarios for exercises are varied from exercise to exercise to provide opportunity for appropriate capabilities to be demonstrated; and	Section II Part N II.D	
N.3.ii	All exercise scenario elements are utilized during each eight-year exercise cycle.	Section II Part N II.D & G	
N.3.a.i	The HAB scenario element is utilized at least once during each eight-year exercise cycle; and	Section II Part N II.D & G	
N.3.a.ii	The HAB scenario element is not combined with the no/minimal radiological release scenario in consecutive exercises at a single site.	Section II Part N II.D & G	

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N.3.b.i	A rapid escalation scenario element is utilized at least once during each eight-year exercise cycle.	Section II Part N II.D & G	
N.3.c.i	A no/minimal radioactive material release scenario element is utilized only once each eight-year exercise cycle and is optional for state, local, and tribal governments.	Section II Part N II.D & G	
N.3.c.1.i	ORO participation is optional for a no/minimal release scenario.	NA – County will support the Licensee on all drills	
N.3.c.2.i	The planning process will account for capabilities and activities that may not have the opportunity to be evaluated under the no/minimal radiological release scenario elements; and	Section II Part N II.D	
N.3.c.2.ii	Consideration is given to alternative demonstration and evaluation venues.	Section II Part N III.E	
N.3.d.i	A resource integration element is utilized once during each eight-year exercise cycle; and	Section II Part N III.B	
N.3.d.ii	This scenario element may be combined with other scenario elements.	Section II Part N III.B	
N.4.i	All major elements of plans/procedures are tested at the minimum frequency specified.	Section II Part N II.G	
N.4.b.i	Annual medical services drills are conducted annually at each medical facility identified in the emergency plan.	Section II Part N III.B	

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N.4.c.i	Laboratory drills are conducted biennially.	NA – State Function	
N.4.d.i	Environmental monitoring drills are conducted annually.	Section II Part N III.C State Function	
N.4.e.i	Ingestion pathway drills are conducted biennially; and	Section II Part N II.G Section II Part N III.D	
N.4.e.ii	Participants include any OROs that have roles/responsibilities for the ingestion pathway and/or post-plume phase activities.	Section II Part N III.D	
N.4.f.i	Communications drills between all applicable emergency response organizations within the plume and ingestion exposure pathway EPZs are conducted at the frequencies determined in evaluation criterion F.3; and	Section II Part N III.A	
N.4.f.ii	A message content check is included in all communications drills.	Section II Part N III.A.4	
O.1.i	The organization(s) or individual(s) responsible for ensuring training requirements are met, including a description of their responsibilities;	Section II Part A II.A Section II Part O II.A Section II Part O IV	
O.1.ii	Provisions to ensure personnel with an operational role receive appropriate training;	Section II Part O II.A	
O.1.iii	A description of training programs, including scope, time intervals at which training will be offered, and organization(s) that will provide training assistance;	Section II Part O VI Section II Part O Enc. 1	

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O.1.iv	Identification of mutual aid organizations and applicable arrangements for offering or receiving training;	Section II Part O V.C	
O.1.v	Provisions for initial training;	Section II Part O VI.G	
O.1.vi	Provisions for at least annual retraining;	Section II Part O VI.G	
O.1.vii	Provisions for just-in-time training; and	Section II Part O VI.G.4	
O.1.viii	Documentation of attendance for training.	Section II Part O VI.G2	
P.1.i	The individual(s), by title/position, that require training because of their planning responsibilities; and	Section II Part P IV.A Section II Part P VI.A	
P.1.ii	A description of the initial and recurrent training program for the identified individuals.	Section II Part P VI.A	
P.2.i	The individual(s), by title/position, with the overall authority and responsibility for radiological emergency response planning.	Section II Part P IV.A Section II Part A II.A.1.c	
P.3.i	The individual(s), by title/position, responsible for developing, maintaining, reviewing, updating, and distributing emergency plans/procedures, as well as coordinating plans/procedures with other response organizations.	Section II Part P V.A.1 Section II Part A II.A.1.c	
P.4.i	A description of the process for reviewing annually, and updating as necessary, the emergency plan, implementing procedures, maps, charts, and agreements;	Section II Part P V.A.1 Section II Part A II.A.1.c	
P.4.ii	A method to indicate where and when the most recent plans/procedures changes were made;	Section II Part P V.A.4 Detailed Record of Changes	
P.4.iii	A method to indicate how plan/procedure changes are retained and historical context preserved;	Record of Changes	

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P.4.iv	The process for correcting identified findings and plan issues; and	Section II Part P V.A.1	
P.4.v	Acknowledgment/documentation that plans/procedures and agreements have been reviewed for accuracy and completeness of information, and when appropriate, changes have been made, within the last year.	Section II Part P V.A.4 Detailed Record of Changes Certification	
P.5.i	A list of the organizations and individuals, by title/position, who are to receive the updated plans/procedures;	Section II Part P Enc. 1	
P.5.ii	The process for distributing the latest plans/procedures to appropriate organizations and individuals; and	Section II Part P V.A.1 & 2	
P.5.iii	A process to verify that updated plan/procedures have been received.	Section II Part P V.A.2	
P.6.i	A list of annexes, appendices, and supporting plans; and	Section VI Table of Contents	
P.6.ii	Originating agency for each listed annex, appendix, and support plan.	Section VI	
P.7.i	A list of all implementing procedures associated with the emergency plan; and	Section VI	
P.7.ii	Identification of which section(s) of the plan are implemented by each procedure.	Section VI	
P.8.i	A table of contents; and	Table of Contents	

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P.8.ii	A cross-reference between the plans/procedures and the NUREG-0654/FEMA-REP-1, Rev. 2 evaluation criteria.	Section V	
P.10.i	The process for reviewing and updating contact information.	Section II Part F II.B Section II Part P V.A.3	

SECTION VI - SUPPORTING DOCUMENTS

I. SUPPORTING PROCEDURES – All from CCEMA

<u>Standard Operating Guideline</u>		<u>SOG related to this Section of RERP</u>	<u>Planning Standard Cross Reference NOT detailed in RERP</u>
SOG-1. County EOC		II-A, II-C, II-D, II-E, II-F, II-G, II-H, II-J, II-K, II-L, II-M	A.3.i; C.3.iv; J.11.b.ii;
	Annex 1 - Notification	II-A, II-E, II-F, II-H	F.1.c.i; F.1.c.ii
	Annex 2 - EOC Activation	II-A, II-C, II-E, II-F, II-H	E.1.a.ii
	Annex 3 - Decision-Making	II-A, II-G, II-J, II-K	J.11.i; J.11.iii; J.11.g.i; J.11.g.ii;
	Annex 4 - Public Alert	II-A, II-C, II-D, II-F, II-G, II-J	E.2.ii; E.2.iii(b); E.2.iv; E.4.ii
SOG-2. Public Information EOC		II-A, II-G, II-J	G.2.iii; G.2.iv; G.3.iii; G.3.a.i; G.4.ii
SOG-3. Fire Services		II-A, II-C, II-E, II-F, II-H, II-K	NA
	a. Route Alerting	II-A, II-C, II-E, II-F, II-J, II-K, II-M	E.2.iv
	b. Monitoring and Decon	II-A, II-C, II-F, II-H, II-J, II-K, II-G	J.13.i-v; J.14.e.i; K.4; M.1.b.vi
SOG-4. Law Enforcement TCP/ACP		II-A, II-C, II-E, II-F, II-J, II-K	J.11.c.iii; J.11.e.i; J.11.f.i-iii
	a. TACP Officer Checklist	II-A, II-C, II-E, II-F, II-J, II-K	J.11.e.i; J.11.e.iv; J.11.e.v
	b. TACP Supervisor	II-A, II-C, II-E, II-F, II-J, II-K	J.11.e.i; J.11.e.vi
SOG-5. Health/Medical EOC		II-A, II-C, II-H, II-J, II-K, II-L	E.2.ii; J.11.i-iii
SOG-6. Highway Services EOC		II-A, II-C, II-H, II-J, II-K	J.11.c.iii; J.11.f.i
SOG-7. School Services EOC		II-A, II-C, II-E, II-F, II-G, II-H, II-J, II-K	J.11.d.iv; J.11.g.iii
SOG-8. Job and Family Services EOC		II-A, II-H, II-J, II-K	NA
SOG-9. Red Cross Care Center		II-A, II-H, II-J, II-K	NA
SOG-10. Radiological Officer EOC		II-A, II-H, II-I, II-J, II-K, II-M, II-O	J.11.b.iv
SOG-11. Agricultural Services EOC		II-A, II-J, II-E	NA
SOG-12. Communications		II-A, II-F	NA
SOG-13. Message Center EOC		II-A, II-C, II-H, II-J, II-M	NA
SOG-14. Security EOC		II-A, II-H	NA
SOG-15.			
	a. Bus Drivers	II-A, II-C, II-E, II-F, II-H, II-J, II-K	NA
	b. Transportation Supervisor	II-A, II-C, II-E, II-F, II-H, II-J, II-K	NA
SOG-16. Special Facility Operations		II-A, II-C, II-E, II-F, II-H, II-J, II-K	NA
	a. Special Facility Worksheet	II-A, II-C, II-E, II-F, II-H, II-J, II-K	NA
	chcc. Calcutta Health Care Center	II-A, II-C, II-E, II-F, II-H, II-J, II-K	NA
	orch. The Orchards	II-A, II-C, II-E, II-F, II-H, II-J, II-K	NA
	vlyok. Valley Oaks	II-A, II-C, II-E, II-F, II-H, II-J, II-K	NA
SOG-17. Support Radiological Functions		II-A, II-C, II-E, II-F, II-H, II-J, II-K	NA
SOG-18. Operations Officer EOC		II-A, II-C, II-E, II-F, II-H, II-J, II-M	NA
SOG-19. Emergency Alert System EOC		II-A, II-D, II-E, II-H, II-J, II-M	NA
SOG-20. Transportation Staging Officer		II-A, II-C, II-E, II-F, II-H, II-J, II-K	NA

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SOG-21. Recovery Reentry Return EOC	II-L	J.12.iii,vi,viii; J.14.a-d,f; M.1.ii,iii,iv; M.1.b all; M.5.ii,iii
SOG-22. Emergency Medical Services EOC	II-A, II-C, II-E, II-H, II-J, II-K, II-L, II-M	NA
a. Emergency Medical Services Field	II-A, II-C, II-E, II-H, II-J, II-K, II-L, II-M	L.4.vii
SOG-23. Hospital MS-1	II-C, II-E, II-F, II-H, II-J, II-L, II-O	L.1.iv; L.4.vi
SOG-24 to 30 (schools) there is no SOG 26	II-C, II-D, II-H, II-J, II-K, II-O	J.11.g.iii

II. SUPPORTING DOCUMENTS

- A. U.S. Nuclear Regulatory Commission and Federal Emergency Management Agency. Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, NUREG-0654/FEMA-REP-1, Revision 2, December 2019.
- B. U.S. Code of Federal Regulations Title 10, Part 50, Appendix E; Title 44, Part 350, Appendix E.
- C. Emergency Action Level Guidelines for Nuclear Power Plants (NUREG-0610)
- D. FEMA Program Manual December 2019.
- E. Ohio Revised Code; State of Ohio.
- F. The Ohio Radiological Emergency Preparedness Plan or equivalent.
- G. Beaver Valley Power Station Emergency Preparedness Plan, Volumes I and II.
- H. West Virginia Emergency Response Plan.
- I. Hancock County Emergency Response Plan.
- J. Pennsylvania Emergency Response Plan.
- K. Beaver County Emergency Response Plan.
- L. State of Ohio Emergency Operations Plan.
- M. Columbiana County Emergency Operations Plan.
- N. American Red Cross Emergency Response Plan.
- O. Salem Regional Medical Center Procedure
- P. East Liverpool City Hospital Procedure
- Q. Nursing Home Procedures
- R. EPA-400R-92-001 and EPA-400/R-17/001, PAGs
- S. Weirton Medical Center