MONTOUR COUNTY
EMERGENCY MANAGEMENT AGENCY
(Nuclear/Radiological Incident Plan)

TO THE COUNTY EMERGENCY OPERATIONS PLAN

COUNTY SUPPORT PROCEDURES
FOR
NUCLEAR POWER PLANT INCIDENTS

DECEMBER 1994

Change 6
2008

SUMMARY OF CHANGES

Changes in this plan are designated by the revision bars located in the left margin.

TABLE OF CONTENTS

MONTOUR COUNTY NUCLEAR/RADIOLOGICAL INCIDENT PLAN FOR NUCLEAR POWER PLANT INCIDENTS AT THE SUSQUEHANNA STEAM ELECTRIC STATION

1. PURPOSE

   A. To specify procedures for establishing host schools to support students from the Berwick School District resulting from an incident at Susquehanna Steam Electric Station (SSES) Nuclear Power Plant.

   B. Montour County will receive school students from the Berwick School District (Columbia County) and provide host school support for same until the parents pick up their students.

   C. To specify procedures for minimizing the effects of radioactive contamination on milk, agricultural products, water, and food processing plants within Montour County.

2. SITUATION

   A. In the event of an evacuation from Columbia County because of an incident at SSES, where the situation requires an evacuation of the Berwick School District, Montour County will provide host school support for the evacuees.

   B. Montour County lies wholly within the 50-mile radius ingestion exposure pathway emergency planning zone (EPZ) relative to the Susquehanna Steam Electric Station Nuclear Power Plant.

   C. In order to accomplish these responsibilities, training and practice are necessary. Periodic exercises are conducted to evaluate radiological emergency response capabilities, periodic drills are conducted to develop and maintain these skills, and shortcomings identified as a result will be corrected. In addition to the provisions of the Montour County EOP (Basic Plan), the provisions of the State EOP; current PEMA Training Directives; and paragraph II.N. and O., NUREG-654/FEMA REP-1 apply.

   D. Parents of students may enter Montour County via designated evacuation routes.

3. CONCEPT OF OPERATIONS

   A. General

      1) In the event of an evacuation of the Berwick School District to Montour County, the main route of ingress is U.S. Route 11 South. See Appendix 1 for evacuation routes and Traffic Control Points (TCPs).

      2) In the event that the Berwick school students are at or sent home before the evacuation notice is issued, Montour County will notify local police departments if traffic control is required.

3) Emergency classification levels are defined in Paragraph 8.C of this Annex.

B. Host Schools

The following will serve as host schools for the Berwick School District:

1) Danville Senior High School

2) Danville Middle School

3) Liberty-Valley Elementary School

4) Danville Elementary School

5) Mahoning-Cooper School

These host schools will provide assistance to Berwick school students and their parents to include information and direction to the Mass Care Centers located in Union and Lycoming Counties (see Appendix 1, Attachment A, Tab 7).

C. Student Pickup Points -- Host Schools

1) Evacuated school students will be bused to host schools under the control and supervision of the Berwick School District. The student evacuees will remain at these host schools until pick-up by their parents/guardians. (See Appendix 2.)

2) If students have not been picked up after approximately twelve hours, they will be transported to a single location, the Danville Senior High School.

3) When the parents/guardians' situation is unknown:

a. Request the assistance of the local county children and youth social services office.

b. Notify the local county Clerk of the Orphans Court, if appropriate.

c. School officials will retain custody until the school official in charge determines that continued care of the child must be assumed by a responsible agency such as Children Services or Human Services. A receipt for the child will be obtained from that agency.

d. Report the proposed course of action and completion of that action to the Berwick School District Superintendent.

D. Ingestion Exposure Pathway

State EAS message will advise all persons residing within the ingestion exposure pathway emergency planning zone will be advised regarding precautions to be taken with food and water supplies. Farmers will be advised on the need to shelter livestock and to feed from stored grains and non-contaminated water supplies. Food processors will be directed to ensure that the processed foods distributed for consumption are not contaminated. (See Appendix 4.)

E. Notification

1) PEMA Headquarters notifies risk and support counties on the declaration of any emergency classification level Emergency Classification Level (ECL) of Alert or higher, on any escalation of an ECL, reduction of an ECL, and demobilization the emergency. See Emergency Notification Report (ENR) form at Enclosure 1. (Only risk counties notified of an unusual event.)

2) Montour County notifies officials and agencies upon the declaration of any ECL of Alert or higher, on any escalation of an ECL, reduction of an ECL, and demobilization of the emergency.

3) Montour County EOC maintains contact with PEMA until demobilization of the emergency.

F. Emergency Response Actions, Montour County, for ECLs

Staffing of the emergency response positions will be in accordance with the information provided in Enclosure 2, Basic Annex.

1) **Unusual Event**

a. No actions are required.

2) **Alert**

a. Acknowledge, verify, and log notification message.

b. Notify:

(1) County Commissioners

(2) Emergency Support Functions (ESF) staff officers, as appropriate

c. Operational:

(1) County EOC (partial or full mobilization per incident assessment)

d. Place on Standby:

(1) Host schools

(2) Balance of ESF's as appropriate

e. Unmet Needs

(1) Satisfy reported host school unmet needs.

f. Review Documents

(1) Review applicable procedures, mutual aid agreements, and letters of understanding.

3) **Site Area Emergency**

a. If this is initial emergency level, perform all actions listed under Alert above.

b. Acknowledge, verify, and log notification message.

c. Notify County Commissioners

d. Mobilize:

(1) County ESF's staff (as appropriate)

(2) Fire, police, and ambulance services (as appropriate)

e. Operational:

(1) Host schools

f. Emergency Public Information (EPI)

(1) Issue EPI advisories, if appropriate.

g. Agriculture Advisories

(1) Issue advisories in coordination with PEMA State EOC.

h. Unmet needs

(1) Report unmet needs of Montour County to PEMA State EOC.

4) **General Emergency**

a. If this is initial emergency level, perform all actions under Alert and Site Area Emergency above.

b. Acknowledge, verify, and log notification message.

c. Notify County Commissioners.

d. Unmet needs satisfied.

e. Mobilize:

(1) Host school districts

f. Emergency Public Information (EPI)

(1) Update EPI, if appropriate.

g. Agricultural Advisories

(1) Update advisories in coordination with PEMA State EOC

h. Report unmet needs to PEMA State EOC

5) Recovery (Return)

a. Traffic Control Points mobilized, as required.

b. Convey Recovery/Return instructions announced by PEMA through emergency management channels.

c. Records and Reports submitted within 48 hours of incident termination to PEMA State EOC.

d. Review-revise plans if appropriate in accordance with state policy.

4. ORGANIZATION AND RESPONSIBILITY

A. Organization

1) See Basic Plan. The county operates in accordance with The National Incident Management Plan (NIMS).

B. Responsibilities

1) Montour County Board of Commissioners

a. Refer to Basic Plan.

2) Emergency Management Coordinator (ESF-5)

a. See Basic Plan.

b. Notify appropriate staff.

3) Communications Officer/Warning Officer (ESF-2)

a. Refer to Basic Plan.

b. Establish and maintain communications between the County EOC and the host schools.

c. Mobilize and deploy supplemental communications personnel and equipment as the situation dictates.

4) Public Information Officer (ESF-15)

a. Refer to Basic Plan.

5) Police Services Officer (ESF-13)

a. Refer to Basic Plan.

b. Provide traffic control and law enforcement for host schools, as necessary.

6) Fire-Rescue Officer (ESF-4 & 9)

a. Refer to Basic Plan.

7) Health/Medical Services Officer (ESF-8)

a. Refer to Basic Plan.

b. Assist in operations of host schools, as required.

8) Mass Care Officer (ESF-6)

a. Refer to Basic Plan.

b. Assist host schools operations, as required.

9) Transportation Officer (ESF-1)

a. Refer to Basic Plan.

10) Resource Officer (ESF-7)

a. Refer to Basic Plan.

b. Support with available resources.

11) Food and Water Services Officer (ESF-11)

a. Refer to Basic Plan.

b. Supply information and advise on agricultural matters.

c. Coordinate with PEMA Central Region EOC on the effects of radiological contaminates within the County's portion of the ingestion exposure pathway EPZ.

d. Be prepared to coordinate with Department of Environmental Protection and Department of Agriculture in the collection of milk, food, and water samples.

14) Education Services Officer (ESF-6)

a. Refer to Basic Plan.

b. Ensure host school(s) is (are) prepared to handle the assigned student/ teacher evacuees at Site Area Emergency. (See Appendices 1 and 2 of this Annex.)

5. ADMINISTRATION AND LOGISTICS

A. Records

Maintain an EOC log on support operations in the county. Maintain adequate supply of necessary forms and reports. (See paragraph 5, Basic Plan, County EOP.)

B. Resource Lists

Maintain agreements and update resources and contact lists. Inventory resources semi-annually.

6. EXERCISE CORRECTION PROCEDURES

A. County Emergency Management Coordinators will forward applicable after action reports to other agencies within the county (e.g., school districts, hospitals.) Corrective actions requiring changes to county plans will be returned to the county for appropriate adjustments. County Coordinators will forward corrective actions or rebuttals to PEMA. County plans changes, if any, will be forwarded to PEMA.

B. Remedial training will be scheduled as necessary and included in the county REP Training Plan submitted with the Act 31 of 2007 Annual Report. Appropriate PEMA staff members will attend/participate in the training as appropriate. Prior issues will be demonstrated at the next scheduled exercise and re-evaluated at the next scheduled biennial exercise. See Appendixes titled "Training" and "Exercises and Drills" in the State Annex E for more details of exercise preparation and documentation.

7. REFERENCES

A. State Emergency Operations Plan, May 2005, Pennsylvania Emergency Management Agency.

B. Appendix 1, Emergency Management Directive D90-1 (Draft).

Appendix 1, "Procedure of Use of U.S. Department of Agriculture Foods for Disaster Mass Feeding," to PEMA Emergency Management Directive No. D90-1, dated April 26, 1990.

8. DEFINITIONS OF TERMS

A. Acknowledge(ment) - Timely affirmation by the addressee of receipt of a message or announcement.

B. Activate - To start or place into action an activity or system.

C. Deploy - To move to the assigned location in order to start operations.

D. Emergency Planning Zone (EPZ) - A generic area defined about a nuclear power plant to facilitate off-site emergency planning and develop a significant response base. It is defined for the plume and ingestion exposure pathways.

E. Ingestion Exposure Pathway EPZ - That area surrounding a nuclear power plant which, as a result of a release of radioactive material, is a potential source of exposure through the ingestion of water and food, such as milk or fresh vegetables originating there. This EPZ consists of a circular area of 50 miles radius around the nuclear power plant.

F. Mobilize - To augment staff and resources in order to accomplish the mission at an indicated location on a 24-hour/day basis.

G. Notify - To inform about a condition, event, or situation.

H. Nuclear Power Plant Incident (hereinafter called an "incident") - An incident is an event or condition at a nuclear power plant which could result in impact on public health and safety. Four incident classes have been identified; from the least serious to the most serious they are: Unusual Event, Alert, Site Area Emergency, and General Emergency. (Note: Site Area Emergency or General Emergency action levels are not to be confused with a "Declaration of Disaster Emergency" made by the Governor in accordance with 35 Pa. C.S.) Within each class there are specific emergency responses necessary to ensure that public health and safety are protected. Descriptions of the four emergency classification levels are as follows:

1) Unusual Event

Events are in progress or have occurred, that indicates a potential degradation of the level of safety of the plant or indicate a security threat to facility protection. No release of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occur.

2) Alert

Events are in progress or have occurred, that indicate actual or potential substantial degradation of the level of safety at 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 release of radioactive material is expected to be limited to small fractions of the Environmental Protection Agency (EPA) Protective Action Guidelines (PAG) exposure levels.

3) Site Area Emergency

Events are in progress or which have occurred, that involve actual or likely major failure 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 of radioactive material are not expected to exceed EPA PAG exposure levels except near the site boundary.

4) General Emergency

Events are in progress or have occurred, that involve actual or imminent substantial core degradation or melting with potential loss of containment integrity or security events that result in an actual loss of physical control of the facility. Releases or radioactive material can be reasonably expected to exceed EPA PAG exposure levels offsite for more that the immediate area.

I. Operational - Capable of accepting mission assignments at an indicated location with partial staff and resources.

J. Plume Exposure Pathway EPZ - The area surrounding a nuclear power plant which potentially is subject to radiation exposure as a result of an incident involving radioactive material emanating from the facility. Such potential exposure could involve:

1) Whole body exposure to gamma radiation from the plume and from deposited materials.

2) Inhalation exposure from the passing radioactive plume. The EPZ for this pathway consists of an area of approximately ten miles in radius around the nuclear power plant. (The exact size and configuration of each plume exposure pathway EPZ for the respective nuclear power plant in Pennsylvania were determined in relation to local emergency response needs and capabilities as they are affected by conditions such as demography, topography, access routes, and jurisdictional boundaries. Plume exposure pathway EPZs for the nuclear power plants are shown in Appendix 24 of Annex E to the State EOP.)

K. Radiological Emergency Response Procedures (RERP) - Detailed incident response procedures developed by the State and its agencies and county emergency management agencies in coordination with PEMA and the nuclear power plants.

L. Risk Counties - Those counties located partially or wholly within the plume exposure pathway EPZ of a nuclear power plant.

M. Sheltering - Action by the public within the risk counties to take advantage of the protection against radiation exposure afforded by remaining indoors, away from doors and windows, during and following the passage of the radioactive plume. Action taken by farmers to protect livestock.

N. Standby - To be ready to perform but awaiting at home or other location for further instructions.

O. Support County - The county or counties outside the plume exposure pathway EPZ of a nuclear power plant, through prior arrangement, that will provide support to a risk county in the event of an incident. Depending on size and location, the same county may be both a risk and support county.

P. Traffic Control Points (TCPs) - Manned posts established at critical road junctions for the purpose of controlling or limiting traffic. TCPs are used to control evacuation movement and also to limit entry into a nuclear power plant facility when an emergency situation requires it.

Q. Unmet Needs - Capabilities and/or resources required to support emergency operations but neither available nor provided for at the respective levels of government.

R. Verification - Follow-up by the addressee to confirm understanding of the contents of a message or announcement.

9. DISTRIBUTION AND CHANGE

A. Distribution

1) Montour County Commissioners (3)
2) Montour County EMA (13)
3) Danville American Red Cross Chapter (1)
4) Montour County Fire Police (1)
5) Danville Fire Police (1)
6) Columbia County EMA (1) *
7) FEMA Region III (1) *
8) PEMA Eastern Area (1) *
9) PEMA Headquarters (8) (PSP, DMA, PennDOT, ARC Coordinator, Master File, Control Copy, Working Copy, spare)*
10) Berwick School District*

B. While distribution of these plans will be controlled, additional copies can be made available upon specific request and justification to the Montour County Emergency Management Agency. As copies are distributed, the name and address of the recipient will be added to the county distribution list.

C. Changes on pages of this document will be shown by a vertical line in the margin. Additionally, the number and date of the change will be put on the lower right corner of each page that is changed.

* Plans listed in paragraph A above, marked with an asterisk, will be distributed by PEMA. All others will be distributed by the Montour County EMA.

ENCLOSURES:

1. Emergency Notification Report Form
2. Staffing Status Flowchart

APPENDICES:

1. Evacuation Traffic Control
2. Host School Operations
3. Ingestion Exposure Pathway Emergency Planning Zone
4. Agreements and Statements of Understanding.

Control # _____

EMERGENCY NOTIFICATION REPORT

1. Call Status: ☐ **THIS IS A DRILL** ☐ **THIS IS AN ACTUAL EVENT**

2. This is: _____ at PPL Susquehanna, LLC
(Communicator's Name)

My telephone number is: 570-542- 3 _____
570-759- 4 _____
(Callback telephone number)

Notification time is: _____ .
(Time notification initiated)

3. **EMERGENCY CLASSIFICATION:**
☐ **UNUSUAL EVENT**
☐ **ALERT**
☐ **SITE AREA EMERGENCY**
☐ **GENERAL EMERGENCY**
☐ **The event has been terminated.**

UNIT: ☐ **ONE** ☐ **TWO** ☐ **ONE & TWO**

Declaration Time: _____ (Time classification/ termination declared)

DATE: _____ (Date classification/ termination declared)

THIS REPRESENTS A/AN: ☐ **INITIAL DECLARATION** ☐ **ESCALATION** ☐ **NO CHANGE** } **IN CLASSIFICATION STATUS**

4. **The Classification Designation is**: _____

BRIEF NON-TECHNICAL DESCRIPTION OF THE:
☐ **EMERGENCY EVENT** (Initial declaration and escalations) **OR**
☐ **OTHER SIGNIFICANT EVENT**(No change in emergency classification or classification time)

5. **THERE IS:** ☐ **NO** ☐ **AN AIRBORNE** ☐ **A LIQUID** } **RADIOLOGICAL RELEASE IN PROGRESS DUE TO THE EVENT**

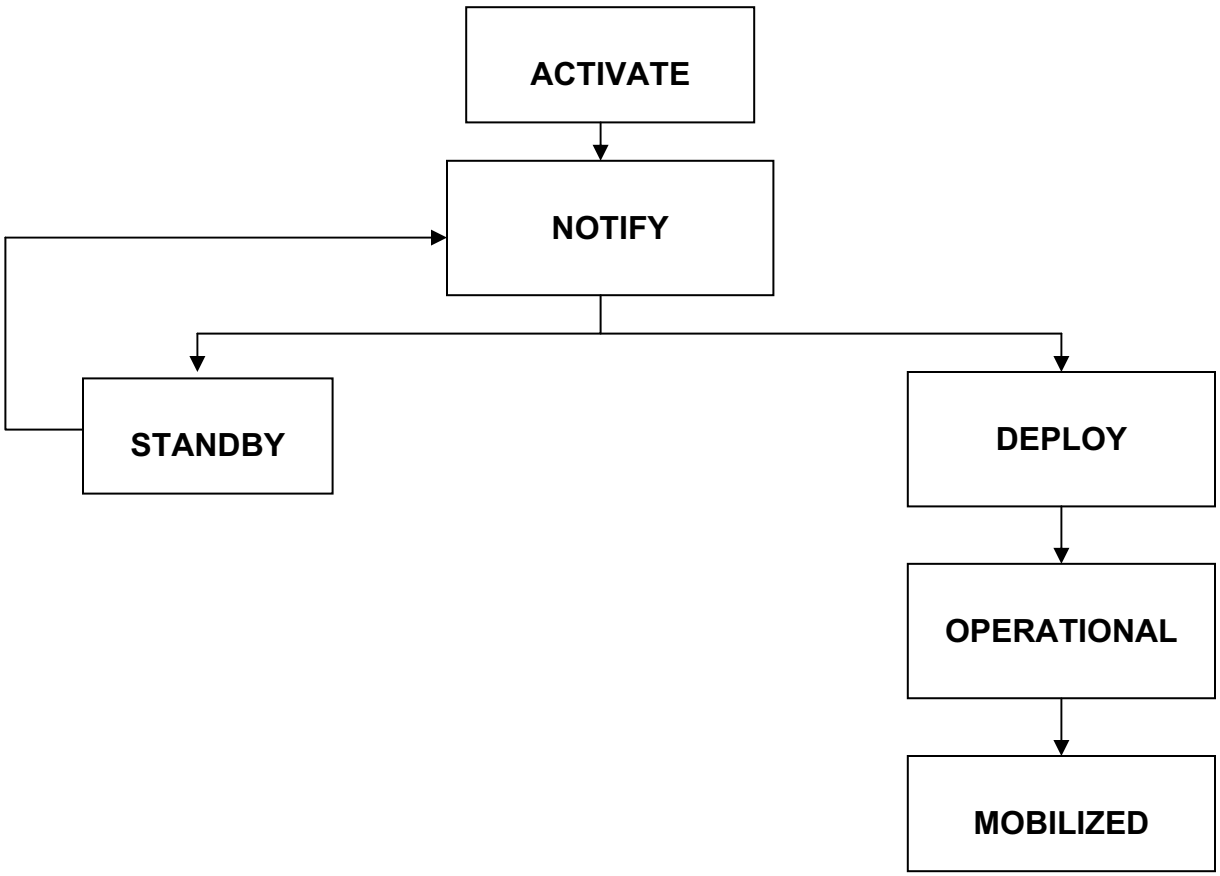
Fuel Clad Barrier **AND Containment** Barrier LOSS, **RCS** Barrier **AND Containment** Barrier LOSS,
an increase in the detected radiation by effluent monitors or sampling that is a result of the event,
any radioactive liquid released beyond the Protected Area that is a result of the event,
RG1, RS1, RA1, RU1, MU7, SBGT initiation on RB Vent hi-rad
Other classifications should be assessed to determine if there is a radiological release due to the event in progress.

6. **WIND DIRECTION IS FROM:** _____ ◦ . **WIND SPEED IS:** _____ **mph.**
(Data from 10 meter meteorological tower, available on PICSY.)

7. **REPEAT:** ☐ **THIS IS A DRILL** ☐ **THIS IS AN ACTUAL EVENT**

APPROVED: _____ (ED, RM, or EOFSS) **Time:** _____ (Time form approved) **Date:** _____ (Date form approved)

STAFFING STATUS FLOWCHART



Activate: Start or place into action

Notify: To inform of a condition

Standby: Ready to perform but awaiting further instructions

Deploy: To move to the assigned location in order to start operations

EVACUATION TRAFFIC CONTROL

1. A schematic depicting the evacuation routes from Columbia County to the host schools in Montour County, and location of Traffic Control Points (TCPs) is at Attachment A, Tab 1, of this Appendix.

ATTACHMENT:

a. Columbia County Evacuation Route to Montour County Host Schools

Attachment A

COLUMBIA COUNTY EVACUATION ROUTE TO MONTOUR COUNTY HOST SCHOOLS

School District (Host School Requirement)	Evacuation Route	Host Schools
Berwick School District (3,422)	Will proceed approximately 25 miles south on U.S. Route 11 to the Danville host schools.	All students will be taken to the specified host school.

TABS:

1. Evacuation Route, Host Schools
2. Strip Map, Evacuation Route from Columbia County to Danville Senior High School
3. Strip Map, Evacuation Route from Columbia County to Danville Middle School
4. Strip Map, Evacuation Route from Columbia County to Liberty-Valley Elementary School
5. Strip Map, Evacuation Route from Columbia County to Mahoning-Cooper School

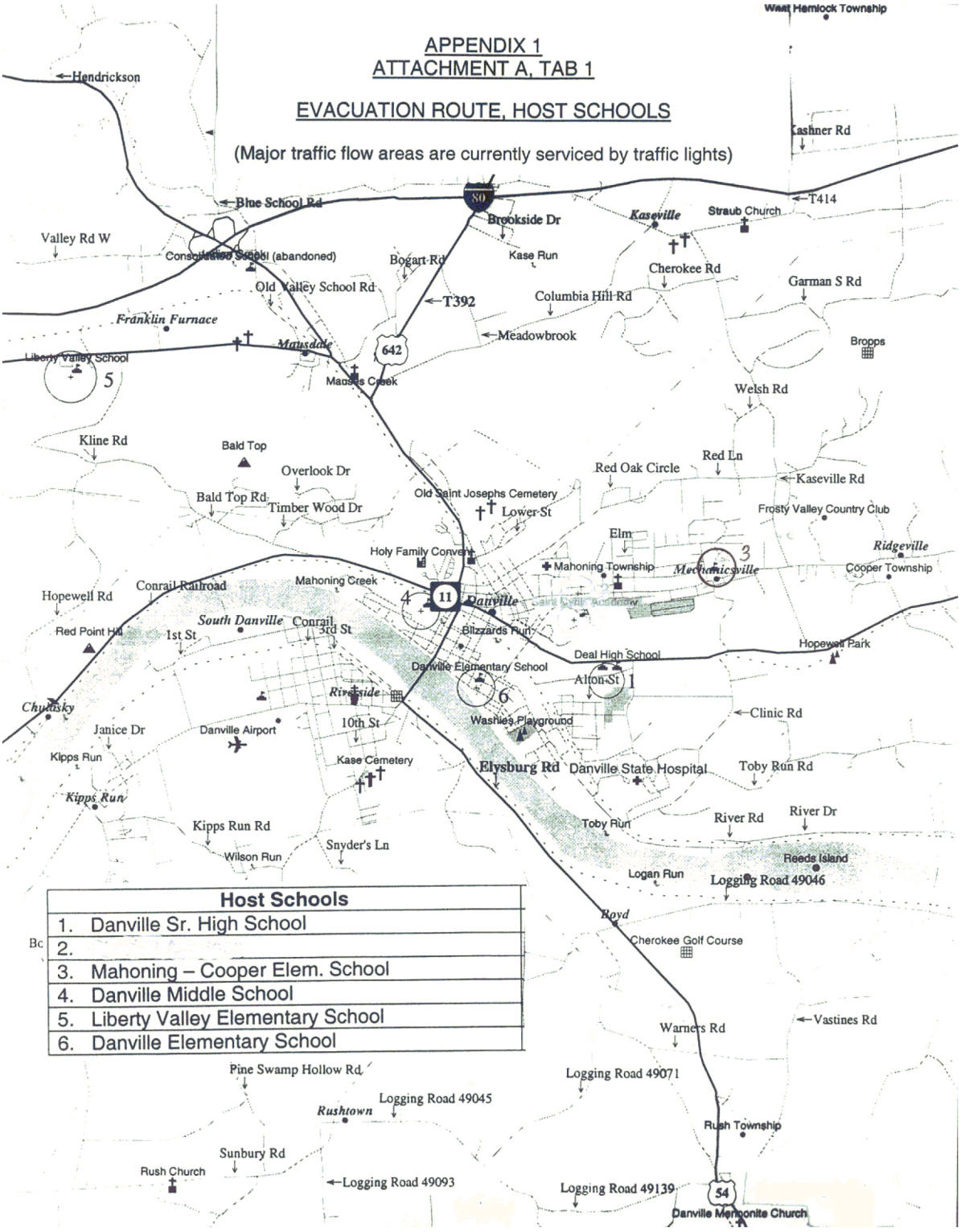
5a. Strip Map, Evacuation Route from Columbia County to Danville Elementary School, Front and Cedar

6. Evacuation Routes from Montour County Host Schools to Reception Centers
7. Evacuation Routes to the Reception Centers Schematic

Attachment A, Tab 1

EVACUATION ROUTE, HOST SCHOOLS

(Major traffic flow areas are currently serviced by traffic lights)



Attachment A, Tab 2

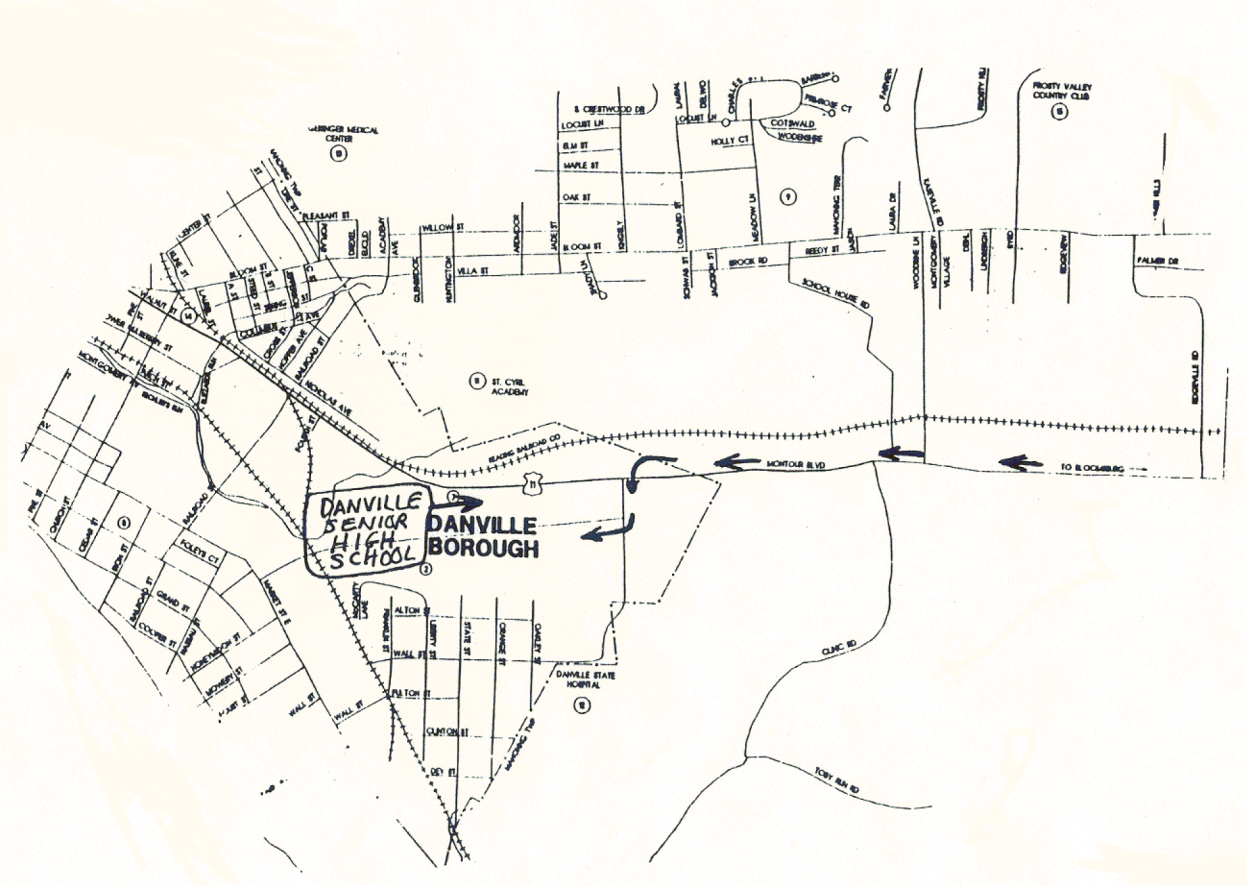
STRIP MAP, EVACUATION ROUTE FROM COLUMBIA COUNTY TO DANVILLE SENIOR HIGH SCHOOL

Directions:

Proceed South on US Route 11

Turn Left at first traffic light in Danville Borough (Danville State Hospital).

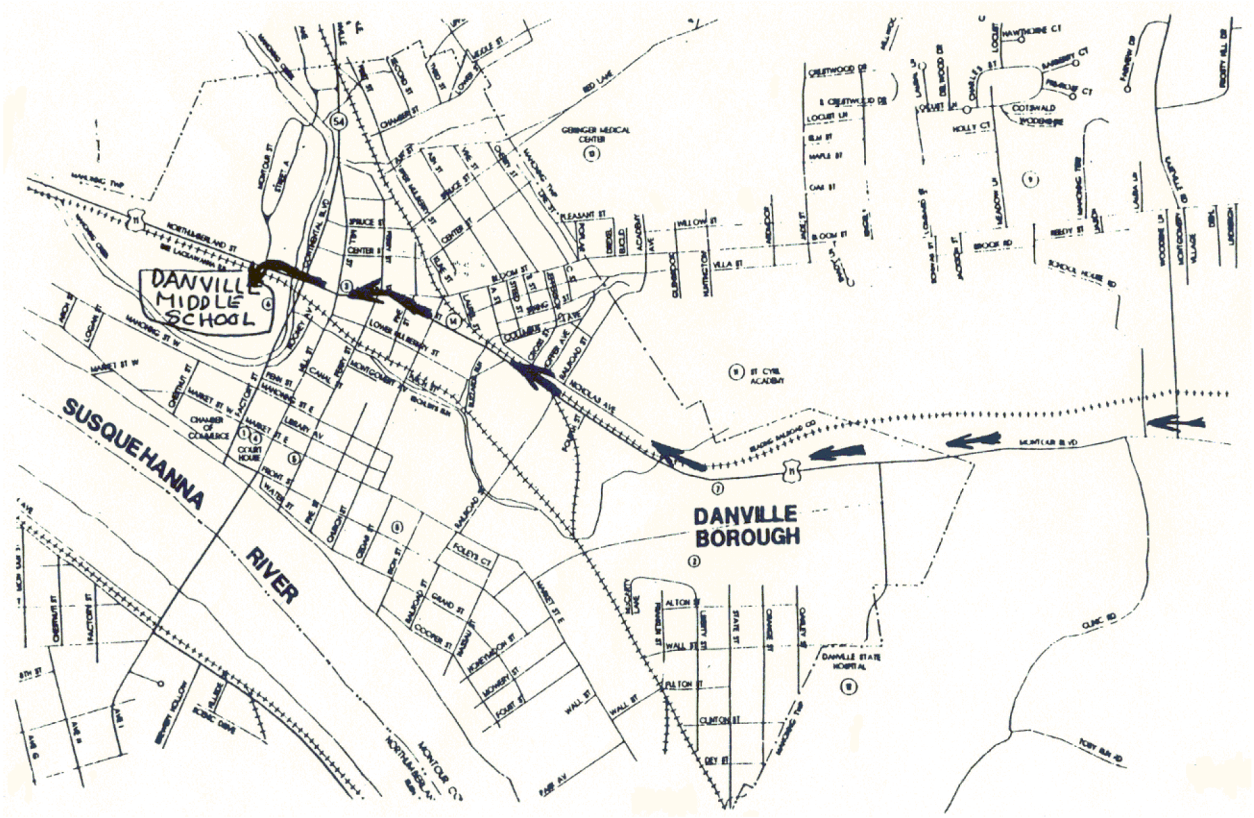
Take immediate right turn into Danville Senior High School.



Attachment A, Tab 3

STRIP MAP, EVACUATION ROUTE FROM COLUMBIA COUNTY TO DANVILLE MIDDLE SCHOOL

Directions:
Proceed South on US Route 11 into Danville Borough.
Danville Middle School is on the left just past the intersection of US Route 11 and PA Route 54.

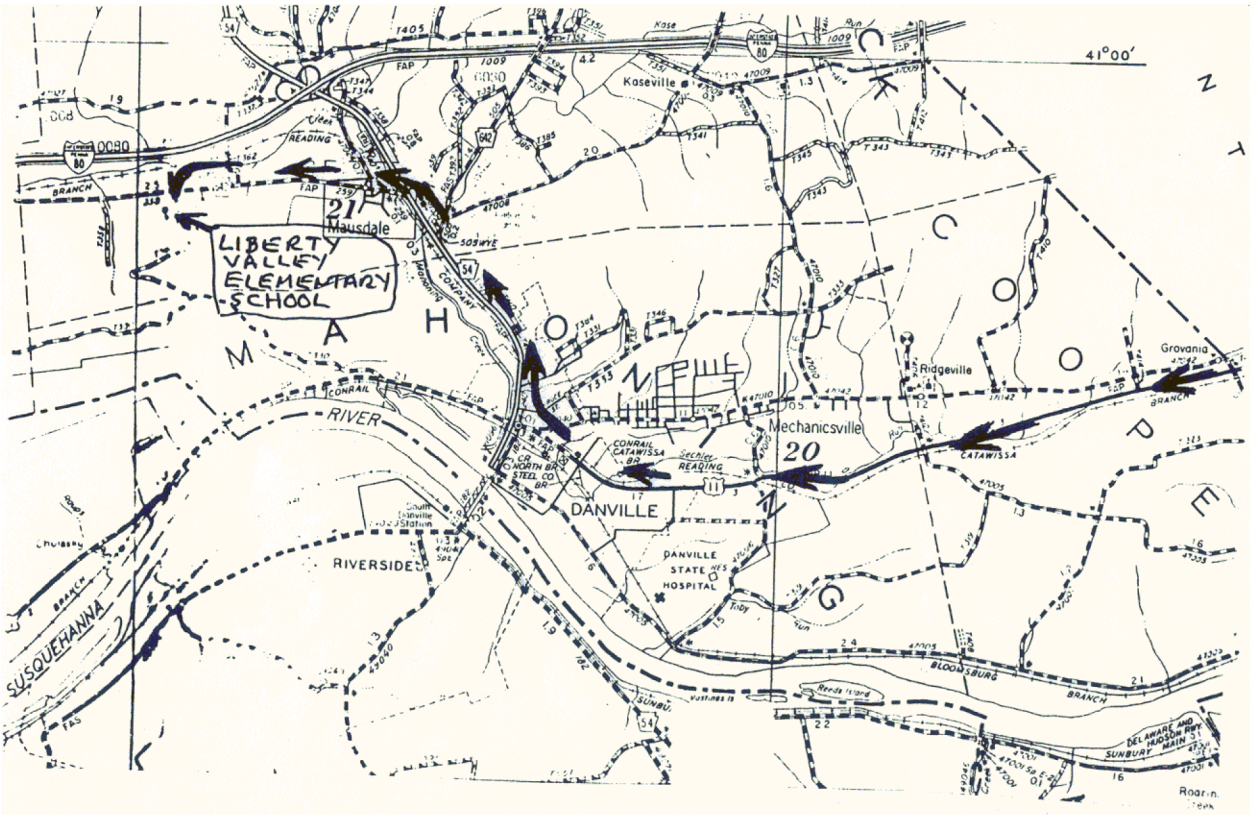


Attachment A, Tab 4

STRIP MAP, EVACUATION ROUTE FROM COLUMBIA COUNTY TO LIBERTY-VALLEY ELEMENTARY SCHOOL

Directions:

Proceed South on US Route 11 through Danville Borough to the intersection of US Route 11 and PA Route 54.
Turn right on PA 54 and Go 1 ½ miles to PA Route 642.
Turn Left on PA 642 and go 1 ½ miles to the school on the left.



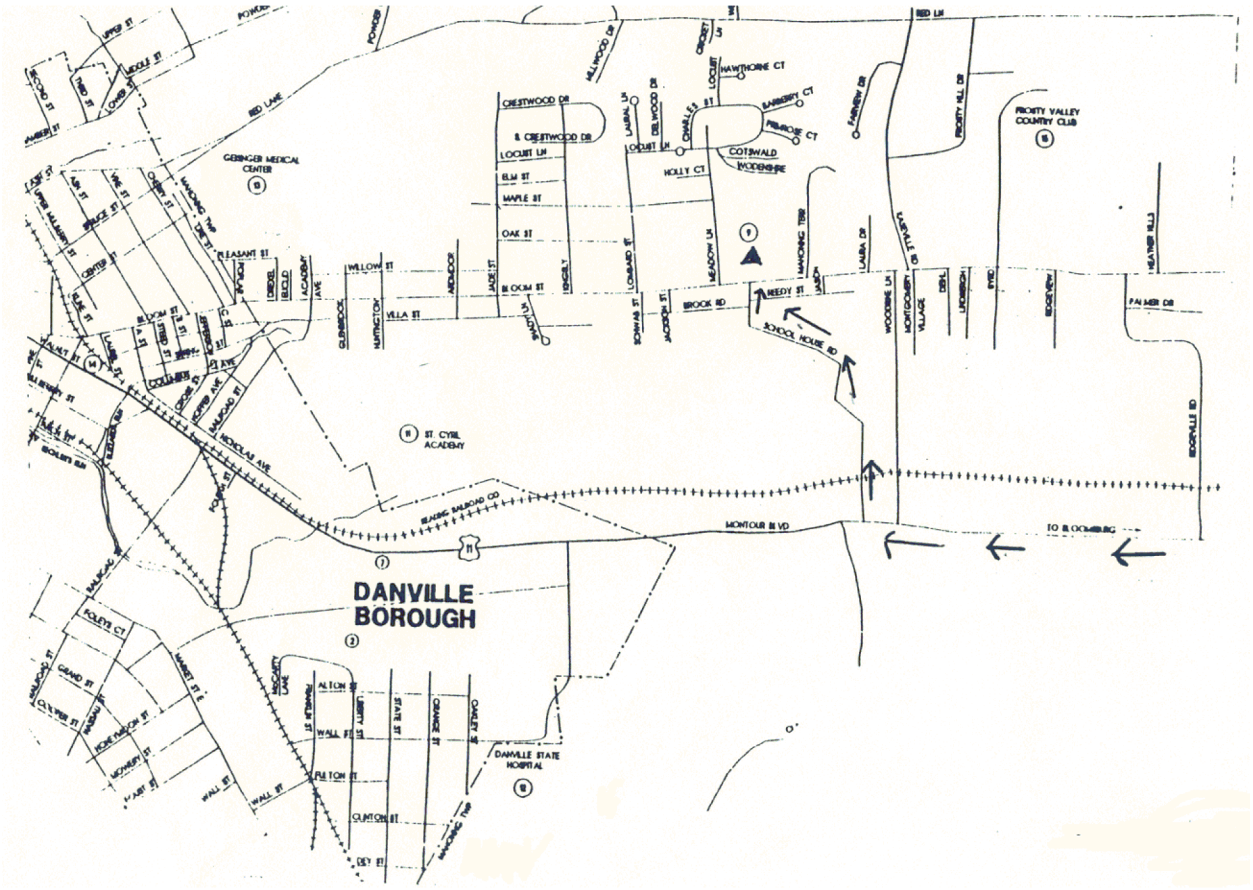
Attachment A, Tab 5

STRIP MAP, EVACUATION ROUTE FROM COLUMBIA COUNTY TO MAHONING-COOPER SCHOOL

Directions:

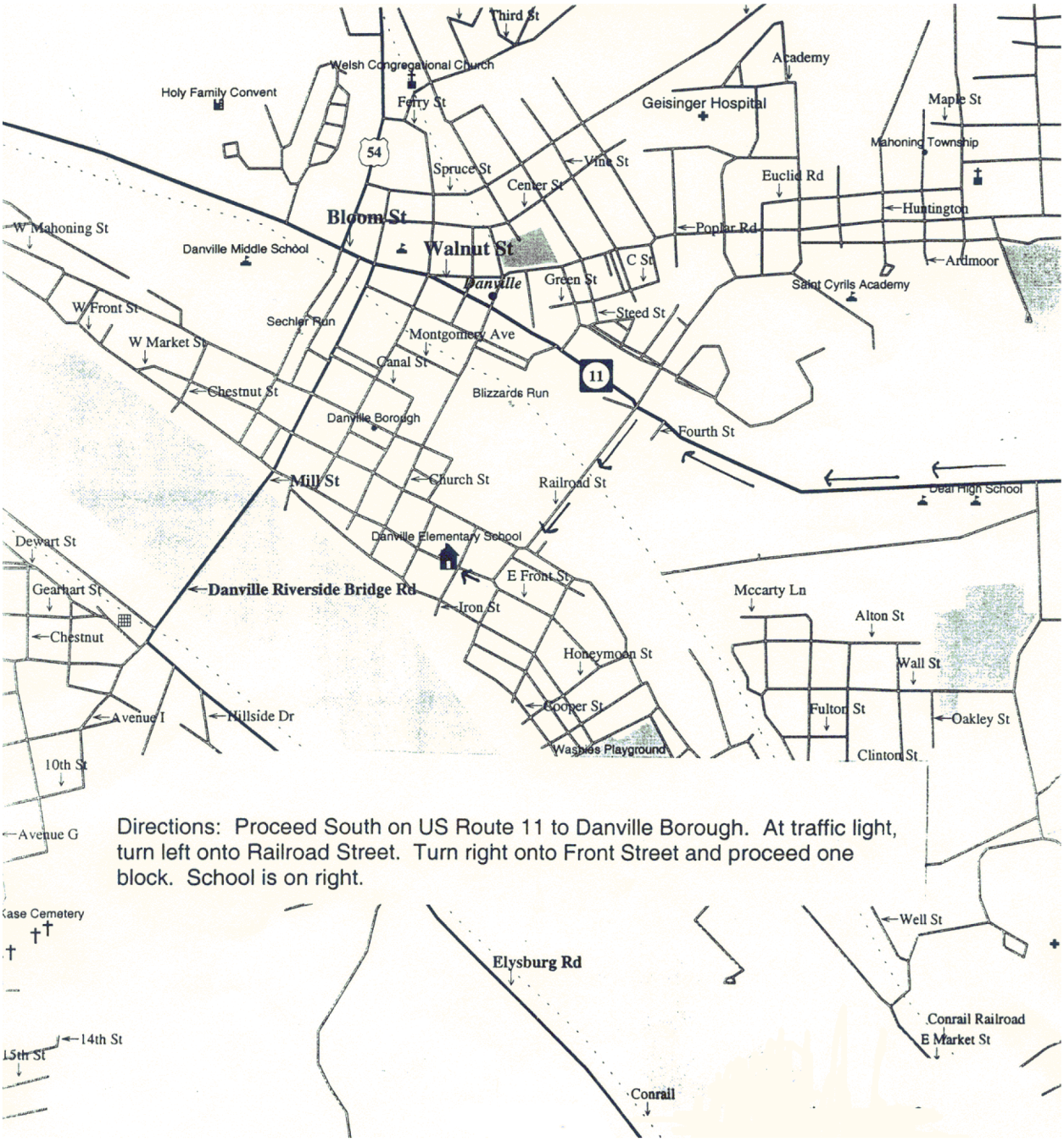
Proceed South on US Route 11 to School House Lane, turn right immediately after Maria Joseph Manor Nursing Home.

Follow the road to Mahoning-Cooper Elementary School.



Attachment A, Tab 5a

STRIP MAP, EVACUATION ROUTE FROM COLUMBIA COUNTY TO DANVILLE ELEMENTARY SCHOOL, FRONT & CEDAR



Attachment A, Tab 6

EVACUATION ROUTES FROM MONTOUR COUNTY HOST SCHOOLS TO RECEPTION CENTERS

IF YOU LIVE IN	GO TO THIS RECEPTION CENTER	DIRECTIONS
Berwick Borough Briar Creek Borough	Lycoming Mall, Halls Lycoming County	Take PA 54 north to I-80, west on I-80 to Exit 212B to I-180. West on I-180 to Lycoming Mall, Halls.
Briar Creek Township North Centre Township	Shikellamy High School Northumberland County	Interstate 80 West to Danville Exit #224. Take Rte 54 East to Danville. Turn right onto Rte 11 South to Northumberland. Turn left onto 147 South, across Susquehanna River to Sunbury. Turn right on 147 to Chestnut Street (Rte 61 South). Proceed to Second Street. Turn right onto Second to Walnut Street. Left on Walnut. Shikellamy High School on left.
Hollenback Township Nescopeck Borough Nescopeck Township Salem Township	Montandon Elementary School, Montandon Union County	If host school is Liberty Valley, proceed west on 642 to RTE. 45. Continue 45 west to Montandon. Balance of schools, PA 54 north to I-80, west on I-80 to Exit 212A to 147 south. Continue 147 south to SR 45.

HOST SCHOOL OPERATIONS

1. ACTIVATION

The order to activate host schools is issued by the Coordinator of the Montour County Emergency Management Agency or his designee. Once the order to activate is issued, the Educational Services Officer is notified to contact the host school managers. The host school managers are responsible for notifying and activating their respective staffs.

2. CONCEPT OF OPERATIONS

A. UNUSUAL EVENT:

No action required.

B. ALERT:

1) County Coordinator notifies the Educational Services Officer.

2) Educational Services Officer reports to the EOC and notifies host school principal, informing him of the emergency status and instructing him to contact his respective staffs assuring availability.

3) The Educational Services Officer will notify principals of host schools who will make preliminary staff assignments.

4) The Educational Services Officer coordinates with Communications/Warning Officer on assignment of RACES team personnel at host schools.

C. SITE AREA EMERGENCY:

1) If this is the initial emergency level, perform all actions listed under ALERT above.

2) Educational Services Officer reports to the EOC and notifies the host school principals to place host schools on standby status and of the need to utilize the facility.

3) Educational Services Officer confirms assignment of RACES personnel with Communications/ Warning Officer.

4) Host school principals notify staff to report to assigned host schools and assign a person to pick up strip maps from the county EOC.

5) Upon arrival at host schools, the principals brief staffs on emergency status and reviews responsibilities and procedures.

6) Host school principal provides periodic status reports to the county EOC.

D. GENERAL EMERGENCY:

1) If this is the initial emergency level, perform all actions listed under ALERT and SITE AREA EMERGENCY above.

2) Activate host schools:

a. Host school principal will assign staff to distribute one reception center strip map and host school handout to each vehicle.

b. Host school principals will keep the County EOC informed of host school unmet needs.

3) Upon closing of the host school, the principal will take all necessary steps to return the facility to its original condition.

4) Upon conclusion of duties, the host school principals should prepare an after-action report to include:

a. Summary of all activities with statistics on the total number of evacuees processed.

b. Names and addresses of participating staff.

c. Message log.

d. Expenses (including bills, invoices, etc.).

ATTACHMENT:

A. Host School Handout

Attachment A

HOST SCHOOL HANDOUT

This school is being used as a host school. Your student (students) is (are) here with their teacher(s). It is our intent to reunite you with your student (students) so you may proceed on your way. We ask your cooperation as follows:

1. Park your car in established parking areas.

2. Proceed to reception desk inside the main entrance.

3. Identify yourself to the reception desk who will arrange for your student (students) to be brought to you.

4. Provide identification to reception desk and sign the release roster (acceptable identifications are social security card, driver's license, or voter's registration card.)

5. Immediately after picking up your student (students) you are urged to leave the school and parking lot to make way for others that will be arriving.

Thank you for your cooperation,

Montour County Emergency Management Agency

INGESTION EXPOSURE PATHWAY EMERGENCY PLANNING ZONE

1. PURPOSE

To describe the means to be used in Montour County in minimizing the effects of radioactive contamination of the human food chain, including animal feeds and water, resulting from an incident at a nuclear power plant.

2. SITUATION

A. Pennsylvania Nuclear Power Plants

There are five 50-mile radius ingestion exposure pathway emergency planning zones (EPZ) associated with the five nuclear power plants within the Commonwealth. The EPZ for the Susquehanna Steam Electric Station lies entirely within Pennsylvania. The Three Mile Island Nuclear Station EPZ extends into Maryland; the Peach Bottom Atomic Power Station EPZ extends into Maryland, Delaware, and New Jersey; the Limerick Generating Station EPZ extends into Delaware, Maryland, and New Jersey; and the Beaver Valley Power Station EPZ extends into Ohio and West Virginia. (See Attachment A, Tabs 1 and 2.)

B. Out of State Nuclear Power Plants

Portions of Pennsylvania also lie within the 50 mile ingestion exposure pathway EPZs of four nuclear power plants located beyond the boundaries of the Commonwealth. These four plants are the Artificial Island Nuclear Generating Station and Oyster Creek Nuclear Generating Station in New Jersey; the Indian Point Nuclear Power Station in New York; and the Perry Nuclear Power Plant in Ohio. (See Attachment A, Tab 2.)

C. Counties within the 50-mile EPZs

There are 49 counties within Pennsylvania that lie wholly or partially inside the 50-mile radius of one or more nuclear power plants. Additionally, as a result of the Chernobyl disaster in 1986, the Governor has determined that all 67 counties within the Commonwealth are to be designated as ingestion counties. (See Attachment A, Tab 2.)

D. Montour County

Montour County lies wholly within the 50-mile radius of Susquehanna Steam Electric Station.

E. Ingestion

In the event of a radioactive release from one of the above mentioned sources, the deposition of radiocontaminants on crops, other vegetation, bodies of surface water, and ground surfaces could occur and result in the ingestion of contaminated food products, milk and water.

F. County Response

Affected counties have the responsibility to take protective actions in the event that a radiological incident causes contamination of human food and animal feeds. They are assisted by PEMA and the County Emergency Board (CEB) in the discharge of that responsibility.

3. CONCEPT OF OPERATIONS

A. General

1) Emergency response operations within the ingestion exposure pathway EPZ involve the identification of areas in which food and/or water may have become contaminated. Once contaminated areas are identified, protective actions will be taken to minimize further contamination in those areas and to place restrictions, appropriate for protecting the public health, upon the use of contaminated food or water.

2) At the State Level, PEMA serves as the operative arm in responding to and recovering from the ingestion exposure problem. Emergency response operations will be coordinated through the State EOC. The Pennsylvania Department of Agriculture (PDA), State Emergency Board, as well as the USDA component of the Federal Radiological Monitoring and Assessment Center (FRMAC) will provide assistance in the form of personnel and agricultural expertise.

3) At the County Level, the county EMA serves as the operative arm in responding to and recovering from the ingestion exposure problem. The USDA Services located in the county - Agricultural Stabilization and Conservation Services (ASCS), Cooperative Extension Service (CES), Farmers Home Administration (FHA) and the Soil Conservation Service(SCS) - will provide assistance in the form of personnel and agricultural expertise. Collectively, these services comprise the county Food and Agriculture Council (FAC). The term County Emergency board (CEB) is used to denote these services in their emergency work to assist the agricultural community within the county. A member of the CEB (usually the ASCS County Executive Director) serves as the Agricultural Staff Officer on the County EOC staff. In this document, the terms FAC and CEB will be used interchangeably.

B. Protective Actions

1) The United States Food and Drug Administration (FDA) recommends two levels of protective response which apply to all food pathways. They are:

a. Preventive protective actions - Actions taken to prevent or reduce contamination of milk and food products.

b. Emergency protective actions - Actions taken by public officials to isolate food to prevent its introduction into commerce and to determine whether condemnation or other disposition is appropriate.

2) Protective actions, as announced by PEMA, may require modifications of food production, processing, and distribution cycle pathways in affected areas both within and outside of the ingestion exposure pathway EPZ.

3) Protective actions will be based upon known releases to the environment, radiological measurements, laboratory analyses, and/or integrated dose projections.

4) Protective actions will not be taken without verification by PEMA in coordination with BRP and federal agencies involved, of the measured levels for both preventive or emergency protective actions and a consideration of the health, economic, and social impacts of such actions.

5) In this appendix "protective action" is used in the generic sense unless specifically referred to as "preventive" or "emergency" protective action.

C. Notification

The public in both the plume and ingestion exposure EPZs will be notified about initial preventive and emergency protective actions by means of broadcast and print media. These include commercial radio ad television stations, cable TV systems, National Oceanic and Atmospheric Administration (NOAA) radio, and newspapers. The Emergency Alert System (EAS) can be used in those counties having appropriate alerting systems (e.g., primary route alerting or sirens). Agricultural organizations such as Grange Associations and County and Community Farmers Committees can provide an alternate means of notification.

D. Target Audiences

Target audiences for public information concerning radiocontamination through ingestion exposure are farmers, food processors and distributors, feed processors and distributors, water suppliers, and members of the general public located within the ingestion exposure EPZ.

4. ORGANIZATION AND RESPONSIBILITIES

A. Organization

1) Pennsylvania Emergency Management Agency

The Pennsylvania Emergency Management Agency serves as the lead state agency in coordination with State and Federal agencies in the public education of and response to problems associated with the ingestion exposure pathway emergency planning zone. PEMA also provides direction and control over the ingestion response and recovery activities (through its Area Offices for support and ingestion counties, and directly for risk counties) of all counties in the Commonwealth.

2) PEMA Area Offices

The PEMA Area Offices provide overall direction and control over the ingestion response and recovery activities of support and ingestion counties located within the boundaries of their respective operational areas. This includes the initial and follow-up notification of ECLs.

3) Pennsylvania Department of Agriculture (PDA)

The Pennsylvania Department of Agriculture serves as the state coordinating agency in problems relevant to the agricultural community. The PDA works in close coordination with the State Emergency Board (SEB), PEMA, BRP, and the Pennsylvania Department of Health (DOH) in the development and issuance of guidance to counties concerning response procedures and action necessary to evaluate and prevent radioactive contamination of agricultural, dairy and food products. The PDA also issues guidance (through PEMA) concerning the control and disposition of such products should they become contaminated.

4) Bureau of Radiation Protection (BRP)

The Bureau of Radiation Protection provides accident assessment and ingestion exposure information as it relates and pertains to the food chain to PEMA, PDA, DOH, and other appropriate bureaus of the Department of Environmental Protection (DEP). This information will guide the PDA and Bureau of Community Environmental Control in the conduct of initial sampling procedures and in continuing operations. BRP also reviews laboratory test results and consults with PEMA, PDA, and DOH in developing ingestion protective action recommendations.

5) State Emergency Board (SEB)

The State Emergency Board is chaired by the ASCS State Executive Director and provides advice, leadership, and coordination to the county emergency boards (CEBs). The ASCS State Executive Director (or his/her designated representative) serves as a member of the Agricultural Response Cell in the State EOC. In this capacity, he/she assists and provides information to State government officials and coordinates USDA radiological emergency programs at the State level. He/she is also the primary emergency contact for State officials in the event that Federal agricultural assistance is required.

6) Montour County Emergency Management Agency

The Montour County Emergency Management Agency serves as the lead county agency in coordination with State and County agencies in the public education of and response to problems associated with the ingestion exposure pathway emergency planning zone.

7) Montour County Emergency Board

The Montour County Emergency Board is chaired by the ASCS County Executive Director and assists and provides agricultural information to local governments in the event of a radiological incident. The CEB also coordinates emergency programs at the local level. The ASCS County Executive Director (or his/her designated representative) serves as the Agricultural Staff Officer on the Montour County EOC staff. In this capacity, he/she assists and provides information to county government officials and coordinates USDA radiological emergency programs at the county level. He/she is also the primary emergency contact for county officials in the event that State CEB agricultural assistance is required.

B. Responsibilities

1) Pennsylvania Emergency Management Agency

a. Act as lead agency in coordination with Federal and Commonwealth agencies and departments in public education of and response to problems associated with the ingestion exposure pathway EPZ.

b. Provide overall direction and control during ingestion response and recovery operations.

c. Establish procedures and the capability to disseminate information on preventive and emergency protective actions to cope with the efforts of radiological contamination of human food, water and animal feed. This will be accomplished annually for risk counties.

d. In coordination with BRP, DOH, and PDA/USDA, issue guidance to ingestion exposure pathway counties on procedures and actions necessary to prevent or mitigate radioactive contamination of milk, food, and water.

e. Maintain (in coordination with PDA/USDA) files cross-indexed to maps showing agricultural land use, e.g., farms, dairies, slaughter houses, and meat processing plants within the ingestion pathway EPZs.

f. Maintain (in coordination with PDA/USDA) files cross-indexed to maps showing names and locations of all facilities processing milk products, large amounts of food, or agricultural products (to include fertilizer, feed, or seed) originating anywhere in the 50-mile ingestion pathway EPZs.

g. At General Emergency, disseminate to the target audience in the ingestion exposure pathway EPZ, public education information about radiation hazards in the ingestion pathway; protective actions to take; and, locations of contact points where additional information on the subject may be obtained. This will be accomplished at Site Area Emergency for risk counties.

h. In coordination with PDA/USDA, DMA, and PSP, assist BRP in the transportation of milk, food/feed products, and water samples to the Bureau of Laboratories (BOL) or Federal Radiological Monitoring and Assessment Center (FRMAC).

2) PDA/State Emergency Board

a. Develop and issue (through county emergency boards) guidance to county EMAs and the agricultural community concerning response procedures and actions necessary to prevent radioactive contamination of agricultural, dairy, and food products.

b. Develop and issue (through county emergency boards) guidance to county EMAs and the agricultural community concerning the control and disposition of radiologically contaminated agricultural, dairy, and food products.

c. Maintain (in coordination with the appropriate CEB) a site-specific list and map of the location of dairy herds within the ingestion exposure pathway EPZ of nuclear power plants located within the boundaries of the Commonwealth.

d. Maintain (in coordination with the appropriate CEB) a site-specific list and map of the location of food and foodstuff processors handling agricultural, dairy, and other food products grown or raised within the ingestion exposure pathway EPZ of nuclear power plants located within or beyond the boundaries of the Commonwealth.

e. Develop plans and/or response procedures to implement control of the processing or use of the above mentioned products should they become contaminated during an incident.

f. Develop (in coordination with PEMA and BRP) guidance to ingestion exposure counties on procedures and actions necessary to prevent or mitigate radiocontamination of milk, food, and feed products.

g. Develop/distribute (in coordination with PEMA, BRP, and the appropriate CEB) information about radiation hazards in the ingestion pathway and protective actions to take.

h. Assist (in coordination with PEMA, BRP, and the appropriate CEB) in the development and execution of an agricultural sampling plan aimed at determining the safety of the food supply.

i. Provide field personnel for sampling agricultural, dairy, and food products for BRP analysis and in support of BRP radiological monitoring efforts.

j. Coordinate (with PEMA, BRP, and affected county EMAs) the delivery of agricultural and water samples to the Bureau of Laboratories or FRMAC.

k. Train and maintain a pool (at least two per county) of trained agricultural samplers.

l. Establish (in coordination with PEMA) procedures and the capability to conduct surge training for additional agricultural samplers.

3) Bureau of Radiation Protection

a. Provide (to PEMA, PDA, DOH, and other appropriate Bureaus of DEP) accident assessment and plume exposure information as it relates and pertains to the food chain.

b. Prioritize the analytic and sampling efforts to be conducted.

c. Develop and issue guidance (through PEMA and PDA) to ingestion exposure pathway counties regarding initial and continuing agricultural product sampling.

d. Develop and issue guidance (through the BRP Emergency Response Coordinator) to CEC and WOM regarding initial and continuing water sampling.

e. Review laboratory test results and consult with PEMA, PDA, and DOH in developing protective action recommendations.

f. Develop and issue guidance (through PEMA and PDA) to ingestion exposure counties regarding actions necessary to prevent or mitigate radioactive contamination of milk, food, and water.

g. Recommend preventive or emergency protective actions, if required, to be taken within the ingestion exposure pathway EPZ.

h. Prepare (in coordination with PEMA, PDA, and DOH) public education information about radiation hazards in the ingestion exposure pathway EPZ.

4) Bureau of Community Environmental Control (CEC)

   a. Alert affected water suppliers.

   b. Collect (as directed by BRP) appropriate public drinking water samples for incident assessment.

   c. Collect other samples as directed.

5) Bureau of Water Quality Management (WQM)

   a. Collect (as directed by BRP) appropriate surface water samples for incident assessment.

   b. Coordinate (with PEMA, BRP, and affected county EMAs) the delivery of water samples to the Bureau of Laboratories or FRMAC.

   c. Collect other samples as directed.

6) Pennsylvania State Police (PSP)

   Provide (upon request of PEMA) aerial or ground vehicle delivery of agricultural samples from affected counties to the FRMAC, or DEP's Bureau of Laboratories, within capabilities.

7) Montour County EMA

   a. Act as lead county agency in coordination with State and County agencies and departments in public education of and response to problems associated with portions of the County located within the ingestion exposure EPZ.

   b. Provide overall direction and control during county ingestion response and recovery operations.

   c. Develop/maintain a working relationship with the County Emergency board and attend quarterly CEB coordination meetings.

   d. Understand the capabilities available from the USDA Services which comprise the CEB.

   e. Develop a working knowledge of the agricultural entities within the county which could be affected by the introduction/deposition of radionuclides.

   f. When possible, assist the CEB in maintaining files cross-indexed to maps showing the location of all farms, dairies, slaughter houses, and meat processing plants within the ingestion exposure EPZ. This information should be contained in the appropriate electronic data base (i.e., EIS-c/e) and backed-up with hard copy media.

g. When possible, assist the CEB in maintaining files cross-indexed to maps showing the names and locations of all facilities processing milk products, large amounts of food, or agricultural products (to include fertilizer, feed, or seed) within the ingestion exposure EPZ. This information should be contained in the appropriate electronic data base (i.e., EIS-c/e) and backed-up with hard copy media.

h. Establish (in coordination with PEMA and the CEB) procedures and the capability to disseminate information on preventive and emergency protective actions to cope with the effects of radiological contamination of human food, water, and animal feed.

i. Issue (in coordination with PEMA and the CEB) guidance on procedures and actions necessary to prevent or mitigate radiological contamination of human food, water, and animal feed.

j. Issue (in coordination with PEMA and the CEB) instructions concerning the control and disposition of radioactively, contaminated agricultural, dairy, and food products.

k. Assist the CEB, when applicable, in the registration of farmers requesting authorization to reenter restricted areas for the purpose of tending livestock.

l. Assist the agricultural sampling effort by:

(1) Providing a TLD and radiological situation report for incoming agricultural samplers.

(2) Providing incoming agricultural samplers with a mobile communications source.

(3) Providing a guide to assist incoming agricultural samplers with navigation.

NOTE: Amateur Radio provides an excellent resource in the accomplishment of (2) and (3) above.

(4) Providing sample-taking equipment (plastic bags, bottles), if necessary.

(5) Assist with radiological monitoring of agricultural samplers upon mission completion.

(6) Designating/coordinating agricultural sample drop-off points with PEMA, PDA, and BRP.

8) County Emergency Board (CEB)

a. Agricultural Stabilization and Conservation Service (ASCS)

(1) Develop and maintain a working relationship with the appropriate County EMA.

(2) Develop and maintain files cross-indexed to maps showing the names and locations of all farms, dairies, slaughter houses, and meat processing plants within the county. Ensure the County EMA has access to same.

(3) Develop and maintain files cross-indexed to maps showing the names and locations of all facilities processing milk products, large amounts of food, or agricultural products (to include fertilizer, feed, or seed) within the county. Ensure the County EMA has access to same.

(4) Maintain local information on crop production, acreage, and farm capability.

(5) Develop and maintain a list of food, feed, or seed processing facilities located within the county which receive raw materials from sources located outside the county. Identify the location of those sources.

(6) Maintain contact with local food processing storage and wholesale distribution facilities and determine availability and disposition of supplies.

(7) Provide an Agricultural Staff Officer to the County EOC upon notification of the General Emergency ECL.

(8) Designate (if required) local FAC personnel to assist in agricultural sampling of the affected area.

(9) Serve as the primary point of contact for incoming agricultural sample-taking personnel and assist the sampling effort by:

(a) Ensuring sample takers understand their mission instructions and have the necessary equipment.

(b) Providing pertinent information concerning sample locations (name of owner, location of farm, point of contact, etc.)

(c) Contacting sample location owners and informing him/her that sample takers are enroute.

b. Cooperative Extension Service (CES)

(1) Disseminate (in coordination with the County EMA) guidance to the agricultural community concerning response procedures and actions necessary to prevent radioactive contamination.

(2) Disseminate (in coordination with the County EMA) guidance to the agricultural community concerning the control and disposition of radiologically contaminated agricultural, dairy, and food products.

(3) Disseminate (in coordination with the County EMA) information to the agricultural community concerning radiation hazards in the ingestion exposure pathway EPZ and the protective actions that should be taken.

c. Farmers Home Administration (FHA)

Provide temporary housing for farm family evacuees who have been displaced from their homes as a result of a radiological incident, if requested.

d. Soil Conservation Service (SCS)

Estimate (in coordination with the SEB and BRP) the effects of radiation on soils and the agricultural water supply.

5. REFERENCES

A. Federal Guidelines

1) Federal Register, August 13, 1998, pages 47073 - 47083 Department of Health and Human Services, Food and Drug Administration:

Accidental Radioactive Contamination of Human Food and Animal Feeds and Recommendations for State and Local Governments.

2) U.S. Department of Health and Human Services:

Background for Protective Action Recommendations: Accidental Radioactive Contamination of Food and Animal Feeds, HHS Publication, August 13, 1998.

3) U.S. Environmental Protection Agency:

National Interim Primary Drinking Water Regulation, EPA Publication 57019-76-003, Appendix B.

4) Federal Emergency Management Agency:

Guidance on Offsite Emergency Radiation Measurement Systems, Phase I - Airborne Release, FEMA-REP-2, July 1987.

Guidance on Offsite Emergency Radiation Measurement Systems, Phase 2 - The Milk Pathway, FEMA-REP-12 September 1987.

Guidance on Offsite Emergency Radiation Measurement Systems, Phase 3, Water and Non-Dairy Food Pathway, WINCO - 1012, October 1984.*

Guidance Memorandum IN-1: the Ingestion Exposure Pathway, February 26, 1988.

* WINCO is the acronym for Westinghouse Idaho Nuclear Company

B. Commonwealth of Pennsylvania Guidelines

1) Department of Agriculture, Plan for Nuclear Power Generating Station Incidents.

2) Department of Environmental Protection, Emergency Management Plan.

3) Department of Environmental Resources, Bureau of Radiation Protection. "Technical Assessment and Protective Actions," (see Appendix 6).

4) Commonwealth of Pennsylvania, Department of Health, Disaster Preparedness and Recovery Plan.

C. Information for Farmers

1) The Cooperative Extension Service, Pennsylvania State University in cooperation with the Extension Service, U.S. Department of Agriculture, and the Defense Civil Preparedness Agency, Department of Defense, "Disaster Handbook for Extension Agents,".

2) United States Department of Agriculture and Federal Emergency Management Agency, Radiological Emergency Information For Farmers, Food Processors, and Distributors.

ATTACHMENTS:

A. Maps
B. Pathways for Ingestion
C. Preventive and Emergency Protective Actions
D. Information for Farmers
E. Food Protection

Attachment A

MAPS

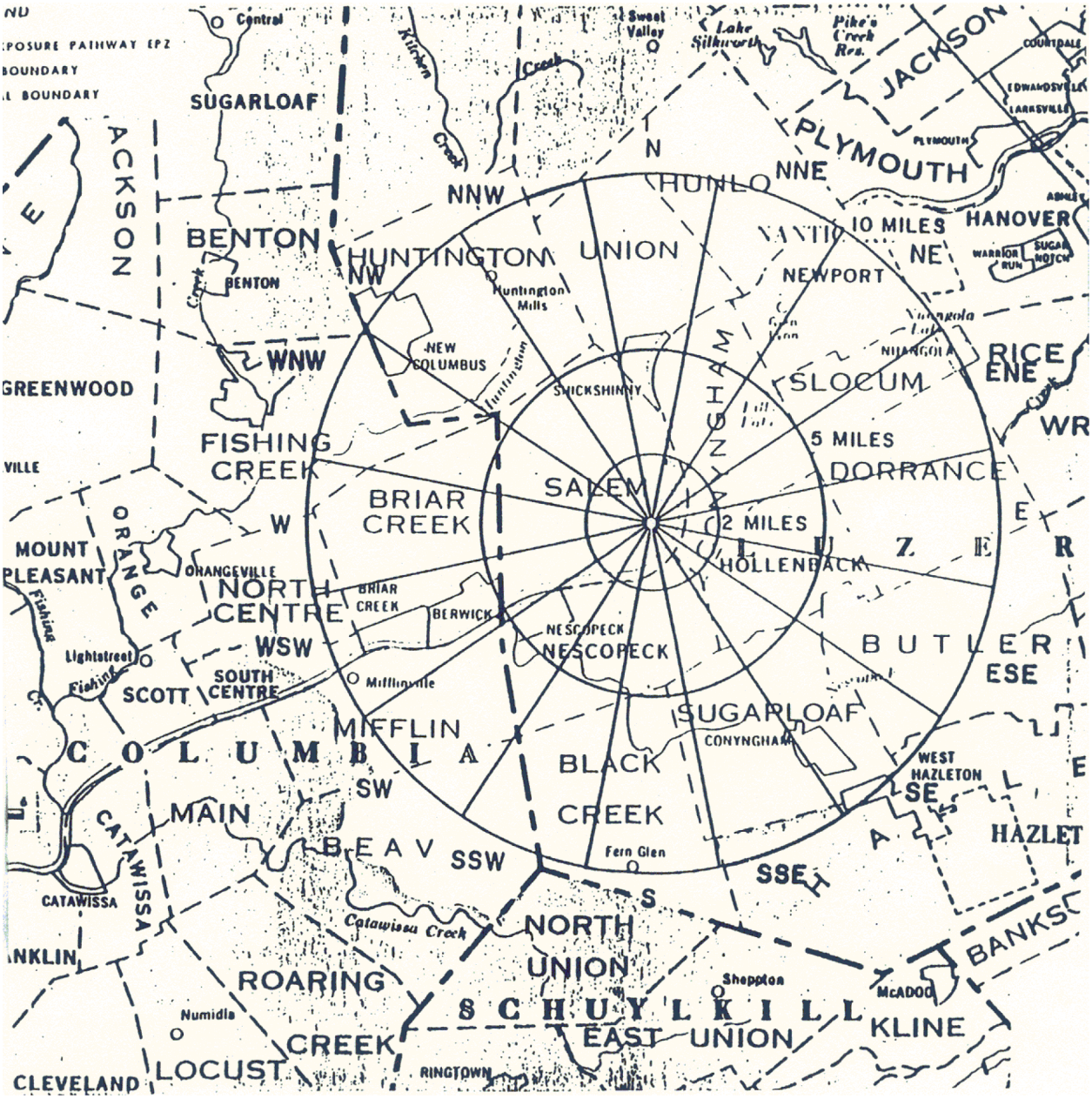
Maps of the plume exposure and ingestion exposure pathways are attached.

TABS:

1. Plume Exposure Pathway EPZ
2. Ingestion Exposure Pathway EPZ
3. Evacuation Plan Map
4. 50-Mile Radii of Nuclear Power Plants Within or Affecting Pennsylvania

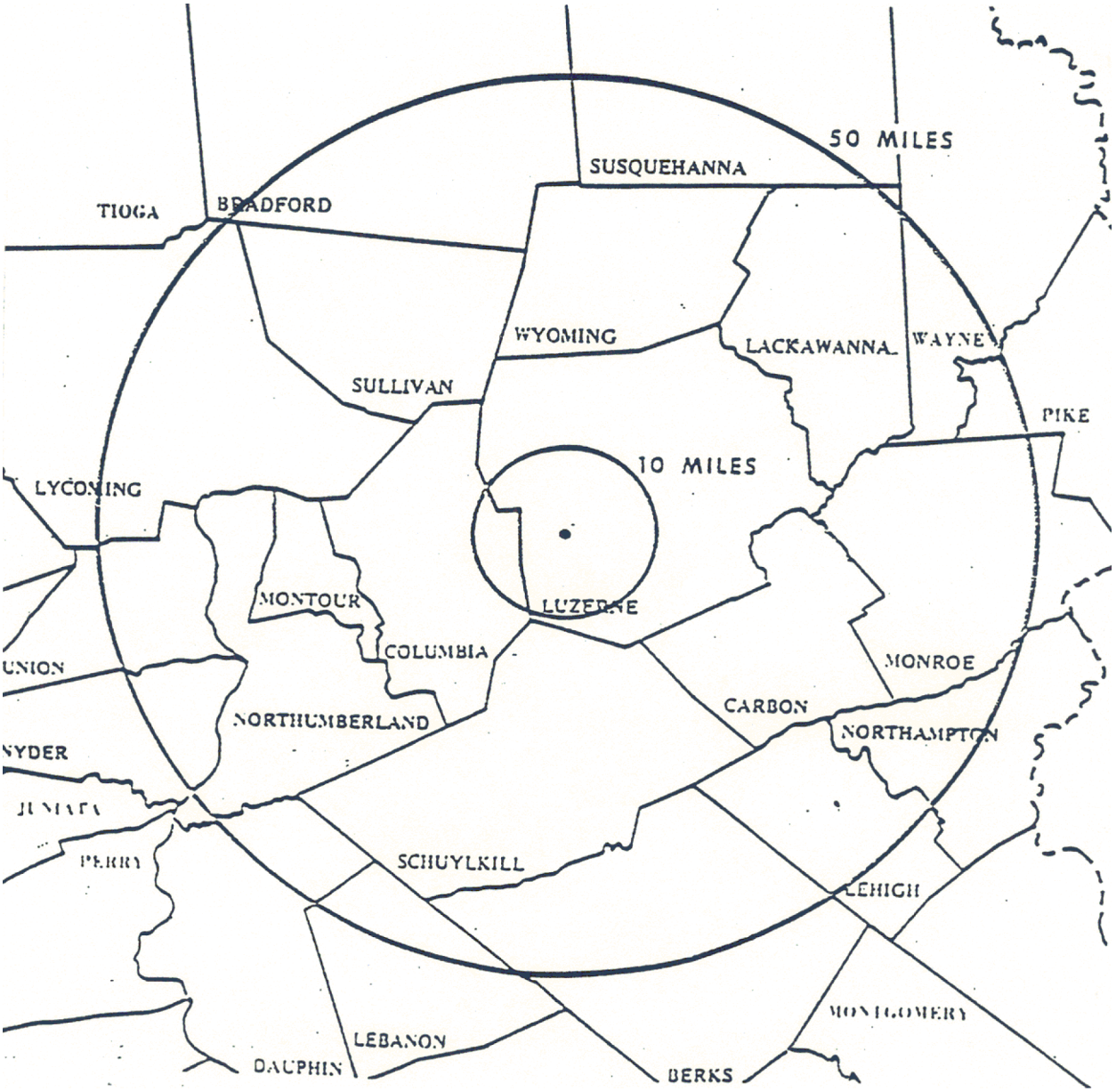
Attachment A, Tab 1

MAP OF PLUME EXPOSURE PATHWAY EPZ



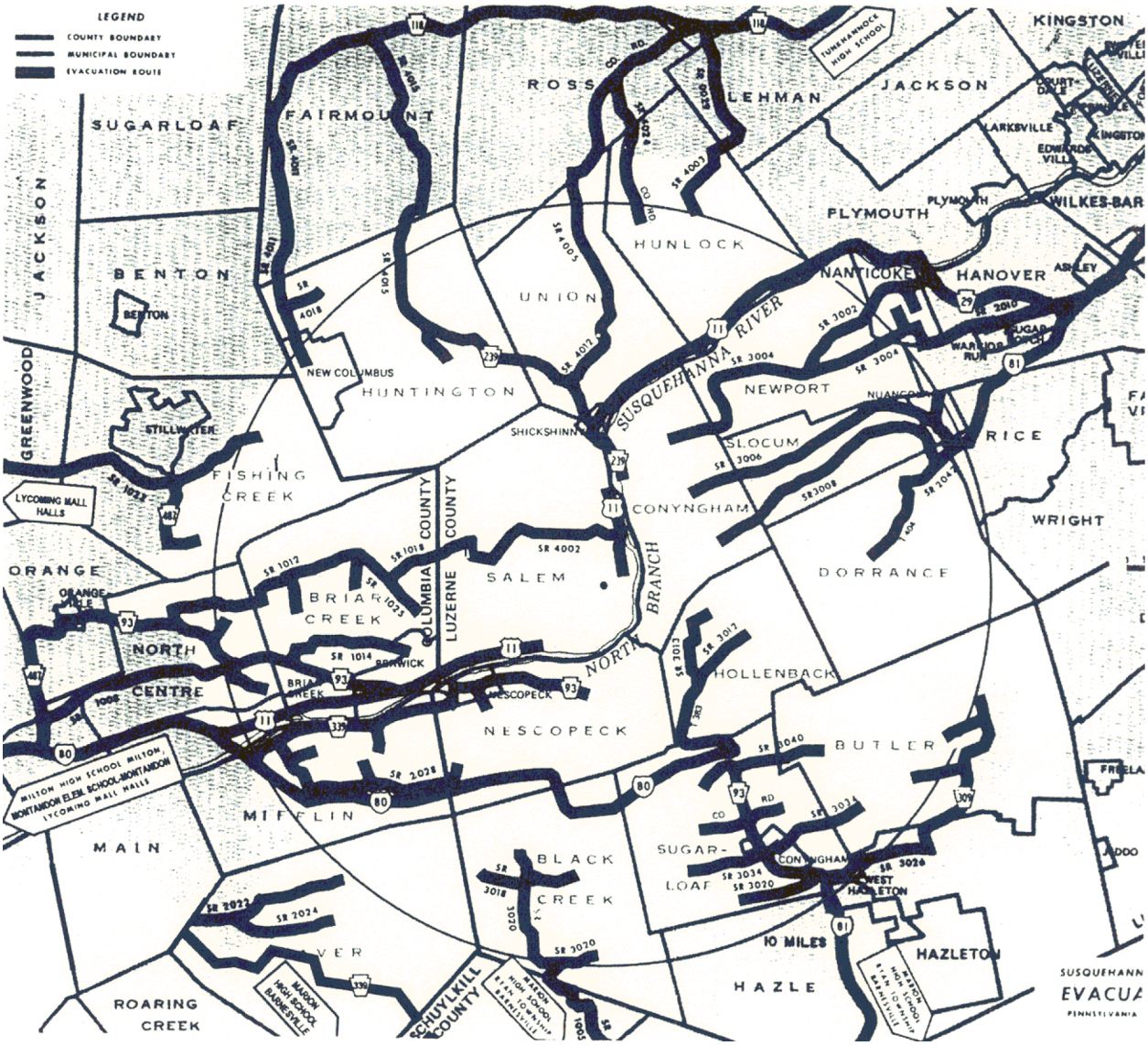
Attachment A, Tab 2

MAP OF INGESTION EXPOSURE PATHWAY EPZ



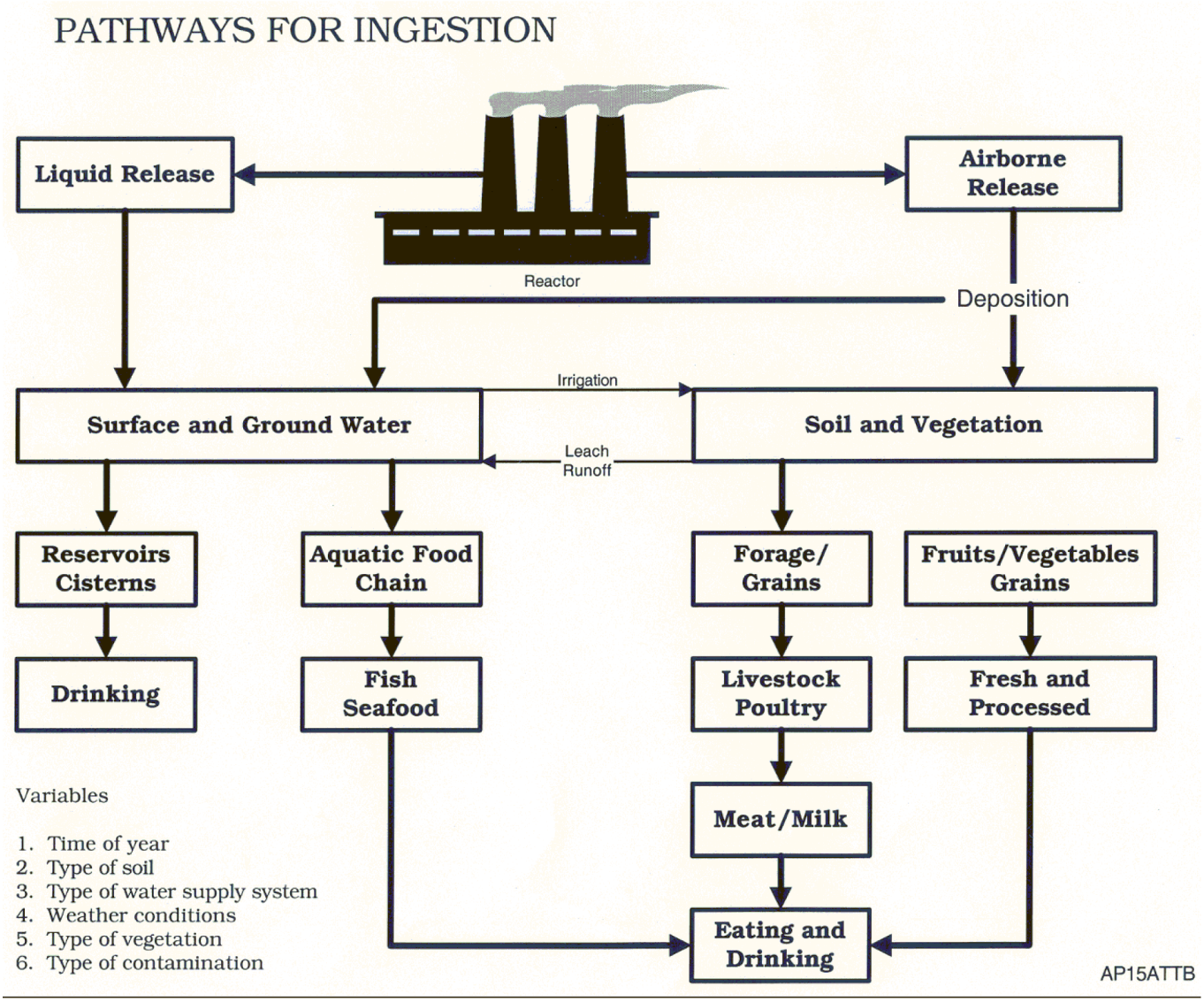
Attachment A, Tab 3

EVACUATION PLAN MAP



Attachment B

PATHWAYS FOR INGESTION



PREVENTIVE AND EMERGENCY PROTECTIVE ACTIONS

1. INTRODUCTION

   A. Protective actions for the ingestion exposure pathway EPZ are designed to reduce opportunities for consumption of radiologically contaminated food and water by humans and livestock.

   B. The need to apply protective actions in the event of a nuclear power plant accident will be determined on a case-by-case basis.

   C. Protective action recommendations are designed to be implemented within hours or days from the time the incident is recognized. The recommended actions should be continued long enough to avoid most of the projected dose.

   D. Determination of when to cease a protective action must be made on a case-by-case basis considering the nuclear incident and the food supply contaminated.

2. GENERAL INFORMATION

   A. Protective Action Guides (PAGs)

      1) PAGs represent FDA judgments on the level of food contamination resulting from radiation incidents at which protective action should be taken to protect public health.

      2) A basic assumption in the development of protective actions is that the condition requiring their implementation is unusual and should not occur frequently.

      3) A Protective Action Guide never implies an acceptable dose. The PAG is based on a dose and is used to minimize the risk from an event. If an event has occurred, PAGs should be implemented to ameliorate the impact on already exposed or yet to be exposed populations. The minimization of effects implies that the radiation exposure under consideration is avoidable. Protective actions should be implemented as soon as possible to be most effective.

      4) To permit flexibility of actions in reducing radiation exposure to the public via the food pathway caused by a nuclear incident, the FDA (47 FR 47073, October 22, 1982) adopted Preventive and Emergency PAGs for an exposed individual in the population. See paragraphs B.1.a and b below.

B. Response Levels Equivalent to PAGs

1) The basic PAG recommendations are given in terms of projected dose equivalents. It is more convenient to use specific radionuclide concentrations upon which to initiate protective actions. The Food and Drug Administration (FDA) derived response levels equivalent to the PAGs for radionuclides of interest in the ingestion exposure pathway EPZ. They are accepted by the Commonwealth and will be used in any ingestion exposure incident for both Preventive and Emergency PAGs.

a. Response levels for Preventive PAGs:

Preventive PAGs for the ingestion of food, water, and milk are 0.5 Rem projected dose to the whole body, bone marrow, or other organ, and 1.5 Rem projected dose to the thyroid.

b. Response levels for Emergency PAGs:

Emergency PAGs for the ingestion of food, water, and milk are 5 Rem projected dose to the whole body, bone marrow, or other organ and 15 Rem projected dose to the thyroid. For these PAGs the infant values are used for the general population, while the adult values are offered to permit flexibility in cases where the higher exposures can be limited to adults only.

c. Response levels for Drinking Water PAGs

The basis for criteria for drinking water concentration is the USEPA National Interim Primary Drinking Water Regulations, EPA-570/9-76-003, Appendix B.

C. Implementation

BRP will perform the procedure for estimating projected total intake for targeted radionuclides and recommended the implementation of preventive or emergency protective actions as necessary.

D. Implementing Protective Actions when PAGs exceeded:

Actions are appropriate when the health benefit associated with the achievable reduction in dose outweighs the undesirable health, economic, and social factors. Protective actions listed below should be considered for implementation in order to reduce the consequences in the ingestion pathway if the preventive or emergency PAGs are exceeded. Several of the actions are easily implemented and may be considered for implementation as precautionary measures during the time period when post-plume data are being evaluated, or when it is reasonable to assume from early field data that the level of radioactive material in the environment is likely to approach or exceed the PAGs. Once protective actions are initiated, they continue for a time period sufficient to mitigate the radiological consequences via the ingestion pathway.

1) Preventive Protective Actions

a. For pasture: Removal of lactating dairy cows from contaminated pastures and substitute uncontaminated stored feed.

Substitute source of covered uncontaminated water. Do not use surface waters.

b. For milk: Withholding of contaminated milk from the market. Disposition of the milk would be addressed depending upon the situation at the time of the incident and after evaluation by BRP and the Department of Agriculture in coordination with PEMA.

Storage for prolonged times at reduced temperatures also is feasible provided ultrahigh temperature pasteurization techniques are employed for processing.

c. For fruits and vegetables: Washing, brushing, scrubbing, or peeling to remove surface contamination.

Preservation by canning, freezing, and dehydration or storage to permit radioactive decay of short-lived radionuclides.

d. For grains: Milling and polishing.

e. For drinking water: Avoid use of surface water (streams, lakes, ponds) for human and animal consumption.

Limit ingestion of potable water until source has been approved for consumption.

Use bottled water and canned beverages and juices as water sources.

f. For other food products: Process to remove surface contamination.

g. For meat and meat products: Intake of Cesium-134 and Cesium-137 by an adult via the meat pathway may exceed that of the milk pathway; therefore, levels of cesium in milk which approach the "response level" should cause surveillance and protective actions for meat as appropriate.

h. For animal feed other than pasture: Action should be on a case-by-case basis taking into consideration the relationship between the radionuclide concentration in the animal feed and the concentration of the radionuclide in human food.

i. For fish and shellfish: Suspend fishing operations of commercial fish firms and charter fishing boats until resumption is recommended.

Check the catch made on the day of the accident.

2) Emergency Protective Actions

Responsible officials from the Department of Agriculture will isolate food containing radioactive material to prevent its introduction into commerce and determine whether condemnation or another disposition is appropriate. Before taking this action, the following factors will be considered.

a. The availability of other possible protective actions.

b. The relative proportion of the total diet by weight represented by the item in question.

c. The importance of the particular food in nutrition and the availability of uncontaminated food or substitutes having the same nutritional properties.

d. The relative contribution of other foods and other radionuclides to the total projected dose.

e. The time and effort required to implement corrective action.

E. Recovery

Consideration will be given to removing restrictions on harvesting, processing, and consumption of food and water, on a case-by-case basis. Criteria include termination of the release on measurable and consistent decline in concentrations and commodities. Removal of restrictions will be directed by the Governor or his designee, based upon recommendations from PEMA in coordination with BRP and the Departments of Agriculture and Health. In addition, the assistance of Federal Agencies, including EPA and FDA, will be used, as needed.

INFORMATION FOR FARMERS

1. INTRODUCTION

This attachment provides information for farmers that will assist in the protection of their livestock and crops from radiocontamination.

2. GENERAL INFORMATION

A. PEMA, in coordination with the licensee, BRP, and other state agencies, will provide specific information following an incident concerning amounts and types of radiocontaminant releases. This information will contain available warning time, the probable duration of discharge, the quantities of radiocontaminant discharged, and the mix of radiocontaminant discharge. Generally, in a nuclear power plant incident radioiodine will be the major contaminant, although it is possible that other radiocontaminants will be released also.

B. Experience has shown that the time from the depositing of radioiodines on the pasture to the appearance of significant quantities of radioiodine in cow's milk may be as short as the time lapse between milkings (12 hours). It is extremely important, therefore, that actions to minimize milk contamination be taken at the earliest possible time.

C. Several options are available for the protection of the public from exposure to radioiodine through the milk food chain.

1) Removal of dairy cattle and other milk producing animals from the pasture in the affected area as soon as possible and provide feed and water from sources that are not contaminated.

2) Disposal of contaminated milk, as determined by an analysis of a sample to be taken by the appropriate state agency.

D. Suggested priorities for sheltering and feeding farm animals with stored food and water.

1) Dairy cattle and other milk producing animals.

2) Egg producing fowl.

3) Breeding stock.

4) Other livestock and poultry.

E. No attempts should be made to evacuate farm animals from the ingestion exposure pathway EPZ.

F. A shelter can be a barn, shed, garage, or other building. If these are not available, a roadway underpass or a wooded area can be better than no cover at all.

G. Crops that have been harvested before the accident should be covered or put in a covered area, if possible. An emergency supply of water should also be kept in covered containers, e.g., barrels, cisterns, and wells.

H. The Emergency Alert System (EAS) will broadcast the State Department of Agriculture advisories and guidance through EMA channels in coordination with BRP and PEMA. If more information is needed, the farmer should ask the County EMA for help.

FOOD PROTECTION

1. INTRODUCTION

This attachment is intended to serve as guidance and be an information source to be utilized at the time of an emergency. It contains protective action information which may be used by the general public as a precaution to minimize exposure to contaminated agricultural, dairy and other food products through ingestion. When considering public information releases on food protection measures, careful thought should be given to the possibility of arousing undue and unnecessary public concern regarding the suitability of consumption of food. On the other hand, where food contamination has occurred, the public must be warned and issued appropriate protective action information.

2. GENERAL INFORMATION

A. Foods stored in the home will virtually always be free of radiocontamination and therefore suitable for immediate use. This pertains to food stored in a normal manner (i.e., food stored in the refrigerator, cabinets, and containers or packages), but not necessarily to foods in the open such as fruit, cookies, or candy in uncovered dishes. Therefore, unless advised otherwise, the public can assume that no special measures are necessary in preparing stored foods for consumption.

B. Food not stored indoors or similarly protected, such as garden vegetables, fruit on trees, or food products obtained outside the home after the incident, could be contaminated. Contamination, however, does not render such foods unusable. Most foods can easily be decontaminated by fairly simple food preparation procedures. These procedures are described in Tab 1 to this Attachment.

C. In nuclear power plant incidents involving the release of radioiodine, cows may ingest the contaminant and produce milk with some degree of contamination. Only milk produced after any exposure of the cows to contaminated feed (not milk stored in the home or already packaged milk at the dairy or store) is subject to radioiodine contamination. The Department of Agriculture, in coordination with BRP and PEMA, will issue advisories on the amount of contamination, if any, and the suitability of the milk for consumption. Specific information intended for use by farmers and food processors on protective actions for milk is contained in Attachment C to this Appendix.

D. The "Department of Agriculture Plan for Nuclear Power Generating Station Incidents" also contains information pertaining to food protection and will be a valuable reference at the time of an incident.

3. INFORMATION FOR FOOD PROCESSORS

The primary objective of the food processor must be to prevent the contamination of the public through the processing of contaminated food. Guidance is provided in the Departments of Agriculture and Environmental Resources Plans for Nuclear Power Generating Station Incidents. Questions not answered in the referenced documents should be addressed to the emergency management agency at the county EOC.

TAB:

1. Recommended Protective Action for Food

Attachment E, Tab 1

RECOMMENDED PROTECTIVE ACTION FOR FOOD

The following procedures for various food types are generally considered to be effective protective measures in assuring that food is free of contamination and suitable for consumption.

TYPE OF FOOD	RECOMMENDED PROTECTIVE ACTION
a. Root crops	Thoroughly wash, brush, scrub, or peel (potatoes, carrots, etc.) to remove surface contamination. Root crops are the least susceptible to contamination since the soil protects the edible portion from immediate contamination. Care should be taken in digging and storing to prevent contact with contaminated surface.
b. Fruits and vegetables	Thoroughly wash, brush, scrub, or peel to remove surface contamination. These food products are susceptible to contamination due to the exposure surface area of the edible portion.
c. Canned or packaged foods	Thoroughly clean the surface of the package by washing, vacuuming, or using a damp cloth to remove surface contamination prior to opening.
d. Frozen foods	Frozen foods packaged prior to an incident involving radioactive contamination will be safe as long as they were kept in a freezer. If the surface becomes contaminated, or is suspected of being contaminated, it should be thoroughly cleaned off prior to opening to prevent contaminating the contents.
e. Unpackaged stored foods	These foods will be safe to eat if outside air has been excluded from the storage area. If the storage area has become contaminated, they may be able to be salvaged by washing, scrubbing, peeling, etc. This will depend upon the type of food item involved.

AGREEMENTS AND STATEMENTS OF UNDERSTANDING

Montour County has entered into Agreements, Letters of Intent, or Statements of Understanding with the organizations listed below. The complete documents are on file in the Montour County EOC.

1. Danville Area School District

   Summary - The Danville Area School District agrees that its facilities may be used as a temporary holding facility for school children from the Berwick Area School District in the event of an emergency at SSES.

2. Emergency Alert System

   Summary - The agreement on EAS is contained in the Sunbury, Pennsylvania Operational Area EAS Plan.

ANNEX MAINTENANCE AND CONCURRENCE

Responsibility for the Radiological Emergency Response Procedures Annex has been assigned to the Radiological Officer by the Montour County Board of Commissioners. The Annex will be revised and updated as necessary, but at least annually. Whenever the Annex is implemented during an emergency response or for an exercise, a review will be conducted to determine what changes, if any, are necessary. Reviews and updates by the Radiological Officer will be coordinated with all parties assigned responsibilities in this Annex, for example, municipalities, school districts, hospitals, nursing homes, daycare centers, and holders of letters of agreement/intent, and with the County Emergency Management Coordinator.

Development, maintenance, and implementation of this Annex will be in accordance with and under the auspices of the Montour County Emergency Operations Plan, developed in consonance with the Commonwealth of Pennsylvania's Emergency Management Services Code and Radiation Protection Act, the Federal Civil Defense Act of 1950, and Disaster Relief Act of 1974, as amended, the Federal Superfund Amendments and Reauthorization Act of 1986 (SARA), Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants (NUREG-0654, FEMA-REP-1), and other applicable regulations of the Federal Emergency Management Agency and the Nuclear Regulatory Commission. This annex is part of and to be used with the basic county Emergency Operations Plan. The Annex pertains only to a specific response requirement in support of Columbia and Luzerne Counties.

We, the undersigned, adopt, accept, concur with, and support the provisions of this Annex as part of the Montour County Emergency Operations Plan.

Radiological Officer	Date
Montour County Emergency Management Coordinator	Date
Chairman, Montour County Board of Commissioners	Date
Central Region Director Pennsylvania Emergency Management Agency	Date

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