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PHILADELPHIA ELECTRIC COMPANY  
PHILADELPHIA

PEACH BOTTOM ATOMIC POWER STATION  
EMERGENCY PLAN  
IMPLEMENTING PROCEDURES

With Revisions

April 30, 1981

8104300343

## EMERGENCY PLAN PROCEDURES INDEX

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EP-102	Unusual Event (Emergency Director Functions)	04/01/81	0	04/01/81
EP-103	Alert Condition (Emergency Director Functions)	04/01/81	0	04/01/81
EP-104	Site Area Emergency (Emergency Director Functions)	04/01/81	0	04/01/81
EP-105	General Emergency (Emergency Director Functions)	04/01/81	0	04/01/81
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EP-209 Appendix D-7	Technical Support Center Team	03/23/81	0	03/23/81
EP-209 Appendix E	Off-Site Emergency Team Leaders	03/23/81	0	03/23/81
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EP-305	Site Evacuation (Emergency Director Functions)	04/01/81	0	04/01/81
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EP-311	Handling Personnel with Serious Injuries, Radioactive Contamination Exposure, or Excessive Radiation Exposure Emergency Director Functions	04/01/81	0	04/01/81
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EP-101	Classification of Emergencies (Emergency Director Functions) W.J. KNAPP	04/01/81	0	04/01/81
EP-102	Unusual Event (Emergency Director Functions)	04/01/81	0	04/01/81
EP-103	Alert Condition (Emergency Director Functions)	04/01/81	0	04/01/81
EP-104	Site Area Emergency (Emergency Director Functions)	04/01/81	0	04/01/81
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EP-312	Radioactive Liquid Release (Emergency Director Functions)	04/01/81	0	04/01/81
EP-316	Cumulative Population Dose Calculations	04/01/81	0	04/01/81
EP-320	Procedure for Leaking Chlorine	04/01/81	0	04/01/81
EP-401	Re-Entry and Recovery (Emergency Director Functions)	04/01/81	0	04/01/81
EP-500	Review and Revision of Emergency Plan (FSAR Appendix 0)	04/01/81	6	04/01/81

*JJY*  
*4/1/81*

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

Emergency Plan Implementing Procedure

EP-101      CLASSIFICATION OF EMERGENCIES (EMERGENCY DIRECTOR  
FUNCTIONS)

PURPOSE:

To provide specific guidelines for classifying emergency situations and to prescribe the immediate actions of the Interim Emergency Director in event of an emergency.

REFERENCES:

1. Emergency Plan, Sec. 4 (Emergency Conditions), Sec. 5 (Organizational Control of Emergencies), and Sec. 6 (Activation of Emergency Organization)
2. Pennsylvania Emergency Management Agency Plan, Sec. II
3. Maryland Civil Defense and Disaster Preparedness Plan

APPENDICES:

1. Appendix EP-101-1, 2, 3, 4 Emergency Action Levels (Emergency Plan, Table 4.2)
2. Appendix EP-101-5 Emergency Report Form

ACTION LEVEL:

Action levels corresponding to the four emergency classifications.

PROCEDURE:

Immediate Actions:

The Shift Superintendent shall assume the role of Interim Emergency Director. He shall continue to act in this capacity on a 24 hour-a-day shift basis, rotating with designated alternates, until relieved by the Emergency Director or until the emergency is terminated. The Interim Emergency Director shall:

1. Proceed to the Control Room. For a fire, have the shift supervisor proceed to the scene of the fire and also assume



the role of Interim Fire and Damage Team Leader (See EP-206).

2. Direct the Immediate Operator Actions specified in the applicable Emergency Procedures.
3. Activate the appropriate alarm systems, if not already activated.
4. Ensure that all plant operators are informed of the nature of the emergency and of appropriate specific information. Make announcements using the interplant telephone and the PA system, if necessary.
5. If the affects of the emergency situation cannot be directly monitored from the Control Room, as for fire or toxic chemical hazards, direct the Control Room operators to establish communications with the scene of the emergency.
6. Determine the following, as soon as possible:
  - a. If there are injured personnel, or personnel who have suffered exposure to radioactive contamination, toxic chemicals, or radiation.
  - b. Extent of damage to plant systems, monitoring instrumentation, and other equipment.
  - c. Hazards to site personnel and the public (radioactive contamination, radiation, smoke, fire, dangerous chemicals, damaged or unsafe equipment, electrical hazards, steam, leaking high pressure liquid or gas, etc.).
7. Assess the conditions and determine the classification of the emergency in accordance with Appendix I. Carry out the applicable procedure from the following:

Unusual Event	- EP-102
Alert Condition	- EP-103
Site Area Emergency	- EP-104
General Emergency	- EP-105

FOLLOW-UP ACTION:

1. The Interim Emergency Director or Emergency Director shall review the Appendices periodically to ensure proper classification of the emergency situation. He should be especially alert to changes in the various indications listed on the charts. If the situation is worsening, it is important to recognize this fact immediately.
2. For an alert condition, site emergency, or general emergency the Interim Emergency Director or Emergency Director shall



document or have documented operating conditions and release data on the Emergency Report Form (Appendix 5). (Dose rate data can be calculated using EP-316). If the emergency is reclassified, an amended form should be filled out as soon as possible so that a record of current information is available.

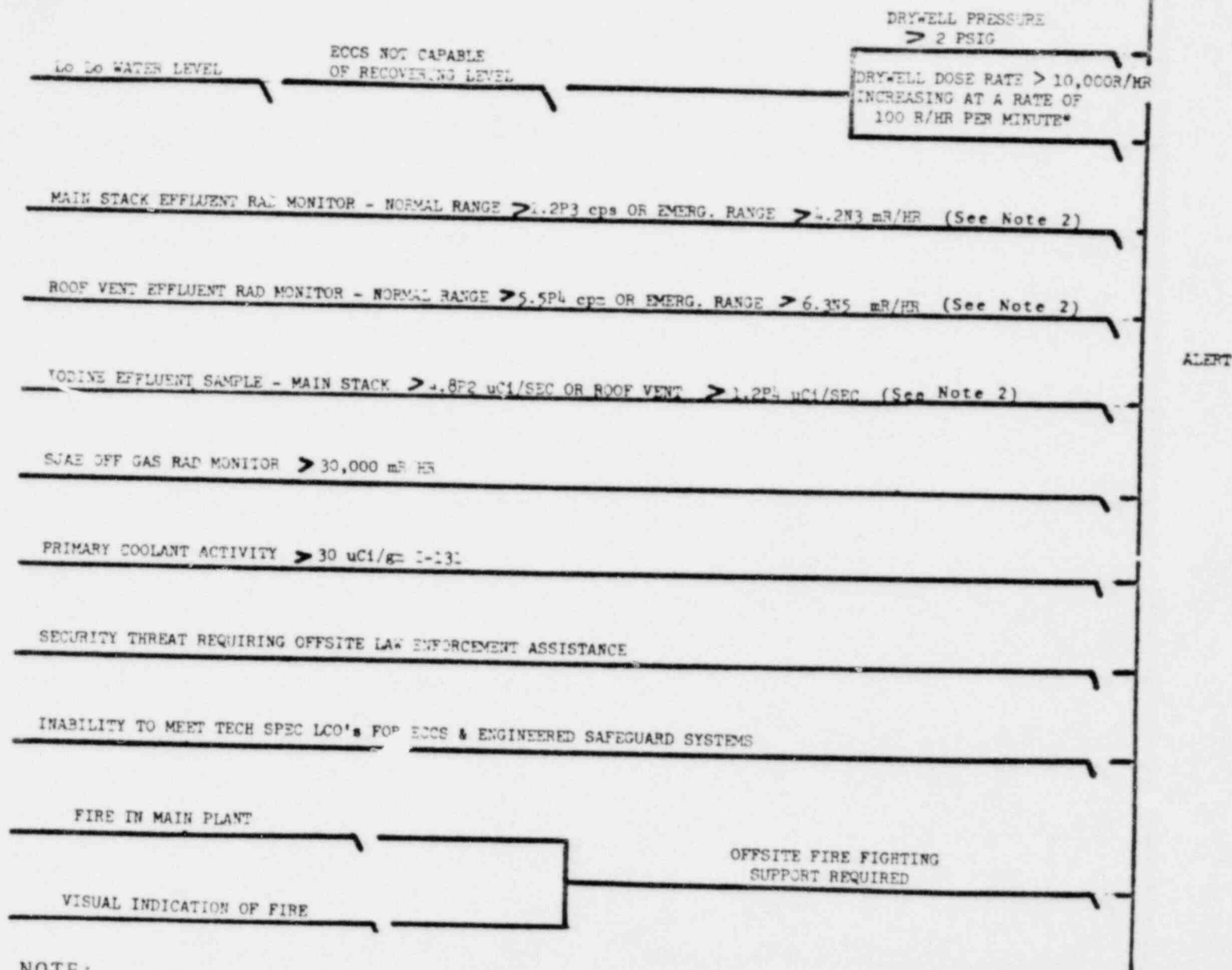
Appendix EP-101-1 Emergency Action Levels

EP-101  
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Toxic Agent Release Which has a potential of affecting the Public	
Reactor Coolant System Leakage T.S. exceeded	
Security Threat or Attempted Sabotage	
Explosion or Fire Anywhere on Site	
Radiological Effluent T.S. Exceeded	
Fuel Damage Indication and Coolant Activity T.S. Exceeded	UNUSUAL EVENT
Power Generation Interrupted by Low Level in Conowingo Pond	
Seismic Event Causing Seismic Monitor Alarms	
River Level Greater than 113' and predicted River Flow Greater than 840,000 cfs	
Tornado Sighted from Plant	
Injury Requiring Offsite Transport by Ambulance	
Incident which may cause public concern	

NOTE:

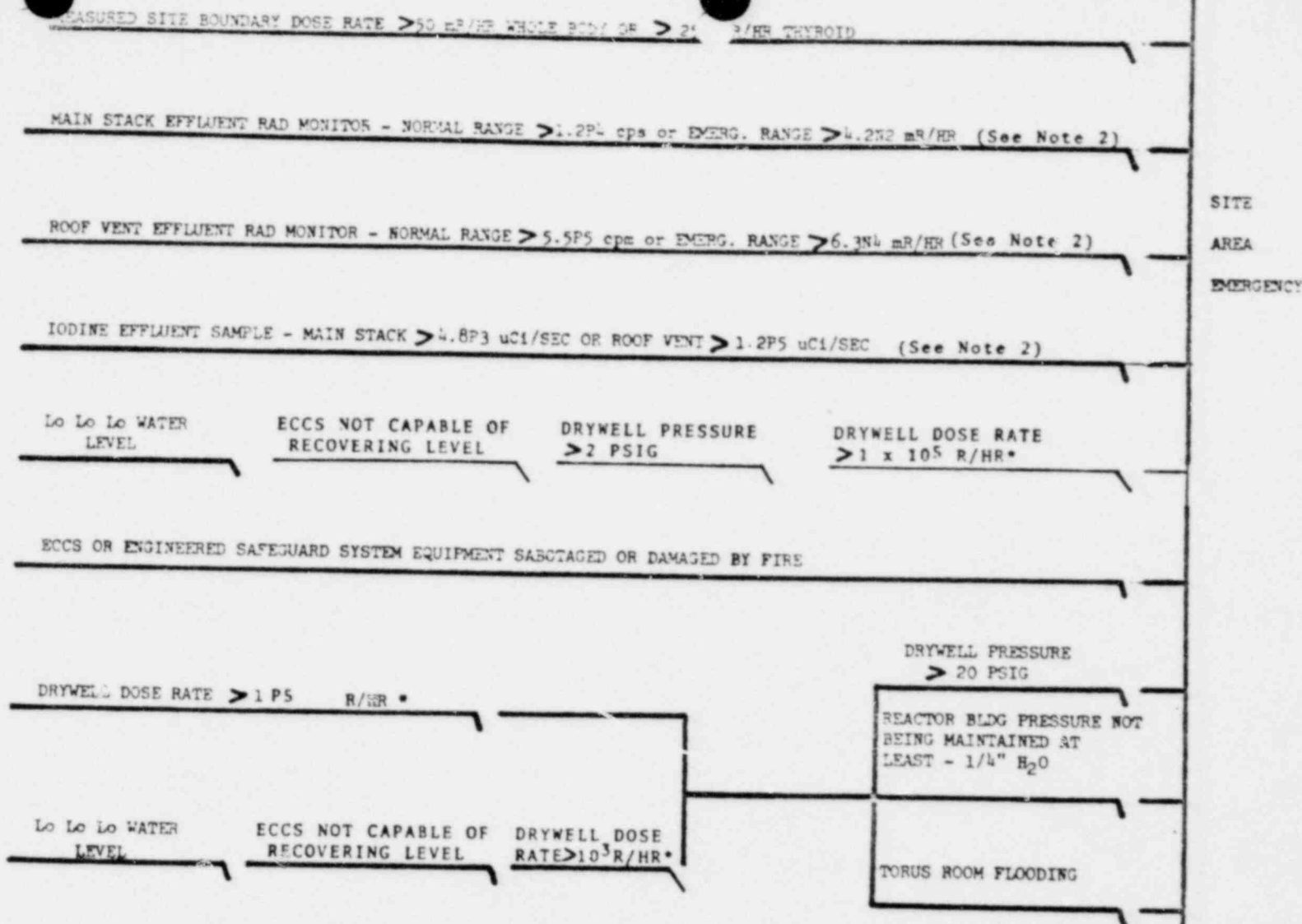
1. Action levels are representative. Implementing procedures describe applicable action levels.



NOTE:

1. Action levels are representative. Implementing procedures describe applicable action levels.
2. Release data is based on:
  - a. Class V weather
  - b. Wind velocity of 3 miles per hour
  - c. Main stack flow 20,000 cfm
  - d. Roof vent flow 200,000 cfm

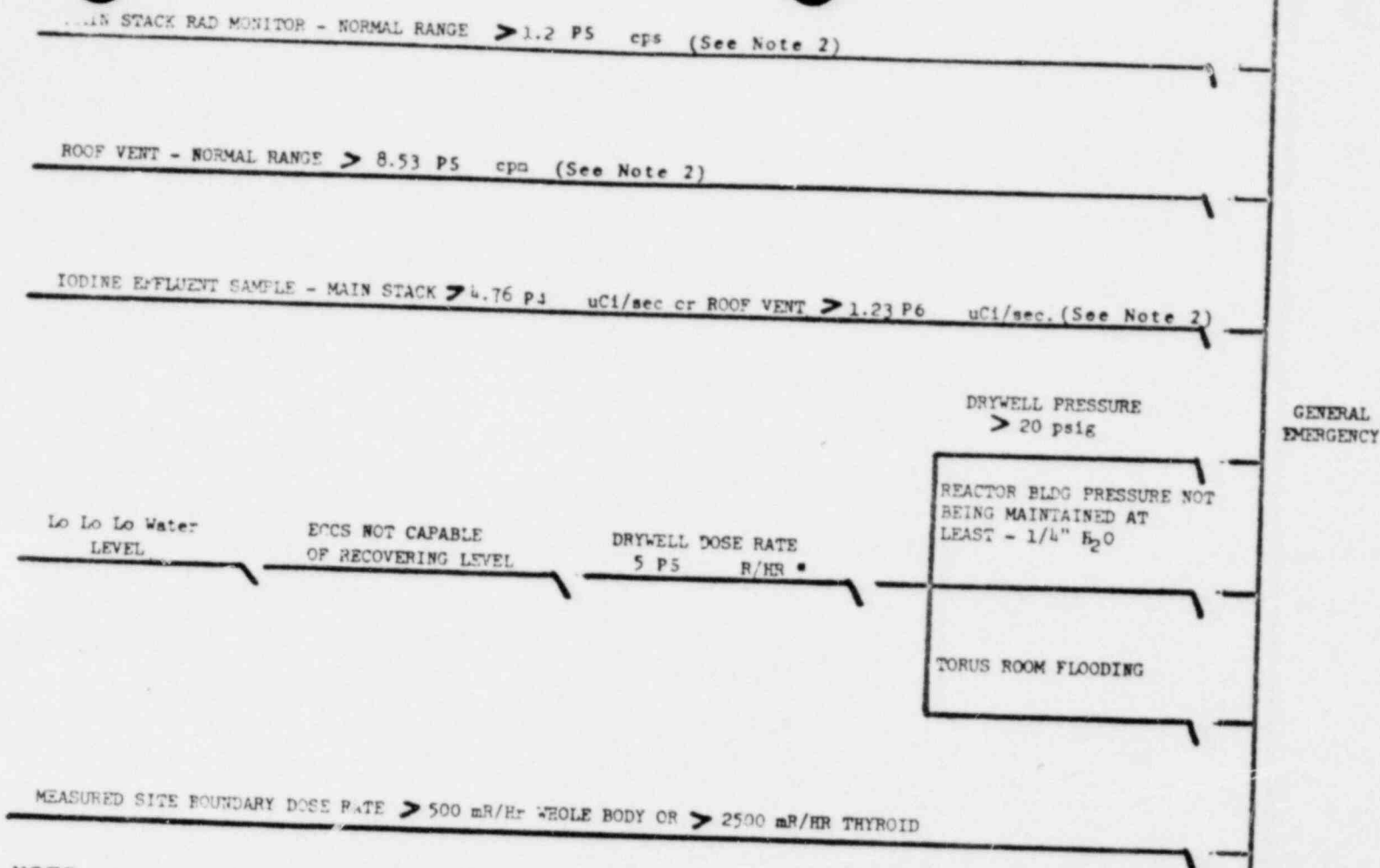
\* THIS IS AN ASSUMPTION WHICH MUST BE MADE



NOTE:

1. Action levels are representative. Implementing procedures describe applicable action levels.
2. Release data is based on:
  - a. Class V weather
  - b. Wind velocity of 3 miles per hour
  - c. Main stack flow - 20,000 cfm
  - d. Roof vent flow - 200,000 cfm

\* THIS IS AN ASSUMPTION WHICH MUST BE MADE SINCE THE DRYWELL RADIATION MONITOR IS NOT YET INSTALLED.



NOTE:

1. Action levels are representative. Implementing procedures describe applicable action levels.
2. Release data is based on:
  - a. Class V weather
  - b. Wind velocity of 3 miles per hour
  - c. Main stack flow 20,000 cfm
  - d. Roof vent flow 200,000 cfm

\* THIS IS AN ASSUMPTION WHICH MUST BE MADE SINCE THE DRYWELL RADIATION MONITOR IS NOT YET INSTALLED.

Emergency Report Form

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Appendix EP-101-5 Emergency Report Form

4. Radioactive Gaseous Release

	Main Stack	No. 2 Roof Vent	No. 3 Roof Vent
Time			
cps			
μCi/cc			
Flow CFM			
μCi/sec			
Duration (min)			
μCi			
mREM S.B.			
μREM E.P.Z.			
( 1 mi.)			
( 2 mi.)			
( 5 mi.)			
(10 mi.)			

Major Isotopes:

Affected Sectors:

5. Radioactive Particulate and Iodine Release

	Main Stack		No. 2 Roof Vent		No. 3 Roof Vent	
	Cartridge	Filter	Cartridge	Filter	Cartridge	Filter
Time						
μCi/cc						
Vent Flow CFM						
μCi/sec						
Duration (min)						
μCi						
mREM S.B.						
mREM L.P.Z.						
Major Isotopes:						



Appendix EP-101-5 Emergency Report Form

6. Radioactive Liquid Release

	Location	Location	Location
Time			
CPM			
μCi/ml			
Flow gpm			
duration (min)			
Vol. released			
μCi released			
Major Isotopes:			

7. Chemical Spill

	Time	Volume
Acid		
Caustic		
Chlorine		
Other Chemical		
Oil, diesel fuel		
Bunker "C"		
Lube		
Other		

8. Remarks:

Reviewed by: \_\_\_\_\_  
Interim Emergency Director  
or Emergency Director

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

PHILADELPHIA ELECTRIC COMPANY

Peach Bottom Units 2 and 3

Emergency Plan Implementing Procedure

EP-102 Unusual Event (Emergency Director Functions)

PURPOSE:

To prescribe the general actions to be taken for an Unusual Event. The specific protective measures required depend on the nature of the emergency and are given in the applicable Emergency Procedures and Emergency Plan Implementing Procedures.

REFERENCES:

Emergency Plan, Sec. 4 (Emergency Conditions), Sec. 5 (Organizational Control of Emergencies, and Sec. 6 (Activation of Emergency Organization)

APPENDICES:

Appendix EP-102-1, Unusual Event Check-off List

ACTION LEVELS:

The emergency is classified as an Unusual Event in accordance with EP-101.

PROCEDURE:

NOTE: UNUSUAL EVENTS ARE HANDLED BY SHIFT SUPERVISION AND THE OPERATING GROUP.

During the initial response, the Interim Emergency Director has overall responsibility for the following:

1. Classification and assessment of the emergency
2. Declaration of emergency conditions
3. Directing the immediate response
4. Activation of the On-Site Emergency Organization
5. Implementation of on-site corrective and protective measures
6. Notification of civil agencies and off-site organizations within 15 minutes of the declaration of the event.

These general responsibilities are not to be delegated.

NOTE: THE JUDGEMENT OF THE INTERIM EMERGENCY DIRECTOR OR EMERGENCY DIRECTOR IS VITAL IN PROPER CONTROL OF AN EMERGENCY AND MAY TAKE PRECEDENCE OVER GUIDANCE IN THE EMERGENCY PROCEDURES AND EMERGENCY PLAN IMPLEMENTING PROCEDURES.

*M. Kline*  
*Eff 4/1/81*

IMMEDIATE ACTIONS:

The Interim Emergency Director shall:

1. Direct actions to terminate the incident and minimize the hazards:
  - a. Carry out the applicable Emergency Procedures.
  - b. In event of serious personnel injury, radioactive contamination exposure, or excessive radiation exposure, direct the Personnel Safety Team Leader to carry out applicable portions of EP-207.
  - c. In event of fire:
    - (1) Direct plant equipment in the fire area to be deenergized or shut down, as required.
    - (2) Activate the Interim Fire and Damage Team in accordance with EP-206. Direct the Team to report to the fire area. Inform the Team if there are any radiological hazards.
    - (3) Direct the Shift Supervisor to supervise the fire-fighting efforts (see EP-206).
    - (4) Arrange for off-site fire-fighting support, if necessary (see EP-209 for telephone numbers).
    - (5) Activate the Interim Personnel Safety Team in accordance with EP-207. Direct the Team to report to the fire area or assembly area as appropriate and assist as needed.
  - d. In event of toxic agent release:
    - (1) Direct plant equipment in the affected area to be deenergized or shut down, as required.
    - (2) Activate the Interim Fire and Damage Team in accordance with EP-206. Direct the Team to take steps to contain the toxic agents.
    - (3) Activate the Interim Personnel Safety Team in accordance with EP-207. Direct the Team to report to the hazard area or assembly area as appropriate and assist as needed.
    - (4) Arrange for off-site support to assist in containment and clean-up, if necessary (see EP-209 for telephone numbers).
  - e. In the event of high radiation, excessive radioactive contamination, or excessive gaseous radioactive release:
    - (1) Activate the Interim Radiation Survey Team in accordance with EP-205. Direct the Team to report to the hazard area and conduct surveys in accordance with HPO/CO Procedures to determine the magnitude of the radiological hazards.
    - (2) Activate the Interim Personnel Safety Team in accordance with EP-207.

- (3) If the event results in a radiation release, direct the Radiation Monitoring Team Leader to calculate the activity released and estimate dose rates in accordance with EP-316, Part I.1.A or III.1.A. Refined determination of off-site dose rates (EP-316, Part I.1.B and C. or III.1.B and C.) shall normally be directed by the Emergency Director, in accordance with EP-201.

- f. Activate additional Interim Emergency Teams and Emergency Teams as appropriate, in accordance with the following:

Radiation Survey Team	-	EP-205
Fire and Damage Team	-	EP-206
Personnel Safety Team	-	EP-207
Security Team	-	EP-208

2. Initiate appropriate actions as required by existing conditions.
3. Verify immediate notification of the following:  
(See EP-209 for telephone numbers)

NOTE: NOTIFICATIONS MUST BE MADE WITHIN 15 MINUTES OF THE DECLARATION OF THE EVENT.

NOTE: THE DIRECTOR HAS THE OPTION OF HAVING A SHIFT TECHNICAL ADVISOR, A TEST ENGINEER, OR A PLANT OPERATOR OR HIGHER CLASS OPERATOR, MAKE THE NOTIFICATIONS, BUT IT REMAINS THE RESPONSIBILITY OF THE DIRECTOR TO VERIFY THAT THE NOTIFICATIONS HAVE BEEN MADE.

- a. Emergency Director (the Station Superintendent, or alternately, the Assistant Station Superintendent)
- b. Load Dispatcher.
- c. Nuclear Regulator Commission, Region I, Office of Inspection and Enforcement.
- d. Pennsylvania Emergency Management Agency.
- e. York County Emergency Management Agency.

FOLLOW-UP ACTIONS:

1. The Interim Emergency Director shall:
- a. Periodically review Appendix 1 of EP-101 to ensure proper classification of the emergency situation. Be especially alert to changes in the various indications listed on the chart. If the situation is degrading, it is important to recognize this fact immediately.

APPENDIX EP-102-1, UNUSUAL EVENT CHECK-OFF LIST

1. TIME/DATE OF INCIDENT \_\_\_\_\_
2. APPROPRIATE EMERGENCY TEAMS ACTIVATED (TIME) \_\_\_\_\_
3. NOTIFICATIONS:  
(See EP-209 for Telephone #'s)

	PERSON NOTIFIED	NOTIFIED BY	TIME	DATE
a. EMERGENCY DIRECTOR	_____	_____	_____	_____
b. LOAD DISPATCHER	_____	_____	_____	_____
c. PENNSYLVANIA EMERGENCY MANAGEMENT AGENCY	_____	_____	_____	_____
d. YORK COUNTY EMERGENCY MANAGEMENT AGENCY	_____	_____	_____	_____
e. NRC, REGION I, OFFICE OF INSPECTION AND ENFORCEMENT	_____	_____	_____	_____

4. FOR RADIATION RELEASE, ACTIVITIES AND DOSE ESTIMATES  
CALCULATED (EP-316, PART I.1.A or III.1.A) (TIME) \_\_\_\_\_
5. OTHER ACTIONS:

VERIFIED BY: \_\_\_\_\_

INTERIM EMERGENCY DIRECTOR or  
EMERGENCY DIRECTOR

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

*W. K. Kunt*  
*Eff 4/1/81*

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY PLAN IMPLEMENTING PROCEDURE

EP-103 ALERT CONDITION (EMERGENCY DIRECTOR FUNCTIONS)

PURPOSE:

To prescribe the general actions to be taken in event of an Alert Condition. The specific protective measures required depend on the nature of the emergency and are given in the applicable Emergency Procedures and Emergency Plan Implementing Procedures.

REFERENCES:

Emergency Plan, Sec. 4 (Emergency Conditions) Sec. 5 (Organizational Control of Emergencies), and Sec. 6 (Activation of Emergency Organization)

APPENDICES:

Appendix EP-103-1, Alert Condition Check-Off List

ACTION LEVELS:

The emergency is classified as an Alert Condition in accordance with EP-101.

PROCEDURE:

NOTE: ALERT CONDITIONS REQUIRE PARTICIPATION BY OFF-SHIFT PLANT STAFF PERSONNEL.

During the initial response, the Interim Emergency Director has overall responsibility for the following:

1. Classification and assessment of the emergency.
2. Declaration of emergency conditions.
3. Directing the immediate response.
4. Activation of the On-Site Emergency Organization.
5. Implementation of on-site corrective and protective measures.
6. Notification of civil agencies and off-site organizations within 15 minutes of the declaration of the event.

These general responsibilities are not be delegated.

NOTE: THE JUDGEMENT OF THE INTERIM EMERGENCY DIRECTOR OR EMERGENCY DIRECTOR IS VITAL IN PROPER CONTROL OF AN EMERGENCY AND MAY TAKE PRECEDENCE OVER GUIDANCE IN THE EMERGENCY PROCEDURES AND EMERGENCY PLAN IMPLEMENTING PROCEDURES.

IMMEDIATE ACTIONS:

The Interim Emergency Director shall:

1. Consider shutting down the affected unit if proper or safe operation of a unit is in jeopardy or if such action will mitigate the consequences of the emergency. Direct actions to terminate the incident and minimize the hazards:
  - a. Carry out the applicable Emergency Procedures.
  - b. In event of serious personnel injury, radioactive contamination exposure, or excessive radiation exposure, direct the personnel safety team leader to carry out the applicable portions of EP-207.
  - c. In event of fire:
    - (1) Direct plant equipment in the fire area to be deenergized or shut down, as required.
    - (2) Activate the Interim Fire and Damage Team in accordance with EP-206. Direct the team to report to the fire area. Inform the team if there are any radiological hazards at the fire area.
    - (3) Direct the shift supervisor to supervise the fire-fighting efforts (see EP-206).
    - (4) Arrange for off-site fire-fighting support, if necessary (see EP-209 for telephone numbers).
    - (5) Activate the Interim Personnel Safety Team in accordance with EP-207. Direct the team to report to the fire area or assembly area as appropriate and assist as needed.
  - d. In event of toxic agent release:
    - (1) Direct plant equipment in the affected area to be deenergized or shut down, as required.
    - (2) Activate the Interim Fire and Damage Team in accordance with EP-206. Direct the team to take steps to contain the toxic agents.
    - (3) Activate the Interim Personnel Safety Team in accordance with EP-207. Direct the team to report to the hazard area or assembly area as appropriate and assist as needed.
    - (4) Arrange for off-site support to assist in containment and cleanup, if necessary (see EP-209 for telephone numbers).
  - e. In the event of high radiation, excessive radioactive contamination, or excessive gaseous radioactive release:



- (1) Activate the Interim Radiation Survey Team in accordance with EP-205. Direct the team to report to the hazard area and conduct surveys in accordance with HPO/CO procedures to determine the magnitude of the radiological hazards.
  - (2) Activate the Interim Personnel Safety Team in accordance with EP-207.
- f. Activate additional Interim Emergency Teams and Emergency Team appropriate, in accordance with the following:
- |                       |          |
|-----------------------|----------|
| Radiation Survey Team | - EP-205 |
| Fire and Damage Team  | - EP-206 |
| Personnel Safety Team | - EP-207 |
| Security Team         | - EP 208 |
2. Initiate a Plant Evacuation in accordance with EP-303 if an unexpected or uncontrolled radiation or toxic hazard exists in two or more large operating areas as indicated by:
    - a. An unexpected sudden increase in area radiation monitor readings, with continuous air monitor readings greater than alarm point levels.
    - b. Radiation levels greater than 100 mR/hr within those operating areas affected, which normally experience less than 10 mR/hr.
    - c. Airborne radioactivity greater than 100 times maximum permissible concentration within those operating areas affected which is  $3 \times 10^{-7}$  uCi/cc for an unidentified isotope in an occupational environment.
    - d. Release, leakage, or spill of a toxic reagent such that the concentration of chemical vapors makes the areas unable to be occupied.
  3. Verify immediate notification of the following (see EP-209 for telephone numbers):
- NOTE: NOTIFICATION MUST BE MADE WITHIN 15 MINUTES OF THE DECLARATION OF THE EVENT.
- NOTE: THE DIRECTOR HAS THE OPTION OF HAVING A SHIFT TECHNICAL ADVISOR, A TEST ENGINEER, OR A PLANT OPERATOR OR HIGHER CLASS OPERATOR MAKE THE NOTIFICATIONS, BUT IT REMAINS THE RESPONSIBILITY OF THE DIRECTOR TO VERIFY THAT THE NOTIFICATIONS HAVE BEEN MADE.
- a. Emergency Director (Station Superintendent, or alternately, the Assistant Station Superintendent).
  - b. Load Dispatcher
  - c. Pennsylvania Emergency Management Agency (PEMA)
  - d. York County Emergency Management Agency
  - e. Lancaster County Emergency Management Agency
  - f. Chester County Emergency Management Agency
  - g. Maryland Civil Defense and Disaster Preparedness Agency
  - h. Harford County Civil Defense Agency
  - i. Cecil County Civil Defense Agency
  - j. Nuclear Regulatory Commission, Region I, Office of Inspection and Enforcement.
- (Expect a call from the Pennsylvania Bureau of Radiation Protection verifying emergency plant conditions approximately 30 minutes after notification of PEMA. After business hours, this call may come through commercial phone lines.)

4. If the event results in a gaseous radiation release, direct the Radiation Monitoring Team Leader to calculate the activity released and estimate dose rates in accordance with EP-316, Part I.1.A or III.1.A. Refined determination of off-site dose rates (EP-316, Part I.1.B and C or III.1.B and C) shall normally be directed by the Emergency Director, in accordance with EP-201.

FOLLOW-UP ACTIONS:

1. The Interim Emergency Director shall:
    - a. Direct the follow up actions as specified in the applicable Emergency Procedures. Continue to monitor plant status and the effects of the emergency, until relieved by the Emergency Director or until the emergency is terminated.
    - b. Notify other off-site support groups as appropriate.
    - c. Document the actions taken on the Alert Condition check-off list in the appendix.
    - d. Maintain authority in the control room. Strictly enforce procedures regarding control room access and formality to prevent crowding and to ensure that the line of authority is clear.
    - e. Keep the Emergency Control Officer informed (if activated) of plant status and operational plans.
    - f. Provide status and assessment information to off-site support organizations until relieved of this responsibility by the Site Emergency Coordinator per EP-203 (if activated).
    - g. Direct on-shift personnel not actively engaged in emergency assignments to report to the operational support center or an alternate designated location, such as the administration building or the shift supervisor's office.
    - h. Periodically review Appendices of EP-101 to ensure proper classification of the emergency situation. Be especially alert to changes in the various indications listed on the chart. If the situation is degrading, it is important to recognize this fact immediately.
    - i. Ensure proper radiation dose budgeting and management for emergency work and repairs as required by the normal radiation work procedures (for Search and Rescue in accordance with EP-207, the RWP procedure is suspended).
- NOTE: PLANNED RADIATION EXPOSURES IN EXCESS OF NORMAL STATION ADMINISTRATIVE GUIDE LEVELS, HPO/CO-100, MUST BE SPECIFICALLY AUTHORIZED BY THE INTERIM EMERGENCY DIRECTOR OR EMERGENCY DIRECTOR.
- j. When relieved by the Emergency Director, reassume duties as shift superintendent or shift supervisor. The shift superintendent shall normally retain his responsibilities and authority in the control room.

2. Other On-Site Emergency Organisation personnel shall carry out the applicable procedures from the following:

Emergency Director	- EP-201
Radiation Survey Team	- EP-205
Fire and Damage Team	- EP-206
Personnel Safety Team	- EP-207
Security Team	- EP-208

APPENDIX EP-103-1, ALERT CONDITION CHECK-OFF LIST

1. TIME/DATE OF INCIDENT \_\_\_\_\_
2. ASSEMBLY FOR POSSIBLE SITE EVACUATION INITIATED (TIME) \_\_\_\_\_  
(IF NECESSARY)
3. APPROPRIATE EMERGENCY TEAMS ACTIVATED (TIME) \_\_\_\_\_
4. NOTIFICATIONS: (SEE EP-209 FOR TELEPHONE NUMBERS)
 

	Person Notified	By	Time	Date
a. EMERGENCY DIRECTOR	_____	_____	_____	_____
b. LOAD DISPATCHER	_____	_____	_____	_____
c. PENNSYLVANIA EMERGENCY MANAGEMENT AGENCY	_____	_____	_____	_____
d. MARYLAND CIVIL DEFENSE AGENCY	_____	_____	_____	_____
e. COUNTY EMERGENCY MANAGEMENT AGENCIES	_____	_____	_____	_____
(1) YORK COUNTY	_____	_____	_____	_____
(2) LANCASTER COUNTY	_____	_____	_____	_____
(3) CHESTER COUNTY	_____	_____	_____	_____
(4) HARFORD COUNTY	_____	_____	_____	_____
(5) CECIL COUNTY	_____	_____	_____	_____
f. EMERGENCY CONTROL OFFICER	_____	_____	_____	_____
g. OFF-SITE SUPPORT GROUPS (IF NECESSARY)	_____	_____	_____	_____
h. NRC, REGION I, OFFICE OF INSPECTION AND ENFORCEMENT	_____	_____	_____	_____
5. VERIFICATION CALL RECEIVED FROM PENNSYLVANIA  
BUREAU OF RADIATION PROTECTION \_\_\_\_\_
6. FOR GASEOUS RADIATION RELEASE, ACTIVITIES AND  
DOSE ESTIMATES CALCULATED (EP-316, PART  
I.1.A or III.1.A) (TIME) \_\_\_\_\_
7. EMERGENCY CENTERS SET UP:
  - a. TECHNICAL SUPPORT CENTER (TIME) \_\_\_\_\_
  - b. OPERATIONAL SUPPORT CENTER (TIME) \_\_\_\_\_

APPENDIX EP-103-1, ALERT CONDITION CHECK-OFF LIST

8. OTHER ACTIONS:

VERIFIED BY: \_\_\_\_\_  
INTERIM EMERGENCY DIRECTOR  
or EMERGENCY DIRECTOR

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

*RBF*  
*EFFECTIVE 4/1/81*

PHILADELPHIA ELECTRIC COMPANY

Peach Bottom Units 2 and 3

Emergency Plan Implementing Procedure

EP-104 SITE AREA EMERGENCY (EMERGENCY DIRECTOR FUNCTIONS)

PURPOSE:

To prescribe the actions to be taken in response to a Site Area Emergency. The specific protective measures required depend on the nature of the emergency and are given in the applicable Emergency Procedures and Emergency Plan Implementing Procedures.

REFERENCES:

Emergency Plan, Sec. 4 (Emergency Conditions), Sec. 5 (Organizational Control of Emergencies), and Sec. 6 (Activation of Emergency Organization)

APPENDICES:

Appendix EP-104-1, Site Area Emergency Check-Off-List

ACTION LEVELS:

The emergency is classified as a Site Area Emergency in accordance with EP-101.

PROCEDURE:

During the initial response, the Interim Emergency Director has overall responsibility for the following:

1. Classification and assessment of the emergency
2. Declaration of emergency conditions
3. Directing the immediate response
4. Activation of the on-site Emergency Organization
5. Implementation of on-site corrective and protective measures
6. Notification of off-site agencies and off-site organizations within 15 minutes of the declaration of the event

These general responsibilities are not to be delegated.

NOTE: THE JUDGEMENT OF THE INTERIM EMERGENCY DIRECTOR OR EMERGENCY DIRECTOR IS VITAL IN PROPER CONTROL OF AN EMERGENCY AND MAY TAKE PRECEDENCE OVER GUIDANCE IN THE EMERGENCY PROCEDURES AND EMERGENCY PLAN IMPLEMENTING PROCEDURES.

Immediate Actions:

The Interim Emergency Director shall:

1. Verify that the release rates indicated by the gaseous effluent radiation monitors are below the levels for a General Emergency. If release rates indicate a General Emergency, carry out EP-105.
2. Shut down the affected units if proper or safe operation is in jeopardy or if such action will mitigate the consequences of the emergency. Direct actions to terminate the incident and minimize the hazards:
  - a. Carry out the applicable Emergency Procedures.
  - b. In event of serious personnel injury, radioactive contamination exposure, or excessive radiation exposure direct the Personnel Safety Team Leader to carry out the applicable portions of EP-207.
  - c. In event of fire:
    - (1) Direct plant equipment in the fire area to be deenergized or shut down, as required.
    - (2) Activate the Interim Fire and Damage Team in accordance with EP-206. Direct the Team to report to the fire area. Inform the team if there are any radiological hazards at the fire area.
    - (3) Direct the Shift Supervisor to supervise the fire-fighting efforts (see EP-206).
    - (4) Arrange for off-site fire-fighting support, if necessary (see EP-209 for telephone numbers).
    - (5) Activate the Interim Personnel Safety Team in accordance with EP-207. Direct the Team to report to the fire area or assembly area as appropriate and assist as needed.
  - d. In event of toxic agent release:
    - (1) Direct plant equipment in the affected area to be deenergized or shut down, as required.
    - (2) Activate the Interim Fire and Damage Team in accordance with EP-206. Direct the Team to take steps to contain the toxic agents.
    - (3) Activate the Interim Personnel Safety Team in accordance with EP-207. Direct the Team to report to the hazard area or assembly area as appropriate and assist as needed.



- (4) Arrange for off-site support to assist in containment and clean-up, if necessary (see EP-209 for telephone numbers).
- e. In the event of a radioactive liquid release, carry out EP-312.
- f. In event of high radiation, excessive radioactive contamination, or excessive gaseous radioactive release:
  - (1) Activate the Interim Radiation Survey Team in accordance with EP-205. Direct the Team to conduct surveys in accordance with HPO/CO Procedures to determine the magnitude of the radiological hazards.
  - (2) Activate the Interim Personnel Safety Team in accordance with EP-207.
- g. Activate additional Interim Emergency Teams and Emergency Teams as appropriate, in accordance with the following:
 

Radiation Survey Team	-	EP-205
Fire and Damage Team	-	EP-206
Personnel Safety Team	-	EP-207
Security Team	-	EP-208
3. Initiate a Plant Evacuation in accordance with EP-303 if any of the following occur:
  - a. Unexpected or uncontrolled radiation or toxic hazards exist in two or more large operating areas (reactor building, turbine building, rad-waste building or recombiner building) as indicated by:
    - (1) An increase in the area radiation monitor or continuous air monitor indications to greater than alarm levels.
    - (2) Radiation levels greater than 100 mR/hr within those operating areas affected which normally have radiation levels less than 10 mR/hr.
    - (3) Airborne radioactivity greater than 100 times maximum permissible concentration within those operating areas affected which is  $3 \times 10^{-7}$  uCi/cc for an unidentified isotope in an occupational environment.
    - (4) Release, leakage, or spill of a toxic reagent such that the concentration of chemical vapors makes the areas unable to be occupied.
  - b. Unexplained radioactive spills, releases, or leakages occur in two or more large operating areas.
4. Initiate an Assembly for Possible Site Evacuation in accordance with EP-304, if plant evacuation conditions exist, as stated above, and:
 

Airborne radioactivity at the assembly area is above normal background, but less than 4 times the maximum permissible concentration which is  $4 \times 10^{-10}$  uCi/cc for an unidentified isotope in a non-occupational environment.

5. Initiate a Site Evacuation in accordance with EP-305 if any of the following occur:
  - a. Unexpected or uncontrolled radiation hazards exist which affect areas of the site in addition to the main plant as indicated by:
    - (1) Airborne radioactivity within the security fence of 10 times maximum permissible concentration which is  $1 \times 10^{-9}$  uCi/cc for an unidentified isotope in a non-occupational environment.
    - (2) Radiation levels within the security fence greater than 100 mR/hr, in areas normally experiencing less than 10 mR/hr levels.
  - b. Plant Evacuation conditions exist, as specified in step 3 above, and:
    - (1) Radiation levels at the designated assembly area are greater than 10 mR/hr or airborne contamination levels are greater than 4 times the maximum permissible concentration which is  $4 \times 10^{-10}$  uCi/cc for an unidentified isotope, in a non-occupational environment.
    - (2) No alternate on-site assembly area is feasible.
  - c. Roof vent radiation recorders indicate roof vent release rates in excess of the following levels:

One roof vent:	25 mR/hr (at site boundary)
Total of all roof vents:	25 mR/hr (at site boundary)
Each roof vent:	10 mR/hr (at site boundary)

CAUTION: IN-PLANT RADIOLOGICAL HAZARDS MAY BE CAUSED BY RECIRCULATION OF HIGH LEVEL ROOF VENT RELEASES.

6. If a Plant or Site Evacuation or an Assembly for Possible Site Evacuation is ordered:
  - a. Notify Unit 1 personnel of the evacuation.
  - b. Direct the Information Center staff to evacuate visitors in accordance with EP-306 and also bring the frisker, which is stored at the Information Center, to the assembly area. Dispatch a Health Physics qualified individual to survey the Information Center evacuees. Specify an assembly area (SUE, North Sub, Delta Serv. Bldg.)
7. Verify Immediate Notification of the following:  
(See EP-209 for telephone numbers)

NOTE: NOTIFICATIONS MUST BE MADE WITHIN 15 MINUTES OF THE DECLARATION OF THE EVENT.

NOTE: The Director has the option of having a Shift Technical Advisor, A Test Engineer, or a Plant Operator or higher class operator, make the notifications, but it remains the responsibility of the Director to verify that the notifications have been made.

- a. Emergency Director (the Station Superintendent or alternately, the Assistant Station Superintendent)
- b. Load Dispatcher
- c. Pennsylvania Emergency Management Agency (PEMA)

- d. York County Emergency Management Agency
- e. Lancaster County Emergency Management Agency
- f. Chester County Emergency Management Agency
- g. Maryland Civil Defense and Disaster Preparedness Agency
- h. Harford County Civil Defense Agency
- i. Cecil County Civil Defense Agency
- j. Nuclear Regulatory Commission, Region I, Office of Inspection and Enforcement

Expect a call from the Pennsylvania Bureau of Radiation Protection verifying emergency conditions, approximately 30 minutes after notification of PEMA. After business hours, this call may come through commercial phone lines. The Site Emergency Coordinator will normally be notified by the Emergency Director per EP-201.

8. If the event results in a gaseous radiation release, direct the Radiation Survey Team Leader to calculate the activity released and estimate dose rates in accordance with EP-316, Part I.1.A or III.1.A. Refined determination of off-site dose rates (EP-316, Part I.1.B and C or III.1.B and C) shall normally be directed by the Emergency Director, in accordance with EP-201.
9. If radiation levels anywhere within the plant or on-site areas which normally are less than 10 mR/hr, are greater than 500 mR/hr, direct the Radiation Survey Team to extend the survey area boundary to verify that a General Emergency (500 mR/hr at the site boundary) does not exist. If radiation levels indicate a General Emergency, carry out EP-105. Any radiation surveys in off-site areas are normally directed by the Site Emergency Coordinator, through the Radiation Survey Team Leader.

Follow-Up Actions:

1. The Interim Emergency Director shall:
  - a. Direct the follow-up actions as specified in the applicable Emergency Procedures. Continue to monitor plant status and the effects of the emergency, until relieved by the Emergency Director or until the emergency is terminated.
  - b. Direct the Radiation Survey Team Leader to have the Chemistry Section Group perform the following:
    - (1) Change and analyze effluent filters and charcoal cartridges.
    - (2) Obtain gaseous effluent samples and identify isotopic composition if possible.
    - (3) Obtain and analyze primary coolant samples.
    - (4) Obtain and analyze in-plant and field samples.
  - c. Verify that reactor safeguards are operable and that plant conditions are stable.
  - d. Notify other off-site support groups as appropriate.

- e. Document or have documented, actions taken on the Site Area Emergency Check-Off List in the Appendix.
  - f. Maintain authority in the Control Room. Strictly enforce procedures regarding Control Room access and formality to prevent crowding and to ensure that the line of authority is clear.
  - g. Keep the Emergency Control Officer informed of plant status and operational plans.
  - h. Provide status and assessment information to off-site support organizations, until relieved of this responsibility by the Site Emergency Coordinator per EP-203.
  - i. Direct on-shift personnel not actively engaged in emergency assignments to report to the Operational Support Center, or an alternate designated location such as the Administration Building or the Shift Supervisor's office.
  - j. If requested by the county representatives direct a member of the Test Engineer Group to the Risk County Emergency Operations Centers.
  - k. Make recommendations to the Site Emergency Coordinator concerning necessary additional facilities, equipment, supplies, technical services, and support.
  - l. Periodically review Appendix 1 of EP-101 to ensure proper classification of the emergency situation. Be especially alert to changes in the various indications listed on the chart. If the situation is degrading, it is important to recognize this fact immediately.
  - m. Ensure proper radiation dose budgeting and management for emergency work and repairs, as required by the normal radiation work procedures (for Search and Rescue in accordance with EP-207, the RWP procedures are suspended).
- NOTE: PLANNED RADIATION EXPOSURES IN EXCESS OF NORMAL STATION ADMINISTRATIVE GUIDE LEVELS, HPO/CO-100, MUST BE SPECIFICALLY AUTHORIZED BY THE INTERIM EMERGENCY DIRECTOR OR EMERGENCY DIRECTOR.
- n. When relieved by the Emergency Director reassume duties as Shift Superintendent or Shift Supervisor. The Shift Superintendent shall normally retain his responsibilities and authority in the Control Room.
2. Other on-site Emergency Organization personnel shall carry out the applicable procedures from the following:
- |                            |   |        |
|----------------------------|---|--------|
| Emergency Director         | - | EP-201 |
| Site Emergency Coordinator | - | EP-203 |
| Radiation Survey Team      | - | EP-205 |
| Fire and Damage Team       | - | EP-206 |
| Personnel Safety Team      | - | EP-207 |
| Security Team              | - | EP-208 |

3. Off-Site Emergency Organization personnel shall carry out the applicable procedures from the following:

Emergency Control Officer	-	EP-210
Corporate Support Functions	-	EP-211



Appendix EP-104-1 SITE AREA EMERGENCY CHECK-OFF-LIST

1. TIME/DATE OF INCIDENT			
2. APPROPRIATE EMERGENCY TEAMS ACTIVATED	(TIME)		
3. STACK & VENT SYSTEM RELEASE RATES BELOW LIMITS FOR GENERAL EMERGENCY	yes/no (circle one)		
4. IF EVACUATION NECESSARY:			
a. PLANT EVACUATION INITIATED	(TIME)		
b. SITE EVACUATION INITIATED (TIME)	South Utility Bldg.	North Sub	Delta Service Bldg.
	(Circle One)		
c. UNIT 1 NOTIFIED	(TIME)		
d. INFORMATION CENTER EVACUATED (TIME)	South Utility Bldg.	North Sub	Delta Service Bldg.
	(Circle One)		
e. HP QUALIFIED INDIVIDUAL DIRECTED TO MONITOR INFORMATION CENTER EVACUEES	(TIME)		
f. PERSONNEL ACCOUNTED FOR	(TIME)		
5. SECURITY TEAM INITIATING EMERGENCY PROCEDURES	(TIME)		
6. NOTIFICATIONS: (See EP-209 for telephone nos.)	Person Notified	Notified By	Time Date
a. EMERGENCY DIRECTOR			
b. LOAD DISPATCHER			
c. PENNSYLVANIA EMERGENCY MANAGEMENT AGENCY			
d. MARYLAND CIVIL DEFENSE AGENCY			
e. COUNTY EMERGENCY MANAGEMENT AGENCIES			
(1) YORK COUNTY			
(2) LANCASTER COUNTY			
(3) CHESTER COUNTY			
(4) HARFORD COUNTY			
(5) CECIL COUNTY			
f. SITE EMERGENCY COORDINATOR			
g. EMERGENCY CONTROL OFFICER			

Appendix EP-104-1 SITE AREA EMERGENCY CHECK-OFF-LIST (continued)

	Person Notified	Notified By	Time	Date
h. NRC, REGION I, OFFICE OF INSPECTION AND ENFORCEMENT	_____	_____	_____	_____
i. DEPARTMENT OF ENERGY RAP	_____	_____	_____	_____
j. OFF-SITE SUPPORT GROUPS (IF NECESSARY)	_____	_____	_____	_____
7. VERIFICATION CALL RECEIVED FROM PENNSYLVANIA BUREAU OF RADIATION PROTECTION	_____	_____	_____	_____
8. FOR GASEOUS RADIATION RELEASE, ACTIVITIES AND DOSE ESTIMATES CALCULATED (EP-316, PART I.1.A OR III.1.A)	(TIME)	_____	_____	_____
9. RADIATION LEVELS BELOW LIMITS FOR GENERAL EMERGENCY	(TIME)	_____	_____	_____
10. EMERGENCY CENTERS SET UP:				
a. TECHNICAL SUPPORT CENTER	(TIME)	_____	_____	_____
b. OPERATIONAL SUPPORT CENTER	(TIME)	_____	_____	_____
c. EMERGENCY CONTROL CENTER	(TIME)	_____	_____	_____
d. EMERGENCY SUPPORT CENTER	(TIME)	_____	_____	_____
11. OTHER ACTIONS:				

VERIFIED BY: \_\_\_\_\_  
INTERIM EMERGENCY DIRECTOR  
or EMERGENCY DIRECTOR

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



*M. M. M.*  
*4/1/81*

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EP-105 GENERAL EMERGENCY (EMERGENCY DIRECTOR FUNCTIONS)

PURPOSE:

To prescribe the actions to be performed in the event of a General Emergency. The specific protective measures to be taken depend on the nature of the emergency and are given in the applicable Emergency Procedures and Emergency Plan Implementing Procedures (300 Series).

REFERENCES:

Emergency Plan, Sec. 4 (Emergency Conditions), Sec. 5 (Organizational Control of Emergencies), and Sec. 6 (Activation of Emergency Organization)

APPENDICES:

Appendix EP-105-1, General Emergency Check-off List

ACTION LEVEL:

The emergency is classified as a General Emergency in accordance with EP-101.

PROCEDURE:

During the initial response, the Interim Emergency Director has overall responsibility for the following:

1. Classification and assessment of the emergency
2. Declaration of emergency conditions
3. Directing the immediate response
4. Activation of the On-Site Emergency Organization
5. Implementation of On-Site corrective and protective measures
6. Notification of civil agencies and off-site organizations within 15 minutes of the declaration of the event
7. Providing direct recommendations to county emergency management agencies when warranted by the emergency conditions, as detailed in this procedure

These general responsibilities are not to be delegated.

NOTE: THE JUDGEMENT OF THE INTERIM EMERGENCY DIRECTOR OR EMERGENCY DIRECTOR IS VITAL IN PROPER CONTROL OF AN EMERGENCY AND MAY TAKE PRECEDENCE OVER GUIDANCE IN THE EMERGENCY PROCEDURES AND EMERGENCY PLAN IMPLEMENTING PROCEDURES.

IMMEDIATE ACTIONS:

The Interim Emergency Director shall:

1. Shutdown the unit causing the releases. Direct actions to terminate the incident and minimize the hazards:
  - a. Carry out the applicable Emergency Procedures.
  - b. In event of serious personnel injury, radioactive contamination exposure, or excessive radiation exposure direct the Personnel Safety Team Leader to carry out applicable portions of EP-207.
  - c. In event of fire:
    1. Direct plant equipment in the fire areas to be de-energized or shutdown, as required.
    2. Activate the Interim Fire and Damage Team in accordance with EP-206. Direct the Team to report to the fire area. Inform the team if there are any radiological hazards at the fire area.
    3. Direct the Shift Supervisor to supervise the fire-fighting efforts (see EP-206).
    4. Arrange for off-site fire-fighting support, if necessary (see EP-209 for telephone numbers).
    5. Activate the Interim Personnel Safety Team in accordance with EP-207. Direct the Team to report to the fire area or assembly area as appropriate and assist as needed.
  - d. In event of toxic agent release:
    1. Direct plant equipment in the affected areas to be deenergized, or shutdown, as required.
    2. Activate the Interim Fire and Damage Team in accordance with EP-206. Direct the Team to take steps to contain the toxic agents.
    3. Activate the Interim Personnel Safety Team in accordance with EP-207. Direct the Team to report to the hazard area or assembly area as appropriate and assist as needed.

4. Arrange for off-site support to assist in containment and cleanup, if necessary (see EP-209 for telephone numbers).
- e. In Event of a Radioactive liquid release, carry out EP-312.
- f. Activate the Interim Radiation Survey Team in accordance with EP-205. Direct the Team to perform the following:
  1. In the event of high radiation or excessive radioactive contamination, conduct surveys to determine the magnitude of the radiation hazards. For high radiation the survey shall extend to the site boundary.
  2. Conduct surveys downwind at the site boundary. Report the results immediately.
  3. Have the Chemistry Section personnel perform the following steps:
    - a. Change and analyze effluent filters and charcoal cartridges.
    - b. Obtain gaseous effluent samples and identify isotopes if possible.
    - c. Obtain and analyze primary coolant samples.
    - d. Obtain and analyze in-plant and field samples.

(Any radiation surveys in off-site areas are normally to be directed by the Site Emergency Coordinator, through the Radiation Survey Team Leader.)

- g. Activate the Interim Security Team in accordance with EP-208 and direct the Team to carry out emergency security procedures.
- h. Activate additional Interim Emergency Teams and Emergency Teams as appropriate, in accordance with the following:

Radiation Survey Team	-	EP-205
Fire and Damage Team	-	EP-206
Personnel Safety Team	-	EP-207
Security Team	-	EP-208
2. Initiate a Plant Evacuation in accordance with EP-303 if any of the following occur:
  - a. Unexpected or uncontrolled radiation or toxic hazards exist in two or more large operating areas (reactor building, turbine building, radwaste building or recombiner building) as indicated by:

1. An increase in the area radiation monitor or continuous air monitor indications to greater than alarm levels.
  2. Radiation levels greater than 100 mR/hr within those operating areas affected which normally have radiation levels less than 10 mR/hr.
  3. Airborne radioactivity greater than 100 times maximum permissible concentration within those operating areas affected which is  $3 \times 10^{-7}$  uCi/cc for an unidentified isotope in an occupational environment.
  4. Release, leakage, or spill of a toxic reagent such that the concentration of chemical vapors makes the areas unable to be occupied.
- b. Unexplained radioactive spills, releases, or leakages occur in two or more large operating areas.
3. Initiate a Site Evacuation in accordance with EP-305 if any of the following occur:
- a. Unexpected or uncontrolled radiation hazards exist which affect areas of the site in addition to the main plant as indicated by:
1. Airborne radioactivity within the security fence of 10 times maximum permissible concentration which is  $1 \times 10^{-9}$  uCi/cc for an unidentified isotope in a non occupational environment.
  2. Radiation levels within the security fence greater than 100 mR/hr in areas which are normally less than 10 mR/hr.
- b. Plant Evacuation conditions exist, as specified in step 2 above, and:
1. Radiation levels at the designated assembly area are greater than 10 mR/hr or airborne contamination levels are greater than 4 times the maximum permissible concentration which is  $4 \times 10^{-10}$  uCi/cc for an unidentified isotope in a non occupational environment.
  2. No alternate on-site assembly area is feasible.
- c. Roof vent radiation recorders indicate roof vent release rates in excess of the following levels:
- |                          |                             |
|--------------------------|-----------------------------|
| one roof vent:           | 25 mR/hr (at site boundary) |
| total of all roof vents: | 25 mR/hr (at site boundary) |
| each roof vent:          | 10 mR/hr (at site boundary) |

CAUTION: IN-PLANT RADIOLOGICAL HAZARDS MAY BE CAUSED BY RECIRCULATION OF HIGH LEVEL ROOF VENT RELEASES.

4. If a Plant or Site Evacuation is ordered:

- a. Notify Unit 1 personnel of the evacuation.
- b. Direct the Information Center Staff to evacuate visitors in accordance with EP-306 and also to bring the frisker which is located at the Information Center to the assembly area. Dispatch a Health Physics qualified individual to survey the Information Center evacuees.

5. Verify immediate notification of the following: (See EP-209 for telephone numbers)

NOTE: Notifications must be made within 15 minutes of the declaration of the event.

NOTE: The Interim Emergency Director has the option of having a Shift Technical Advisor, a Test Engineer, a Plant Operator or higher class operator, make the notifications, but it remains the responsibility of the Director to verify that the notifications have been made.

- a. Emergency Director (Station Superintendent, or alternately, the Assistant Station Superintendent)
- b. Site Emergency Coordinator (Superintendent, Generation Division-Nuclear, or alternately, the Station Superintendent, Limerick Generating Station)
- c. Emergency Control Officer (designated from the Office of the Vice President, Electric Production Department)
- d. Load Dispatcher
- e. Pennsylvania Emergency Management Agency (PEMA)
- f. York County Emergency Management Agency
- g. Lancaster County Emergency Management Agency
- h. Chester County Emergency Management Agency
- i. Maryland Civil Defense and Disaster Preparedness Agency
- j. Harford County Civil Defense Agency
- k. Cecil County Civil Defense Agency
- l. Delaware Civil Defense Agency
- m. New Jersey Civil Defense Agency



- n. Nuclear Regulatory Commission, Region I, Office of Inspection and Enforcement

(Expect a call from the Pennsylvania Bureau of Radiation Protection verifying emergency conditions about 30 minutes after notification of PEMA. After business hours, this call may come through commercial phone lines.)

6. Use the Pond Loudspeaker System to warn boaters away from the plant area in accordance with EP-301.
7. If the event results in a gaseous radiation release, direct the Radiation Survey Team Leader to calculate the activity released and estimate dose rates in accordance with EP-316, Part I.1.A or III.1.A. Refined determination of off-site dose rates (EP-316, Part I.1.B and C. or III.1.B and C.) shall normally be directed by the Emergency Director, in accordance with EP-201.
8. Recommend protective actions to the county emergency management agencies in accordance with EP-317 if both of the following occur:
  - a. The off-site dose rates (as measured or as calculated in accordance with EP-316) exceed 500 mR/hr (whole body) or 2500 mR/hr (child's thyroid); and
  - b. Neither the Pennsylvania Emergency Management Agency nor the Bureau of Radiation Protection have responded within 15 minutes of the initial notification.

FOLLOW-UP ACTIONS:

1. The Interim Emergency Director shall:
  - a. Direct the follow-up actions as specified in the applicable Emergency Procedures. Continue to monitor plant status and the effects of the emergency, until relieved by the Emergency Director or until the emergency is terminated.
  - b. Verify that reactor safeguards are operable and that the plant condition is stable.
  - c. Notify other off-site support groups as appropriate.
  - d. Document, or have documented, actions taken on the General Emergency Check-off List in the Appendix.
  - e. Maintain authority in the Control Room. Strictly enforce procedures regarding Control Room access and formality to prevent crowding and to ensure that the line of authority is clear.

- f. Keep the Emergency Control Officer informed of plant status and operational plans.
- g. Provide weather data, activity release data, plant status information, and assessment information to off-site support organizations, until relieved of this responsibility by the Site Emergency Coordinator per EP-203.
- h. Direct on-shift personnel not actively engaged in emergency assignments to report to the Operational Support Center or an alternate designated location, such as the Administration Building or the Shift Supervisor Office.
- i. If requested by the County Representatives, direct a member of the test engineer group to report to the Risk County Emergency Operations Centers.
- j. Make recommendations to the Site Emergency Coordinator concerning necessary additional facilities, equipment, supplies, technical services, and support.
- k. Periodically review Appendix 1 of EP-101 to ensure proper classification of the emergency situation. Be especially alert to changes in the various indications listed on the chart.
- l. Ensure proper radiation dose budgeting and management for emergency work and repairs as required by the normal radiation work procedures (for Search and Rescue in accordance with EP-207, the RWP procedure is suspended).

NOTE: PLANNED RADIATION EXPOSURES IN EXCESS OF NORMAL STATION ADMINISTRATION GUIDE LEVELS, HPO/CO-100, MUST BE SPECIFICALLY AUTHORIZED BY THE INTERIM EMERGENCY DIRECTOR OR EMERGENCY DIRECTOR.

- m. When relieved by the Emergency Director, reassume duties as Shift Superintendent or Shift Supervisor. The Shift Superintendent shall normally retain his responsibilities and authority in the Control Room.
2. Other On-Site Emergency Organization personnel shall carry out the applicable procedures from the following:

Emergency Director	-	EP-201
Site Emergency Coordinator	-	EP-203
Radiation Survey Team	-	EP-205
Fire and Damage Team	-	EP-206
Personnel Safety Team	-	EP-207
Security Team	-	EP-208



3. Off-Site Emergency Organization personnel shall carry out the applicable procedures from the following:

Emergency Control Officer - EP-210  
Corporate Support Functions - EP-211

Appendix EP-105-1 GENERAL EMERGENCY CHECK-OFF LIST

1. Time/Date of incident \_\_\_\_\_
2. Appropriate Emergency Teams activated (TIME) \_\_\_\_\_
3. If Evacuation Necessary:
  - a. Plant Evacuation Initiated  
(TIME) \_\_\_\_\_  
Admin Bldg, S. Utility Bldg, N. Sub  
(circle one)
  - b. Site Evacuation Initiated  
(TIME) \_\_\_\_\_  
S. Utility Bldg, North Sub, Delta Service Bldg  
(circle one)
  - c. Unit 1 Notified (TIME) \_\_\_\_\_
  - d. Information Center evacuated  
(TIME) \_\_\_\_\_  
S. Utility Bldg, North Sub, Delta Service Bldg  
(circle one)
  - e. IIP qualified individual directed to monitor Information Center evacuees (TIME) \_\_\_\_\_
  - f. Pond loudspeaker announcements completed (TIME) \_\_\_\_\_
  - g. Personnel accounted for (TIME) \_\_\_\_\_
4. Radiation surveys directed (TIME) \_\_\_\_\_
5. Security team initiating emergency procedures (TIME) \_\_\_\_\_
6. Notifications: (See EP-209 for telephone numbers)
 

	Person Notified	Notified By	Time	Date
a. Emergency Director	_____	_____	_____	_____
b. Site Emergency Coord.	_____	_____	_____	_____
c. Emergency Control Officer	_____	_____	_____	_____
d. Load Dispatcher	_____	_____	_____	_____
e. Pennsylvania Emergency Management Agency	_____	_____	_____	_____
f. Maryland Civil Defense Agency	_____	_____	_____	_____

	Person Notified	Notified By	Time	Date
g. County Emergency Management Agencies	_____	_____	_____	_____
(1) York County	_____	_____	_____	_____
(2) Lancaster County	_____	_____	_____	_____
(3) Chester County	_____	_____	_____	_____
(4) Harford County	_____	_____	_____	_____
(5) Cecil County	_____	_____	_____	_____
h. NRC Region I Office	_____	_____	_____	_____
i. Department of Energy RAP	_____	_____	_____	_____
j. Delaware Civil Defense Agency	_____	_____	_____	_____
k. New Jersey Civil Defense Agency	_____	_____	_____	_____
l. Emergency Information Officer	_____	_____	_____	_____
m. Manager, Engineering and Research	_____	_____	_____	_____
n. Emergency Security Officer	_____	_____	_____	_____
o. Admin and Logistics Manager	_____	_____	_____	_____
p. Off-site support groups (if necessary)	_____	_____	_____	_____
7. Verification call received from Pennsylvania Bureau of Radiation Protection	_____	_____	_____	_____
8. For gaseous radiation release, activities and dose estimates completed (EP-316), Part I.1.A or III.1.A).	(TIME)	_____	_____	_____
9. Emergency centers set up:				
a. Technical Support Center	(TIME)	_____	_____	_____
b. Operational Support Center	(TIME)	_____	_____	_____
c. Emergency Control Center	(TIME)	_____	_____	_____
d. Emergency Support Center	(TIME)	_____	_____	_____
10. Other Actions:				

VERIFIED BY:

INTERIM EMERGENCY DIRECTOR  
or EMERGENCY DIRECTOR

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

*ASR*  
*EFFECTIVE*  
*4/1/81*

PHILADELPHIA ELECTRIC COMPANY

Peach Bottom Units 2 and 3

Emergency Plan Implementing Procedure

EP-201 EMERGENCY DIRECTOR/TECHNICAL SUPPORT CENTER (TSC)

PURPOSE:

To describe the responsibilities and actions of the Emergency Director and to prescribe procedures for establishment and functioning of the TSC for Alert, Site, or General Emergencies.

REFERENCES:

Emergency Plan, Sec. 3 (Emergency Direction and Assignments), Sec. 5 (Organizational Control of Emergencies), Sec. 6 (Activation of Emergency Organization), and Sec. 7 (Emergency Facilities and Equipment).

APPENDICES:

None

ACTION LEVEL:

The Emergency Control Officer is activated for the following classes of emergencies:

1. Alert Condition (EP-103)
2. Site Area Emergency (EP-104)
3. General Emergency (EP-105)

The TSC is activated for the same classes of emergencies.

PROCEDURE:

The TSC is maintained in the Unit 1 Administration Building. The TSC is equipped to enable the TSC staff to assess plant status and make recommendations to the Emergency Director concerning plant operations, corrective actions, and protective actions.

IMMEDIATE ACTION:

1. The Station Superintendent (or alternately, the Assistant Station Superintendent) shall:
  - a. Proceed to either the TSC or the control room. Contact the Interim Emergency Director, (who will probably be in the Control Room).

PROCEDURE: (continued)

- b. Review the current status of the emergency, including:
    - (1) Background information leading up to the emergency.
    - (2) Indications and suspected cause of the emergency, including existing hazards to personnel; damage to plant systems, instrumentation, and other equipment; and radiation levels or releases.
    - (3) Classification of the emergency.
    - (4) Corrective actions taken.
    - (5) Status of execution of the steps in EP-101 and other Emergency Plan Implementing Procedures, especially activation of Emergency Teams and required notifications.
    - (6) Present plant lineups, and plant evolutions or operations in progress.
    - (7) Evolutions or operations which have been directed or are planned.
  - c. Relieve the Interim Emergency Director of his responsibilities. The Shift Superintendent shall normally retain his responsibilities and authority in the Control Room.
  - d. For a Site Area Emergency, notify the Site Emergency Coordinator (the Superintendent, Generation Division-Nuclear, or alternately, the Station Superintendent, Limerick Generating Station).  
  
For a General Emergency, verify that the Interim Emergency Director has made this notification.
  - e. Proceed to the TSC, if not there already, and supervise the establishment of the TSC.
2. The maximum occupancy limit for the TSC should be held to 25 to limit congestion and confusion.

The following personnel are required for TSC operation:

- a. Emergency Director (can shuttle between the TSC and the Control Room)
- b. Engineer - Technical
- c. Engineer - HP
- d. Record Keeper/Communicator
- e. NRC representatives (5; separate space provided)
- f. Consultants (2)
- g. Other Engineers and Technicians as necessary as determined by the Emergency Director
- h. TV monitor operators (2)

PROCEDURE: (continued)

3. The Emergency Director shall assign relief rotation for the following positions: (See EP-209 for alternates)
  - a. Emergency Director
  - b. Engineer - Technical
  - c. Engineer - Operations
  - d. Record Keeper/Communicator
  - e. TV Monitor Operators
4. Phone lines shall be checked out between the TSC and the following:

<u>LOCATION</u>	<u>PHONE CIRCUIT</u>
*a. Emergency Control Center	Dedicated
*b. Headquarters Emergency Control Center (Philadelphia Electric Headquarters)	Dedicated
c. Control Room	Dedicated
d. NRC Headquarters (Bethesda)	Dedicated
*e. NRC, Region I Office	Dedicated

5. Appropriate notifications shall be verified in accordance with EP-102, 103, 104 or 105, as directed by the Emergency Director.
6. Energize the HVAC system, lighting, TV monitors, and airborne radioactivity monitors.

FOLLOW-UP ACTIONS:

1. The responsibilities of the Emergency Director include those of the Interim Emergency Director as listed in EP-102, 103, 104, or 105, and the following:
  - a. Periodically reviewing Appendix 1 of EP-101 to ensure proper classification of the emergency condition. (He should be especially alert to changes in the indications listed on the chart. If the situation is degrading, it is important to recognize this fact immediately.
  - b. Continuing to carry out procedures initiated by and actions directed by the Interim Emergency Director, including directing the actions of Emergency Teams.
  - c. Confirming the activation of appropriate emergency organizations.
  - d. Direct the Radiation Monitoring Team Leader to complete EP-316 for refined determination of off-site dose rates (Part I.1.B and C. or III.1.B and C.) and requesting collection of environmental samples per EP-315).
  - e. Providing status and assessment information to off-site support organizations, until relieved of this responsibility by the Site Emergency Coordinator, per EP-203.

\* Not Applicable at this time.



PROCEDURE: (continued)

- f. Keeping the Emergency Control Officer appraised of plant status and operations.
- g. Making recommendations to the Site Emergency Coordinator and requesting necessary additional facilities, equipment, supplies, technical services, and support.
- h. Coordinating with the Site Emergency Coordinator and the Emergency Control Officer in determining when to modify the Emergency Organization for the recovery phase.
- i. Ensuring proper radiation dose budgeting and management for emergency work and repairs, as required by the normal radiation work procedures (for Search and Rescue in accordance with EP-207, the RWP procedure is suspended).

NOTE: PLANNED RADIATION EXPOSURES WHICH ARE IN EXCESS OF NORMAL STATION ADMINISTRATIVE GUIDE LEVELS, HPO/CO-100, MUST BE SPECIFICALLY AUTHORIZED BY THE INTERIM EMERGENCY DIRECTOR OR EMERGENCY DIRECTOR.

2. TSC Personnel Shall:

- a. Maintain close liaison with Shift Supervision concerning plant status and on-site protective actions.
- b. Perform assessment actions and advise shift personnel of recommended actions.
- c. The communicator and record keeper shall maintain logs or otherwise record pertinent data, events, and communications and include the time of occurrence.
- d. Provide continued direction to the Emergency Director concerning plant operations, corrective actions, and protective actions.
- e. Operate TV Monitors as required.



*NSP*  
*EFFECTIVE 4/1/81*

PHILADELPHIA ELECTRIC COMPANY  
PEACH BOTTOM UNITS 2 AND 3  
EMERGENCY PLAN IMPLEMENTING PROCEDURE

EP-202 OPERATIONAL SUPPORT CENTER INSTRUCTIONS

PURPOSE:

This procedure describes the actions to be taken by personnel manning the Operational Support Center (OSC), when its activation is required by the Emergency Plan or EP procedures.

REFERENCE:

1. Emergency Plan, Section 7, Emergency Facilities and Equipment

DISCUSSION:

The station Operational Support Center (OSC) is located in the Turbine Building at elevation 165' just outside of the Control Room. This center is activated for alert conditions, site emergencies, and general emergencies as specified in the Emergency Procedures. The OSC will be initially manned by shift personnel not having posted duty in the control room or assigned to activated Emergency Teams. Shortly after activation, the OSC manning will be supplemented by off-shift Operators, HP Techs, and Test Engineers. The OSC will provide a location outside of the control room where these personnel will be readily available to the Peach Bottom Emergency Management staff.

PROCEDURE:

1. When an emergency occurs which requires manning of the OSC, persons specified in the discussion above shall immediately proceed to the OSC. The first persons to enter the OSC shall functionally check the installed communications.
2. Personnel entering shall log their names and job classification in the log book which is kept in the OSC, marked "Operational Support Center Emergency Log". When any person leaves the OSC, he should note his location and the task to which he has been assigned. Upon return the person should log back in. Maintenance of this log will allow tracking of each person and determination of available skills.
3. In the event that the OSC is not habitable, a limited number (approximately 10-15) of operation support personnel should

be directed to one of the offices within the Control Room and the remainder directed to the Administration Building, or the Emergency Control Center.

*M. M. M.*  
*Eff 4/1/81*

PHILADELPHIA ELECTRIC COMPANY

Peach Bottom Units 2 and 3

Emergency Plan Implementing Procedure

EP-205 RADIATION SURVEY TEAM

PURPOSE:

To delineate the responsibilities and actions of the Radiation Survey Team.

REFERENCES:

1. Emergency Plan, Sec. 5 (Organizational Control of Emergencies) and Sec. 6 (Emergency Measures)
2. Health Physics/Chemistry Operating Procedures

APPENDICES:

1. On-Site Survey Data Sheet
2. Off-Site Survey Data Sheet

ACTION LEVEL:

The Interim Emergency Director shall direct the Interim Radiation Survey Team Leader to activate the Interim Radiation Survey Team. If necessary, the Interim Emergency Director or Emergency Director shall then contact the Radiation Survey Team Leader, or designated alternate (see EP-209 for telephone numbers), and direct him to activate the Radiation Survey Team.

PROCEDURE:

Immediate Actions:

1. The Operations Health Physics Technician shall:
  - a. Assume the role of Interim Radiation Survey Team Leader.
  - b. Carry out actions directed by the Interim Emergency Director, in accordance with applicable Emergency Plan Implementing Procedures and HPO/CO procedures (refer to the Follow-up Actions for general responsibilities).

2. The Radiation Survey Team Leader (or designated alternate) when directed by the Interim Emergency Director or Emergency Director, shall:
  - a. Notify the team members (see EP-209 for telephone numbers).
  - b. Instruct each member concerning the following:
    - (1) Where to report (usually the Emergency Control Center, maintained in the Unit 1 Administration Building).
    - (2) When to report.
    - (3) Special hazards or precautions in proceeding to the reporting place.
  - c. Proceed to the designated reporting place and assemble the team members.
  - d. Assign personnel to functional groups as follows:
    - (1) Field Survey Group - Assign Health Physics Technical Assistants to direct one or more Field Survey Teams, as necessary. Assign at least two technicians from the HP&C Group to each Field Survey Team, as required.
    - (2) Plant Survey Group - Assign Health Physics Technical Assistants to direct one or more Plant Survey Teams, as necessary. Assign at least two technicians from the HP&C Group to each Plant Survey Team, as required.
    - (3) Chemistry Section Group - The Group shall be directed by the Engineer - Chemistry (or alternately, a designated Chemistry Technical Assistant). The Group shall be comprised of one or more teams, as necessary. Assign at least two technicians from the HP&C Group to each Chemistry Team, as required.
    - (4) Dose Assessment Group - The Dose Assessment Group shall consist of the Engineer - HP&C and a qualified alternate. The Dose Assessment Group should remain in the Emergency Control Center, but may have access to the Technical Support Center.
    - (5) Vehicle Decontamination Group - The Group shall be directed by a Health Physics Technical Assistant. Assign at least two technicians from the HP&C Group to the group.
  - e. Establish the Emergency Control Center (if activated), as specified in EP-203. The Site Emergency Coordinator shall supervise the activation of the ECC on his arrival.
  - f. Inform the Interim Emergency Director or Emergency Director and also the Site Emergency Coordinator as appropriate that the Radiation Survey Team is assembling.

- g. Review the current status of the emergency and relieve the Interim Radiation Survey Team Leader. Review the Emergency Plan Implementing Procedures and Health Physics Operating/Chemistry Operating Procedures, HPO/CO Procedures, pertinent to the emergency and brief the team members concerning the emergency.
- h. Direct personnel to assemble necessary Radiation Survey Team equipment and materials. Equipment, materials, and instruments are stored in the Emergency Control Center.
- i. Direct the team members to relieve the interim team members, if necessary.
- j. Arrange for relief for team members as required.

FOLLOW-UP ACTIONS:

- 1. The Radiation Survey Team Leader reports directly to the Interim Emergency Director or Emergency Director during subsequent phases of the emergency response and recovery. With regard to off-site radiation survey activities, the Radiation Survey Team Leader normally reports directly to the Site Emergency Coordinator.
- 2. The general responsibilities of the Interim Radiation Survey Team Leader or Radiation Survey Team Leader during the emergency response and recovery are the following:
  - a. Direct the actions of the various Radiation Survey Team Groups.
  - b. Report to the Interim Emergency Director or Emergency Director, and also the Site Emergency Coordinator as appropriate and advise him of the radiological consequences of the incident.
  - c. Advise the Interim Emergency Director or Emergency Director and also the Site Emergency Coordinator as appropriate concerning the need for off-site radiation survey personnel (off-site personnel are notified at the direction of the Interim Emergency Director or Emergency Director utilizing EP-209).
  - d. Coordinate the actions of the off-site radiation survey groups. These groups maybe comprised of employees of other utilities or agencies which have agreed to provide mutual emergency support.

NOTE: IN GENERAL, THE ACTIONS OF OFF-SITE RADIATION SURVEY TEAMS SHOULD BE COORDINATED TO AVOID NEEDLESS DUPLICATION OF EFFORT. HOWEVER, PERIODIC VERIFICATION OF SURVEY RESULTS BY DIFFERENT ORGANIZATIONS IS DESIRABLE, ESPECIALLY IF THE SURVEYS ARE CRITICAL IN CLASSIFYING THE EMERGENCY OR IF PROTECTIVE ACTIONS DEPEND ON THE RESULTS.

- e. Provide radiation monitoring support for other teams which are working in contaminated areas.
- f. Maintain a detailed log and a comprehensive file of all survey maps and data sheets.

- g. In the event that the Emergency Director directs that a re-entry effort be initiated:

1. The Radiation Survey Team Leader shall direct the Plant Survey Group to do the following:

CAUTION: PLANNED RADIATION EXPOSURE IN EXCESS OF NORMAL STATION ADMINISTRATIVE GUIDES MUST BE SPECIFICALLY AUTHORIZED BY THE EMERGENCY DIRECTOR.

- a. Obtain the equipment listed below from an assembly area as specified by the Team Leader.
  1. Anti-contamination clothing
  2. Respirators or air packs
  3. Flashlights or spotlights
  4. Blankets and/or stretchers
  5. High range gamma survey instruments
  6. High range self-reading dosimeters
  7. Portable radio (walkie-talkie)
  8. Tools for moving heavy equipment or debris
  9. Notebooks or logbooks and pens/pencils
- b. Obtain radiation and contamination survey instruments.
- c. Enter the hazardous area when directed.
- d. Obtain radiation and contamination data and relay the information to the Radiation Survey Team Leader.  
Obtain samples of process fluids, etc., for analysis.
- e. Monitor time and exposure rates for team members so that the the radiation exposure limits established by the Emergency Director are not exceeded.
- f. Rope off and post those areas showing greater than 100 mR/hr radiation level, greater than  $3 \times 10^{-9}$  uCi/cc airborne contamination for an unidentified isotope, or greater than 10,000 dpm/100 cm<sup>2</sup> removable contamination.
- g. Report all difficulties encountered and all equipment damage to the Radiation Survey Team Leader.
- h. Return to the assembly area at the direction of the Radiation Survey Team Leader or when exposure limits are reached.

NOTE: THIS PROCEDURE SHALL BE REPEATED UNTIL ALL DESIGNATED AREAS WITHIN THE PLANT HAVE BEEN SURVEYED AND RECOVERY WORK CAN COMMENCE.

- h. In the event of a radiological liquid release:
  1. Have the Dose Assessment Group calculate the activity released and the resulting downstream concentrations using Appendix 3.
  2. Dispatch survey teams to the locations listed in Appendix 3.



3. Have the Dose Assessment Group calculate the estimated duration of radioactive concentrations at various public water system intakes, using Appendix 4.
  4. Report to the Site Emergency Coordinator and the Interim Emergency Director or Emergency Director and advise him of the off-site radiological consequences of the incident.
- i. In the event of a Plant Evacuation, or an Assembly for Possible Site Evacuation:
    1. Direct that surveys be performed in the affected areas.
  - j. In the event of a fire:
    1. Provide assistance as needed.
    2. Advise personnel concerning radiological hazards.
3. The general responsibilities of the various groups of the Radiation Survey Team (and of the Interim Radiation Survey Team until relieved by the Radiation Survey Team) are as follows:
    - a. The Plant Survey Group shall:
      - (1) Conduct on-site surveys in accordance with applicable HPO/CO procedures, as directed by the Interim Radiation Survey Team Leader or Radiation Survey Team Leader. The Group shall record the results of surveys on the On-Site Radiation Survey Data Sheet (Appendix EP-205-1).
      - (2) Advise the Interim Radiation Survey Team Leader or Radiation Survey Team Leader concerning the on-site radiological consequences of the incident.
      - (3) Establish controlled-access areas to limit the spread of radioactive contamination in accordance with HPO/CO procedures.
      - (4) Perform other duties as directed by the Interim Radiation Survey Team Leader or Radiation Survey Team Leader.
      - (5) Maintain a detailed log throughout the event.
    - b. The Field Survey Group shall:
      - (1) Conduct off-site surveys in accordance with applicable HPO/CO procedures, in areas determined by the Interim Radiation Survey Team Leader or Radiation Survey Team Leader. The Group shall record the results of surveys on the Off-Site Radiation Survey Data Sheet (Appendix 205-2).
      - (2) Advise the Interim Radiation Survey Team Leader or Radiation Survey Team Leader concerning the Off-Site radiological consequences of the incident.



- (3) Perform other duties as directed by the Interim Radiation Survey Team Leader or Radiation Survey Team Leader.
- (4) Maintain a detailed log throughout the event.

c. The Chemistry Section Group shall:

- (1) Coordinate with the Dose Assessment Group to obtain necessary radiological release data.
- (2) In the event of a gaseous radiation release change and analyze effluent filters and charcoal cartridges, obtain effluent gas samples, primary coolant samples, and containment samples.
- (3) In the event of an excessive radioactive liquid release, report to the discharge structure and obtain water samples.
- (4) Analyze data from samples, process instrument readings, and effluent instrument readings, and determine isotopic composition and release rates.
- (5) Perform other duties as directed by the Interim Radiation Survey Team Leader or Radiation Survey Team Leader.
- (6) Maintain a detailed log throughout the event.

d. The Dose Assessment Group shall:

- (1) Evaluate radiological and meteorological data and calculate dose rates. Typically such calculations will entail initial estimates directed by the Interim Emergency Director and calculated in accordance with EP-316, Sections I.1.A or III.1.A; followed by refined estimates directed by the Emergency Director and calculated in accordance with EP-316, Sections I.1.B and C or III.1.B and C.
- (2) Coordinate with the other Radiation Survey Team Groups in obtaining radiological release data. Should the effluent radiation monitors be off-scale or inoperable, containment\* monitor readings can be used to complete calculations required by EP-316\*. Grab samples from the main stack and roof vents can be used, as well as field samples or samples obtained with a helicopter.
- (3) Advise the Radiation Survey Team Leader of the radiological consequences of the incident.
- (4) Perform other duties as directed by the Interim Radiation Survey Team Leader or Radiation Survey Team Leader.
- (5) Maintain a detailed log throughout the event.

\* Not Applicable at this time.

e. The Vehicle Decontamination Group shall:

- (1) Survey the vehicles at the assembly area to determine the level of contamination (surveys should be performed initially with a GM survey meter).
- (2) Conduct swipe surveys to determine the level of loose surface contamination. The surveys should include the following parts of the vehicle:
  - a. Tires
  - b. Radiator
  - c. Air filter
  - d. Upholstery

If the contamination levels indicate that decontamination is possible with the resources at hand, the Team shall proceed as follows:

1. Decontaminate the vehicle using rags, paper towels, and masking tape.
2. If additional decontamination is necessary, wipe the affected areas with damp towels, rags, sponges, or equivalent. Plain water is recommended, but detergent or soap is to be used if available. Bag all decontamination materials.
3. Continue decontamination until removable contamination levels are:
  - 1) Less than 100 dpm per 100 cm above background
  - or 2) Less than 100 cpm above background per 1 ft masslin or equivalent
  - or 3) Until total contamination levels (fixed and removable) are less than 100 cpm above background on contact as determined by a GM radiation Survey Instrument.
4. Record the final contamination levels and the registration of the vehicle on Appendix EP-205-5. This information is to be delivered to the Interim Emergency Director and included in the final report covering the accident.

APPENDIX EP-205-1 ON-SITE SURVEY DATA SHEET, Page 1 of 3

File Number: \_\_\_\_\_

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

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

1. SURVEY AREA:

☒ Unit 2

☒ Unit 3

☒ Other (Specific area: \_\_\_\_\_)

2. REASON FOR SURVEY: \_\_\_\_\_

3. RADIATION SURVEY DATA Instrument: \_\_\_\_\_ Serial: \_\_\_\_\_

Item	Distance	Beta (mRAD/hr)	Gamma (mR/hr)	Neutron (mREM/hr)	Total (mREM/hr)
1-					
2-					
3-					
4-					
5-					
6-					
7-					
8-					
9-					
10-					

APPENDIX EP-205-1, Page 2 of 3

4. SURFACE CONTAMINATION SURVEY DATA

Instrument: \_\_\_\_\_ Serial: \_\_\_\_\_

Location	Beta, Gamma (dpm/100 cm <sup>2</sup> )	Alpha (dpm/100 cm <sup>2</sup> )
1-		
2-		
3-		
4-		
5-		
6-		
7-		
8-		
9-		
10-		

5. AIRBORNE CONTAMINATION SURVEY DATA

1- Sample Time - Start: \_\_\_\_\_ Flow Rate: \_\_\_\_\_ Cu. Ft./Min  
@ top: \_\_\_\_\_

2- Total Volume: \_\_\_\_\_ Cu. Ft.

3- Counter: \_\_\_\_\_ Eff: \_\_\_\_\_

4- Gross Counts: \_\_\_\_\_ counts

5- Counting Time: \_\_\_\_\_ min

6- Gross Counts/min: \_\_\_\_\_ cpm

7- Background: \_\_\_\_\_ cpm

8- Net cpm: \_\_\_\_\_ cpm

9- Specific Activity: \_\_\_\_\_  $\mu$ Ci/cc

$$\mu\text{Ci/cc} = \frac{\text{Net cpm}}{\text{Scatter Eff} \times \text{Filter Eff} \times \text{Area Fraction} \times \text{Volume} \times 6.28 \times 10^{10}}$$

APPENDIX EP-205-1 Page 3 of 3

10- Isotopes: \_\_\_\_\_

6. REMARKS/DIAGRAM:

Survey By: \_\_\_\_\_

Sample Counting By: \_\_\_\_\_

Reviewed By: \_\_\_\_\_

APPENDIX EP-205-2: OFF-SITE SURVEY DATA SHEET Page 1 of 3

File Number: \_\_\_\_\_

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

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

1. SURVEY AREA:

2. REASON FOR SURVEY: \_\_\_\_\_

3. RADIATION SURVEY DATA Instrument: \_\_\_\_\_ Serial: \_\_\_\_\_

Item	Distance	Beta (mRAD/hr)	Gamma (mR/hr)	Neutron (mREM/hr)	Total (mREM/hr)
1-					
2-					
3-					
4-					
5-					
6-					
7-					
8-					
9-					
10-					



APPENDIX EP-205-2: Page 2 of 3

4. SURFACE CONTAMINATION SURVEY DATA

Instrument: \_\_\_\_\_ Serial: \_\_\_\_\_

Location	Beta, Gamma (dpm/100 cm <sup>2</sup> )	Alpha (dpm/100 cm <sup>2</sup> )
1-		
2-		
3-		
4-		
5-		
6-		
7-		
8-		
9-		
10-		

5. AIRBORNE CONTAMINATION SURVEY DATA

1- Sample Time - Start: \_\_\_\_\_ Flow Rate: \_\_\_\_\_ Cu. Ft./Min  
Stop: \_\_\_\_\_

2- Total Volume: \_\_\_\_\_ Cu. Ft.

3- Counter: \_\_\_\_\_ Eff: \_\_\_\_\_

4- Gross Counts: \_\_\_\_\_ counts

5- Counting Time: \_\_\_\_\_ min

6- Gross Counts/min: \_\_\_\_\_ cpm

7- Background: \_\_\_\_\_ cpm

8- Net cpm: \_\_\_\_\_ cpm

9- Specific Activity: \_\_\_\_\_  $\mu\text{Ci/cc}$

$\mu\text{Ci/cc} = \frac{\text{Net cpm}}{(\text{Scaler Eff}) \times (\text{Filter Eff}) \times (\text{Area Fraction}) \times (\text{Volume}) \times (6.28 \times 10^{10})}$

10. Isotopes \_\_\_\_\_

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6. REMARKS/DIAGRAM:

Survey By: \_\_\_\_\_

Sample Counting By: \_\_\_\_\_

Reviewed By: \_\_\_\_\_

APPENDIX EP-205-3 CALCULATION OF ACTIVITY RELEASED AND RESULTING DOWNSTREAM CONCENTRATIONS

1. Record the Radwaste Effluent count rate  
(an estimated average). (1) \_\_\_\_\_ cps

NOTE: USE HIGHEST VALUE INDICATED ON RECORDER. IGNORE BACKGROUND UNDER EMERGENCY CONDITIONS.

2. Convert Item (1) to uCi/ml using the current calibration curve. (2) \_\_\_\_\_ uCi/ml
3. Record the Radwaste Effluent flow rate. (3) \_\_\_\_\_ gpm
4. Calculate the release rate as follows:  
uCi/sec = Item (2) x Item (3) x 63. (4) \_\_\_\_\_ uCi/sec
5. Calculate the total activity released as follows: Item (4) x  $10^{-6}$  x Duration of Release, (in seconds). (5) \_\_\_\_\_ Curies
6. Call the Conowingo shift superintendent and obtain the average river flow in CFS. (6) \_\_\_\_\_ cfs
7. Using Table 1, and the river flow from Conowingo, obtain the maximum concentration for a 1 Curie release and its time of occurrence. Multiply by the actual release in Item 5 to obtain expected maximum concentration for this incident. Itemize in the table below.

Location	Max. Concentration For a 1 Curie Release (uCi/cc)	Time of Max. Conc. (Hours After Release)	Max. Concentration For This Release (uCi/cc) Col. C x Item (5)
PBAPS Intake			
Chester Intake			
Baltimore Intake			
Conowingo Tailrace			

MAXIMUM CONCENTRATION RESULTING FROM AN ARBITRARY ONE CURIE  
SLUG RELEASE INTO THE PEACH BOTTOM DISCHARGE CANAL

<u>Peach Bottom Cooling Water Intake</u>			<u>Chester Water Intake</u>	
<u>Average River Flow (cfs)</u>	<u>Maximum Concentration (<math>\mu\text{Ci/cc}</math>)</u>	<u>Time of Maximum Concentration (Hours after Release)</u>	<u>Maximum Concentration (<math>\mu\text{Ci/cc}</math>)</u>	<u>Time of Maximum Concentration (Hours after Release)</u>
2,500	$2.5 \times 10^{-8}$	12	$1.4 \times 10^{-8}$	144
5,000	$2.0 \times 10^{-8}$	12	$6.6 \times 10^{-9}$	70
10,000	$1.0 \times 10^{-8}$	12	$3.1 \times 10^{-9}$	33
15,000	0	--	$2.0 \times 10^{-9}$	21
25,000	0	--	$1.0 \times 10^{-9}$	11
50,000	0	--	$3.0 \times 10^{-9}$	4
100,000	0	--	0	-
150,000	0	--	0	-

<u>Baltimore Water Intake</u>			<u>Conowingo Powerhouse Tailrace</u>	
<u>Average River Flow (cfs)</u>	<u>Maximum Concentration (<math>\mu\text{Ci/cc}</math>)</u>	<u>Time of Maximum Concentration (Hours after Release)</u>	<u>Maximum Concentration (<math>\mu\text{Ci/cc}</math>)</u>	<u>Time of Maximum Concentration (Hours after Release)</u>
2,500	$0.7 \times 10^{-9}$	208	$5.0 \times 10^{-10}$	193
5,000	$0.8 \times 10^{-9}$	110	$8.0 \times 10^{-10}$	100
10,000	$0.8 \times 10^{-9}$	61	$1.3 \times 10^{-9}$	53
15,000	$0.9 \times 10^{-9}$	45	$1.8 \times 10^{-9}$	38
25,000	$1.1 \times 10^{-9}$	31	$2.3 \times 10^{-9}$	25
50,000	$1.4 \times 10^{-9}$	22	$5.2 \times 10^{-9}$	16
100,000	$2.1 \times 10^{-9}$	17	$1.0 \times 10^{-8}$	12
150,000	$2.9 \times 10^{-9}$	15	$1.5 \times 10^{-8}$	10

(Based on a condenser circulating water flow of 3350 cfs (1,500,000 gpm) with all 6 circulating water pumps operating)

APPENDIX EP-205-4 ESTIMATE OF THE DURATION OF RADIOACTIVE CONCENTRATIONS

1. Using the total activity released (Item 5) of Appendix 3, calculate the multiplier as follows:

$$\frac{\text{Total Activity Released (Curies)}}{1 \text{ Curie}} = \text{Multiplier: } \underline{\hspace{2cm}}$$

2. Multiply the concentrations listed in Table 2 by the multiplier in Item 1. Record the corrected concentrations in the table below.
3. For the location of interest enter Table 2 with average river flow and copy the data from the four columns of Table 2 directly onto the four columns of the chart below.

		Corrected Concentrations:			
		_____ uCi/cc	_____ uCi/cc	_____ uCi/cc	_____ uCi/cc
Location	River Flow (cfs)				
PBAPS Intake:					
Chester Intake:					
Baltimore Intake:					
Conowingo Tailrace:					

EP-205 TABLE-2

TIME IN DAYS AFTER RELEASE TO REACH VARIOUS CONCENTRATIONS FOR  
AN ARBITRARY ONE CURIE SLUG RELEASE FROM THE PEACH BOTTOM DISCHARGE (a)

Average River Flow (cfs)	Peach Bottom Cooling Water Intake Concentration ( $\mu\text{Ci/cc}$ )				Chester Water Intake Concentration ( $\mu\text{Ci/cc}$ )			
	$2.8 \times 10^{-9}$	$1.4 \times 10^{-9}$	$2.8 \times 10^{-10}$	$2.8 \times 10^{-11}$	$2.8 \times 10^{-9}$	$1.4 \times 10^{-9}$	$2.8 \times 10^{-10}$	$2.8 \times 10^{-11}$
2,500	13	47	142	277	7	47	142	277
5,000	10	27	75	142	7	27	75	142
10,000	7	17	41	75	7	17	41	75
15,000	-	-	-	-	-	8	21	47
25,000	-	-	-	-	-	-	10	25
50,000	-	-	-	-	-	-	0.3	8
100,000	-	-	-	-	-	-	-	-
150,000	-	-	-	-	-	-	-	-

Average River Flow (cfs)	Baltimore Water Intake Concentration ( $\mu\text{Ci/cc}$ )				Conowingo Powerhouse Tailrace Concentration ( $\mu\text{Ci/cc}$ )			
	$2.8 \times 10^{-9}$	$1.4 \times 10^{-9}$	$2.8 \times 10^{-10}$	$2.8 \times 10^{-11}$	$2.8 \times 10^{-9}$	$1.4 \times 10^{-9}$	$2.8 \times 10^{-10}$	$2.8 \times 10^{-11}$
2,500	-	-	152	287	-	-	152	287
5,000	-	-	85	152	-	-	85	152
10,000	-	-	51	85	-	-	51	85
15,000	-	-	33	55	-	18	33	55
25,000	-	-	19	31	-	11	19	31
50,000	-	0.9	8	13	3	5.5	8	13
100,000	-	0.9	2.8	4.5	1.2	2.8	3	4.5
150,000	-	0.8	1.0	1.5	0.6	0.7	1.0	1.5

(a) If 1 curie were uniformly mixed with the entire static volume of Conowingo Pond at mean water elevation, a concentration of about  $2.8 \times 10^{-9}$   $\mu\text{Ci/cc}$  would result. No credit for radioactive decay has been included.



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[illegible]

\* or equivalent

\*\* Fixed Concentration only

*RS/L*  
*EFFECTIVE 4/1/81*

Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementating Procedure

EP-206

Fire and Damage Team

PURPOSE:

To delineate the responsibilities and actions of the Fire and Damage Team.

REFERENCES:

Emergency Plan, Sec. 5 (Organizational Control of Emergencies) and Sec. 6 (Emergency Measures)

APPENDICES:

None

ACTION LEVEL:

The Interim Emergency Director shall activate the Interim Fire and Damage Team. If necessary, the Interim Emergency Director or Emergency Director shall then contact the Fire and Damage Team Leader, or designated alternate (see EP-209 for telephone numbers), and direct him to activate the Fire and Damage Team.

PROCEDURE:

Immediate Actions:

1. The Shift Supervisor shall:
  - a. Assume the role of Interim Fire and Damage Team Leader.
  - b. Direct the designated Auxiliary operator to assume the role of interim team member.
  - c. If also acting as Interim Emergency Director, carry out actions in the applicable Emergency Procedures and Emergency Plan Implementing Procedures to terminate the incident. If not acting as Interim Emergency Director, carry out actions directed by the Interim Emergency Director, in accordance with applicable Emergency Procedures and Emergency Plan Implementing Procedures (refer to the Follow-up Actions for general responsibilities).
2. The Fire and Damage Team Leader (or designated alternate) when directed by the Interim Emergency Director, shall:
  - a. Notify an appropriate number of Team members as required (see EP-209 for telephone numbers).
  - b. Instruct each member concerning the following:
    - (1) Where to report
    - (2) When to report

- (3) Special hazards or precautions in proceeding to the reporting place.
- c. Proceed to the designated reporting place and assemble the team members.
- d. Assign personnel to functional groups as follows:
  - (1) Fire-Fighting Group - Assign designated plant staff to direct one or more Fire Fighting Teams as necessary. Assign at least three personnel to each team, as required.
  - (2) Emergency Repair Group - The Group shall be directed by the Maintenance Foreman (or alternately, the Maintenance Sub-Foreman). The Group shall be comprised of one or more Emergency Repair Teams as necessary. Assign at least three personnel to each team as required.
- e. Inform the Emergency Director or Interim Emergency Director that the team is assembling.
- f. Review the current status of the emergency and relieve the Interim Fire and Damage Team Leader. Review the Emergency Plan Implementing Procedures pertinent to the emergency and brief the team members concerning the emergency.
- g. Direct Personnel to assemble necessary fire-fighting and damage repair equipment and tools. Equipment is stored in the Red Emergency Fire Cabinet located outside of the Control Room.
- h. Direct the team members to relieve the interim members if necessary.

Follow-up Actions:

- 1. The Fire and Damage Team Leader reports directly to the Emergency Director or Interim Emergency Director during subsequent phases of the emergency response and recovery.
- 2. The general responsibilities of the Interim Fire and Damage Team Leader or Fire and Damage Team Leader during the emergency response and recovery are the following:
  - a. Direct the actions of the various Fire and Damage Team Groups.
  - b. In event of fire:
    - (1) Direct fire-fighting efforts and emergency repairs in accordance with E-8, Fire On Site.
    - (2) Coordinate the activities of off-site fire-fighting support groups.
    - (3) Be alert to radiological, electrical, and toxic hazards to personnel involved in fire fighting. Seek advice from the Radiation Survey Team Leader on radiological or toxic agent hazards.
    - (4) Ensure that personnel have adequate protection to fight the fire.
    - (5) Advise the Interim Emergency Director or Emergency Director concerning the need for deenergizing or removing equipment or systems from service.

- (6) Advise the Interim Emergency Director or Emergency Director of the significance of damage sustained and the impact on plant operations and safety.
- c. In the event of an acid, caustic or oil release, direct the Emergency Repair Group to:
  - (1) Put on appropriate protective clothing, including breathing apparatus.
  - (2) Attempt to isolate leak.

IF THE NASAL PASSAGES OR THROAT EXPERIENCE A TINGLING OR IRRITATING SENSATION, VACATE THE AREA IMMEDIATELY.

- d. In the event of a Chlorine leak, refer to EP-320.
- e. If a Local Evacuation or Pre-Site Evacuation Assembly is required, provide assistance as needed.
- f. In event of personnel injury, provide assistance as needed.
- g. Advise the Interim Emergency Director or Emergency Director concerning the need for additional fire and damage team personnel (additional personnel are notified at the direction of the Interim Emergency Director or Emergency Director utilizing EP-209).
- h. Advise the Interim Emergency Director or Emergency Director concerning radiation dose budgeting and management. For team members involved in emergency work and repairs, attempt to minimize radiation exposure and contamination as much as possible.

CAUTION: PLANNED RADIATION EXPOSURE IN EXCESS OF NORMAL STATION ADMINISTRATIVE GUIDES, HPO/CO-100, MUST BE SPECIFICALLY AUTHORIZED BY THE INTERIM EMERGENCY DIRECTOR OR EMERGENCY DIRECTOR.

- 3. The general responsibilities of the various groups of the Fire and Damage Team (and of the Interim Fire and Damage Team until relieved by the Fire and Damage Team) are as follows:
  - a. The Fire-Fighting Group shall:
    - (1) Control and extinguish fires in accordance with E-8 Fire on Site, as directed by the Interim Fire and Damage Team Leader or Fire and Damage Team Leader.
    - (2) Advise the Interim Fire and Damage Team Leader or Fire and Damage Team Leader concerning corrective actions necessary for fire-fighting, such as isolating plant systems, deenergizing equipment, or removing equipment from service.
    - (3) Advise the Interim Fire and Damage Team Leader or Fire and Damage Team Leader of the significance of fire damage and the impact on plant operations and safety.
    - (4) Perform other duties as directed by the Interim Fire and Damage Team Leader or Fire and Damage Team Leader.

b. The Emergency Repair Group shall:

- (1) In the event of toxic reagent releases, carry out EP-320 to contain the toxic reagents.
- (2) Effect emergency or temporary repairs to systems and equipment as directed by the Interim Fire and Damage Team Leader or Fire and Damage Team Leader.
- (3) Advise the Interim Fire and Damage Team Leader or Fire and Damage Team Leader concerning the need to isolate plant systems, deenergize equipment, or remove equipment from service so that repairs can be accomplished.
- (4) Advise the Interim Fire and Damage Team Leader or Fire and Damage Team Leader concerning the limitations and potential hazards associated with emergency or temporary repairs.
- (5) When working in radiation areas, observe the time and exposure rates so that personnel do not exceed the dose levels established by normal station administrative guidelines, or levels specially directed by the Interim Emergency Director or Emergency Director.
- (6) Perform other duties as directed by the Interim Fire and Damage Team Leader, or Fire and Damage Team Leader.

*JW Allumb*  
*off 4/11/81*

Philadelphia Electric Company

Peach Bottom Units 2 and 3

Emergency Plan Implementing Procedure

EP-207 Personnel Safety Team

PURPOSE:

To delineate the responsibilities and actions of the Personnel Safety Team.

REFERENCES:

1. Emergency Plan, Sec. 5 (Organizational Control of Emergencies) and Sec. 6 (Emergency Measures)
2. Health Physics/Chemistry Operating Procedures

APPENDICES:

EP-207-1 Evacuee Disposition Form

ACTION LEVEL:

The Interim Emergency Director shall direct the Interim Personnel Safety Team Leader to activate the Interim Personnel Safety Team. If necessary, the Interim Emergency Director or Emergency Director shall then contact the Personnel Safety Team Leader, or designated alternate (see EP-209 for telephone numbers), and direct him to activate the Personnel Safety Team.

PROCEDURE:

IMMEDIATE ACTIONS:

1. The Plant Operator designated shall:
  - a. Assume the role of Interim Personnel Safety Team Leader.
  - b. Direct the Assistant Plant Operator to assume the role of interim team member.
  - c. Carry out actions directed by the Interim Emergency Director, in accordance with applicable Emergency Plan Implementing Procedures (refer to the follow-up actions for general responsibilities).



2. The Personnel Safety Team Leader (or designated alternate), when directed by the Interim Emergency Director, shall:
  - a. Notify an appropriate number of team members (see EP-209 for telephone numbers).
  - b. Instruct each member concerning the following:
    - (1) Where to report.
    - (2) When to report.
    - (3) Special hazards or precautions in proceeding to the reporting place.
  - c. Proceed to the designated reporting place and assemble the team members.
  - d. Assign personnel to functional groups as follows:
    - (1) Personnel Accountability Group - The group shall consist of at least four members of the Test Engineer Group. One member shall be designated group leader.
    - (2) First Aid Group - The group shall consist of at least three designated safety team members. Assign Health Physics Technical Assistants to direct one or more first aid groups.
    - (3) Personnel Monitoring Group - Assign Health Physics Technical Assistants to direct one or more personnel monitoring groups. Assign at least two designated safety team members per team as required.
    - (4) Search and Rescue Group - Each group shall consist of at least three designated safety team members. Each group should have first aid and health physics qualifications. One member shall be designated as team leader.
  - e. Inform the Emergency Director or Interim Emergency Director that the team is assembling.
  - f. Review the current status of the emergency and relieve the Interim Personnel Safety Team Leader. Review the Emergency Plan Implementing Procedures pertinent to the emergency and brief the team members concerning the emergency.
  - g. Direct personnel to assemble necessary radiation monitoring and first aid equipment and materials. Equipment and materials are normally stored in the Emergency Control Center.
  - h. Direct the team members to relieve the interim team members if necessary.

FOLLOW-UP ACTIONS:

1. The Personnel Safety Team Leader reports directly to the Emergency Director or Interim Emergency Director during subsequent phases of the emergency response and recovery.
2. The general responsibilities of the Interim Personnel Safety Team Leader or Personnel Safety Team Leader during the emergency response and recovery are the following:
  - a. Direct the actions of the various Personnel Safety Team Groups.
  - b. In event of fire:
    - (1) Provide assistance as needed.
    - (2) Advise personnel concerning radiological and toxic hazards.
  - c. In event of radiological release in which radioiodines pose a radiological health hazard:
    - (1) Provide assistance as needed.
    - (2) Coordinates the distribution of KI tablets to specific emergency workers which require treatment as directed by the Emergency Director
  - d. In event of toxic agent release:
    - (1) Provide assistance as needed.
  - e. Assist the Radiation Survey Team in re-entry efforts as directed by the Emergency Director.
  - f. Advise the Interim Emergency Director or Emergency Director concerning the need for additional safety team personnel (additional personnel are notified at the direction of the Interim Emergency Director or Emergency Director utilizing EP-209).
  - g. In the event of a plant evacuation, or an assembly for possible site evacuation:
    - (1) Secure a frisker, an RO-2A, and an air sampler on the way to the assembly area.
    - (2) Have four operable radios brought from the control room to the assembly area.
    - (3) Obtain release and wind data from the control room.
    - (4) Survey the assembly area. If radiation levels are greater than 10 mR/hr or airborne contamination levels are greater than 4 times the maximum permissible concentration which is  $4 \times 10^{-10}$  uCi/cc for an unidentified isotope in a non-occupational environment, notify the Interim Emergency Director and recommend an alternate assembly area.

- (5) Inform the evacuees that they shall:
    - (a) Retain their personnel dosimetry.
    - (b) Wait at the assembly area to be frisked and cleared by the Personnel Safety Team.
    - (c) Surrender personnel dosimetry to Personnel Safety Team members when released if requested.
  - (6) Determine the extent of personnel contamination (external and internal) in accordance with HPO/CO-6. Use portable instruments for frisking evacuees and interview the evacuees. Document applicable data on the "Disposition of Evacuee" record form (see Appendix).
  - (7) Account for personnel as follows:
    - (a) Ask evacuees if they know of anyone working with them or near them who did not leave the hazard area.
    - (b) Direct the guard Sergeant to determine from the security printout sheet any persons remaining in the plant and to transmit this information to the assembly area.
    - (c) Contact various supervisors (for example, Maintenance Foreman, Testing Section Supervisor, Results Engineer) and request them to report any personnel who are unaccounted for.
    - (d) Compare the lists and reports with personnel known to be accounted for and report missing persons to the Interim Emergency Director.
  - (8) Report to the Interim Emergency Director if there are personnel unaccounted for, or personnel suffering from injuries, radioactive contamination exposure, or excessive radiation exposure.
  - (9) Collect evacuees site estimate TLDs for processing if necessary.
  - (10) Initiate decontamination for personnel as necessary.
  - (11) Forward all "Disposition of Evacuee" record forms to the Interim Emergency Director or Emergency Director.
- h. In the event of a site evacuation:
- (1) Have the radiation survey suitcases brought to the assembly area. These are stored in the ECC.
  - (2) Have four operable radios brought from the control room to the assembly area.
  - (3) Obtain release and wind data from the control room.

- (4) Survey the assembly area. If radiation levels are greater than 10 mR/hr or airborne contamination levels are greater than 4 times the maximum permissible concentration which is  $4 \times 10^{-10}$  uCi/cc for an unidentified isotope in a non-occupational environment, notify the Interim Emergency Director and recommend an alternate assembly area.
- (5) Log data on appropriate record forms and assembly area log book.
- (6) Inform the evacuees that they shall:
  - (a) Retain their personnel dosimetry.
  - (b) Wait at the assembly area to be frisked and cleared by the Personnel Safety Team.
  - (c) Surrender personnel dosimetry to Personnel Safety Team members when released if requested.
- (7) Determine the extent of personnel contamination (external and internal) in accordance with HPO/CO-6. Use portable instruments for frisking evacuees and interview the evacuees. Document applicable data on the "Disposition of Evacuee" record form (see Appendix).
- (8) Account for personnel as follows:
  - (a) Ask evacuees if they know of anyone working with them or near them who did not leave the hazard area.
  - (b) Direct the guard Sergeant to determine from the security printout sheet any persons remaining in the plant and to transmit this information to the assembly area.
  - (c) Contact various supervisors (for example, Maintenance Foreman, Testing Section Supervisor, Results Engineer) and request them to report any personnel who are unaccounted for.
  - (d) Compare the lists and reports with personnel known to be accounted for and report missing persons to the Interim Emergency Director.
- (9) Report to the Interim Emergency Director if there are personnel unaccounted for, or personnel suffering from injuries, radioactive contamination exposure, or excessive radiation exposure.
- (10) Collect evacuees site estimate TLDs for processing if necessary.
- (11) Initiate decontamination for personnel as necessary.

- (12) Forward all "Disposition of Evacuee" record forms to the Interim Emergency Director or Emergency Director.

1. In the event that personnel cannot be accounted for:

- (1) The Personnel Safety Team Leader shall inform the Interim Emergency Director that persons are unaccounted for and are believed to be in the accident area, or that persons are known to be trapped or injured in the accident area.
- (2) Attempts shall be made to determine the location of missing personnel by interviewing evacuees by requesting the guard sergeant to review the plant access log and by announcements on the Public Address system. If the attempts fail, the Interim Emergency Director shall authorize the Personnel Safety Team Leader to form a Search and Rescue Team consisting of three or more persons. At least one of those persons should be familiar with the use of radiation survey instruments and with radiation exposure limits, and at least one should be familiar with first aid techniques. The required personnel shall be drawn from the assembly area or the Emergency Control Center, and the Personnel Safety Team Leader shall designate one person as Team Leader.
- (3) The Search and Rescue Team members shall ready the equipment listed below (as required).
  - (a) Anti-contamination clothing
  - (b) Respirators or air packs
  - (c) Flashlights or spotlights
  - (d) Blankets and/or stretchers
  - (e) High range gamma survey instruments
  - (f) High range self-reading dosimeters \*
  - (g) Portable radio (walkie-talkie) - to be obtained from the personnel safety team leader.
  - (h) Tools for moving heavy equipment or debris
- (4) When preparations are completed, the Search and Rescue Team shall search for the missing person(s).

\* Not currently available.

- (5) The Search and Rescue Team members shall keep aware of their exposure rates and exposure times so as not to exceed the exposure limits specified by the Emergency Director.

NOTE: PLANNED RADIATION EXPOSURES IN EXCESS OF NORMAL STATION ADMINISTRATIVE GUIDE LIMITS, HPO/CO-100, MUST BE SPECIFICALLY AUTHORIZED BY THE INTERIM EMERGENCY DIRECTOR OR EMERGENCY DIRECTOR. FOR LIFE-SAVING MEASURES, A MAXIMUM EXPOSURE OF 75 REM IS SUGGESTED. FOR SEARCH AND RESCUE, THE RWP PROCEDURE IS SUSPENDED.

- (6) The Search and Rescue Team Leader shall:

- (a) Determine if the rescued persons are injured, and administer first aid.

LIFE SAVING MEASURES SHALL OVERRIDE ANY CONSIDERATION FOR DECONTAMINATION EFFORTS.

NOTE: ATTEMPT TO MINIMIZE RADIATION EXPOSURE AND CONTAMINATION OF TEAM MEMBERS AS MUCH AS POSSIBLE.

- (b) As soon as possible, move the persons out of any radiation or contaminated areas.

CAUTION: IF A RESCUED PERSON HAS A NECK OR BACK INJURY, THE SEARCH AND RESCUE TEAM LEADER SHALL EVALUATE THE NEED FOR IMMEDIATE EVACUATION OF THE VICTIM FROM THE ACCIDENT AREA, BASED ON RADIATION EXPOSURE RATES. IF EVACUATION IS DICTATED, THE INJURED PERSON SHALL BE CAREFULLY TRANSPORTED IN ACCORDANCE WITH EP-311.

IF RADIATION EXPOSURE RATES ARE LOW ENOUGH, AND A RESCUED PERSON CANNOT BE MOVED, INITIATE DECONTAMINATION PROCEDURES IN PLACE. PERSONNEL DECONTAMINATION EFFORTS SHALL NOT CAUSE AGGRAVATION OF ANY INJURIES.

- (c) If the rescued persons are injured and/or contaminated and can be moved, transport them to the Medical Room or Decontamination Room. Continue to administer first aid treatment. Inform the personnel safety team leader if additional first aid personnel are required.

- j. In the event of injured personnel, radioactive contamination exposure, or excessive radiation exposure:

- (1) The Personnel Safety Team Leader shall direct the following actions:

- (a) Administer first aid. During day shift (Monday through Friday) the personnel in the First Aid Trailer can assist in administering first aid.

NOTE: PROVIDING LIFE-SAVING FIRST AID TREATMENT HAS PRIORITY OVER DECONTAMINATION OR TREATMENT FOR RADIATION EXPOSURE.



- (b) If the victims are injured and/or contaminated and can be moved, transport them to the Medical Room or decontamination room as applicable. Continue to administer first aid treatment.
- (c) Attempt to determine the nature and degree of radiation exposure by:
  - (1) Discussion with the patients, if possible.
  - (2) Surveying the work area.

NOTE: MINIMIZE RADIATION EXPOSURE AND CONTAMINATION OF TEAM MEMBERS.

- (3) Recovering the site estimate TLD and immediately having the exposure evaluated, and shipping the patients' vendor personnel dosimetry for emergency processing.
- (d) Determine the level of external contamination using a GM detector.
- (e) Advise the Interim Emergency Director of the nature of the injuries, if the victims are contaminated or have suffered excessive radiation exposure, and if off-site medical support is necessary.
- (2) Carry out the steps from the applicable categories below:

PART I	No Radiation Involved	-	Serious Injury
PART II:	A. Excessive Radiation Exposure	-	No Serious Injury
	B. Excessive Radiation Exposure	-	Serious Injury
	C. Contamination Exposure	-	No Serious Injury
	D. Contamination Exposure	-	Serious Injury
	E. Excessive Radiation and Contamination Exposure	-	No Serious Injury
	F. Excessive Radiation and Contamination Exposure	-	Serious Injury

PART I: No Radiation Involved - Serious Injury

Criteria: Any serious injury warranting the attention of off-site medical support.

FOLLOW-UP ACTIONS:

- a. If the injured person is to be treated off site, prepare the injured person for transport as follows:
  - (1) Cover the stretcher and the injured persons in order to contain radioactive contamination. Wrap the cover loosely around the injured persons to avoid overheating and excessive perspiration.
  - (2) Cover the flooring of the transport vehicle as applicable.
  - (3) Verify proper placement of radiation shielding for personnel in the transport vehicle. (as required)

CAUTION: IF THE INJURY IS CONSIDERED SO SERIOUS THAT TIME IS CRITICAL, NO SPECIAL EFFORTS SHOULD BE SPENT IN CONTAINING THE CONTAMINATION. IF THE AMBULANCE IS DELAYED, STATION VEHICLES MAY BE USED TO TRANSPORT THE INJURED PERSON.

- b. Provide a health physics representative to accompany the injured personnel as directed by the Interim Emergency Director, and direct him to recover all radioactive waste from the Treatment Center.
- c. Transfer the injured persons to the transport vehicle.
- d. Direct the Janitorial Force to inventory and restock emergency medical supplies in any first aid boxes used.
- e. Direct the Engineer-Health Physics to notify Radiation Management Corporation to inventory and restock expended Medical Supplies from the Medical Room and Decontamination Room if these facilities were used.

PART II: Radiation-Related Personnel Accidents

A. Excessive Radiation Exposure - No serious Injury

Criteria: Acute whole body exposure greater than 3 REM.

FOLLOW-UP ACTIONS:

1. The Personnel Safety Team Leader shall:
  - a. Direct that the patients be observed for symptoms such as nausea or vomiting and be detained pending the results of consultation between the Medical Director and Radiation Management Corporation.
  - b. Direct that the patients' vendor personnel dosimetry be shipped for emergency processing, and immediately read the site estimate TLD.

THERE IS NO NEED FOR FIRST AID OR FOR URGENT TRANSFER OF THE PATIENTS TO A HOSPITAL BECAUSE OF THE RADIATION EXPOSURE. WHEN DETERMINED BY MEDICAL CONSULTATION THAT HOSPITALIZATION IS NECESSARY THE PATIENTS WILL BE TRANSFERRED TO HARFORD MEMORIAL HOSPITAL BY ROUTINE HOSPITAL PROCEDURES, OR TO THE RMC FACILITIES, AT THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA IN PHILADELPHIA.

2. Subsequent treatment for excessive radiation exposure will follow consultations between the Company Medical Director and Radiation Management Corporation.

PART II: Radiation-Related Personnel Accidents

B. Excessive Radiation Exposure - Serious Injury

Criteria: Any person suffers both of the following:

1. Any injury of sufficient magnitude to warrant the attention of off-site medical support.
2. An acute whole body exposure of greater than 3 REM.

FOLLOW-UP ACTIONS:

NCTE: CONCERN FOR THE INJURY OVERRIDES IMMEDIATE CONCERN FOR RADIATION EXPOSURE.

- a. If the injured person is to be treated off site, prepare the injured person for transport as follows:
  - (1) Cover the stretcher and the injured persons in order to contain radioactive contamination. Wrap the cover loosely around the injured persons to avoid overheating and excessive perspiration.
  - (2) Cover the flooring of the transport vehicle as applicable.
  - (3) Verify proper placement of radiation shielding for personnel in the transport vehicle. (As required)

CAUTION: IF THE INJURY IS CONSIDERED SO SERIOUS THAT TIME IS CRITICAL, NO SPECIAL EFFORTS SHOULD BE SPENT IN CONTAINING THE CONTAMINATION. IF THE AMBULANCE IS DELAYED, STATION VEHICLES MAY BE USED TO TRANSPORT THE INJURED PERSON.

- b. Provide a health physics representative to accompany the injured personnel as directed by the Interim Emergency Director, and direct him to recover all radioactive waste from the Treatment Center.
- c. Transfer the injured persons to the transport vehicle.
- d. Direct the Janitorial Force to inventory and restock emergency medical supplies in any first aid boxes used.
- e. Direct the Engineer-Health Physics to notify Radiation Management Corporation to inventory and restock expended Medical Supplies from the Medical Room and Decontamination Room if these facilities were used.
- f. Subsequent treatment for excessive radiation exposure will follow consultation between the Company Medical Director and Radiation Management Corporation.

PART II: Radiation-Related Personnel Accidents

C. Contamination Exposure - No Serious Injury

Criteria: Any person suffers one of the following:

1. A body contact reading of 1 mR/hr using a GM detector.
2. Suspected or actual inhalation or ingestion of radioactive material.

CAUTION: GROSS EXTERNAL CONTAMINATION USUALLY RESULTS IN SOME INTERNAL CONTAMINATION.

FOLLOW-UP ACTIONS:

1. The Personnel Safety Team Leader shall:
  - a. Initiate personnel decontamination procedures in accordance with HPO/CO-7 to reduce the radiation dose and minimize further internal contamination.

CAUTION: PERSONNEL DECONTAMINATION EFFORTS SHALL NOT CAUSE AGGRAVATION OF ANY INJURIES.

- b. The Personnel Monitoring Team with assistance from the Radiation Management Corporation, perform analyses to determine the isotopic composition and initiate a bioassay program to help determine the level of internal contamination and the projected dose.
2. Subsequent treatment to reduce internal contamination will follow consultation between the Company Medical Director and Radiation Management Corporation.

PART II: Radiation-Related Personnel Accidents

D. Radioactive Contamination Exposure - Serious Injury

Criteria: Any person suffers both of the following:

1. A body contact reading of 1 mR/hr using a GM detector or suspected or actual inhalation or ingestion of measurable quantities of radioactive material.
2. Any injury warranting the attention of off-site medical support.

CAUTION: GROSS EXTERNAL CONTAMINATION USUALLY RESULTS IN SOME INTERNAL CONTAMINATION.

FOLLOW-UP ACTIONS:

NOTE: CONCERN FOR THE INJURY OVERRIDES IMMEDIATE CONCERN FOR RADIOACTIVE CONTAMINATION.

- a. Continue administering first aid and start decontamination procedures to reduce the radiation dose and minimize further internal contamination.

NOTE: PROCEDURE HPO/CO-7 DESCRIBES METHODS FOR PERSONNEL DECONTAMINATION. WHEN A SERIOUS INJURY OCCURS WITH PERSONNEL CONTAMINATION, SOME DEVIATIONS FROM NORMAL DECONTAMINATION PROCEDURES ARE IN ORDER:

- (1) Decontamination efforts are not to interfere with first aid treatment.
- (2) No decontamination steps should be taken which would aggravate the injury.
- (3) Cut clothing if necessary to reach contaminated areas.
- (4) Use decon prep kits provided. Phisoderm or EDTA may also be used.
- b. Assist the local physician.
- c. Prepare the injured persons for transport in the transport vehicle as follows:
  - (1) Cover the stretcher and the injured persons in order to contain radioactive contamination. Wrap the cover loosely around the injured persons to avoid overheating and excessive perspiration.
  - (2) Cover the flooring of the transport vehicle as applicable.
  - (3) Verify proper placement of radiation shielding for personnel in the transport vehicle. (as required)

CAUTION: IF THE INJURY IS CONSIDERED SO SERIOUS THAT TIME IS CRITICAL, NO SPECIAL EFFORTS SHOULD BE SPENT IN CONTAINING THE CONTAMINATION. IF THE AMBULANCE IS DELAYED, STATION VEHICLES MAY BE USED TO TRANSPORT THE INJURED PERSON.

- d. Provide a health physics representative to accompany the ambulance or helicopter as directed by the Interim Emergency Director, and direct him to recover all radioactive waste from the Treatment Center.
- e. Transfer the injured persons to the transport vehicle.
- f. The Personnel Monitoring Team, assisted by Radiation Management Corporation shall perform analyses to determine the isotopic composition and initiate a bioassay program to help determine the level of internal contamination and the projected dose.
- g. Subsequent treatment for the internal radioactive contamination will follow consultation between the Company Medical Director and Radiation Management Corporation.

NOTE: ANY RADIOACTIVE MATERIAL (SHRAPNEL), EXCISED TISSUE, SPONGES, DRESSINGS, ETC. REMOVED FROM THE INJURED PERSON SHALL BE RECOVERED AND USED FOR ISOTOPIC IDENTIFICATION, AND IF PRACTICAL, USE IN QUANTIFYING THE TOTAL EXPOSURE RECEIVED.

PART II: Radiation-Related Personnel Accidents

E. Excessive Radiation and Contamination Exposure - No Serious Injury

Refer to PART II C.

F. Excessive Radiation and Contamination Exposure - Serious Injury

Refer to PART II D.







*JPW*  
*EH 4/1/81*

PHILADELPHIA ELECTRIC COMPANY

Peach Bottom Units 2 and 3

Emergency Plan Implementing Procedure

EP-208 SECURITY TEAM

PURPOSE:

To delineate the responsibilities and actions of the Security Team.

REFERENCES:

1. Emergency Plan, Sec. 5 (Organizational Control of Emergencies) and Sec. 6 (Emergency Measures)
2. Security Plan and Procedures

APPENDICES:

None

ACTION LEVEL:

The Interim Emergency Director or Emergency Director shall contact the Guard Sergeant, or designated alternate, and direct him to activate the Security Team.

PROCEDURE:

Immediate Actions:

1. The Guard Sergeant shall:
  - a. Assume the role of Interim Security Team Leader.
  - b. Direct other designated Security Force personnel to assume roles as interim team members.
  - c. Carry out actions directed by the Interim Emergency Director or Emergency Director, in accordance with applicable Emergency Plan Implementing Procedures and Security Procedures (refer to the Follow-up Actions for general responsibilities).

PROCEDURE: (continued)

2. The Security Team Leader (or designated alternate), shall:
  - a. Notify the team members (see EP-209 for telephone numbers).
  - b. Instruct each member concerning the following:
    - (1) Where to report (usually to stations at designated access roads or the Emergency Support Center (ESC), established in temporary facilities near the South Utility Building; alternate ESC on-site location is near the North Sub-Station).
    - (2) When to report.
    - (3) Special hazards or precautions in proceeding to the reporting place.
  - c. Proceed to the designated reporting location and assemble the team members.
  - d. Assign personnel to functional groups as follows:
    - (1) Access Control Group - Assign designated Sergeants to direct one or more Access Control Teams, as necessary. Assign personnel to each team as required.
    - (2) Personnel Accountability Group - Assign a designated Sergeant to direct the Personnel Accountability Group, as necessary. Assign personnel to the group as required.
    - (3) Plant Security Group - Assign designated Sergeants to each direct one or more Plant Security Teams, as necessary. Assign personnel to each team as required.
  - e. Establish a Security post at the Emergency Support Center (if activated), as specified in EP-204.
  - f. Inform the Emergency Director or Interim Emergency Director that the team is assembling.
  - g. Review the current status of the emergency and relieve the Interim Security Team Leader. Review the Emergency Plan Implementing Procedures pertinent to the emergency and brief the team members concerning the emergency.
  - h. Report to the Interim Emergency Director or Emergency Director when preparations are completed and await further instructions.

FOLLOW-UP ACTIONS:

1. The Security Team Leader reports directly to the Emergency Director or Interim Emergency Director during later phases of the emergency response and recovery.

PROCEDURE: (continued)

2. The general responsibilities of the Interim Security Team Leader or Security Team Leader during the emergency response and recovery are the following:
  - a. Direct the actions of the various Security Team Groups.
  - b. Secure access roads and implement emergency security procedures, as directed by the Interim Emergency Director or Emergency Director.
  - c. Advise the Interim Emergency Director or Emergency Director concerning the need for off-site security team personnel (off-site personnel are notified at the direction of the Interim Emergency Director or Emergency Director utilizing EP-209).
  - d. Coordinate the actions of off-site security team personnel if their assistance is required on-site.
  - e. Maintain a detailed log throughout the incident.
3. The general responsibilities of the various groups of the Security Team (and of the Interim Security Team until relieved by the Security Team) are as follows:
  - a. The Access Control Group shall:
    - (1) Secure access roads and implement emergency security procedures, as directed by the Interim Security Team Leader or Security Team Leader.
    - (2) For a Site Area Emergency or General Emergency, direct all authorized personnel who are called to the plant site to check-in at the Emergency Support Center.
    - (3) Perform other duties as directed by the Interim Security Team Leader or Security Team Leader.
  - b. The Personnel Accountability Group shall:
    - (1) In the event of a Plant Evacuation or an assembly for possible Site Evacuation assist in personnel accounting by:
      - (a) Determining from the security computer output which persons are on-site.
      - (b) Transmitting this information to the Personnel Safety Team at the prescribed assembly area.
    - (2) In the event of a Site Evacuation:
      - (a) Station guards at the exit area of the Security Building to perform the applicable functions in PP-11.
      - (b) Transmitting a list of personnel who are still on site to the Personnel Safety Team at the assembly area when it appears that all of the evacuees have evacuated.

PROCEDURE: (continued)

- (3) Perform other duties as directed by the Interim Security Team Leader or Security Team Leader.
- c. The Plant Security Group shall:
  - (1) Maintain plant security, in accordance with emergency security procedures, and as directed by the Interim Security Team Leader or Security Team Leader.
  - (2) In event of a Plant Evacuation or Assembly for Possible Site Evacuation or Site Evacuation, assist in personnel accounting.

*M. M. M.*  
*EH 4/1/81*

PHILADELPHIA ELECTRIC COMPANY

Peach Bottom Units 2 and 3

EP-209 TELEPHONE LIST FOR EMERGENCY USE

PURPOSE:

To delineate members of the Emergency Teams and to supply pertinent company and non-company emergency support personnel telephone numbers.

PROCEDURE:

The names and telephone numbers listed in the appendices of this procedure are for use in an emergency. Each appendix represents a specific group of personnel. In some cases, a name will appear in more than one appendix. The appendices are:

<u>Appendix No.</u>	<u>Description</u>
A	Immediate Notification Call Lists
B	P.E. Company Officials
C	Peach Bottom Station Supervision
D1	On Site Emergency Team Leaders
D2	Radiation Survey Team
D3	Fire and Damage Team
D4	Personnel Safety Team
D5	Security Team
D6	Re-Entry Team
D7	Technical Support Center Team
E	Off Site Emergency Team Leaders
F	United States Governmental Agencies
G	Emergency Management Agencies
H	P.E. Company Consultants and Contractors
I1	Field Support Personnel
I2	Rad Services Call List
J	Nearby Public & Industrial Users of Downstream Waters
K	Miscellaneous
L	Local PECO Phones
M	Emergency Administrative and Logistics Personnel
N	Medical Support Groups

INTERIM FIRE AND DAMAGE TEAM LEADERS

Shift Supervisors: Refer to Alternate Emergency Director

PROCEDURE: (continued)

FIRE AND DAMAGE TEAM

The Fire and Damage Team consists of the interim team members, (the on-shift P.O.'s, APO's, and A.O.'s). The team is augmented by other personnel who are on site or called in. The augmenting forces are trained in fire fighting but not necessarily in the emergency plan. These augmenting forces operate under the direction of the team members and leaders who have had emergency plan training. The augmenting forces are:

1. Staff engineers and test engineers
2. Maintenance personnel
3. Construction personnel
4. Janitors and Storeroom personnel
5. Delta-Cardiff Volunteer Fire Department

Most personnel in Groups 1 through 4 receive PECO fire training; Group 5 personnel are trained in fire fighting by the Delta-Cardiff Volunteer Fire Company.

PERSONNEL SAFETY TEAM

The personnel safety team is made up of on-shift P.O.'s, A.P.O.'s, and A.O.'s who are trained in the Emergency Plan Procedures. The team is augmented by other site personnel such as plant staff engineers, test engineers, health physics technicians, and others who are not necessarily trained in the Emergency Plan but will assist under the direction of the team leaders and members.

SEARCH AND RESCUE TEAM

The search and rescue team is organized by the Personnel Safety Team Leader at the direction of the Emergency Director. It will consist of personnel who are available which are knowledgeable of the plant layout and recognize conditions which could result from the existing emergency condition. The purpose of this team is to search plant areas quickly to locate and rescue victims. Personnel who know plant layout and are available make up this team are from the following groups:

Shift Operators	Construction
Test Engineers	H.P. Technicians
Staff Engineers	Susquehanna Test Branch
Maintenance	Field Engineers

INTERIM SECURITY TEAM LEADER AND TEAM MEMBERS

The security team is made up of the Burns Guard Force. The sergeant of the guard is the Interim Team Leader. The guard force is trained in security and necessary Emergency Plan Procedures by the Burns Detective Agency.



PROCEDURE: (continued)

RE-ENTRY TEAM

The Re-Entry Team will be made up of available personnel. It is anticipated that personnel with some radiological controls experience or training would be used. Personnel from the following groups are available:

Shift Personnel	HP Technicians
Staff Engineer	Some Maintenance Personnel
Test Engineers	Some Construction Personnel

Specialized training is not required for personnel other than the team leaders.

TECHNICAL SUPPORT CENTER TEAM

The Technical Support Center Team is organized by the Emergency Director. It consists of various staff, administrative, and consulting personnel who can jointly provide recommendations to the Emergency Director intended to correct and improve emergency conditions.

REVIEW REQUIREMENTS

1. Changes to this procedure proper shall be in accordance with A-4.
2. Additions, deletions, or changes of names or responsibilities on the appendices shall be PORC approved in accordance with A-4.
3. Corrections to addresses or phone numbers on the appendices may be handled by the secretarial staff without PORC review and approval; however, these appendices must be signed by the superintendent or his alternate.

*12/1/81*

PHILADELPHIA ELECTRIC COMPANY

Peach Bottom Units 2 and 3

EP-209 TELEPHONE LIST FOR EMERGENCY USE

PURPOSE:

To delineate members of the Emergency Teams and to supply pertinent company and non-company emergency support personnel telephone numbers.

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The names and telephone numbers listed in the appendices of this procedure are for use in an emergency. Each appendix represents a specific group of personnel. In some cases, a name will appear in more than one appendix. The appendices are:

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K	Miscellaneous
L	Local PECO Phones
M	Emergency Administrative and Logistics Personnel
N	Medical Support Groups
O	Corporate Support Personnel

INTERIM FIRE AND DAMAGE TEAM LEADERS

Shift Supervisors: Refer to Alternate Emergency Director

PROCEDURE: (continued)

FIRE AND DAMAGE TEAM

The Fire and Damage Team consists of the interim team members, (the on-shift P.O.'s, APO's, and A.O.'s). The team is augmented by other personnel who are on site or called in. The augmenting forces are trained in fire fighting but not necessarily in the emergency plan. These augmenting forces operate under the direction of the team members and leaders who have had emergency plan training. The augmenting forces are:

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The personnel safety team is made up of on-shift P.O.'s, A.P.O.'s, and A.O.'s who are trained in the Emergency Plan Procedures. The team is augmented by other site personnel such as plant staff engineers, test engineers, health physics technicians, and others who are not necessarily trained in the Emergency Plan but will assist under the direction of the team leaders and members.

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The search and rescue team is organized by the Personnel Safety Team Leader at the direction of the Emergency Director. It will consist of personnel who are available which are knowledgeable of the plant layout and recognize conditions which could result from the existing emergency condition. The purpose of this team is to search plant areas quickly to locate and rescue victims. Personnel who know plant layout and are available make up this team are from the following groups:

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The security team is made up of the Burns Guard Force. The sergeant of the guard is the Interim Team Leader. The guard force is trained in security and necessary Emergency Plan Procedures by the Burns Detective Agency.

PROCEDURE: (continued)

RE-ENTRY TEAM

The Re-Entry Team will be made up of available personnel. It is anticipated that personnel with some radiological controls experience or training would be used. Personnel from the following groups are available:

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Test Engineers	Some Construction Personnel

Specialized training is not required for personnel other than the team leaders.

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1. Changes to this procedure proper shall be in accordance with A-4.
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*JKL*  
3/27/81

EP-209 APPENDIX A - IMMEDIATE NOTIFICATION CALL LIST

Unusual Event Immediate Notification Call List

		<u>Centrex</u>
a. Emergency Director		
W. T. Ullrich	757-1344	244
Alternate: R. S. Fleischmann	456-7411	245
b. Load Dispatcher	215-841-5141	5141
c. Pennsylvania Emergency Management Agency	783-8150	
d. York County Emergency Management Agency	843-5111 or 843-4641 After Business Hours: 767-5228	
e. NRC, Region 1, Office of Inspection and Enforcement	215-337-5000	

Alert Condition Immediate Notification Call List

		<u>Centrex</u>
a. Emergency Director		
W. T. Ullrich	757-1344	244
Alternate: R. S. Fleischmann	456-7411	245
b. Load Dispatcher	215-841-5141	5141
c. Pennsylvania Emergency Management Agency	783-8150	
d. Maryland Civil Defense Agency	301-486-4422	
e. County Emergency Management Agencies		
(1) York County	843-5111 or 843-4641 After Business Hours: 767-5228	
(2) Lancaster County	299-8373 or 299-8374 or 393-4532	
(3) Chester County	215-431-6160	
(4) Harford County	301-838-3336	
(5) Cecil County	301-398-3815	
f. NRC, Region 1, Office of Inspection and Enforcement	215-337-5000	
g. Emergency Control Officer		
S. L. Daltroff	215-566-6493	5001
Alternate: J. W. Gallagher	215-644-0155	5003



Site Area Emergency Immediate Notification Call List

		<u>Centrex</u>
a. Emergency Director		
W. T. Ullrich	757-1344	244
Alternate: R. S. Fleischmann	456-7411	245
b. Load Dispatcher	215-841-5141	5141
c. Pennsylvania Emergency Management Agency	783-8150	
d. Maryland Civil Defense Agency	301-486-4422	
e. County Emergency Management Agencies		
(1) York County	843-5111 or 843-4641 After Business Hours: 767-5228	
(2) Lancaster County	299-8373 or 299-8374 or 393-4532	
(3) Chester County	215-431-6160	
(4) Harford County	301-838-3336	
(5) Cecil County	301-398-3815	
f. NRC, Region 1, Office of Inspection and Enforcement	215-337-5000	
g. Department of Energy Rep	516-345-2200	
h. Site Emergency Coordinator		
M. J. Cooney	215-687-1270	5020
Alternate: G. M. Leitch	215-876-3547	81-28-2000
j. Emergency Control Officer		
S. L. Daltroff	215-566-6493	5001
Alternate: J. W. Gallagher	215-644-0155	5003

General Emergency Immediate Notification Call List

		<u>Centrex</u>
a. Emergency Director		
W. T. Ullrich	757-1344	244
Alternate: R. S. Fleischmann	456-7411	245
b. Site Emergency Coordinator		
M. J. Cooney	215-687-1270	5020
Alternate: G. M. Leitch	215-876-3547	81-28-2000
c. Emergency Control Officer		
S. L. Daltroff	215-566-6493	5001
Alternate: J. W. Gallagher	215-644-0155	5003
d. Load Dispatcher	215-841-5141	5141
e. Pennsylvania Emergency Management Agency	783-8150	
f. Maryland Civil Defense Agency	301-486-4422	
g. County Emergency Management Agencies		
(1) York County	843-5111 or 843-4641 After Business Hours: 767-5228	
(2) Lancaster County	299-8373 or 299-8374 or 393-4532	
(3) Chester County	215-431-6160	
(4) Harford County	301-838-3336	
(5) Cecil County	301-398-3815	
h. NRC Region I Office	215-337-5000	
i. Department of Energy RAP	516-345-2200	
j. Delaware Civil Defense Agency	302-736-4489 or 302-736-4487	
k. New Jersey Civil Defense Agency	609-882-4200	

*W. K. Kline*  
*3/23/81*

EP-209 APPENDIX B - PHILADELPHIA ELECTRIC COMPANY OFFICIALS

<u>Medical Director</u>	<u>Home Phone</u>	<u>Centrex</u>
W. F. Husion, MD	1-215:544-1311	81-4370

Vice President, Elect. Production

S. L. Daltroff Emergency Control Officer 1881 Kimberwick Road Media, PA 19063	1-215:566-6493	81-5001
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Manager, Electric Production

J. W. Gallagher Alternate Emergency Control Officer 307 Country Road Berwyn, PA 19312	1-215-644-0155	81-5003
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Generation Division,  
Superintendent - Fossil & Hydro

A. J. Weigand Off-Site Emergency Coordinator 4409 Dermond Avenue Drexel Hill, PA 19026	1-215:236-7139	81-5015
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Generation Division,  
Superintendent - Nuclear

M. J. Cooney Site Emergency Coordinator 1475 Anthony Wayne Drive Wayne, PA 19087	1-215:687-1270	81-5020
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Superintendent, Services Division

W. B. Willsey Alternate Site & Off-Site Emergency Coordinator 108 Deerfield Drive Cherry Hill, NJ 08034	1-609:429-8389	81-5030
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Vice President -  
Engineering & Research Department

J. S. Kemper Emergency Technical Support Officer 91 Pollocat Road Glen Mills, PA 19342	1-215:459-5448	81-4502
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Chief Mechanical Engineer

E. C. Kistner Alternate Emergency Technical Support Officer 345 Parham Road, Springfield, Delaware County, PA 19064	1-215:543-7795	81-4510
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Manager Corporate Communications

W. R. Taylor 18 Wyncroft Drive Media, PA 19063	1-215:566-7026	81-4102
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Manager - Public Information

R. L. Harper Emergency Information Officer 194 Lake Side Road Ardmore, PA 19003	1-215:649-4732	81-4122
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Manager of Claims Security

J. D. McGoldrick Emergency Security Officer 1674 Muhlenberg Drive Center Square Green Norristown, PA 19401	1-215:279-9738	81-4280
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Director of Security

R. J. Deneen Alternate Emergency Security Officer 785 Worthington Road Wayne, PA 19087	1-215:783-7622	81-4292
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Engineer in Charge Chemistry Section

G. H. Assenheimer 827 Ormond Ave. Drexel Hill, PA 19026	1-215:449-2959	81-5114 or 81-5118
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Superintendent of Maintenance

W. C. Whitfield Fawn Lane R. D. 2 Hamorton P.O. Kennett Square, PA 19348	1-215:388-7040	81-5220
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Vice President,  
Transmission & Distribution

W. L. Maruchi 341 Lincoln Avenue Lansdowne, PA 19050	1-215:259-2464	81-5100
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Manager,  
Transmission & Distribution

T. W. Coppock 210 Quiet Hollow Lane Media, PA 19063	1-215:565-4976	81-5102
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Quality Assurance (Engineer)

H. R. Walters 237 Jefferson Avenue Haverfield, NJ 08033	1-609:828-7897	81-4582
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Administration  
(Electric Production)

G. Conover, Jr. 258 Buttonwood Lane Cinnaminson, NJ 08077	1-609:829-3730	81-5010
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*W. Ullrich*  
*3/22/81*

EP-209 APPENDIX C - PEACH BOTTOM STATION SUPERVISION

<u>Station Superintendent</u>	<u>Home Phone</u>	<u>Centrex</u>
W. T. Ullrich 3220 Forrest Lane York, PA 17402	1-757-1344	244
<u>Assistant Station Superintendent</u>		
R. S. Fleischmann P. O. Box 102 Delta, PA 17314	456-7411	245
<u>Engineer - Outage Planning</u>		
D. C. Smith 128 Summit Drive York, PA 17403	1-845-8057	460
<u>Engineer - Maintenance</u>		
J. K. Davenport Box 210 R. D. 6 Lancaster, PA 17603	1-872-5335	248
<u>Engineer - Technical</u>		
J. E. Winzenried Box 363 Wise Road R. D. 1 Delta, PA 17314	456-5504 or 456-5223	246
<u>Engineer - Operations</u>		
S. R. Roberts R. D. 3 Box 289H Oxford, PA 19363	1-215-932-2011	375



Engineer - Quality

S. A. Spitko  
R. D. 4 Box 300  
Quarryville, PA 17566

1-786-4114

326

Engineer - Administration

S. J. Kovacs  
Bradley Avenue  
R. D. 2 Box A-574  
Dallastown, PA 17313

1-244-5271

249

Results Engineer

A. A. Fulvio  
R. D. 4  
Box 335  
Quarryville, PA 17566

1-786-4236

253

Security Supervisor

S. Q. Tharpe  
Box 65  
R. D. 1  
Pylesville, MD 21132

1-301-452-5049  
or  
1-301-836-1203

310

Engineer - I&C

G. F. Dawson  
R. D. 2  
Box 159A, Kings Row  
Landenberg, PA 19350

1-215-255-4609

229

Engineer - Chemistry

H. L. Watson  
Box 53  
R. D. 3  
Oxford, PA 19363

1-215-932-3161

491

Engineer-Health Physics

N. F. Gazda  
214 Forrest Hills Road  
Red Lion, PA 17356

1-244-7102

492

Engineer - Reactor

F. W. Polaski Seymour Road (Fairwinds) Bear, DE 19701	1-302-322-3697	258
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Chemist

K. James 1465-B Millersville Pike Lancaster, PA 17600	1-397-6945	491
--	------------	-----

Shift Superintendent

H. L. Metz 7 Linwood Court Bel Air, MD 21014	1-301-879-3230	223
--	----------------	-----

W. O. Pieper R. D. 1 Brogue, PA 17309	1-927-9176	223
---	------------	-----

T. J. Donaghy Box 103 R. D. 4 Red Lion, PA 17356	1-244-4685	223
---	------------	-----

W. B. Widener Griffith Road Delta, PA 17314	456-5474	223
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D. R. Filson R. D. 3 Felton, PA 17322	1-993-6342	223
---	------------	-----

Shift Supervisor

F. Pfender P. O. Box 54 Drumore, Pennsylvania 17518	1-548-2921	423
---	------------	-----

L. M. Silvey R. D. 1 Brogue, PA 17309	1-927-6942	423
---	------------	-----

F. L. Shanaman, Jr. R. D. 2 Felton, PA 17322	1-244-7208	423
--	------------	-----

R. R. Betz 706 Idlewild Road Bel Air, MD 21014	1-301:879-1788	224
A. R. Wargo Silver Spring Road R. D. 1 Holtwood, PA 17356	1-284-2092	423
T. H. Jones 153 Keener Avenue Red Lion, PA 17356	1-246-1352	423
R. A. Blasy R. D. 4 Red Lion, PA 17356	1-244-1497	423
J. S. Webster R. D. 1 Box 446A Wrightsville, PA 17368	1-927-6980	423

*W. Ullrich*  
*3/23/81*

EP-209 APPENDIX D-1 ON SITE EMERGENCY TEAM LEADERS

<u>Emergency Director</u>	<u>Home Phone</u>	<u>Centrex</u>
W. T. Ullrich 3220 Forest Lane York, PA 17402	1-757-1344	244
 <u>Alternate Emergency Director</u>		
R. S. Fleischmann P. O. Box 102 Delta, PA 17314	456-7411	245
 <u>Interim Emergency Directors</u>		
H. L. Metz 7 Linwood Court Bel Air, MD 21014	1-301-879-3230	223
W. O. Pieper R. D. 1 Brogue, PA 17309	1-927-9176	223
T. J. Donaghy Box 103 R. D. 4 Red Lion, PA 17356	1-244-4685	223
W. B. Widener Griffith Road Delta, PA 17314	456-5474	223
D. R. Filson R. D. 3 Felton, PA 17322	1-993-6342	223
 <u>Alternate Interim Emergency Directors/ Interim Fire and Damage Team Leaders</u>		
L. M. Silvey R. D. 1 Brogue, PA 17309	1-927-6942	423
P. L. Shanaman R. D. 2 Felton, PA 17322	1-244-7208	423

EP-209 APPENDIX D-1 ON SITE EMERGENCY TEAM LEADERS

R. R. Betz 706 Idlewild Road Bel Air, MD 21014	1-301-879-1788	224
F. J. Pfender P. O. Box 54 Drumore, PA 17518	1-548-2921	423
A. R. Wargo Silver Spring Road R. D. 1 Holtwood, PA 17532	1-284-2092	423
T. H. Jones 153 Keener Avenue Red Lion, PA 17356	1-246-1352	423
R. A. Blasy R. D. 4 Red Lion, PA 17356	1-244-1497	423
J. S. Webster R. D. 1 Box 446A Wrightsville, PA 17368	1-927-6980	423

*W. K. Kline*  
3/23/81

EP-209 APPENDIX D-2 RADIATION SURVEY TEAM

<u>Radiation Survey Team Leader</u>	<u>Address</u>	<u>Home Phone</u>	<u>Centrex</u>
J. A. Valinski	103 Forest Hills Road Red Lion, PA 17356	1-244-8168	495
<u>Alternate Radiation Survey Team Leader</u>			
R. W. MacAllester	R. D. 2 Felton, PA 17322	1-927-6758	390

Those members with (\*) have emergency plan training and may be directed by shift supervision to serve as leader. Personnel who are trained in HP practices but not in the emergency serve as augmentation forces, working under the direction of trained team leaders.

Interim Radiation Survey  
Team Leader (\*) & Members

* A. Beward	R. D. 2 Box 266 Brogue, PA 17309	1-927-9253
* M. Dedrich	1719 Schucks Road Bel Air, MD 21014	1-301-734-6047
* D. McClellan	R. D. 4 Tanglewood Drive Quarryville, PA 17566	1-786-1256
* T. Mscisz	314 Pleasant View Drive Willow Street, PA 17584	1-464-2919
* S. Grosh	R. D. 4 Box 383 Quarryville, PA 17566	1-786-1982
* W. Downey	R. D. 4 Box 315 Quarryville, PA 17566	1-786-4952
J. Moyer	776 Franlyn Drive Dallastown, PA 17313	1-246-1754



* E. Preston	11 Harvest Lane Pennfield West Grove, PA 19390	1-215-869-3908
* E. Reese	87 Main Street Fawn Grove, PA 17321	382-4190
* J. McDaniel	R. D. 2 Box 462 Delta, PA 17314	456-5359
M. Head	479 Moores Mill Road Bel Air, MD 21014	1-301-838-6734
G. Paden	12 North Lime Street Quarryville, PA 17566	1-786-1850
T. Hoopes	P. O. Box 108 Delta, PA 17314	
S. Malin	720 G. Colony Drive York, PA 17404	1-764-0200
L. Hewell	Chestnut Street Delta, PA 17314	456-5818
C. Hoffmaster	R. D. 4 Box 315 Quarryville, PA 17566	1-786-4952
T. Stone	R. D. 2 Felton, PA 17322	1-244-1430
T. Albright	46 South Main Street Red Lion, PA 17356	1-244-4317
R. Moore	616 Broad Street Oxford, PA 19363	1-215-932-8883
D. Musselman	148 Mallard Avenue Willow Street, PA 17584	1-464-2672
J. Kirkpatrick	R. D. 1 Fawn Grove, PA 17321	382-4623
J. Scone	11 Hessler Lane Wilmington, DE 19809	1-302-792-2119
S. Taylor	100 Winterstown Road Apt. 5 Red Lion, PA 17356	1-246-2428

J. Volz	R. D. 1 Box 214 Pequea, PA 17565	1-284-3467
M. Henry	R. D. 2 Box 156 Dallastown, PA 17313	1-244-8345
M. Fry	Box 217 Conowingo, MD 21918	1-301-658-3068
C. Smith	629 North Duke Street Lancaster, PA 17602	1-393-5931
G. Menard	R. D. 2 Airville, PA 17302	1-862-3159
W. Hoopes	Box 108 Delta, PA 17314	1-301-452-5338
D. Grove	R. D. 3 Box 119 Stewartstown, PA 17363	1-993-6171
F. LePerson	Box 43 R. D. 1 Holtwood, PA 17532	1-284-2095
G. Scone	R. D. 2 Box 129 Quarryville, PA 17566	1-529-6813
S. King	2411 Carsins Run Road Aberdeen MD 21001	1-301-836-2375
R. Ullrich	3220 Porrest Lane York, PA 17402	1-757-1344
J. Gruber	Apt. A-4 Griffith Road Apts. R. D. 1 Delta, PA 17314	456-5383
G. Smith	R. D. 1 Box 44 Holtwood, PA 17532	1-284-4415

NOTE: Supplemental Forces available from Rad Services, Inc.  
Appendix I-2.

RADIATION SURVEY TEAM - CHEMISTRY SECTION GROUP

<u>Engineer - Chemistry</u>	<u>Home Phone</u>	<u>Centrex</u>
Harry Watson	215-932-3161	491
<u>Group Members</u>		
Ken James	717-397-6945	
Ed Traverso	717-285-1081	
Deryl Dick	301-836-3677	
Bob Loesch	301-879-7135	
Bruce Wargo	717-244-6331	
Craig Hoffmaster	717-786-4952	
Darrel Chase	301-838-2645	
Rick Sarge	717-464-4862	
Dave Crowe	717-464-5074	
Howard Fuqua	301-836-9539	
Tom Miller	717-569-2766	
Ken Lewis	717-862-3112	
Jim Gasper	301-838-0267	
Bryan Leone	301-838-3217	
Tom Suess	717-456-5996	

*W. Willard*  
3/23/81

EP-209 APPENDIX D-3 FIRE AND DAMAGE TEAM

Fire and Damage Team Leader

J. K. Davenport	R. D. 6 Lancaster, PA 17603	1-872-5335
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Alternate

J. F. Mitman	29 Cedar Drive Willow Street, PA 17584	1-464-2616
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Fire and Damage Team Members

L. White	456-5456	S. Cohn	1-741-3268
L. Rhodes	1-215-932-8832		
W. Bradley	1-301-838-7732		
D. Duane	1-786-7601	N. Yost	456-7378
D. McRoberts	1-993-6464	D. Kauffman	1-284-4683
P. Cromwell	862-3834	J. Weaver	1-786-2055
J. Barbour	456-7412	J. Deni	1-284-2941
J. Ballantyne	1-786-7568	R. Proctor	1-548-2348
W. Eagles	1-548-3562	B. Saxman	1-548-2669
L. Givler	1-215-384-1889		
		W. Gleaves	456-5449
T. Megashko	1-786-1856	R. Rogers	1-548-3646
D. Turkelson	1-215-383-4164	G. Tharpe	1-301-836-1203
D. Falcone	456-7361	L. MacEntee, III	1-786-2482
W. Watson, Jr.	1-872-2757	W. Johnson, Jr.	1-301-836-8075
J. Betzela	1-215-586-9997	R. Truax	1-301-838-6045
J. Gribble	456-7361	S. Johnson	1-464-4650

Maintenance Personnel - Fire and Damage Augmentation Forces

Kemper	1-786-3167	Achilles	1-456-5978
Shortes	1-215:932-3375	McNeill	1-244-4359
Hiller	1-284-2709		
		Mellor	1-786-4016
Cibroski	1-215-255-4595		
Farrington	1-862-3451	Galliera	1-244-4139
Henry	1-244-8893	Holgate	1-464-3093
Pesarchik	1-786-4527	Plummer	1-755-1256
Sentman	382-4740	Street	1-215:932-4533
Rath, R.	1-284-3391	Glidden	1-786-2954
Lowe	1-786-1151	Brown, F.	1-284-2500
Stull	1-215:869-3569	D'Archangelo	1-786-3760
Speakman	1-215:869-3560	Brewer	1-215:486-0416
Bailey	1-687-8967	Scone	1-786-7608
Rath, T.	1-786-1841	McGarrity	Unlisted
Dennett	382-4140	Penimore	1-244-0843
Szwajkowski	No Phone	Harahan	1-529-6506
Hallman	Unlisted	McFadden	1-786-4167
Sedgley	1-786-1580	Harper, F.	1-301:378-3218
Fritz	1-529-6636	Urian, W.	1-548-3619
		Fletcher	1-382-4747
Brainerd	No Phone	Maas	1-301:679-4473
Ieverly	1-548-3409	Lobb	1-215:543-2686
Schlegel	1-786-1056		
Urian, B.	1-786-7066	Callahan	1-786-7930
		Stinger	1-786-4055
May	1-845-2394	LePerson	1-786-7868
Stoddard	1-529-6479	Forrest	1-927-6576
Lingo	1-284-3276		
Aucott	1-786-7299	Reiss	1-548-3605
Whisted	1-301-679-7063	Young	1-301-838-7821
Stewart	1-284-2541	Hendron	1-301-642-6038
Foley	1-301-287-9052	Dalson	1-302-363-5037
Hamilton	1-215-255-4439	Martin	1-301-378-4539
Rightmire	456-5775	Blake	1-301-452-5505
Kammer	1-301-398-8026	Scott	1-786-3359
McCarron	1-301-457-4823	Raybold	1-548-3273
Malloy	456-5440	Curry	1-786-1449
Cann	1-872-8476	McGowan	1-215-TR6-7314

*J. W. Allen*  
3/23/81

EP-209 APPENDIX D-4 PERSONNEL SAFETY TEAM

Personnel Safety Team Leader

R. W. MacAllester R. D. 2  
Felton, PA 17322

Home Phone

1-927-6758

Centrex

495

Alternate Personnel Safety Team Leaders

N. F. Gazda 214 Forrest Hills Road  
Red Lion, PA 17356

1-244-7102

492

Interim Personnel Safety Team Leaders and Team Members

S. I. Cohn 356 Blue Ridge Drive  
York, PA 17402

1-741-3268

R. Rhodes Box 145  
R. D. 1  
Nottingham, PA 19362

1-215-932-8832

W. A. Bradley 102 West Bel Crest Road  
Bel Air, MD 21014

1-301-638-7732

W. T. Gleaves Paper Mill Road  
R. D. 2  
Delta, PA 17314

456-5449

D. W. Duane 308 S. Church Street  
Quarryville, PA 17566

1-786-7601

J. C. McRoberts Box 300 AA  
R. D. 1  
Stewartstown, PA 17363

1-993-6464

H. D. Yost R. D. 1  
Delta, PA 17314

456-7378

P. B. Cromwell R. D. 2  
Airville, PA 17302

862-3834

D. E. Kauffman R. D. 2  
Holtwood, PA 17532

1-284-4683

A. Barbour R. D. 1  
Delta, PA 17314

456-7412



J. M. Weaver	209 Deaver Road Box 299 R. D. 4 Quarryville, PA 17566	1-786-2055
J. W. Ballantyne	Box 316 R. D. 4 Quarryville, PA 17566	1-786-7568
J. S. Deni	Box 61-B Bethesda Church Road R. D. 1 Holtwood, PA 17532	1-284-2941

The following people are team members but not Interim Team Leaders

W. M. Eagles, III	Box 206 R. D. 2 Nottingham, PA 19362	1-548-3562
R. C. Proctor	Box 42A-4 Harmony Ridge Road R. D. 1 Drumore, PA 17518	1-548-2348
L. D. Givler	Wagontown, PA 19376	1-215-384-1889
B. E. Saxman	Box 395 Spring Valley Road R. D. 1 Quarryville, PA 17566	1-548-2669
T. A. Megashko	Box 446-B R. D. 3 Quarryville, PA 17566	1-786-1856
D. M. Turkelson	70 School House Lane Coatesville, PA 19320	1-215-383-4164
D. G. Falcone	Box 73 R. D. 2 Delta, PA 17314	456-7361
W. C. Watson	Box 447A Conestoga, PA 17516	1-872-2757
J. W. Betzala	513 Harrison Avenue Norwood, PA 19074	LU-6-9997
M. Gribble	Box 295 Delta, PA 17314	

R. E. Rogers	Box 390 R. D. 1 Quarryville, PA 17566	1-548-3646
G. W. Tharpe	404 Pylesville Road Pylesville, MD 21132	1-301-836-120
L. E. MacEntee, III	339 Scotland Road Quarryville, PA 17566	1-786-2482
W. E. Johnson, Jr.	1204 Prospect Mill Road Bel Air, MD 21014	1-301-836-8075
R. F. Truax	200-J Fairwood Road Bel Air, MD 21014	1-301-838-6045

THE FOLLOWING LIST OF PERSONNEL IS TO BE USED TO FORM THE  
PERSONNEL ACCOUNTABILITY GROUP(4 PERSONS REQUIRED).

	<u>Address</u>	<u>Phone</u>
C. P. Lauletta	Box 320 Ridge View Drive R. D. 4 Quarryville, PA 17566	1-786-2071
G. E. Wadkins, Jr.	114 Willow Valley Drive Lancaster, PA 17602	1-464-5188
J. L. Clupp	1619 Eshleman Mill Rd. Willow Street, PA 17584	1-464-5041
J. T. Budzynski	20 N. Prince Street Millersville, PA 17551	1-244-1663
K. W. Hunt	Carol Drive R. D. 1 Washington Boro, PA 17582	1-872-6447
T. J. Niessen	215 Maple Ave. Oxford, PA 19363	1-215-932-5263
W. J. Manski	56 Willow Valley Drive Lancaster, PA 17602	1-464-4951
J. H. Armstrong	1224 West Chester Pike Apt. E-21 West Chester, PA 19380	1-215-436-8685
S. J. Mannix	Box 47D Delta, PA 17314	456-7461

P. Helker	R. D. 2, Apt. 1 Box 22 Delta, PA 17314	456-5908
R. M. Sware, Jr.	53 Willow Valley Drive Lancaster, PA 17602	1-464-4472
C. E. Koppenhaver	R. D. 1, Box 125B Stewartstown, PA 17363	382-4146
J. J. Yacyshyn	R. D. 2, Apt. 3 Delta, PA 17314	456-7528
R. H. Wright	135A W. Charlotte Street Millersville, PA 17551	1-872-8363
W. L. Bloss	Apt. 8, 100 Wellington Road Lancaster, PA 17603	1-397-8019
J. G. Hufnagel	33 Willow Valley Drive Lancaster, PA 17602	1-464-4934
P. L. Bushek	83 Willow Valley Drive Lancaster, PA 17602	456-5788
J. Meckley	197 Keener Avenue Red Lion, PA 17356	1-246-1310
D. L. Helock	369 Church Street Glen Rock, PA 17327	1-235-2171
C. N. Swenson	R. D. 2, Goshen Mill Road Peach Bottom, PA 17563	1-548-3629
G. A. John	33 Willow Valley Drive Lancaster, PA 17602	1-464-4934
E. G. Firth	4 Willow Valley Drive Lancaster, PA 17602	1-464-3751
T. J. Gabrey	R. D. 2 Box 97-B Martie Hgts. Holtwood, PA 17534	1-284-4554
J. M. Hessler	25 Willow Valley Drive Lancaster, PA 17602	1-464-4637
A. J. Iepson	74 Valleybrook Drive Lancaster, PA 17601	1-569-4679

F. J. Mascitelli

R. D. 2  
Box 97-B  
Martic Hgts.  
Holtwood, PA 17532

1-284-455

D. B. Warfel

R. D. 2  
Delta, PA 17314

456-5366

A. J. Wasong

Box 313  
R. D. 4  
Quarryville, PA 17566

1-786-7080

*M. J. Wilcox*  
3/23/81

EP-209 APPENDIX D-5 SECURITY TEAM

Security Team Leader

R. S. Fleischmann 717-456-7411

Alternates

S. Q. Tharpe (Security Supervisor)	301-452-5049
C. W. Myers (Capt of the Guards)	717-862-3253
C. L. Buckingham (Guard - Acting Lt. when Capt. is on extended leave or vacation)	717-456-7276
J. N. Raymond (Training Lt.)	301-838-9558

Security Team - Sergeants

R. L. Dennison	717-548-2826
K. L. Knouse	301-692-5560
J. C. Lewis	717-244-8774
H. J. Wade	717-456-7366

Assit. To PeCo Security Supervisor

Lt. B. J. Biggs 301-734-6874

Clerk

D. S. Watkins 717-456-5361

Security

1. Adams, J. R.

2. Ashby, D. M.

3. Campbell, J. R.

4. Cox, J. R.

5. Hall, J. R.

11



26. Shaw, Louis L.	301-836-3614
27. Sissum, Michael G.	301-272-1134
28. Sizemore, Priscilla A.	717-456-5051
29. Smith, Larry D.	717-456-5616
30. Smith, Steven M.	301-836-1354
31. Spencer, Steven A.	301-452-8646
32. Stewart, Walter A.	301-836-8097
33. Taylor, Roger L.	717-456-7141
34. Travers, Lee C.	301-939-5369
35. Warner, Bradley	717-456-5726
36. Williams, Thomas B.	301-452-5079
37. Williams, Urlo C.	717-862-3186
38. Wyatt, Alan R.	301-452-8365
39. Wilburn, Dale E.	717-548-3462

Security Team Members - Watchmen

Tel.#

1. Armentrout, Treva C.	301-452-8504
2. Biggs, James Z.	301-734-6874
3. Brooks, Kimberly A.	301-658-4019
4. Buckingham, William C.	717-456-7276
5. Buser, Edward J. III	301-836-3696
6. Clay, Kathleen M.	301-939-5247
7. Edwards, Perrilee T.	301-692-5419
8. Hamilton, Trudy L.	717-456-5779
9. Heaps, William A.	717-382-4078
10. Herold, George M.	301-836-3683
11. Heverly, Leisa	717-548-3409

12. Miller, Deborah R.	717-456-5728
13. Reed, Charles C.	301-272-0480
14. Runkle, Brian K.	717-993-2927
15. Shwedick, Laurie S.	301-836-7715
16. Williams, Tereas C.	301-452-5815
17. Wilson Jr., James P.	301-452-5365

Secondary Alarm St. & Control Alarm St. Attendants

Tel.#

1. Andrews, Donald A.	301-939-4234
2. Baker, Paul N.	301-877-3696
3. Beal, Norma J.	717-456-5533
4. Casey, William L.	301-838-8019
5. Cross, Sharon L.	717-456-5533
6. Duh, Anita F.	717-456-5888
7. Guilbault, Denise A.	301-378-4403
8. Haga Jr., Charles L.	717-456-5519
9. Lowe, Mary E.	301-452-8342
10. McLaughlin, Carol A.	717-456-7414
11. Sarti, Tammy S.	717-456-5231
12. Warenicz, Paula L.	301-557-9860

Part Time Security Team Members - Guard

Tel.#

1. Cantler, Ronald	717-862-3740
2. McLain, Lester S.	301-836-3808
3. Robinson, James H.	301-457-4223
4. Stewart, Ralph E.	717-456-5000

Part Time Security Team Members - Watchmen

1. Annicelli, John J.	301-272-0462
2. Brown, Howard M.	717-332-4234
3. Cross, Donald	301-692-6342
4. Johnson, Donald P.	717-456-5514
5. Harrington, Harold J.	717-456-7334
6. Hewitt, Jerry W.	301-939-3204

Burns Detective Agency

17th Floor, 1518 Walnut Street, Philadelphia, Pa.	19102	1-215-546-8010
1511 North Front Street, Harrisburg, Pa.	17102	1-236-4004

Burns Project Manager

A. Steven Gibbs	1-236-4004	(Res) 1-757-3137
Burns Wats Line	1-800-692-7414	

Burns Area Supervisor

George Sisum	301-272-1134
--------------	--------------

EP-209 APPENDIX D-6 RE-ENTRY AND RECOVERY TEAM

*M. Kellert*  
3/23/81

Re-Entry and Recovery Team Leader

R. S. Fleischmann	P. O. Box 102	456-7411	245
	Delta, PA 17314		

Alternate Re-Entry and Recovery Team Leader

J. E. Winzenried	Box 363	456-5504	246
	R. D. 1	or	
	Delta, PA 17314	456-5223	

*J. W. Hunt*  
3/23/81

EP-209 APPENDIX D-7 TECHNICAL SUPPORT CENTER TEAM

<u>Technical Support Center Director</u>	<u>Home</u>	<u>Centrex</u>
J. E. Winzenried	456-5504 or 456-5223	246
<u>Alternates</u>		
D. C. Smith	845-8057	460
S. R. Roberts	215-932-3625 or 215-932-2011	375
A. A. Fulvio	786-4236	253
<u>Supervising Engineers &amp; Alternates</u>		
<u>Outage Planning Engineer</u>		
D. C. Smith	845-8057	460
<u>Administration Engineer</u>		
S. J. Kovacs	244-5271	249
<u>Results Engineer</u>		
A. A. Fulvio	786-4236	253
Alternate: A. J. Wasong	786-7080	254
<u>I &amp; C Engineer</u>		
G. F. Dawson	215-255-4609	229
Alternate: T. J. Neissen	215-932-5263	230
<u>Reactor Engineer</u>		
P. W. Polaski	302-322-3697	258
Alternate: K. W. Hunt	872-6447	553



Maintenance Engineer

J. K. Davenport	872-5335	248
Alternate: J. F. Mitman	464-2616	468
G. E. Wadkins	464-5188	448

HP&C Engineer

A. E. Hilsmeier	456-5873	250
Alternate: N. F. Gazda	244-7102	492

Health Physics Engineer

N. F. Gazda	244-7102	492
Alternate: C. S. Nelson	548-3151	521

Chemistry Engineer

Harry L. Watson	215-932-3161	493
Alternate: K. L. James	397-6945	491

Quality Assurance Engineer

S. A. Spitko	786-4114	326
Alternate: W. R. Corse	252-1388	556

Communicator and Record Keeper

See EP-209 Appendix I-1 for personnel to fill this position.

Utility Shift Control Operator

E. G. Alwood	927-9019
R. G. Birely	382-4505
R. A. Blasy	244-1497
J. G. Casey	301-838-8019
A. R. Clark	244-6059
E. D. Cosgrove	382-4138
E. S. Cromwell, III	862-3458
J. M. Diaz	786-2529
T. J. Donaghy, Sr.	244-4685
D. R. Filson	993-6342
T. H. Jones	246-1352
H. L. Metz	301-879-3230
J. T. Monaghan, Jr.	393-6537
J. K. Mucha	786-1359
F. J. Pfender, Jr.	548-2921
W. O. Pieper	927-9176
F. R. Shanaman	244-7208
R. E. Sheetz	757-1901
L. M. Silvey	927-6942
B. A. Stambaugh	-
W. R. Truax	529-2090
L. R. Wargo	284-2092
W. B. Widener	456-5474
D. M. Wise	456-5382
D. S. Woodrow	786-2968

Consultants

See EP-209 Appendix H for company consultants.

NRC

NRC Operations Center Duty Officer O.P.X. (red phone) system in  
plant control room or direct  
dial - 301-492-8111

*M. Willsey*  
3/23/81

EP-209 APPENDIX E OFF-SITE EMERGENCY TEAM LEADERS

Vice President  
Electric Production

Home Phone

Centrex

S. L. Daltroff  
Emergency Control Officer  
1881 Kimberwick Road  
Media, PA 19063

1-215:566-6493

5001

Manager  
Electric Production

J. W. Gallagher  
Alternate Emergency Control  
Officer  
307 Country Road  
Berwyn, PA 19312

1-215:644-0155

5003

Generation Division  
- Fossil & Hydro

A. J. Weigand  
Off-Site Emergency Coordinator  
4409 Dermond Avenue  
Drexel Hill, PA 19026

1-215:236-7139

5015

Generation Division  
- Nuclear

M. J. Cooney  
Site Emergency Coordinator  
1475 Anthony Wayne Drive  
Wayne, PA 19087

1-215:687-1270

5020

Superintendent -  
Services Division

W. B. Willsey  
Alternate Site & Off Site  
Emergency Coordinator  
108 Deerfield Drive  
Cherry Hill, NJ 08034

1-609:429-8389

5030

Manager  
Engineering & Research

J. S. Kemper	1-215:459-5448	4502
Emergency Technical Support Officer		
91 Polecat Road		
Glen Mills, PA 19342		

Chief Mechanical  
Engineer

E. C. Kistner	1-215:543-7795	4510
Alternate Emergency Technical Support Officer		
345 Parham Road		
Springfield, Delaware County, PA 19064		

Manager  
Corporate Communications

R. Taylor	1-215:566-7026	4102
18 Wyncroft Drive		
Media, PA 19063		

Manager -  
Public Information

R. L. Harper	1-215:649-4732	4122
Emergency Information Officer		
194 Lake Side Road		
Ardmore, PA 19003		

Manager of  
Claims Security

J. D. McGoldrick	1-215-279-9738	4280
Emergency Security Officer		
1674 Muhlenberg Drive		
Norristown, PA 19401		

Director of Security

R. J. Deneen  
Alternate Emergency Security  
Officer  
785 Worthington Road  
Wayne, PA 19087

1-215:783-7622

4292

*M. H. H. H.*  
3/23/81

EP-209 APPENDIX F - U. S. GOVERNMENT AGENCIES

	<u>Address</u>	<u>Phone</u>
1. U.S. Nuclear Regulatory Commission		
A. Office of Inspection and Enforcement		
Region 1	631 Park Avenue King of Prussia, PA 19406	1-215:337-5000
B. Directorate of Licensing	Washington, DC 20555	1-301:492-7691 1-301:492-7692
Harold Denton		
2. Dept. of Energy Radiological Program	Brookhaven Nat. Lab Upton, NY 11973	1-516:345-2200 (Manned 24 hours)
3. Environmental Protection Agency	Curtis Building 6th & Walnut Sts Philadelphia, PA 19106	1-215:597-9898
4. Department of Transportation 3rd U.S. Coast Guard District	Governors Island New York, NY 10004	1-212:668-7197 (Chief of Staff) 1-212:668-7975 (Auxiliaries)
5. Department of Agriculture Chief, Division of Milk Sanitation	Dept of Agriculture Bureau of Food & Chemistry 2301 N. Cameron St Harrisburg, PA 17120	1-787-4316
W. Fouse		

*W. J. Hill*  
3/23/81

EP-209 APPENDIX G - EMERGENCY MANAGEMENT AGENCIES

	<u>Address</u>	<u>Phone</u>
1. State Emergency Management Agencies		
a. Pennsylvania Emergency Management Agency	Room B-151 Transportation & Safety Bldg. P.O. Box 3321 Harrisburg, PA 17120	1-783-8150
b. Delaware Civil Defence Agency	State Police & Civil Defense Emergency Mgmt. Section	1-302-736-4489 or 1-302-736-4487
c. New Jersey Civil Defense Agency	P.O. Box 7068 West Trenton, NJ 08625	1-609-882-4200 (24 hrs.)
d. Maryland Civil Defense Agency		1-301-486-4422
2. County Emergency Management Agencies		
a. Lancaster County Paul Leese	County Court House 50 North Duke St. Lancaster, PA 17602	Business: 1-299-8373(24 hrs) 1-299-8374 Home: 1-393-4532
b. York County Randy Curry	York County Court House 28 East Market St. York, PA 17401	Business: 1-843-5111 1-843-4641 Home: 1-767-5228 For Emergency: Call Control



c. Chester County

County Emergency  
Headquarters  
14 East Biddle St.  
West Chester, PA  
19380

1-215-431-6160  
(24 hrs.)

d. Harford County

Harford County  
Civil Defense  
2205 Conowingo Rd.  
Bel Air, MD 21014

1-301-838-3336

e. Cecil County

County Court House  
Elkton, MD 21921

1-301-398-3815

*W. M. M. L.*  
*3/23/81*

EP-209 APPENDIX H COMPANY CONSULTANTS

	<u>Address</u>	<u>Phone</u>
1. General Electric Company General Electric Emergency Support Program	Nuclear Fuel and Services Division 175 Curtner Avenue San Jose, CA 95125	1-408-925-3207 (24 hour emergency number)
	Working Hours: Manager of BWR Product Service	
	Off Hours: Answering service for immediate call back from GE	
2. Nuclear Utilities Services	4 Research Place Rockville, MD 20850	1-301:948-7010 ,
3. Southwest Research Institute	P.O. Drawer 28510 3500 Culebra Road San Antonio, TX 78248	1-512:684-5111
4. Underwater Technics, Inc.	2735 Buren Avenue Camden, NJ 08105	1-609:963-4460
Mr. D. R. Stith		1-215:672-0545
Mr. R. T. Bannon		1-609:939-3252
5. Radiation Management Corp Suite 400 Science Center Bldg 2 (Dr. Roger E. Linneman)	3508 Market Street Philadelphia, PA 19104	1-215:243-2990

6. Burns Detective Agency

4th Floor  
1518 Walnut Street  
Philadelphia, PA  
19102

1-215:893-8300

Burns Detective Agency

1511 North Front St  
Harrisburg, PA  
17102

1-236-4004

7. Institute for Nuclear  
Power Operations (INPO)

1-404-953-0904  
(24 hrs.)

*M. K. Kline*  
*3/23/81*

EP-209 APPENDIX I-1 FIELD SUPPORT PERSONNEL

	<u>Address</u>	<u>Phone</u>
J. E. Winzenried	Box 363 Wise Road R. D. 1 Delta, PA 17314	456-5504 456-5223
S. A. Spitko	Box 300 Deaver Road R. D. 4 Quarryville, PA 17566	1-786-4114
J. K. Davenport	R. D. 6 Lancaster, PA 17603	1-872-5335
G. F. Dawson	Box 159A Kings Row R. D. 2 Landenburg, PA 19350	1-215:255-4609
S. R. Roberts	Box 289 H R. D. 3 Oxford, PA 19363	1-215:932-3625 or 1-215:932-2011
D. B. Warfel	R. D. 2 Delta, PA 17314	456-5366
A. A. Fulvio	R. D. 4 Box 335 Quarryville, PA 17566	1-786-4236
F. W. Polaski	Seymour Road (Fairwinds) Bear, DE 19701	1-302:322-3697
A. J. Wasong	Box 313 R. D. 4 Quarryville, PA 17566	1-786-7080
J. F. Mitman	29 Cedar Drive Willow Street, PA 17584	1-464-2616
C. P. Lauletta	Box 320 Ridge View Drive R. D. 4 Quarryville, PA 17566	1-786-2071
G. E. Wadkins, Jr.	114 Willow Valley Drive Lancaster, PA 17602	1-464-5188

J. L. Clupp	1619 Eshleman Mill Rd. Willow Street, PA 17584	1-464-5041
J. T. Budzynski	20 N. Prince Street Millersville, PA 17551	1-244-1663
K. W. Hunt	Carol Drive R. D. 1 Washington Boro, PA 17582	1-872-6447
T. J. Niessen	215 Maple Ave. Oxford, PA 19363	1-215:932-5263
M. J. Manski	56 Willow Valley Drive Lancaster, PA 17602	1-464-4951
J. M. Armstrong	1224 West Chester Pike Apt. E-21 West Chester, PA 19380	1-215-436-8685
S. J. Mannix	Box 47D Delta, PA 17314	456-7461
D. P. Helker	R. D. 2, Apt. 1 Box 22 Delta, PA 17314	456-5908
R. M. Sware, Jr.	53 Willow Valley Drive Lancaster, PA 17602	1-464-4472
C. E. Koppenhaver	R. D. 1, Box 125B Stewartstown, PA 17363	382-4146
J. J. Yacyshyn	R. D. 2, Apt. 3 Delta, PA 17314	456-7523
R. H. Wright	135A W. Charlotte Street Millersville, PA 17551	1-872-8363
W. L. Bloss	Apt. 8, 100 Wellington Road Lancaster, PA 17603	1-397-8019
J. G. Hufnagel	33 Willow Valley Drive Lancaster, PA 17602	1-464-4934
P. L. Bushek	83 Willow Valley Drive Lancaster, PA 17602	456-5788
M. S. Meckley	197 Keener Avenue Red Lion, PA 17356	1-246-1310

D. L. Helock	369 Church Street Glen Rock, PA 17327	1-235-2171
C. N. Swenson	R. D. 2, Goshen Mill Road Peach Bottom, PA 17563	1-548-3629
G. A. John	33 Willow Valley Drive Lancaster, PA 17602	1-464-4934
E. G. Firth	4 Willow Valley Drive Lancaster, PA 17602	1-464-3751
T. J. Cabrey	R. D. 2 Box 97-B Martic Hgts. Holtwood, PA 17532	1-284-4554
J. E. Hessler	25 Willow Valley Drive Lancaster, PA 17602	1-464-4637
K. J. Iepson	74 Valleybrook Drive Lancaster, PA 17601	1-569-4679
F. J. Mascitelli	R. D. 2 Box 97-B Martic Hgts. Holtwood, PA 17532	1-284-4554

*W. K. Kline*  
*3/23/81*

EP-209 APPENDIX I-2 RAD SERVICES CALL LIST

Brown, J.	1-786-4360
Casey, J.	1-301-836-2995
Chase, D.	1-301-838-2645
Crowe, D.	1-464-5074
Dick, D.	1-301-836-3677
Dworsak, G.	1-687-6569
Frick, J.	1-301-879-2173
Fugua, H.	1-301-836-9539
Garris, E.	1-301-392-0680
Gasper, J.	1-301-838-0267
Hailey, T.	1-284-2554
Hudspeth, R.	1-464-5058
Jackson, K.	1-687-8822
Jones, T.	1-284-2943
Knight, R.	1-301-838-9190
Leone, B.	1-301-838-3217
Lewis, K.	1-862-3112
Loesch, R.	1-301-879-7135
Miller, T.	1-569-2766
Reese, E.	382-4190
Sarge, R.	1-464-4862
Thompson, G.	1-284-2829
Traverso, J.	1-285-3051
Wagner, W.	1-394-8679

Pittsburgh, PA Office	500 Penn Center Blvd.	1-412-823-0810
	Pittsburgh, PA 15235	

Triangle Resources, Inc.	Whiskey Bottom Rd.	1-800-638-4440
	Laurel, MD 20810	
	Instrument Repair & Calibration	
	or:	
	Chemical Waste Disposal	1-800-638-4440
	Triangle Research Inst.	
	Whiskey Bottom Road	
	Laurel, MD 20810	



*W. K. Kline*  
*3/23/81*

EP-209 APPENDIX J      NEARBY PUBLIC AND INDUSTRIAL USERS  
OF DOWNSTREAM WATERS

	<u>Address</u>	<u>Phone</u>
1. David Hines	City of Havre-de-Grace Maryland	(Bus.) 1-301:939-0150 or (Home) 1-301-939-3734
2. Jerry Foster	City of Havre-de-Grace Maryland	(Bus.) 1-301:939-1800 or (Home) 1-301:939-3178
3. James Buchanan Carl Fritzz	Perry Point Veteran's Hospital	1-301:642-2411 (Ext. 365 1-301-642-2411 (Ext. 301
4. Howard Jarman	Conowingo Power Plant	(Home) 1-301:457-5308 or Centrex 6-244
5. Mr. Koterwas	Water Supply Bureau City of Baltimore, MD	1-301:396-0287
6. K. Berry R. Franklin P. Treterson	Susquehanna Chesapeake Job Corps	1-301:939-0450
7. Shankar Gupta	Chester Water Authority	(Business) 1-529-2244 (Home) 1-529-2611
8. Plant Manager	Water Supply Bureau Montebello Filtration Plant City of Baltimore, MD	1-301:396-6091

*W. M. M. M.*  
3/23/81

EP-209 APPENDIX K MISCELLANEOUS

	<u>Address</u>	<u>Phone</u>
1. Western Union Telegraph	York, PA Harrisburg, PA Philadelphia, PA	1-843-0095 1-233-6449 1-215-922-0844 (Central Bureau) 1-215-928-0300 (11th St. Branch)
2. Control Centers		
A. Lancaster County		
Fulton Elementary School	225 W. Orange Lancaster, PA	1-291-6110
B. York County		
Delta-Peach Bottom Elementary School	Main Street R. D. 1 Delta, PA 17314	456-5313
3. Maryland Department of Health Division of Radiation Control		
<u>Emergency Roster</u>	<u>Business:</u>	<u>Home:</u>
Robert Corcoran	1-301:383-2744	1-301:823-8326
Richard Brisson	1-301:383-2734	1-301:838-8359
Charles Keller	1-301:383-2735	1-301:592-7940
Charles Flynn	1-301:383-2734	1-301:433-5553
4. Department of Environmental Resources		
A. Office of Public Information		
Ellen Sprinkle, Director	Room B-102 Transportation & Safety Building Harrisburg, PA 17120	Business: 1-787-2121 1-787-2124 1-787-6800

B. Harrisburg Regional Office

James Flesher, Ch Opns  
Sec

407 S. Cameron St  
Harrisburg, PA  
17101

Business:  
1-787-9665  
Home:  
1-921-8765

5. Bureau of Radiation Protection  
Dept of Environmental  
Resources

P.O. Box 2063  
Harrisburg, PA  
17120

1-787-2480  
1-787-3720  
1-787-3479  
1-787-2163  
After 4:00 PM:  
1-783-8150

Office Hours: 8:00 AM - 4:00 PM

Personnel & Home Phones:

T. Gerusky	1-763-9041
M. Reilly	1-233-4028
W. Dornsife	1-652-6304
D. McDonald	1-732-9128
J. Kopenhaver	1-921-8659
D. Beaver	1-938-2862
E. Burtsavage	1-761-7180

6. Pennsylvania Department of Health  
South Central District Office

21 South Brown St.  
P.O. Box 1012  
Lewistown, PA  
17044

1-248-6785  
1-248-6786

7. State Police York Barracks

1195 Roosevelt Ave.  
York, PA 17404

1-767-6848  
1-764-4337

8. State Police Lancaster Barracks

2099 Lincoln Hwy East  
Lancaster, PA 17602

1-299-0441

9. State Police - Maryland

Pikesville

1-301-486-3101

*M. W. Allen*  
3/23/81

EP-209 APPENDIX L LOCAL PECO PHONES

Peach Bottom

Switchboard: 456-7014 through 456-7019 rotating

456-7010

456-7021

456-7022

Bechtel Trailer

456-7190

456-7198

Catalytic

456-7290

Computer Room:

456-5890 (GE Testing)

Construction:

456-7154

456-7431

456-5574 (Administration Building)

456-5888 (Cooling Towers)

Control Room:

456-7313 (L.D. Emergency)

Field Engineers:

456-5285

Information Center:

456-5101

ISI Trailer:

456-5459

456-5784

Maintenance Computer:

456-7432

Maintenance Planning:

456-7440

NRC Office:

456-7614

456-7615

456-5669 (Facsimile Machine)

Rad Services:

456-5589

Storeroom:

456-7244

456-7337

Susquehanna Test:

456-5711

220 KV House:

456-7221 (Emergency)

Utility Building:

456-5751

Others

Delta Office:

456-7112

Delta Service Building:

456-5212 (Day)

456-5064 (Claude Yale)

EP-209 APPENDIX M - EMERGENCY ADMINISTRATIVE AND  
LOGISTICS PERSONNEL

*M. H. H. H.*  
3/23/81

Phone

Administrative and Logistics Manager

W. M. Alden

215-368-5879

Foreign Crews and Material Identification Group

W. M. Alden

215-368-5879

Foreign Crews Accommodation Group

W. M. Alden

215-368-5879

Communications Coordinator

Primary: B. C. Czarkowski

215-624-3089

Alternate: C. W. Aldred

215-265-2405

Transportation Coordinator

Primary: E. L. Dold

215-LE-4-1580

Alternate: R. T. Melvin

215-MA-3-4657

Purchasing Coordinator

Primary: R. A. Nones

609-767-1807

Alternate: R. F. Mantey

215-SU-9-5085

Stores Division

Primary: T. C. Stapleford

1-302-475-9181

Alternate: H. A. Connor, Jr.

1-215-828-8623

*M. K. Kline*  
3/23/81

EP-209 APPENDIX N - MEDICAL SUPPORT GROUPS

Local Physicians & Addresses

Office Phone

Home Phone

1st choice:

Dr. Josiah A. Hunt  
Main Street  
Delta, PA 17314

456-5511

456-7186

2nd choice:

Dr. M. Dudley Phillips  
Darlington, MD 21034

1-301:457-4771

1-301:457-4781

3rd choice:

Dr. Joseph Burkle  
Grantley Road Extended  
York, PA 17405

1-771-2331

1-854-9425

Harford Memorial Hospital

501 South Union Avenue  
Havre de Grace, MD 21078

1-301:939-3575 Preferred NA  
1-301:939-2400 Switchboard NA

Ambulance

Preferred No.

Alternate

Delta-Cardiff Fire Company  
Box 15  
Delta, PA 17314

452-5111  
Business No.  
456-7133

Harford Co. Fire Control  
Headquarters

452-5111

452-5234

York County Control

Call Control Room  
220,221,222

Medical Director

Home Phone

Centrex

Dr. W. F. Hushion  
437 West Springfield Road  
Springfield, PA

1-215:544-1311

81-4370

Corporate Supervising Engineer Radiation Protection

Walter J. Knapp  
30 Linden Avenue  
Red Lion, PA 17356

1-244-7102

81-5164



Radiation Management Corporation

Preferred

Alternate

Dr. Roger E. Linneman  
3508 Market Street  
Philadelphia PA 19104

Week days:

1-215:243-2990\*

1-215:243-2950

Other:

1-215:387-5013\*\*

(Beeper - 215-894-7771)

\* If no one is at R.M.C. (Radiation Management Corporation) or if this number is called after 5:00 PM, a taped message will be heard. This message will instruct the caller to leave his message or to call the "after 5:00 PM" number.

\*\* This number is located in the PECO load dispatcher office. Ask L.D. supervisor to contact R.M.C. and have them contact you at your number.



*RSC*  
*4/1/81*

EP-209 APPENDIX O CORPORATE SUPPORT PERSONNEL

<u>Site Emerg. Coord. Alternate</u>	<u>Home Phone</u>	<u>Centrex</u>
G. Leitch Supt. Limerick Station	1-215:876-3547	28-2000
<u>Stores Div. Coordinator</u>		
T. Stapelford Gen. Supt. Stores Div.	1-302:475-9181	89-271
<u>Stores Div. Coord. Alternate</u>		
H. Connor Supt. Stores Div.	1-215:TA8-8623	89-271
<u>Transportation Coordinator</u>		
E. Dold Gen. Supt. Transp. Div.	1-215:LE4-1580	89-241
<u>Trans. Coord. Alternate</u>		
B. Melvin Supt. Maint. Trans. Div.	1-215:623-4657	89-241
<u>Admin. &amp; Logistics Manager</u>		
J. Friderichs Director Corporate Analysis	1-215:356-5788	81-4219
<u>Admin. &amp; Logistics Mgr. Alternate</u>		
R. Holman Mgr. Corporate Planning	1-215:659-5768	81-4232

Admin. & Logistics  
Mgr. Alternate

R. Williams  
Mgr. Rate Division

1-215:269-3170

81-5760

Licensing  
Coordinator

R. Logue  
Eng. In Charge Nuc. & Env. Sec.

1-215:544-1450

81-4550

I&C Coordinator

R. Jones  
Supv. Eng. Plant Control Sys. Branch

1-215:KI4-0719

81-4657

Construction  
Coordinator

G. White  
Gen. Supt. Const. Div.

1-609:HA9-0943

81-4750

Core Physics  
Coordinator

L. Rubino  
Supv. Eng. Fuel Mgt.

1-215:446-1374

81-5029

Procedures  
Coordinator

W. Birely  
Sr. Eng. Lic.

1-215:337-0630

81-4048

QA/QC Coordinator

R. Moore  
Supt. Elec. Prod. Q.A.

1-609:858-8773

81-5177

Design & Constr.  
Coord. Alternate

G. DeCowsky  
Chief Elec. Eng.

1-215:543-4960

81-4611

System Eng. - Elec.

J. Perencsik Supv. Eng. Nuclear Generation	1-215:0L9-7477	81-4639
---	----------------	---------

Info. Officer -  
News Center - Alternate

N. McDermott Public Info. Representative	1-215:449-5433	81-4129
---	----------------	---------

Crews Procurement  
Group Director

W. Alden Eng. In Charge Gen. - Nuc.	1-215:368-5879	81-5022
--	----------------	---------

Support Personnel  
Accom. Director

J. O'Brien Mgr. Area Development	1-215:446-0870	81-5657
-------------------------------------	----------------	---------

T&D Support  
Coordinator

J. Mannion Mgr. T&D Services	1-215:KI4-3233	81-5103
---------------------------------	----------------	---------

Purchasing  
Coordinator

R. Hones Nuclear Fuel Section Buyer	1-609:767-1807	81-5418
--	----------------	---------

Purchasing Coord.  
Alternate

R. Mantey Nuclear Fuel Section Buyer	1-215:739-5085	81-5378
---	----------------	---------

Communications  
Coordinator

B. Czarkowski Gen. Supt. Office Systems & Comm.	1-215:624-3089	81-5352
--	----------------	---------

Communications Coord.  
Alternate

C. Aldred  
Supt. Office Systems & Comm.

1-215:265-2405

81-5353

Rad Waste Coordinator

J. Kowalski  
Eng. In Charge Pwr. Plant Serv.

1-609:795-5583

81-4530

System Eng. -  
Mech.

J. Moskowitz  
Eng. In Charge Pwr. Plant Des.

1-215:635-3675

81-4520

*M. McNeil*  
*eff 4/1/81*

PHILADELPHIA ELECTRIC COMPANY

Peach Bottom Units 2 and 3

EP-301 OPERATING THE EVACUATION ALARM AND POND PAGE SYSTEM

PURPOSE:

The purpose of this procedure is to operate the evacuation alarm and pond page.

REFERENCES:

E-1048 Riser diagram, evacuation alarm system  
ST/EP-1 Evacuation Alarm Test  
Emergency Plan, Sec. 6 (Emergency Measures)

PREREQUISITES:

1. Following AC power available
  - a. CKT 11 L - 4 (Emer. AC), normal feed
  - b. CKT 14 L - 11 (Emer. AC), alternate feed
2. Following DC power available
  - a. CKT 29 - 2312, Panel 30D23, normal feed
  - b. CKT 29-- 2109, Panel 20D21, alternate feed

ACTION LEVEL:

The Interim Emergency Director orders an evacuation per EP-303 or 304 or 305; or Shift Supervision authorizes a test of the Evacuation Alarm and Pond Page System.

PROCEDURE:

1. In the control room, on Diesel Generator Panel C26B, rotate the evacuation alarm selector switch, "43", while in the "IN" position to one of the following positions as directed by shift supervision.

Any time that the evacuation alarm selector switch is pulled out, a visual alarm will be seen on C26B in the Unit 2 and 3 control room and an audible alarm will be heard in the Unit 1 control room.

- a. "TAPE" position. (Position 1) Pull the handle out to activate the tape. The recorded message will be delivered through the river speakers only.

PROCEDURE: (continued)

- b. "MIKE" position. (Position 2) Pull the handle to activate the mike. Press the push-to-talk button on the river warning microphone and deliver the evacuation announcement authorized by shift supervision. The message will be delivered through the river speakers only.
- c. "DRYWELL #2" position. (Position 4) Pull the handle to activate the alarm. The evacuation siren will sound in the drywell #2 area only.
- d. "DRYWELL #3" position. (Position 5) Pull the handle to activate the alarm. The evacuation siren will sound in the drywell #3 area only.
- e. "PLANT" position. (Position 6) Pull the handle to activate the alarm. The evacuation siren will sound throughout the plant paging system and the mechanical roof siren will also sound.

IF IT IS DESIRED TO SOUND AN EVACUATION ALARM OVER THE RIVER SPEAKERS, IT MUST BE ACTIVATED FROM UNIT 1 AS FOLLOWS:

In the Unit 1 control room, on board 64, rotate the evacuation alarm selector switch to the "RIVER SPEAKERS" position and pull to activate. This will deliver the siren over the river speakers and give a visual alarm in the Unit 1 control room on board 64, along with an audible alarm in the Unit 2 and 3 control room on the Diesel Generator Panel.

*For 2/2/81  
Eff 4/1/81*

PHILADELPHIA ELECTRIC COMPANY  
PEACH BOTTOM UNITS 2 AND 3

EP-303 PLANT EVACUATION (EMERGENCY DIRECTOR FUNCTIONS)

PURPOSE:

To prescribe the actions to be performed if a plant evacuation is required due to unexpected or uncontrolled radiation hazards in two or more large operating areas.

REFERENCES:

Emergency Plan, Sec. 6 (Emergency Measures)

APPENDICES:

Appendix EP-303-1 Disposition of Evacuee

ACTION LEVEL:

1. Unexpected or uncontrolled radiation or toxic hazards exist in two or more large operating areas (reactor building, turbine building, radwaste building, recombiner building) as indicated by:
  - a. An increase in the area radiation monitor or continuous air monitor indications to greater than alarm levels.
  - b. Radiation levels greater than 100 mR/hr within those operating areas affected, which normally experience less than 10 mR/hr.
  - c. Airborne radioactivity greater than 100 times maximum permissible concentration within those operating areas affected which is  $3 \times 10^{-7}$  uCi/cc for an unidentified isotope in an occupational environment.
  - d. Release, leakage, or spill of a toxic reagent such that the concentration of chemical vapors makes the areas unable to be occupied.
2. Unexplained radioactive spills, releases, or leakages in two or more large operating areas.



PROCEDURE:

A PLANT EVACUATION IS THE SUPERVISED EVACUATION OF CERTAIN PLANT PERSONNEL AND VISITORS FROM THE MAIN PLANT AND INFORMATION CENTER TO DESIGNATED ASSEMBLY AREAS.

("Plant" is defined as the buildings housing the reactors, turbine-generators, auxiliary boiler, recombiner, and radwaste system.)

IMMEDIATE ACTIONS:

1. The Shift Superintendent (or alternately, the Shift Supervisor) shall:
  - a. Direct activation of the evacuation sirens in accordance with EP-301.
  - b. Designate the Administration Building as the assembly area. If the Administration Building is unable to be occupied and no other practicable on-site locations exist, initiate EP-305 Site Evacuation.
  - c. Announce a plant evacuation as follows:

"THIS IS A PLANT EVACUATION. ALL PERSONNEL EVACUATE TO THE (state designated assembly area). SHIFT PERSONNEL REPORT TO THE OPERATIONAL SUPPORT CENTER. I REPEAT. THIS IS A PLANT EVACUATION. ALL PERSONNEL EVACUATE TO THE (state designated assembly area). SHIFT PERSONNEL REPORT TO THE OPERATIONAL SUPPORT CENTER."
  - d. Assume the role of Interim Emergency Director, classify the emergency in accordance with EP-101, and carry out the steps of EP-102, 103, 104, or 105 as applicable.
  - e. Inform the Information Center Staff concerning plant conditions and direct them to evacuate the Information Center per EP-306 and also to bring the frisker which is stored at the Information Center to the assembly area. Dispatch a health physics qualified individual to monitor the Information Center evacuees. Specify the visitors assembly area (SUB, North Sub, or Delta Service Building).
  - f. Direct plant equipment in the affected areas to be de-energized or shutdown, as required.
  - g. Activate the Personnel Safety Team. Direct them to report to the assembly area and carry out the applicable portions of EP-207.
  - h. Activate the Security Team, and direct them to carry out emergency security procedures and to assist in accounting for personnel in accordance with EP-208.

- i. Direct Radiation Survey Team leader to have surveys performed in the affected areas.

FOLLOW-UP ACTIONS:

1. The Interim Emergency Director or Emergency Director shall:
  - a. If personnel are missing, direct the Personnel Safety Team Leader to perform search and rescue in accordance with EP-207.
  - b. Collect and review the "Disposition of Evacuee" record forms.

## APPENDIX EP-303-1 DISPOSITION OF EVACUEES

[illegible]

\* Disposition      D = Detained      R = Released

Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

*J. J. J. J.*  
*8/1 4/1/81*

EP-304 ASSEMBLY FOR POSSIBLE SITE EVACUATION(EMERGENCY DIRECTOR FUNCTIONS)

PURPOSE:

To prescribe the actions to be taken in assembling prior to a possible Site Evacuation.

REFERENCES:

Emergency Plan, Sec. 6 (Emergency Measures)

APPENDICES:

Appendix EP-304-1 - Disposition of Evacuees

ACTION LEVEL:

1. An unexpected or uncontrolled radiation or toxic hazard exists in two or more large operating areas (reactor building, turbine building, radwaste building, recombiner building) which have resulted in the implementation of a plant evacuation in accordance with EP-303.
2. Airborne radioactivity at the assembly area is above normal background, but less than 4 times the maximum permissible concentration which is  $4 \times 10^{-10}$  uCi/cc for an unidentified isotope in a non-occupational environment.

PROCEDURE:

Assembly for site evacuation is an interim step between Plant Evacuation and Site Evacuation and involves the assembly of visitors and certain plant personnel at designated assembly areas. Personnel can be quickly evacuated from the site, if required, or return to work, if conditions return to normal.

Immediate Actions:

The Shift Superintendent (or alternately, the Shift Supervisor) shall:

1. Assume the role of Interim Emergency Director, classify the emergency in accordance with EP-101, and carry out the steps required by EP-102, 103, 104, or 105 as applicable.
2. Make a preliminary evaluation of the hazard. If a practical on-site assembly area is available where minimal hazard exists, announce a Pre-Evacuation Assembly as follows:

"ALL PERSONNEL EXCEPT EMERGENCY TEAMS ARE TO EVACUATE (state the hazard area) AND TO ASSEMBLE AT (state the assembly area) AND AWAIT FURTHER INSTRUCTIONS."

3. Inform the Information Center staff concerning plant conditions, direct them to close the Information Center and bring the frisker stored at the Information Center to the assembly area. Specify the visitors' assembly area. (SUB, North SUB, Delta Service Buildings). Visitors are to be told that they are being requested to leave the site as a precautionary measure. Dispatch an HP qualified individual to monitor the Information Center evacuees.
4. Direct plant equipment in the affected area to be de-energized or shut down, as required.
5. Activate the Personnel Safety Team in accordance with EP-207. Direct them to report to the assembly area and perform the applicable portions of EP-207.
6. Direct the Radiation Survey Team Leader to have surveys performed in the affected areas.

Follow-up Actions:

1. The Interim Emergency Director shall take the following actions:
  - a. If conditions return to normal, announce all clear.
  - b. If the hazard becomes isolated to the plant confines, terminate the Pre-Evacuation Assembly.
  - c. If the hazard becomes more severe, announce a Site Evacuation, and designate appropriate assembly areas. Refer to EP-305.
  - d. If personnel are missing, direct the Personnel Safety Team Leader to perform search and rescue operations in accordance with EP-207.
  - e. Collect and review the "Disposition of Evacuee" record forms.





*M. J. J. J.*  
*Eff 4/1/81*

PHILADELPHIA ELECTRIC COMPANY  
PEACH BOTTOM UNITS 2 AND 3

EP-305 SITE EVACUATION (EMERGENCY DIRECTOR FUNCTIONS)

PURPOSE:

To prescribe the actions to be performed if a site evacuation is required due to unexpected or uncontrolled radiation hazards involving the main plant and extensive site areas outside the plant.

REFERENCES:

Emergency Plan, Sec. 6 (Emergency Measures)

APPENDICES:

1. Appendix EP-305-1 Evacuation Routes
2. Appendix EP-305-2 Record Form: Disposition of Evacuee

ACTION LEVEL:

1. An unexpected or uncontrolled radiation hazard exists which affects the main plant and other areas of the site as indicated by:
  - a. Airborne radioactivity within the security fence greater than 10 times maximum permissible concentration which is  $1 \times 10^{-9}$  uCi/cc for an unidentified isotope in a non-occupational environment.
  - b. Radiation levels within the security fence greater than 100 mR/hr in areas which are normally less than 10 mR/hr.
2. Plant Evacuation conditions exist, as specified in EP-303 and:
  - a. Radiation levels at the designated assembly area are greater than 10 mR/hr or airborne contamination levels are greater than 4 times the maximum permissible concentration which is  $4 \times 10^{-10}$  uCi/cc for an unidentified isotope in a non occupational environment.
  - b. No alternate on-site assembly area is feasible.



3. Roof vent radiation recorders indicate roof vent release rates in excess of the following levels:

One roof vent:	25 mR/hr (at site boundary)
Total of all roof vents:	25 mR/hr (at site boundary)
Each roof vent:	10 mR/hr (at site boundary)

CAUTION: IN-PLANT OR SITE RADIOLOGICAL HAZARDS MAY BE CAUSED BY RECIRCULATION OF ROOF VENT RELEASES.

PROCEDURE:

Immediate Actions:

1. The Shift Superintendent (or alternately, the Shift Supervisor) shall:
  - a. Direct activation of the site evacuation sirens, including the pond loudspeaker system (See EP-301). The pond loudspeaker system is to be used to warn boaters away from the plant.
  - b. If the wind is from the north at greater than 3 miles an hour, designate the North Substation as the assembly area. Otherwise, designate the South Utility Building. The alternate location is the Delta Service Building.
  - c. Announce a site evacuation as follows:

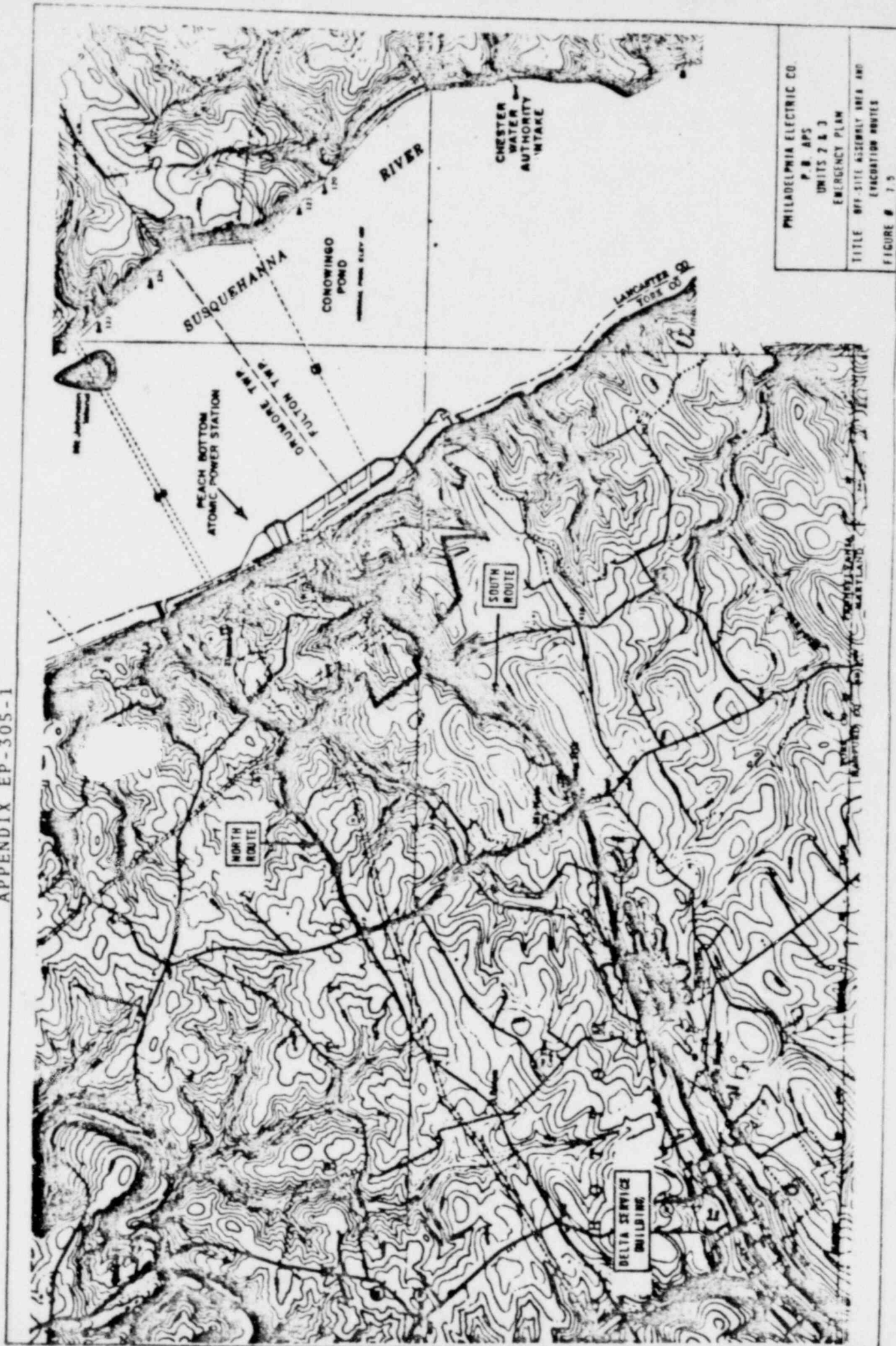
"THIS IS A SITE EVACUATION. ALL PERSONNEL EVACUATE TO THE (state designated assembly area). SHIFT PERSONNEL REPORT TO THE OPERATIONAL SUPPORT CENTER. I REPEAT. THIS IS A SITE EVACUATION. ALL PERSONNEL EVACUATE TO THE (state designated assembly area). SHIFT PERSONNEL REPORT TO THE OPERATIONAL SUPPORT CENTER."
  - d. Assume the role of Interim Emergency Director, classify the emergency in accordance with EP-101, and carry out the steps of EP-102, 103, 104, or 105 as applicable.
  - e. Inform the Information Center Staff concerning plant conditions and direct them to evacuate the Information Center per EP-306, and also to bring the frisker which is located in the Information Center to the assembly area. Specify the visitors assembly area. (Sub, North Sub, or Delta Service Bldg.) Dispatch a health physics qualified individual to monitor the Information Center evacuees.
  - f. Direct plant or site equipment to be de-energized or shut-down, as required.
  - g. Activate the Personnel Safety Team. Direct them to report to the assembly area, and carry out the applicable portions of EP-207.

- h. Activate the Security Team and direct them to carry out emergency security procedures and to assist in accounting for personnel in accordance with EP-208.

FOLLOW-UP ACTIONS:

1. The Interim Emergency Director or Emergency Director shall:
  - a. If personnel are missing, direct the Personnel Safety Team Leader to perform search and rescue in accordance with EP-207.
  - b. Collect and review the "Disposition of Evacuee" record forms.

APPENDIX EP-305-1



[illegible]

\* Disposition      D = Detained      R = Released

Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

*W. J. Hunt*  
*EP-306 7/1/81*

EP-306 EVACUATION OF THE INFORMATION CENTER

PURPOSE:

To prescribe the actions to be performed in the event that the Information Center must be evacuated.

REFERENCES:

Emergency Plan Sec. 6 (Emergency Measures)

APPENDICES:

Appendix EP-306-1 - Disposition of Evacuee

Appendix EP-306-2 - Evacuation Routes

Action Level:

Any of the following occur:

1. A hazard exists in the Information Center area due to toxic chemical or radioactive releases.
2. A plant evacuation is announced in accordance with EP-303.
3. An Assembly for Possible Site Evacuation is announced in accordance with EP-304.
4. A Site Evacuation is announced in accordance with EP-305.

PROCEDURE:

Immediate Actions:

1. The Interim Emergency Director shall direct the Information Center Staff to evacuate the visitors from the Information Center area to the designated assembly area. (SUB, North Sub or Delta Service Building)
2. The Information Center staff shall inform the visitors that a problem in the plant requires them to leave the Center and go to an assembly area. The visitors shall be informed that if they follow instructions there should be no danger.
3. The Information Center staff shall instruct the visitors to use their own vehicles and to follow the staff members to the assembly area.
4. The Information Center staff shall recover the Information Center TLD's and the frisker located in the Information Center, and shall lead the visitors to the assembly area designated by the Interim Emergency Director.



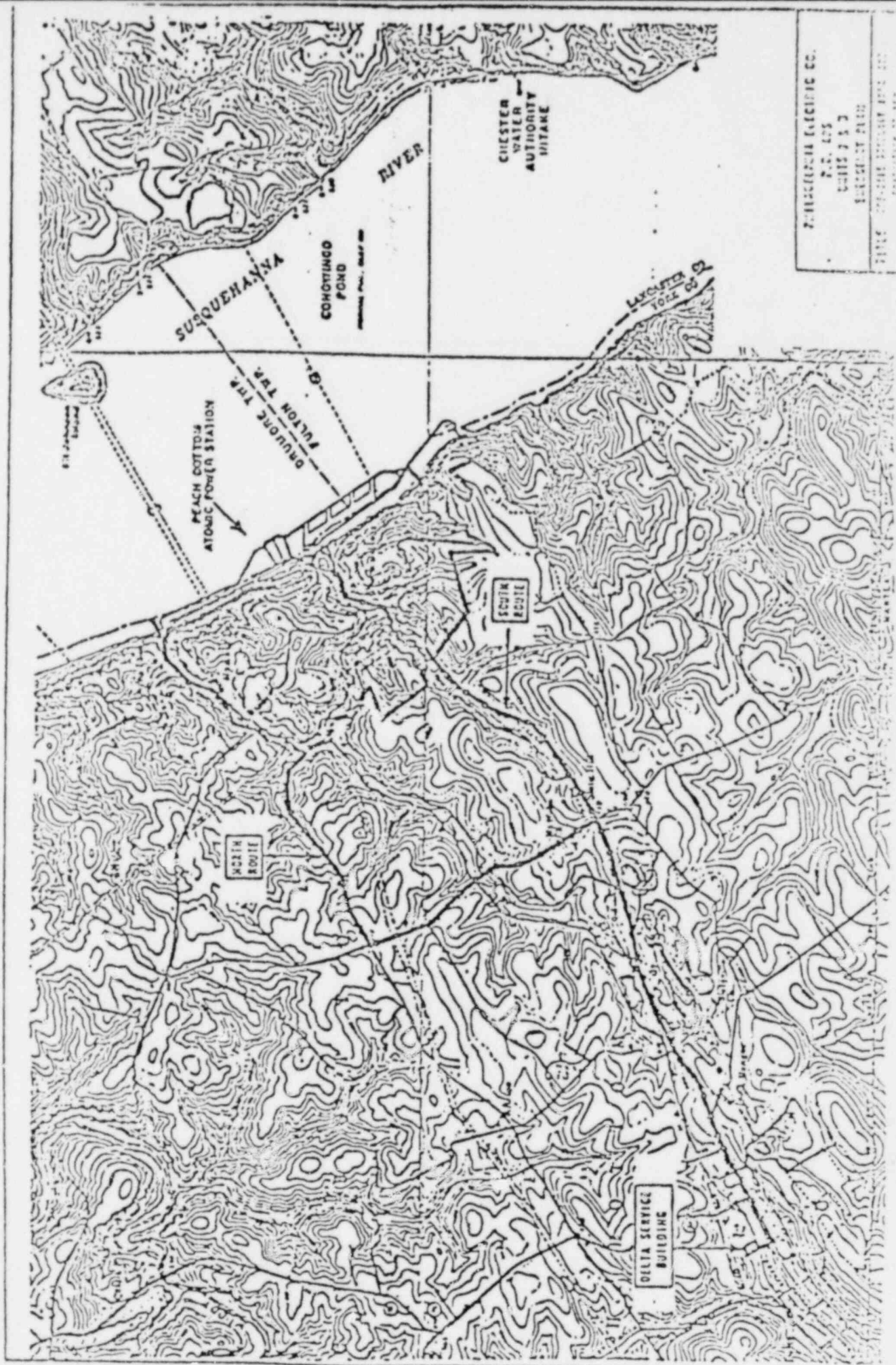
Follow-up Actions:

1. At the assembly area the visitors will be permitted to enter the company buildings for shelter.
2. The Information Center staff shall assure the visitors that there is probably no danger, but that they must remain until they can be checked for contamination as a precautionary measure.
3. The Information Center staff shall record the names and addresses of visitors and the license numbers of vehicles on the "Disposition of Evacuee" record form (see Appendix).
4. The Information Center staff shall inform the Personnel Safety Team Leader of any visitors who are injured or have evidence of radioactive contamination exposure.
5. The Information Center Site estimate TLD shall be forwarded to the Personnel Safety Team Leader for emergency processing.
6. The visitors shall be detained by the Information Center staff until their release is authorized by the Personnel Safety Team Leader, and approved by the Interim Emergency Director or Emergency Director.





APPENDIX EP-306-2



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**4/1/81**

PHILADELPHIA ELECTRIC COMPANY

Peach Bottom Units 2 and 3

Emergency Plan Implementing Procedure

EP-311 HANDLING PERSONNEL WITH SERIOUS INJURIES, RADIOACTIVE CONTAMINATION EXPOSURE, OR EXCESSIVE RADIATION EXPOSURE EMERGENCY DIRECTOR FUNCTIONS

PURPOSE:

To prescribe the actions to be followed by The Emergency Director in expediting medical care for personnel suffering from serious injury, radioactive contamination exposure, or excessive radiation exposure.

REFERENCES:

Emergency Plan, Sec. 6 (Emergency Measures)

APPENDICES:

(None)

ACTION LEVEL:

Personnel suffer serious injuries, radioactive contamination exposure, or excessive radiation exposure

PROCEDURE:

Immediate Actions:

1. The Shift Superintendent (or alternately, the Shift Supervisor) shall:
  - a. Assume the role of Interim Emergency Director, classify the emergency in accordance with EP-101, and carry out the steps of EP-102, 103, 104 or 105 as applicable.
  - b. Activate the Personnel Safety Team in accordance with EP-207. If the injured persons' locations are unknown or if they are in a hazardous area, direct the team to carry out search and rescue in accordance with EP-207.
  - c. During day shift (Monday through Friday) alert the First Aid Trailer to stand by to assist in the treatment of injured persons. (Ext. 271)

PROCEDURE: (continued)

2. Based on the report and recommendations of the Personnel Safety Team, The Interim Emergency Director shall carry out the steps from the applicable categories below:

Part I :	No Radiation Involved	-	Serious Injury
Part II:	A. Excessive Radiation Exposure	-	No Serious Injury
	B. Excessive Radiation Exposure	-	Serious Injury
	C. Contamination Exposure	-	No Serious Injury
	D. Contamination Exposure	-	Serious Injury
	E. Excessive Radiation and Contamination Exposure	-	No Serious Injury
	F. Excessive Radiation and Contamination Exposure	-	Serious Injury

Part I: No Radiation Involved - Serious Injury

Criteria: Any serious injury warranting the attention of off-site medical support.

Follow-Up Actions:

1. The Interim Emergency Director shall:
  - a. Based on the report and recommendations of the Personnel Safety Team, determine if hospitalization is required.
  - b. If hospitalization is not required, request a local physician to come to the site, or arrange to transport the injured persons to a local physician via company or personal vehicle (see EP-209 Appendix 'N' for telephone numbers).
  - c. If hospitalization is required, arrange to transport the injured persons via ambulance, or company or personal vehicle. Contact the Nurse Shift Supervisor at Harford Memorial Hospital (see EP-209 Appendix 'N' for telephone numbers).
- NOTE: EMPHASIZE TO THE NURSE SHIFT SUPERVISOR THAT THE INJURIES DO NOT INVOLVE RADIOACTIVE CONTAMINATION, THAT THE INJURED PERSONS ARE TO BE TREATED USING ROUTINE HOSPITAL PROCEDURES, AND THAT THEY SHOULD BE ADMITTED TO THE CONVENTIONAL EMERGENCY ROOM.
- d. Alert security personnel to prepare to expedite admittance of the physician or ambulance and to provide personnel dosimetry, if necessary.
- e. Notify the Load Dispatcher. The Load Dispatcher shall notify the Company Medical Director and Claims as required.
- f. Notify the injured persons' families or emergency contacts.
2. The Emergency Director (the Station Superintendent, or alternately, Assistant Station Superintendent) shall notify or authorize notification of the Superintendent, Generation Division-Nuclear. (see EP-209 Appendix B for telephone numbers).

Part II: Radiation-Related Personnel Accidents

A. Excessive Radiation Exposure - No Serious Injury

Criteria: Acute whole body exposure greater than 3 REM.

Follow-Up Actions:

1. The Interim Emergency Director shall notify the Load Dispatcher. The Load Dispatcher shall notify the Company Medical Director and Claflus as required.
2. The Station Superintendent (or alternately, Assistant Station Superintendent) shall:
  - a. Notify or authorize notification of the Superintendent, Generation Division-Nuclear and Radiation Management Corporation (see EP-209 Appendices N & B).
  - b. Immediately notify the Nuclear Regulatory Commission, Region I, Office of Inspection and Enforcement by two communications methods, if any of the following conditions exists:
    - Telephone: 1-215-337-5000
    - Telecopier: 1-215-337-5324
    - (1) Whole body exposure is 25 REM or more
    - (2) Skin exposure is 150 REM or more
    - (3) Extremity exposure is 375 REM or more

NOTE: NOTICE WITHIN 24 HOURS IS REQUIRED IF EXPOSURES ARE AT LEAST 20% OF THE ABOVE VALUES.

NOTE: THERE IS NO NEED FOR FIRST AID OR FOR URGENT TRANSFER OF THE PATIENTS TO A HOSPITAL BECAUSE OF THE RADIATION EXPOSURE. WHEN DETERMINED BY MEDICAL CONSULTATION THAT HOSPITALIZATION IS NECESSARY THE PATIENTS WILL BE TRANSFERRED TO HARFORD MEMORIAL HOSPITAL BY ROUTINE HOSPITAL PROCEDURES, OR TO THE RMC FACILITIES IN PHILADELPHIA.

3. Subsequent treatment for excessive radiation exposure will follow consultation between the Company Medical Director and Radiation Management Corporation.

B. Excessive Radiation Exposure - Serious Injury

Criteria:

A person suffers both of the following:

1. Any injury of sufficient magnitude to warrant the attention of off-site medical support; and
2. An acute whole body exposure of greater than 3 REM.

Part II: Radiation-Related Personnel Accidents

Follow-up Actions:

NOTE: CONCERN FOR THE INJURY OVERRIDES IMMEDIATE CONCERN FOR RADIATION EXPOSURE.

1. The Interim Emergency Director shall:

- a. Based on the report and recommendations of the Personnel Safety Team, determine if hospitalization is required.
- b. If hospitalization is not required, request a local physician to come to the site, or arrange to transport the injured persons to a local physician via company or personal vehicle (see EP-209 Appendix 'N' for telephone numbers).
- c. If hospitalization is required, arrange to transport the injured persons via ambulance, or company/personal vehicle. Contact the Nurse Shift Supervisor at Harford Memorial Hospital (see EP-209 Appendix 'N' for telephone numbers).

NOTE: EMPHASIZE TO THE NURSE SHIFT SUPERVISOR THAT THE INJURIES DO NOT INVOLVE RADIOACTIVE CONTAMINATION, THAT THE INJURED PERSONS ARE TO BE TREATED USING ROUTINE HOSPITAL PROCEDURES, AND THAT THEY SHOULD BE ADMITTED TO THE CONVENTIONAL EMERGENCY ROOM.

- d. Alert security personnel to prepare to expedite admittance of the physician or ambulance and to provide personnel dosimetry, if necessary.
- e. Notify the Load Dispatcher. The Load Dispatcher shall notify the Company Medical Director and Claims as required.
- f. Notify the injured persons' families or emergency contacts.

2. The Station Superintendent (or alternately, Assist Station Superintendent) shall:

- a. Notify or authorize notification of the Superintendent, Generation Division-Nuclear and Radiation Management Corporation (see EP-209 Appendices B & N for telephone numbers).
- b. Immediately notify Nuclear Regulatory Commission Region I, Office of Inspection and Enforcement by two communications methods, if any of the following conditions exist:

Telephone - 1-215-337-5000

Telecopier - 1-215-337-5324

- (1) Whole body exposure is 25 REM or more
- (2) Skin exposure is 150 REM or more
- (3) Extremity exposure is 375 REM or more

NOTE: NOTICE WITHIN 24 HOURS IS REQUIRED IF EXPOSURES ARE AT LEAST 20% OF THE ABOVE VALUES.



3. Subsequent treatment for excessive radiation exposure will follow consultation between the Company Medical Director and Radiation Management Corporation.

C. Radioactive Contamination Exposure - No Serious Injury

Criteria:

A person suffers one of the following:

1. Radioactive contamination exposure which causes a body contact reading of 1 mR/hr using a GM detector.
2. Suspected or actual inhalation or ingestion of radioactive material.

CAUTION: GROSS EXTERNAL CONTAMINATION USUALLY RESULTS IN SOME INTERNAL CONTAMINATION.

Follow-Up Actions:

1. The Interim Emergency Director shall:
  - a. Notify the Load Dispatcher. The Load Dispatcher shall notify the Medical Director and Claims as required.
  - b. Direct the Personnel Monitoring Team, assisted by the Radiation Management Corporation, to perform analyses to determine the isotopic composition of the contamination.
2. The Station Superintendent (or alternately, Assistant Station Superintendent) shall notify or authorize notification of the Superintendent, Generation Division-Nuclear and the Radiation Management Corporation. (see EP-209, Appendices B & N for telephone numbers).
3. Subsequent treatment to reduce internal contamination will follow consultation between the Company Medical Director and Radiation Management Corporation.

D. Contamination Exposure - Serious Injury

Criteria:

A person suffers both of the following:

1. Radioactive contamination exposure which causes a body contact reading of 1 mR/hr using a GM detector or suspected or actual inhalation or ingestion of measurable quantities of radioactive material; and
2. Any injury warranting the attention of off-site medical support.

CAUTION: GROSS EXTERNAL CONTAMINATION USUALLY RESULTS IN SOME INTERNAL CONTAMINATION.

Follow-Up Actions:

NOTE: CONCERN FOR THE INJURY OVERRIDES IMMEDIATE CONCERN FOR RADIOACTIVE CONTAMINATION.

1. The Interim Emergency Director shall:

- a. Based on the report and recommendations of the Personnel Safety Team, determine if hospitalization is required.
- b. If hospitalization is not required, request a local physician to come to the site, or arrange to transport the persons to a local physician via company or personal vehicle (see EP-209, Appendix N for telephone numbers).
- c. If hospitalization is required:
  - (1) If Harford Memorial Hospital can handle the victims (depending on their number and exposure/contamination levels) contact the Nurse Shift Supervisor at Harford Memorial Hospital. (see EP-209, Appendix N for telephone numbers).

NOTE: EMPHASIZE THAT THE INJURIES INVOLVE RADIOACTIVE CONTAMINATION AND THAT THE INJURED PERSONS ARE TO BE ADMITTED TO THE RADIATION EMERGENCY ROOM ACCORDING TO THE "PROCEDURES FOR HANDLING RADIATION ACCIDENTS".

- (2) If the number of contaminated injured personnel exceeds the capacity of Harford Memorial Hospital, coordinate with the Company Medical Director and Radiation Management Corporation for proper care of the victims. It may be necessary to notify the Radiation Management Corporation (RMC) Medical Facility at the Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania. RMC, in consultation with the Company Medical Department, may conclude that the exposures require the prolonged, sophisticated treatment available at their facilities at the hospital of the University of Pennsylvania. RMC shall arrange for transport of the patients either by ambulance, personal vehicle, or helicopter. Provisions exist for helicopter transfer from pads at the plant site or Delta-Cardiff.
- d. Alert security personnel to prepare to expedite admittance of the local physician or ambulance and to provide personnel dosimetry, if necessary.
- e. Direct a health physics representative to accompany the ambulance to the hospital or facility to advise the hospital staff concerning the radiation hazards, to control and recover radioactive waste, and to obtain personnel exposure data, if necessary.
- f. Notify the Load Dispatcher. The Load Dispatcher shall notify the Company Medical Director and Claims as required.
- g. Notify the injured persons' families or emergency contacts.



2. The Station Superintendent (or alternately, Assistant Station Superintendent) shall notify or authorize notification of the Superintendent, Generation Division-Nuclear and the Radiation Management Corporation. (see EP-201 Appendices B & N for telephone numbers).
  3. Subsequent treatment for the internal radioactive contamination will follow consultation between the Company Medical Director and Radiation Management Corporation.
- E. Excessive Radiation and Contamination Exposure - No Serious Injury
1. Carry out the steps of Part II. C.
  2. Carry out step 2.b. of Part II. B.
- F. Excessive Radiation and Contamination Exposure - Serious Injury
1. Carry out the steps of Part II. D.
  2. Carry out step 2.b of Part II.B.

*W. H. H. H.*  
*EP 4/1/81*

PHILADELPHIA ELECTRIC COMPANY

Peach Bottom Units 2 and 3

Emergency Plan Implementing Procedure

EP-312 RADIOACTIVE LIQUID RELEASE (EMERGENCY DIRECTOR FUNCTIONS)

PURPOSE:

To prescribe the actions to be performed in event of an excessive radioactive liquid release.

REFERENCES:

Emergency Plan, Sec. 6 (Emergency Measures)

APPENDICES:

None

ACTION LEVELS:

An excessive radioactive liquid release occurs, as indicated by:

1. The Radwaste Effluent radiation recorder at the discharge to Conowingo Pond indicates a release rate of 500 times the maximum permissible concentration which is  $5 \times 10^{-5}$  uCi/cc for an unidentified isotope.
2. Sample measurements at the discharge structure indicate 500 times maximum permissible concentration which is  $5 \times 10^{-5}$  uCi/cc for an unidentified isotope.

PROCEDURE:

Immediate Actions:

1. The Shift Superintendent (or alternately, the Shift Supervisor) shall:
  - a. Assume the role of Interim Emergency Director and carry out the steps of EP-101 to classify the event.  
Depending on the classification of the emergency, carry out the steps of EP-104, or 105.
  - b. Take immediate steps to terminate the discharge and contain the hazard.

PROCEDURE: (continued)

- c. Direct the Interim Radiation Survey Team to report to the discharge structure to obtain and analyze water samples.
- d. Direct the Interim Radiation Survey Team Leader to activate the Radiation Survey Team.
- e. Direct the Interim Radiation Survey Team Leader or Radiation Survey Team Leader to calculate the activity released and the resulting downstream concentrations, using EP-205.

BE PREPARED TO NOTIFY DOWNSTREAM DOMESTIC WATER USERS IF REQUESTED TO DO SO BY THE BUREAU OF RADIOLOGICAL HEALTH - (See EP-209 App J)

FOLLOW-UP ACTIONS:

- 1. The Interim Emergency Director or Emergency Director shall direct continued surveillance of the discharge structure equipment and initiate required decontamination efforts as soon as possible.
- 2. The Site Emergency Coordinator shall:
  - a. Direct the Radiation Survey Team Leader to dispatch survey teams to obtain water samples off-site, primarily at the following downstream public water system intakes:
    - (1) Chester Water Authority
    - (2) Baltimore Water Supply Bureau
    - (3) Conowingo Village
    - (4) Bainbridge Naval Training Center/Port Deposit
    - (5) Perry Point Veteran's Hospital
    - (6) Havre-de-Grace
  - b. Direct that a log be kept to indicate the time of samples and measured radioactive concentrations at appropriate locations along the pond, including all public water system intakes.
  - c. Direct the Interim Radiation Survey Team or Radiation Survey Team to calculate the estimated duration of radioactive concentrations at various public water system intakes using EP-205.

*M. M. M. M.*  
*EP 4/1/81*

Philadelphia Electric Company

Peach Bottom Units 2 and 3

Emergency Plan Implementing Procedure

EP-316 Cumulative Population Dose Calculations

PURPOSE:

To provide methods of estimating the off-site airborne concentrations and resulting dose rates.

REFERENCES:

1. Emergency Plan, Section 6 (Emergency Measures).
2. 10CFR20, Appendix B.

INDEX:

- I. Determination of Magnitude and Direction of Gaseous Radioactive Release and Resulting Dose Rates
  - Part 1 - Off-site Dose Rate Due to Main Stack Release
  - Part 2 - Off-site Dose Rate Due to Roof Vent Release
- II. Determination of Release Rate Based Upon High Range Roof Vent and Main Stack Monitor Indications
- III. Determination of Dose Due to Iodine Release
  - Part 1 - Off-site Dose Determination Due to Main Stack Release
  - Part 2 - Off-site Dose Determination Due to Roof Vent Release

ACTION LEVEL:

Cumulative population dose calculations are required in accordance with EP-103, 104, or 105.

GENERAL PROCEDURE:

Section I provides a method of estimating the off-site airborne concentrations and resulting whole body dose rates at various distances downwind from the main stack (Part 1) or the roof vents (Part 2). Section A of either calculation provides a very rapid, ultraconservative estimate of the worst possible site boundary dose rate. Section B of either calculation provides a refined estimate of the highest ground level dose rate and concentration that will be found in the plume based on existing release rates

and meteorological data. Part C calculations provide refined dose rates and concentrations for any distance downwind in the plume.

Section II provides a method for estimating release rates from high range roof vent and main stack monitors if normal range monitors should be off scale.

Section III provides a method of estimating the off-site concentrations and resulting child thyroid dose due to radioactive iodines released from the main stack (Part 1) or the roof vents (Part 2). Section A of either calculation provides a rapid estimate for the highest possible off-site dose. Section B of either calculation provides a refined estimate of the highest possible off-site ground level center plume line dose. Section C gives refined assessments for other off-site and boundary doses.

I - DETERMINATION OF MAGNITUDE AND DIRECTION OF GASFOUS  
RADIOACTIVE RELEASES AND RESULTANT DOSE RATES

PART 1 - OFF-SITE DOSE RATE DUE TO MAIN STACK RELEASE

A. Rapid assessment of highest off-site dose rate

1. Record the site boundary dose rate corresponding to the peak cps on the main stack radiation recorder. \_\_\_\_\_ cps  
Use the mR/hr to cps scale mounted on the recorder. \_\_\_\_\_ mR/hr

THIS IS THE HIGHEST POSSIBLE SITE BOUNDARY DOSE RATE BASED ON THE WORST CASE METEOROLOGICAL CONDITIONS AND SOURCE COMPOSITION. STEP B, SECTION I-1, PROVIDES A MORE REALISTIC, THOUGH CONSERVATIVE, BOUNDARY DOSE RATE BASED ON ACTUAL METEOROLOGICAL DATA.

B. Refined assessment of highest off-site and boundary dose rates

Use the higher values and indicated on the recorders. Ignore background under emergency conditions.

1. Record the main stack count rate. Estimate the previous 20 minute average in cps. Go to Section II (for next two steps) if main stack monitor is off scale. 1. \_\_\_\_\_ cps
2. Record the main stack effluent flow rate in CFM 2. \_\_\_\_\_ CFM
3. Use the main stack calibration curve to convert main stack count rate (item 1) to uCi/sec. The calibration curves are near the main stack radiation recorder and are attached to this procedure. 3. \_\_\_\_\_ uCi/sec

Insert resultant uCi/sec from Section II if normal range monitor is off scale and then continue with remaining steps 4-20.

TAKE THE FOLLOWING DATA FROM THE 320 FT AEROVANE RECORDER. IF THE 320 FT AEROVANE IS UNAVAILABLE, USE THE 90 FT. WEATHER STATION 1A.

4. Determine the average wind speed for the previous 20 minutes. Use the right hand trace on the recorder. If wind speed is less than 1 mph, use wind speed of 1 mph. 4. \_\_\_\_\_ mph
5. Determine the average wind direction for the previous twenty minutes. Use the left trace. 5. \_\_\_\_\_ deg
6. Determine the direction toward which the wind is blowing by adding 180° to item 5, wind direction. If item 5 + 180° is greater than 360°, subtract 360° from the sum. 6. \_\_\_\_\_ deg



7. Determine the turbulence class by examining the wind direction trace (left hand trace) and comparing this with the turbulence class examples included with this procedure, EP-316 Figure 1 .

7. Class \_\_\_\_\_

8. Using the class, item 7, choose the appropriate dispersion factor and distance listed below. These data will be used to determine the highest dose rate on the plume centerline and the distance from the main stack at which it occurs.

8. \_\_\_\_\_  
Dispersion factor

If the turbulence class from item 7 is	Choose;	
	Dispersion factor	Distance
Class I or III	1500	.6 miles
Class II	3300	.6 miles
Class IV	5800	1.0 miles
Class V	9200	4.2 miles

8. \_\_\_\_\_ miles  
Distance

9. Calculate the maximum plume centerline ground level air concentration in the following manner:

$$\text{maximum concentration} = \frac{(\text{dispersion factor, item 8})(\text{release rate, item 3})(10^{-14})}{(\text{wind speed, item 4})}$$

uCi/cc

9. \_\_\_\_\_ uCi/  
maximum ground level air concentration

10. Calculate the maximum plume centerline ground level dose rate in the following manner:

$$\text{maximum dose rate, mR/hr} = (\text{air concentration, item 9})(2.85 \times 10^6)$$

10. \_\_\_\_\_ mR/h  
maximum ground level dose rate

C. Refined assessment of other off-site and boundary dose rates.

ITEMS 9 AND 10 ARE THE MAXIMUM AIR CONCENTRATION AND DOSE RATE, RESPECTIVELY, DOWNWIND ON THE PLUME CENTERLINE AT GROUND LEVEL. AIR CONCENTRATIONS AND CORRESPONDING DOSE RATES FOR OTHER DISTANCES ON OR OFF THE PLUME CENTERLINE MAY BE DETERMINED AS FOLLOWS:

11. Select other locations of interest downwind. Determine the distance from the main stack to these locations and enter on the calculation table, page 10, in Column A. desired distance.

12. From the chart below for the turbulence class identified in item 7, find the correct dispersion factor for each distance listed on the calculation sheet per item 11. Write the values in the 'B' column of the calculation table beside the distance of interest.

TABLE I Dispersion Factors Vs Distance				
Distance Miles from Main Stack	Dispersion Factors by Turbulence Class			
	Class I or III	Class II	Class IV	Class V
0.5	2000	3900	1350	<10
0.75	960	2500	4000	<10
1.0	640	1800	5900	<10
1.25	440	1250	5200	<10
1.5	330	950	4100	<10
1.75	240	710	3400	<10
2.0	190	560	2900	10
2.25	150	460	2600	250
2.50	130	400	2400	800
2.75	110	350	2050	1700
3.0	90	290	1800	3100
3.25	79	240	1500	4900
3.50	69	200	1200	6500
3.75	60	170	1000	8100
4.0	53	140	850	9000
4.25	48	125	750	9100
4.50	44	110	660	9000
4.75	40	100	630	8500
5.0	36	90	600	8000
5.5	30	80	520	7000
6.0	26	69	450	6200
6.5	22	59	390	5500
7.0	19	51	350	5000
7.5	18	47	320	4500
8.0	16	43	290	4100
8.5	14	39	230	3700
9.0	13	35	210	3500
9.5	11	31	200	3200
10.0	10	29	200	3000
10.5	< 10	27	190	2800
11.0	< 10	24	180	2600
11.5	< 10	22	170	2400
12.0	< 10	21	160	2200
12.5	< 10	19	150	2100
13.0	< 10	18	140	2050
13.5	< 10	17	130	2000
14.0	< 10	16	120	1900

13. constant

14. Perform the operations indicated in the calculation table below to obtain the air concentration (col. D) in  $\mu\text{Ci/cc}$  and the resultant dose rates (col. E) in  $\text{mR/hr}$  at the distance of interest.

[illegible]

## OFF-CENTERLINE DOSE CALCULATIONS

15. To determine the ground concentration and dose rates for locations not on the plume centerline, select the appropriate overlay for the existing turbulence class.
16. Mount the overlay on the control center map with the origin at the main stack.
17. Rotate the overlay to align the centerline with the direction of wind flow.
18. Select the location of interest and from the values on the overlay estimate the decimal fraction of reduction from the centerline. Enter on the off centerline calculation table.
19. Multiply the centerline concentration or dose rate by the decimal fraction (item 18) to obtain the off-centerline concentration or dose rate at the point of interest.
20. A population rose, EP-316 Figure 5, is provided if needed for population man rem dose calculations.



PART 2 OFF-SITE DOSE RATES DUE TO ROOF VENT RELEASE

- A. Rapid assessment of highest off-site dose
- |  | <u>UNIT 2</u>       | <u>UNIT 3</u> |
|--|---------------------|---------------|
| 1. Record <u>peak count rate</u> (cpm) from each unit's roof vent radiation recorder. Use the higher value indicated for each unit. Ignore background. | ____ cpm            | ____ cpm      |
| 2. Using the mR/hr to cpm scale mounted on the recorder, convert each cpm measurement to <u>mR/hr</u> .  | ____ mR/hr          | ____ mR/hr    |
| 3. Obtain the <u>site boundary dose rate</u> by adding the Unit 2 and Unit 3 dose rates.   | ____<br>U/2 and U/3 |               |

THIS IS THE HIGHEST POSSIBLE SITE BOUNDARY DOSE RATE BASED ON WORST CASE WIND CONDITIONS AND SOURCE COMPOSITION. STEP B, SECTION I.2, PROVIDES A MORE REALISTIC, THOUGH STILL CONSERVATIVE, BOUNDARY DOSE RATE BASED ON METEOROLOGICAL DATA.

- B. Refined assessment of highest off-site and boundary dose rates. Ignore background. Use higher values indicated on recorders.
- Record the count rate for each roof vent radiation recorders. Use the higher value for each unit. Take 20 minutes estimated average. If one unit's count rate is less than 1/10 of the other, it may be ignored. 1. \_\_\_\_ cpm \_\_\_\_ cpm  
Go to Section II for the first five steps if normal range roof vent monitor is off scale.
  - Record the pressure correction factor (from the date sheet on the 00C26 panel) for use of the roof vent monitors used in step 1. Use 1.6 if factor not available. 2. \_\_\_\_  
Pressure Press.  
Corr.Fact.Corr  
Factor
  - Calculate the corrected roof vent count rates for each unit. Corrected count rate = (count rate item 1) x (pressure correction factor, item 2) 3. \_\_\_\_ cpm \_\_\_\_ cpm
  - Record the higher of the A or B flow rates for each roof vent. 4. \_\_\_\_ CFM \_\_\_\_ CFM
  - Use the appropriate current calibration curves for the respective roof vents to convert corrected cpm (item 3 above) to uCi/Sec. The calibration curves are near the roof vent radiation recorders and are attached to this procedure. 5. \_\_\_\_ uCi \_\_\_\_ uCi  
sec. sec



6. Add the Unit 2 and Unit 3 release rates from item 5 to obtain the combined roof vent release rate. Insert resultant uCi/sec from Section II if normal range monitors are off scale and then continue with remaining steps 7-15.

6. \_\_\_\_\_  $\frac{\text{uCi}}{\text{sec}}$

TAKE THE FOLLOWING WIND DATA FROM WEATHER TOWER NO. 1 AT THE 90 FT ELEVATION. (IF UNAVAILABLE, USE THE HILL POLE RECORDER).

7. Average wind speed from right trace for previous 20 minutes; minimum value to be used is 1 MPH.

7. \_\_\_\_\_ MPH  
Windspeed

8. Average wind direction from left trace for previous twenty minutes. Record in degrees.

8. \_\_\_\_\_  
Direction wind is from

9. Determine the direction toward which the wind is blowing by adding  $180^\circ$  to the wind direction from item 8. If item 8 +  $180^\circ$  is greater than  $360^\circ$ , subtract  $360^\circ$ .

9. \_\_\_\_\_  
Direction wind is toward

10. Determine the turbulence class by examining the wind direction trace (left side) and comparing this with the turbulence class examples included with this procedure, EP-316, Figure 1.

10. \_\_\_\_\_  
Turbulence Class

11. Based on the turbulence class chosen in item 10, choose the appropriate dispersion factor and distance listed below. These data will be used to determine the highest dose rate on the plume centerline and the distance from the release point where it occurs.

Turbulence class from item	Dispersion factor and distance
Class I or III	3992 at 0.6 miles
Class II	2268 at 0.6 miles
Class IV	14 470 at 0.6 miles
Class V	61,548 at 0.6 miles

11. \_\_\_\_\_  
Dispersion Factor  
0.6 miles  
Distance Downwind

12. Calculate the maximum downwind air concentration in uCi/cc as follows:

$$\text{Maximum Concentration } \frac{\text{uCi}}{\text{cc}} = \frac{(\text{dispersion factor, item 11}) \times (\text{release rate, item 6}) \times (10^{-14})}{(\text{Windspeed, item 7})}$$

12. \_\_\_\_\_  $\frac{\text{uCi}}{\text{cc}}$   
Max. Concentration

13. Calculate the maximum downwind ground level dose rate as follows:

$$\text{Max dose rate} = (\text{Max air concentration, item 12}) \times (2.85 \times 10^6)$$

mR/hr

13. \_\_\_\_\_  $\frac{\text{mR}}{\text{hr}}$   
Max Dose Rate

C. Refined Assessment of Other Offsite and Boundary Dose Rates

ITEMS 12 AND 13 ARE THE MAXIMUM AIR CONCENTRATION AND DOSE RATE, RESPECTIVELY, DOWNWIND ON THE PLUME CENTERLINE AT GROUND LEVEL. AIR CONCENTRATIONS AND CORRESPONDING DOSE RATES FOR OTHER DISTANCES ON THE PLUME CENTERLINE MAY BE DETERMINED AS FOLLOWS:

14. Select other locations of interest downwind. Determine the distance from the roof vents to these locations and enter each distance on the calculation table, page 17, in Column A, desired distance.
15. For the turbulence class identified in item 7, find the correct dispersion factor for each distance on the calculation table from the chart on page 16. Enter these values on the calculation table in column B, beside the distance of interest. Go to step 16.

TABLE II - ALL TURBULENCE CLASSES FOR ANY DIRECTION  
DISPERSION FACTORS FOR ROOF VENT RELEASE  
CALCULATED FOR WORST DIRECTION FOR GIVEN DISTANCE

DISTANCE (MILES)	CLASS I OR III	CLASS II	CLASS IV	CLASS V
.3	14,894	22,577	48,767	189,374
.6	3,992	6,268	14,470	61,548
.9	1,844	2,959	7,063	31,214
1.2	1,066	1,732	4,243	19,199
1.9	493	813	2,072	9,643
2.5	284	477	1,248	5,910
3.1	186	316	838	4,039
3.7	132	224	607	2,959
4.3	99	168	464	2,274
5.0	76	132	363	1,812
5.6	60	105	298	1,481
6.2	52	85	242	1,239
6.8	43	69	208	1,051
7.5	36	63	177	907
8.1	29	54	155	791
8.7	27	47	132	697
9.3	22	40	119	618
9.9	20	36	105	553
10.6	18	31	94	502
11.2	6	29	85	452
11.8	15	27	78	412
12.4	13	25	69	376
24.8	3	7	25	114
37.3	3	3	12	58

- 

16. Constant

17. Perform the operation indicated in the calculation table below to obtain the air concentration (Col. D) in uCi/cc and the resultant dose rates (Col. F) in mR/hr at the distance of interest.

Basis: Centerline of plume only. These calculations are valid only for a constant release rate and constant meteorological condition. If either or these values change significantly, NEW VALUES MUST BE CALCULATED.

[illegible]

18. Overlays are not applicable to off-centerline roof vent data. Any estimate of off-centerline dose rates for roof vent releases would have to be a judgment based on weather conditions.
19. A population rose, EP-316 Figure 5, is attached to provide information if man-rem calculations are required.

# DEFINITION OF TURBULENCE CLASSES

EP-316  
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## CLASS I or III

LARGE, LAZY CONVECTIVE  
EDDIES CAUSED BY HEATING  
AIR CLOSE TO THE GROUND.  
MOST FREQUENT ON SUMMER  
MORNINGS WHEN WIND SPEEDS  
ARE LIGHT AND LAKE BREEZES  
ARE NOT PRESENT. MINIMUM  
RANGE OF FLUCTUATIONS  
45°, NO MAXIMUM LIMIT.

45° MAX.



## CLASS II

TYPICAL DAYTIME TRACE  
HAVING A MIXTURE OF CON-  
VECTIVE AND MECHANICAL  
TURBULENCE. FLUCTUATIONS  
ARE MORE SUBDUED WITH ON-  
SHORE WINDS THAN OFFSHORE.  
RANGE OF FLUCTUATIONS  
10°-45°

10° MIN.



## CLASS IV

TYPICAL TURBULENCE  
ASSOCIATED WITH OVERCAST,  
STORMY, OR NOCTURNAL  
SITUATIONS HAVING RELA-  
TIVELY STRONG WINDS.  
MECHANICAL TURBULENCE  
PREDOMINATES. MINIMUM  
RANGE 10°, NO MAXIMUM  
LIMIT.

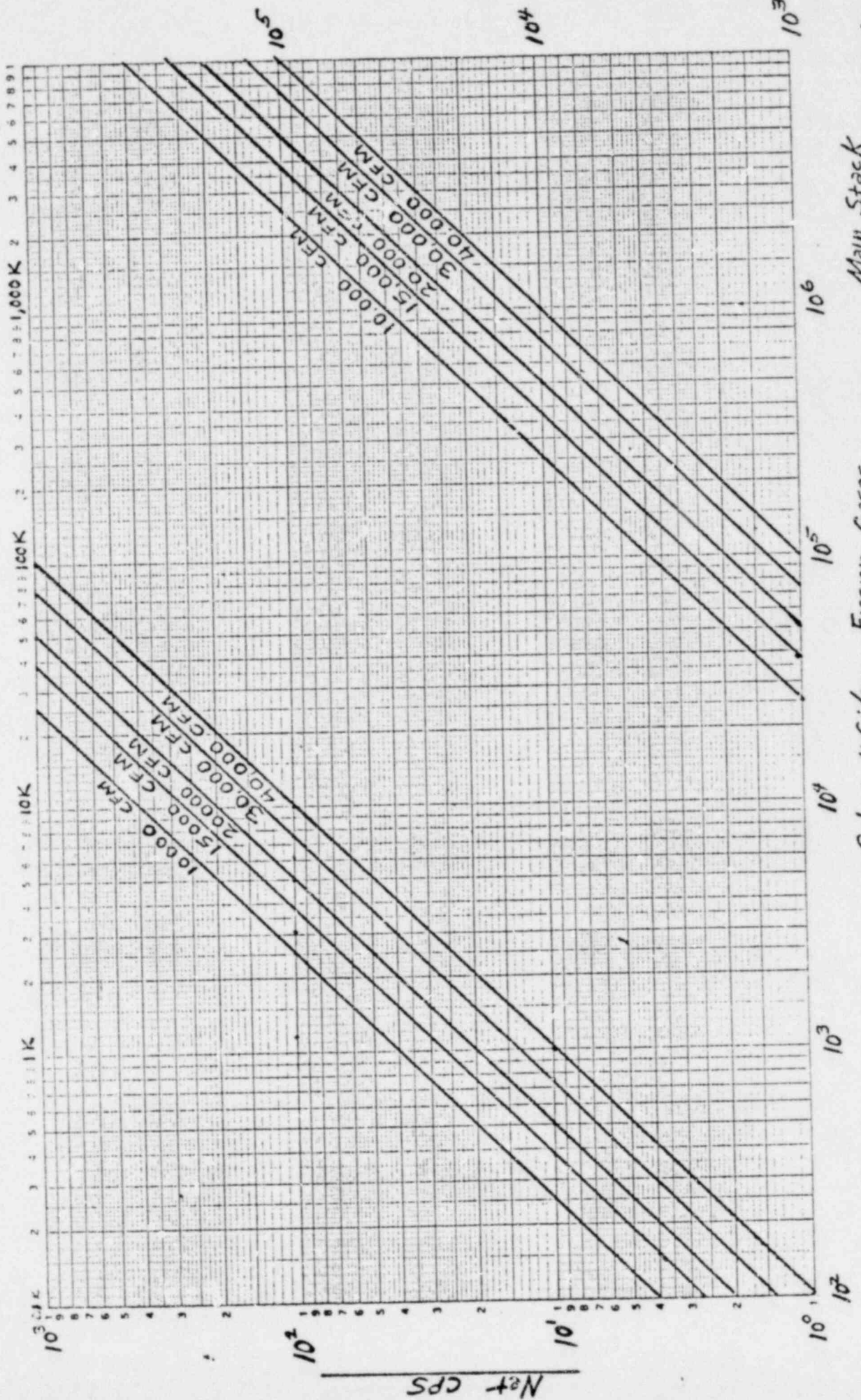
## CLASS V

CLASSIC TEMPERATURE  
INVERSION CASE WITH  
ALMOST NO TURBULENCE  
EITHER NOCTURNAL OR  
OR ASSOCIATED WITH  
DAYTIME LAKE BREEZES,  
ESPECIALLY IN THE  
SPRING. SHORT-TERM  
FLUCTUATIONS DO NOT  
EXCEED 10°, BUT TRACE  
MAY MEANDER DURING  
THE HOUR.





# MAIN STACK



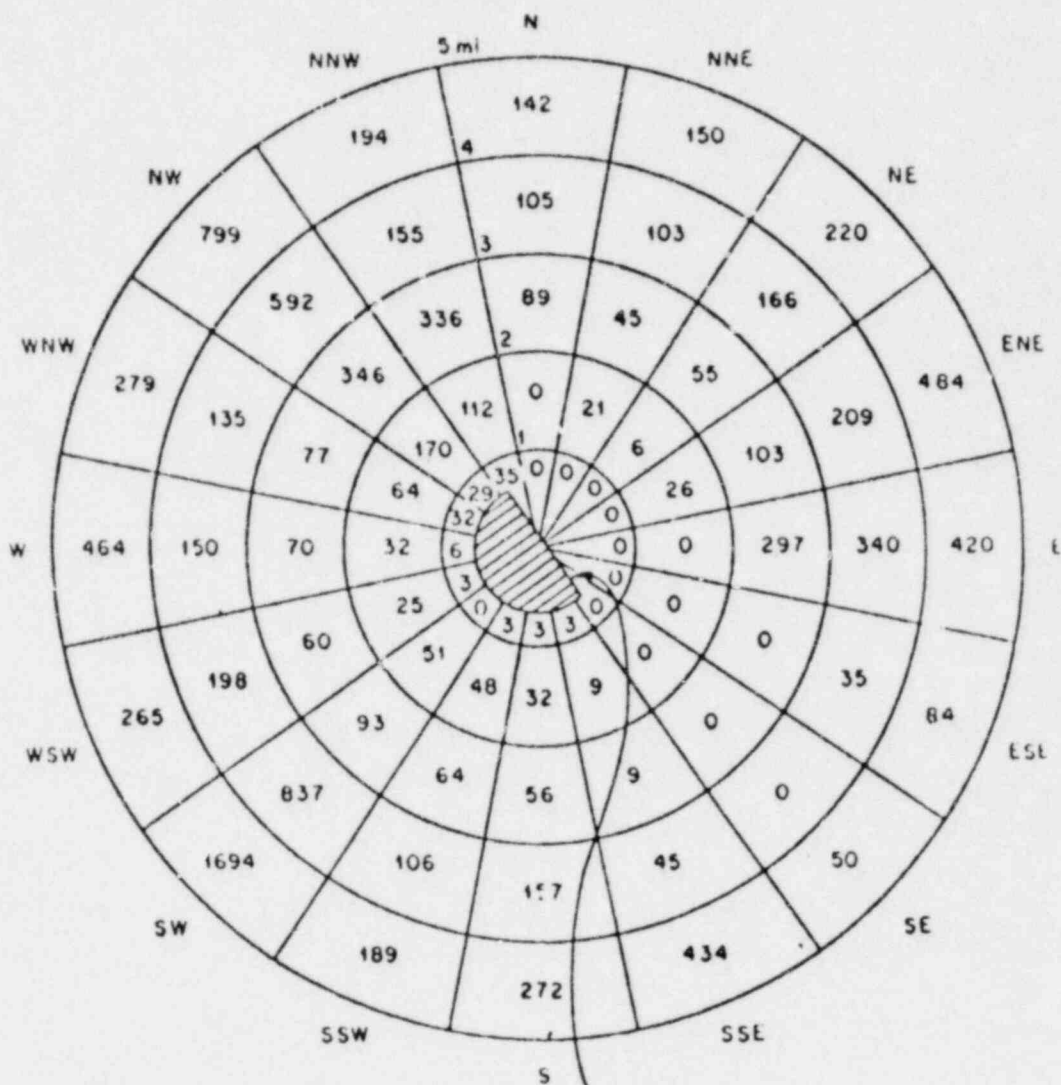
Bases: ① 72 hour delay  
② 1015.20 hours delay (1015.20  $\times 10^3$  CFM  $\times 10^3$ )

Calc.:  $\mu$  Ci/sec Fission Gases

Main Stack  
(approx. for A+B channels)  
averaged







ESTIMATED TOTAL POPULATION

0-1 MILE	114
0-2 MILES	596
0-3 MILES	1447
0-4 MILES	3333
0-5 MILES	6145

Population distribution within 5 miles of Peach Bottom Units 2 and 3, according to a 1971 survey.

EP-316 FIGURE 5



II - DETERMINATION OF RELEASE RATE BASED UPON HIGH  
RANGE ROOF VENT AND MAIN STACK MONITOR INDICATIONS

PROCEDURE:

1. Determination of release rate without isotopic data (either gamma scan or assumed isotopic distribution).
  - A. To calculate release rates without knowledge of isotopic distribution, use attachment A.
  - B. The calculations performed in EP-316 Section II, attachment A, are based upon XE-133 as the main isotope of interest assuming fuel failure.
  - C. If an isotopic distribution is available, use EP-316 Section II, attachment B.

For the abundance of each isotope, refer to the most recent gamma scan of gas samples from the release point. If no gamma scan is available, a postulated isotopic distribution may be used (see Chem Supervision).

2. If off-site whole body dose projections are necessary, use EP-316 Section I, for the calculations.

NOTE: WHEN USING EP-316 SECTION I, IT WILL NOT BE NECESSARY TO CONVERT FROM CPM TO  $\mu\text{Ci}/\text{SEC}$  SINCE  $\mu\text{Ci}/\text{SEC}$  IS ALREADY KNOWN.

BEGIN EP-316, SECTION II, WITH THE STEPS INVOLVING USE OF THE RELEASE RATE ( $\mu\text{Ci}/\text{SEC}$ ) AND WEATHER DATA.

## INITIAL EVALUATION

PROCEDURE FOR DETERMINING RELEASE RATE WITHOUT ISOTOPIC ANALYSIS

Roof Vents		Main
U2	U3	Stack

1. Determine the dose rates from the hi-range roof vent and main stack monitors.  
Reading in mR/hr.....
2. Determine the average background of the hi-range roof vent and main stack monitors based upon the most recent purge data reading in mR/hr.....
3. Calculate the net reading:  
(Data from item 1) - (Data from item 2)  
Net mR/hr (if < 0 record as 0).....
4. Record the data from item 3 in column A of the table below.
5. Determine vent and stack flows, record these flows, in CFM, in column B below.
6. Calculate the release rate by multiplying columns A x B x C. Record the release rates in column D.

	A	B	C	D
	Net mR/hr	Flow-CFM	Conversion Factor	Release Rate u/Ci/sec.
UNIT 2 VENT			6.74 x P2	
UNIT 3 VENT			6.74 x P2	
MAIN STACK			6.74 x P2	

# REFINED EVALUATION

## PROCEDURE FOR DETERMINING RELEASE RATE WITH ISOTOPIC ANALYSIS

Roof Vents		Main
U2	U3	Stack

- Determine the dose rates from the hi-range roof vent and main stack monitors.  
(If the normal radiation monitor for a release point is on scale, this release point may be skipped - place NA in the blanks for this release point.) \_\_\_\_\_
- Determine the average background of the hi-range roof vent and main stack monitors based upon the most recent purge data.  
Reading in mR/hr..... \_\_\_\_\_
- Calculate the net reading:  
(Data from item 1) - (Data from item 2)  
Net mR/hr (if < 0 record as 0)..... \_\_\_\_\_
- Record the data from item 3 in column A of the tables below, for each isotope listed.
- Determine the vent and stack flows, record these flows in CFM in column B, below for each isotope listed.
- From the gamma scan of the vent and stack samples, record the fractional abundance of each isotope listed in the tables below in column C.  
Note: Fractional abundance =  $\% \div 100$
- Multiply the abundance (column C) by the conversion factor (column D) for each isotope listed. Record results in column CXD.
- Add the values in column CXD for all isotopes and record this number in  $\Sigma$  CXD.
- Calculate the release rate by multiplying columns A x B x ( $\Sigma$  CXD). Record the results in column E.



UNIT 2 ROOF VENT RELEASE

UNIT 2 ROOF VENT RELEASE

A	B	$\Sigma CXD$	E
NOT NR/Hr	FRTN-SEL	(CALCULATED BELOW)	RELEASE RATE - MC/SEC.

ISOTOPE	C	D	$\Sigma CXD$
	ABUNDANCE	CONVERSION FACTOR	
Kr-85		$3.93 \times 10^3$	THIS TOTAL GOES HERE
-85m		$6.47 \times 10^1$	
-87		8.58	
-88		5.83	
Xc-131M		$2.95 \times 10^3$	
133		$6.74 \times 10^3$	
133M		$2.95 \times 10^3$	
135		$3.63 \times 10^1$	
135M		$1.97 \times 10^1$	
137		$6.05 \times 10^1$	
138		$1.31 \times 10^1$	

$\Sigma CXD$

UNIT 3 ROOF VENT RELEASE

A		B	Σ C x D	E
NET MR/MC		FMCT-SEM	(CALCULATED BELOW)	RELEASE RATE - MC/SEC

ISOTOPE	C	D	C x D
	ABUNDANCE	CONVERSION FACTOR	
Kr-85		$3.93 \times 10^5$	
-87m		$6.47 \times 10^1$	
-87		8.58	
-96		5.83	
Xc-131m		$2.75 \times 10^3$	
133		$6.74 \times 10^3$	
133m		$2.95 \times 10^6$	
135		$3.63 \times 10^1$	
135m		$1.97 \times 10^1$	
137		$6.05 \times 10^1$	
138		$1.31 \times 10^1$	
			Σ C x D

THIS TOTAL GOES HERE

# MAIN STACK RELEASE

A	B	Σ CKD	E
NET GIG/HR	ELAPSED TIME	(CALCULATED BELOW)	RELEASE RATE - μCi/SEC

ISOTOPE	C	D	CKD
	ABUNDANCE	CONVERSION FACTOR	
Kr-85		$3.93 \times 10^3$	
-85m		$6.47 \times 10^1$	
-87		8.58	
-88		5.83	
Xc-131m		$2.95 \times 10^3$	
133		$6.74 \times 10^3$	
133m		$2.95 \times 10^3$	
135		$3.63 \times 10^1$	
135m		$1.97 \times 10^1$	
137		$6.05 \times 10^1$	
138		$1.31 \times 10^1$	

THIS TOTAL GOES HERE

Σ CKD

### III - DETERMINATION OF DOSE DUE TO IODINE RELEASE

#### PART 1 OFF-SITE DOSE DETERMINATION DUE TO MAIN STACK RELEASE

##### A. Rapid Assessment

1. Obtain iodine activity release from counting laboratory.

1a. \_\_\_\_\_ uCi I-131 released

1b. \_\_\_\_\_ uCi I-133 released

2. Determine wind speed from the 320 ft. microwave tower Aerovane recorder. If the 320 ft. Aerovane is unavailable, use the 75 ft. microwave tower Aerovane recorder. If both the 320 ft. and 75 ft. Aerovane are unavailable, use the 90 ft. Aerovane, Station 1A.

- a. Check which Aerovane recorder used:

\_\_\_\_\_ 320 Ft. \_\_\_\_\_ 75 Ft. \_\_\_\_\_ 90 Ft.

- b. Use the right hand trace on the recorder for wind speed. Visually determine the average wind speed for the period of the release.

2b. \_\_\_\_\_ mph  
(wind speed)

3. Dose Calculation - Infant thyroid in all cases.

- a. I-131 Dose

Inhalation:

$$\frac{\text{(Item 1a, uCi I-131)}}{\text{(Item 1a, uCi I-131)}} \times (4.35 \times 10^{-5}) \div \frac{\text{(Item 2b, Windspeed)}}{\text{(Item 2b, Windspeed)}} =$$

\_\_\_\_\_ mrem

Calculate ingestion dose if April through November, otherwise dose = 0

Ingestion:

$$\frac{\text{(Item 1a, uCi I-131)}}{\text{(Item 1a, uCi I-131)}} \times 3.10 \times 10^{-2} \div \frac{\text{(Item 2b, Wind speed)}}{\text{(Item 2b, Wind speed)}} =$$

\_\_\_\_\_ mrem

Add ingestion plus inhalation doses:

Total I-131 Dose

2a. \_\_\_\_\_ mrem

## b. I-133 Dose

Inhalation:

$$\frac{\text{(Item 1b, uCi, I-133)}}{\text{(Item 2b, Wind speed)}} \times 1.05 \times 10^{-5} = \text{_____ mrem}$$

Calculate ingestion dose if April through November,  
otherwise dose = 0

Ingestion:

$$\frac{\text{(Item 1a, uCi, I-133)}}{\text{(Item 2b, Wind speed)}} \times 2.88 \times 10^{-4} = \text{_____ mrem}$$

Add inhalation plus ingestion doses:

Total I-133 Dose 2b. \_\_\_\_\_ mrem

Total Iodine Dose:

$$\text{_____} + \text{_____} = \text{_____ mrem}$$

(Item 2a, I-131 Dose) (Item 2b, I-133 Dose)

1. is the highest possible off-site dose for iodine releases. It is 3.75 miles from PBAPS and based on the worst meteorological conditions. All other locations, both closer to and further from PBAPS, will have lower iodine doses.

Step B provides a more realistic, though conservative, iodine dose based on actual meteorological data.

B. Refined Assessment

1. Obtain iodine activity released from counting laboratory.

1a. \_\_\_\_\_ uCi I-  
release  
1b. \_\_\_\_\_ uCi I-  
release

2. Determine the estimated time period of release (maximum period is the collection time of the iodine cartridges).

2a. Start: \_\_\_\_\_ Date \_\_\_\_\_ Time E:  
2b. End: \_\_\_\_\_ Date \_\_\_\_\_ Time E:  
2c. \_\_\_\_\_ hrs. (time period of release)

Enter Item 2c, time period of release, in column E of Table III.

Take the following data from  
recorder if possible  
microwave tower Aerovane  
Aerovanes are unavailable, use the

3. - Check which Aerovane is used

220 ft.

4. - Determine the meteorological  
time period of the  
recorder and the data

2 MAY 1964

TABLE III

A	B	C	D	E	F	G	H	I	J
Wind Chart Degrees	Wind Chart Direction	Downwind Direction	Hours in Sector	Release Period hrs	Ave. Wind Speed	Turbulence Class	Dispersion Factor	Distance	Met. Factor
350-10	N	S		1/	1/				
10-35	NNE	SSW		1/	1/				
35-55	NE	SW		1/	1/				
55-80	ENE	WSW		1/	1/				
80-100	E	W		1/	1/				
100-125	ESE	WNW		1/	1/				
125-145	SE	NW		1/	1/				
145-170	SSE	NNW		1/	1/				
170-190	S	N		1/	1/				
190-215	SSW	NNE		1/	1/				
215-235	SW	NE		1/	1/				
235-260	WSW	ENE		1/	1/				
260-280	W	E		1/	1/				
280-305	WNW	ESE		1/	1/				
305-325	NW	SE		1/	1/				
325-350	NNW	SSE		1/	1/				



5. Calculate the maximum plume centerline iodine dose in the following manner. This is the infant thyroid dose in all cases.

Choose the maximum "Met Factor" from column J of Table III.

Met. Factor	Downwind Direction	miles
(Column J)	(Column C)	(Column I)

a. I-131 Dose

Inhalation:

$$\frac{\text{(Item 1a, uCi I-131)}}{\text{(Met. Factor)}} \times 4.7 \times 10^{-6} = \text{_____ mrem}$$

Calculate ingestion dose if April through November,  
otherwise dose = 0

Ingestion:

$$\frac{\text{(Item 1a, uCi I-131)}}{\text{(Met. Factor)}} \times 3.35 \times 10^{-3} = \text{_____ mrem}$$

Add inhalation + ingestion doses

$$\text{Total I-131 dose} = \text{_____} + \text{_____} = \text{_____ mrem (}$$

b. I-133 Dose

Inhalation:

$$\frac{\text{(Item 1b, uCi I-133)}}{\text{(Met. Factor)}} \times 1.13 \times 10^{-6} = \text{_____ mrem}$$

Calculate ingestion dose if April through November,  
otherwise dose = 0

Ingestion:

$$\frac{\text{(Item 1b, uCi I-133)}}{\text{(Met. Factor)}} \times 3.11 \times 10^{-5} = \text{_____ mrem}$$

Add inhalation + ingestion doses

$$\text{Total I-133 dose} = \text{_____} + \text{_____} = \text{_____ mrem (5b)}$$

Total iodine dose

$$\text{(Item 5a, I-131 Dose)} + \text{(Item 5b, I-133 Dose)} = \text{_____ mrem}$$

ITEM 5 REPRESENTS THE MAXIMUM DOSE THAT WOULD BE FOUND DOWNWIND IN THE PLUME CENTERLINE AT GROUND LEVEL. DOSES FOR OTHER DISTANCES ON OFF THE PLUME CENTER LINE MAY BE DETERMINED AS FOLLOWS:

C. Refined assessment of other offsite and boundary doses.

6. Select other locations of interest downwind. Determine the distance from the main stack to these locations and enter on the calculation table in Column A, desired distance.
7. Determine the downwind direction associated with the location of interest. Enter in Column B of the calculation table. From Table III find the wind chart direction and hours in wind chart direction. Enter these in Column C and D, respectively of the calculation table.
8. Enter the release period, Item 2c in Column E of the Calculation Table.
9. From the chart below for the turbulence class identified in Item 4c, find the correct dispersion factor for each distance listed on the calculation sheet per Item 6. Write the turbulence class in column G and the dispersion factor in the column H of the calculation table beside the distance of interest.

TABLE IV

## Dispersion Factors Versus Distance

## Dispersion Factors by Turbulance Class

Distance (mi.)	CLASS I or III	CLASS II	CLASS IV	CLASS V
.25	450,000	390,000	640	<1
.50	190,000	360,000	120,000	<1
.75	94,000	220,000	280,000	<1
1.00	57,000	150,000	330,000	<1
1.25	38,000	100,000	440,000	<1
1.50	27,000	75,000	350,000	23
1.75	20,000	57,000	290,000	220
2.00	16,000	45,000	230,000	1,000
2.25	13,000	36,000	190,000	3,000
2.50	10,000	29,000	160,000	6,900
2.75	8,600	25,000	150,000	220,000
3.00	7,300	21,000	130,000	260,000
3.25	6,300	18,000	110,000	290,000
3.50	5,400	16,000	93,000	320,000
3.75	4,700	11,000	59,000	930,000
4.00	4,100	9,500	51,000	860,000
4.25	3,600	8,400	45,000	800,000
4.50	3,300	7,500	40,000	740,000
4.75	2,900	6,800	36,000	810,000
5.00	2,700	6,100	32,000	740,000
5.50	2,200	5,100	26,000	630,000
6.00	1,900	4,300	22,000	530,000
6.50	1,600	3,700	18,000	460,000
7.00	1,400	3,200	15,00	400,000
7.50	1,200	2,800	13,000	340,000
8.00	1,100	2,400	11,000	290,000
8.50	940	2,100	9,800	250,000
9.00	840	1,900	8,600	210,000
9.50	750	1,700	7,600	180,000
10.00	680	1,500	6,700	160,000
10.50	620	1,400	6,000	140,000
11.00	570	1,300	5,400	120,000
11.50	520	1,200	4,800	100,000
12.00	480	1,100	4,400	89,000
12.50	440	990	4,000	77,000
13.00	410	920	3,600	67,000
13.50	380	850	3,300	58,000
14.00	350	790	3,000	51,000
14.50	330	740	2,800	45,000
15.00	310	690	2,600	39,000

Distance (mi.)	CLASS I or III	CLASS II	CLASS IV	CLASS V
15.50	290	650	2,400	34,000
16.00	270	610	2,200	30,000
16.50	250	570	2,000	26,000
17.00	240	540	1,900	23,000
17.50	230	510	1,800	21,000
18.00	210	480	1,600	18,000
18.50	200	450	1,500	16,000
19.00	190	430	1,400	14,000
19.50	180	410	1,300	13,000
20.00	170	390	1,300	11,000
21.00	160	350	1,100	8,900
22.00	140	320	990	7,100
23.00	130	290	890	5,700
24.00	120	270	800	4,600
25.00	110	250	720	3,700
30.00	78	170	450	1,400
35.00	58	120	300	560
40.00	44	94	210	240
45.00	35	74	150	110
50.00	28	59	120	56

# CALCULATION TABLE

Basis:

Centerline of release path only.  
These calculations are valid only for a constant  
hours in error, constant wind speed, and  
turbulence class. If any of these factors change  
significantly NEW VALUES MUST be calculated.

A	B	C	D	E	F	G	H	I
Desired Distance	Downwind Direction	Wind Chart Direction	Hours In Wind Chart Direction	Release Period	Wind Speed	Turbulence Class	Dispersion Factor	Met. Factor
				1/	1/			
				1/	1/			
				1/	1/			
				1/	1/			
				1/	1/			
				1/	1/			
				1/	1/			
				1/	1/			
				1/	1/			
				1/	1/			
				1/	1/			
				1/	1/			
				1/	1/			
				1/	1/			

10. Multiply columns D x E x F x H, enter answer in column I.

Calculate the plume centerline iodine dose in the following manner. This is the infant thyroid dose in all cases.

Choose the desired location "Met Factor" from column I of the Calculation Table.

Met. Factor	Downwind Direction	miles
(Column I)	(Column B)	(Column A)

a. I-131 Dose

Inhalation:

$$\frac{\text{(Item 1a, uCi I-131)}}{\text{(Met. Factor)}} \times 4.7 \times 10^{-11} = \text{_____ mrem}$$

Calculate ingestion dose if April through November, otherwise dose = 0

Ingestion:

$$\frac{\text{(Item 1a, uCi I-131)}}{\text{(Met. Factor)}} \times 3.35 \times 10^{-8} = \text{_____ mrem}$$

Add inhalation + ingestion doses

$$\text{Total I-131 dose} = \text{_____} + \text{_____} = \text{_____ mrem (11a)}$$

b. I-133 Dose

Inhalation:

$$\frac{\text{(Item 1b, uCi I-133)}}{\text{(Met. Factor)}} \times 1.13 \times 10^{-11} = \text{_____ mrem}$$

Calculate ingestion dose if April through November, otherwise dose = 0

Ingestion:

$$\frac{\text{(Item 1b, uCi I-133)}}{\text{(Met. Factor)}} \times 3.11 \times 10^{-10} = \text{_____ mrem}$$

Add inhalation + ingestion doses

$$\text{Total I-133 dose} = \text{_____} + \text{_____} = \text{_____ mrem (11b)}$$

Total iodine dose

$$\text{(Item 11a, I-131 Dose)} + \text{(Item 11b, I-133 Dose)} = \text{_____ mrem}$$



12. Repeat Step 11 for each desired location on the Calculation Table.

#### OFF CENTERLINE DOSE CALCULATIONS

13. To determine doses for locations other than along the plume centerline, select the appropriate overlay for the existing turbulence class.
14. Mount the overlay on the control center map with the origin at the main stack.
15. Rotate the overlay to align the centerline with the direction of wind flow.
16. Select the location of interest and from the values on the overlay estimate the decimal fraction of reduction from the centerline. Enter on the off centerline calculation table.
17. Multiply the centerline dose by the decimal fraction (Item 16) to obtain the off centerline dose at the point of interest.
18. A population rose, EP-316 Figure 5, is provided if needed for population man rem dose calculations.

[illegible]

PART 2 - OFF-SITE DOSE DETERMINATION DUE TO ROOF VENT RELEASEA. Rapid Assessment

1. Obtain iodine activity release from Units 2 and 3 vents from counting laboratory.

1a. \_\_\_\_\_ uCi I-131  
released  
1b. \_\_\_\_\_ uCi I-133  
released

2. Determine wind speed from the 75 ft. microwave tower Aerovane recorder. If the 75 ft. Aerovane is unavailable, use the 90 ft. Aerovane recorder Station 1A.

- a. Check which Aerovane recorder used:

\_\_\_\_\_ 75 Ft. \_\_\_\_\_ 90 Ft.

- b. Use the right hand trace on the recorder for wind speed. Visually determine the average wind speed for the period of the release.

2b. \_\_\_\_\_ mph  
(wind speed)

3. Dose Calculation - Infant thyroid in all cases.

- a. I-131 Dose

Inhalation:

$$\frac{\text{(Item 1a, uCi I-131)}}{\text{(Item 2b, Windspeed)}} \times (3.39 \times 10^{-5}) \div \text{(Item 2b, Windspeed)} = \text{_____ mrem}$$

Calculate ingestion dose if April through November, otherwise dose = 0

Ingestion:

$$\frac{\text{(Item 1a, uCi I-131)}}{\text{(Item 2b, Wind speed)}} \times 5.23 \times 10^{-3} \div \text{(Item 2b, Wind speed)} = \text{_____ mrem}$$

Add ingestion plus inhalation doses:

Total I-131 Dose

2a. \_\_\_\_\_ mrem

b. I-133 Dose

Inhalation:

$$\frac{\text{(Item 1b, uCi, I-133)}}{\text{(Item 2b, Wind speed)}} \times 3.16 \times 10^{-6} = \text{_____ mrem}$$

Calculate ingestion dose if April through November, otherwise dose = 0

Ingestion:

$$\frac{\text{(Item 1a, uCi, I-133)}}{\text{(Item 2b, Wind speed)}} \times 4.85 \times 10^{-5} = \text{_____ mrem}$$

Add inhalation plus ingestion doses:

Total I-133 Dose 2b. \_\_\_\_\_ mrem

Total Iodine Dose:

$$\text{_____} + \text{_____} = \text{_____ mrem}$$

(Item 2a, I-131 Dose) (Item 2b, I-133 Dose)

This is the highest possible off-site dose for iodine releases. It is the PBAPS site boundary and based on the worst meteorological conditions. All other locations will have lower iodine doses.

Step 3 provides a more realistic, though conservative, iodine dose based on actual meteorological data.

B. Refined Assessment

1. Obtain iodine activity released from Units 2 and 3 vents from counting laboratory.

1a. \_\_\_\_\_ uCi I-131 released

1b. \_\_\_\_\_ uCi I-131 release

2. Determine the estimated time period of release (maximum period is the collection time of the iodine cartridges).

2a. Start: \_\_\_\_\_ Date \_\_\_\_\_ Time ES

2b. End: \_\_\_\_\_ Date \_\_\_\_\_ Time ES

2c. \_\_\_\_\_ hrs. (time period of release)

Enter Item 2c, time period of release, in column E of Table V.

Take the following data from the 75 ft. microwave tower Aerovane recorder. If the 75 ft. Aerovane is unavailable, use the 90 ft. Aerovane recorder Station 1A.

3. Check which Aerovane recorder used:

\_\_\_\_\_ 75 Ft. \_\_\_\_\_ 90 Ft.

4. Determine the meteorological conditions for each sector over the time period of the release and enter in Table V, Inhalation Dose. If some sectors are not applicable, enter zero.

- Assign the wind direction and a wind chart direction for each hour of release. Use the left hand trace. Enter number of hours in column D for each sector.
- Determine the average wind speed for each sector. Use the right hand trace on the recorder. If the wind speed is less than 1 mph, use wind speed of 1 mph.

Example: 350°-10° N Sector:

$$\frac{(5 + 10 + 15) \text{ mph}}{3 \text{ hrs. in sector}} = 10 \text{ mph}$$

Enter average wind speed in column F for each sector.

- Determine the turbulence class for each sector by examining the wind direction trace (left hand trace) and comparing this with the turbulence class examples included in this procedure, EP-316 Figure 1. If the turbulence class for each sector is variable, assign the most frequent one. Enter turbulence class in column G.
- Using the class determined for each sector (column G), determine dispersion factor and distance listed below. Enter dispersion factor in column H, distance in column I.

Inhalation

If the turbulence class from 4C is	Choose:	
	Dispersion factor	Distance
Class I or III	3.663	.25 miles
Class II	5.738	.25
Class IV	7.220	.25
Class V	.3652	.25

- Multiply columns D x E x F x H, enter answer in column J.

- f. If period is April through November, Repeat step 4 using the following data for 4d. Enter data on Table VI, Ingestion Dose.

Ingestion		
If the turbulence class from 4C is	Choose	
	Dispersion Factor	Distance
Class I or VI	89.5	.50 miles
Class II	138.3	.50
Class IV	155.8	.50
Class V	3.1	.50

5. Calculate the maximum plume centerline iodine dose in the following manner. This is the infant thyroid dose in all cases.

- a. Inhalation Dose

Choose the maximum "Met Factor" from column I of Table V.

Met. Factor	Downwind Direction	miles
(Column I)	(Column C)	(Column I)

I-131:

$$\frac{\text{(Item 1a, uCi I-131)}}{\text{(Met. Factor)}} \times 4.7 \times 10^{-6} = \text{mrem}$$

I-133:

$$\frac{\text{(Item 1b, uCi I-133)}}{\text{(Met. Factor)}} \times 1.13 \times 10^{-6} = \text{mrem}$$

Add I-131 + I-133 doses

$$\text{Total Inhalation dose} = \text{_____} + \text{_____} = \text{mrem (5)}$$

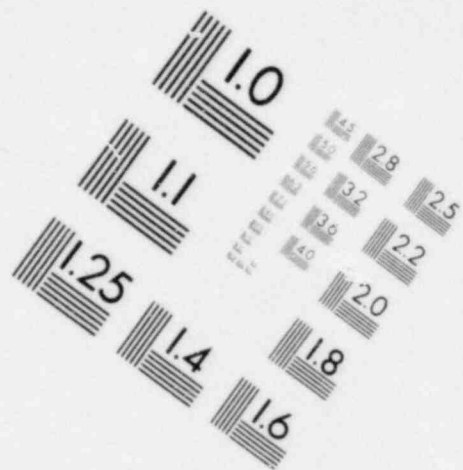
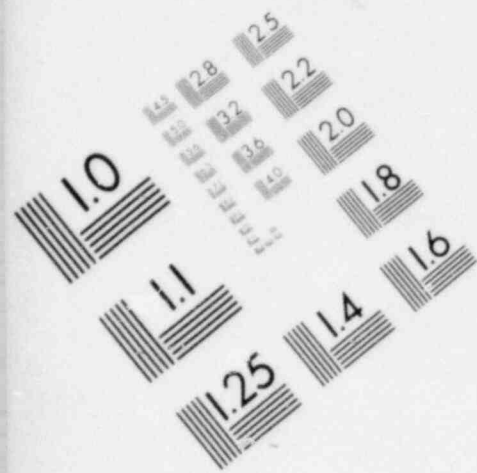
- b. Ingestion Dose:

Calculate ingestion dose if April through November, otherwise dose = 0

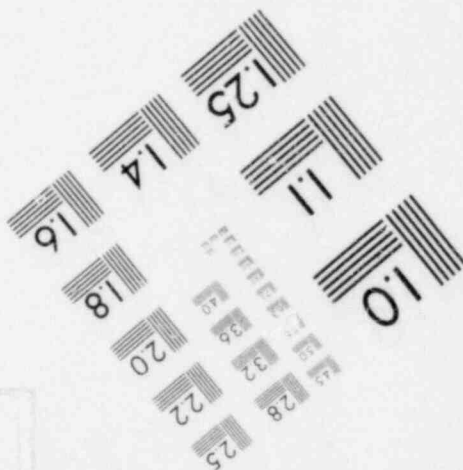
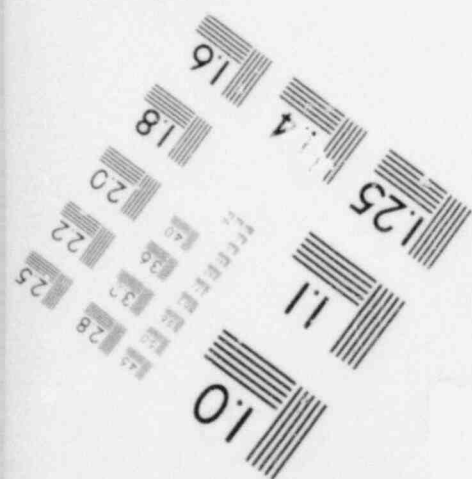
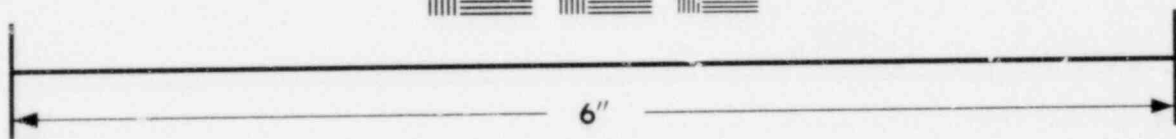
Choose the maximum "Met. Factor" from column I of Table VI.

Met. Factor	Downwind Direction	miles
(Column I)	(Column C)	(Column I)





**IMAGE EVALUATION  
TEST TARGET (MT-3)**



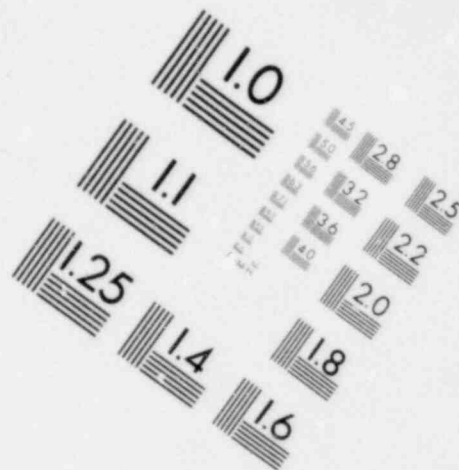
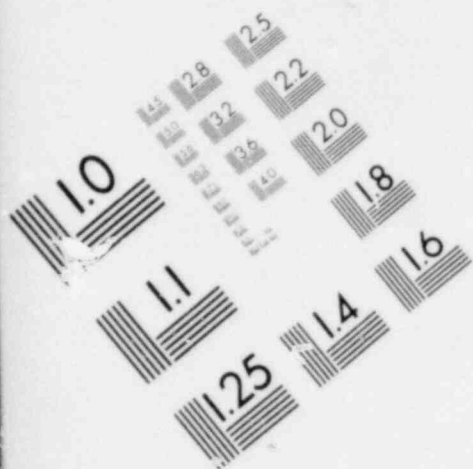
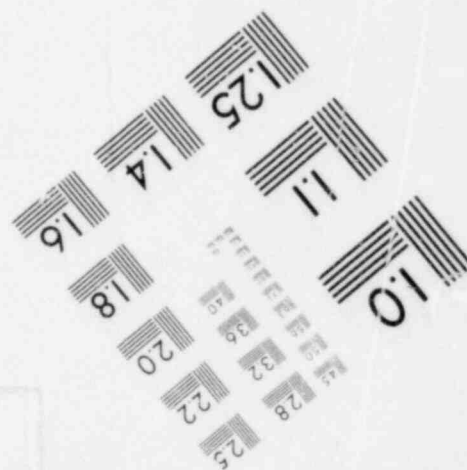
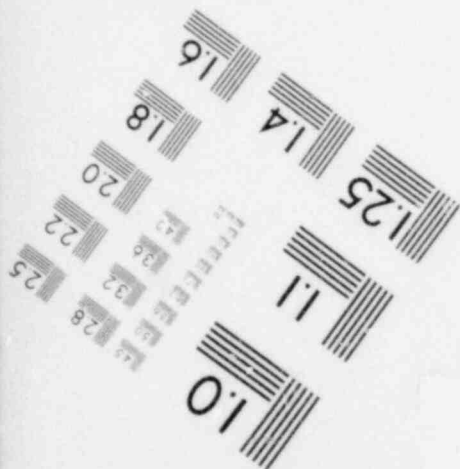
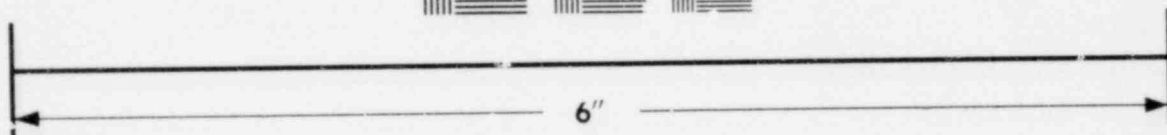
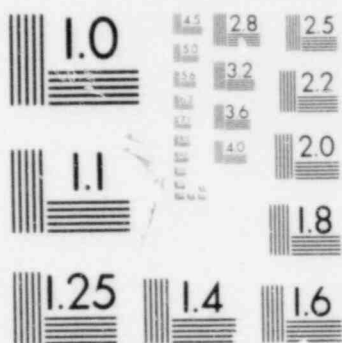


IMAGE EVALUATION  
TEST TARGET (MT-3)



I-131:

$$\frac{(\text{Item 1a, uCi I-131})}{(\text{Met. Factor})} \times 3.35 \times 10^{-5} = \text{mrem}$$

I-133

$$\frac{(\text{Item 1b, uCi I-133})}{(\text{Met. Factor})} \times 3.11 \times 10^{-7} = \text{mrem}$$

Add I-131 + I-133 doses

$$\text{Total Ingestion dose} = \text{_____} + \text{_____} = \text{_____ mrem (}$$

Total iodine dose

$$\frac{(\text{Item 5a, Inhalation Dose})}{(\text{Met. Factor})} + \frac{(\text{Item 5b, Ingestion Dose})}{(\text{Met. Factor})} = \text{_____ mrem}$$

TABLE V  
Inhalation Dose

A	B	C	D	E	F	G	H	I	J
Wind Chart Degrees	Wind Chart Direction	Downwind Direction	Hours in Sector	Release Period hrs	Ave. Wind Speed	Turbulence Class	Dispersion Factor	Distance	Met. Factor
350-10	N	S		1/	1/				
10-35	NNE	SSW		1/	1/				
35-55	NE	SW		1/	1/				
55-80	ENE	WSW		1/	1/				
80-100	E	W		1/	1/				
100-125	ESE	WNW		1/	1/				
125-145	SE	NW		1/	1/				
145-170	SSE	NNW		1/	1/				
170-190	S	N		1/	1/				
190-215	SSW	NNE		1/	1/				
215-235	SW	NE		1/	1/				
235-260	WSW	ENE		1/	1/				
260-280	W	E		1/	1/				
280-305	WNW	ESE		1/	1/				
305-325	NW	SE		1/	1/				
325-350	NNW	SSE		1/	1/				

TABLE VI  
Ingestion Data

A	B	C	D	E	F	G	H	I	J
Wind Chart Degrees	Wind Chart Direction	Downwind Direction	Hours in Sector	Release Period hrs	Ave. Wind Speed	Turbulence Class	Dispersion Factor	Distance	Met. Factor
350-10	N	S		1/	1/				
10-35	NNE	SSW		1/	1/				
35-55	NE	SW		1/	1/				
55-80	ENE	WSW		1/	1/				
80-100	E	W		1/	1/				
100-125	ESE	WNW		1/	1/				
125-145	SE	NW		1/	1/				
145-170	SSE	NNW		1/	1/				
170-190	S	N		1/	1/				
190-215	SSW	NNE		1/	1/				
215-235	SW	NE		1/	1/				
235-260	WSW	ENE		1/	1/				
260-280	W	E		1/	1/				
280-305	WNW	ESE		1/	1/				
305-325	NW	SE		1/	1/				
325-350	NNW	SSE		1/	1/				

ITEM 5 REPRESENTS THE MAXIMUM DOSE THAT WOULD BE FOUND DOWNWIND IN THE PLUME CENTERLINE AT GROUND LEVEL. DOSES FOR OTHER DISTANCES ON OR OFF THE PLUME CENTER LINE MAY BE DETERMINED AS FOLLOWS:

C. Refined assessment of other offsite and boundary doses.

6. Select other locations of interest downwind. Determine the distance from the roof vents to these locations and enter on the calculation table in Column A, desired distance.
7. Determine the downwind direction associated with the location of interest. Enter in Column B of the calculation table. From Table VI find the wind chart direction and hours in wind chart direction. Enter these in Column C and D, respectively of the calculation table.
8. Enter the release period, Item 2c in Column E of the calculation table.
9. From the chart below for the turbulence class identified in Item 4c, find the correct dispersion factor for each distance listed on the calculation sheet per Item 6. Write the turbulence class in column G and the dispersion factor in the column H of the calculation table beside the distance of interest.



TABLE VII

ALL TURBULENCE CLASSES FOR ANY DIRECTION  
DISPERSION FACTORS FOR ROOF VENT RELEASE  
CALCULATED FOR WORST DIRECTION FOR GIVEN DISTANCE

<u>DISTANCE</u> <u>(MILES)</u>	<u>DISPERSION FACTOR BY TURBULENCE CLASS</u>			
	<u>CLASS I OR III</u>	<u>CLASS II</u>	<u>CLASS IV</u>	<u>CLASS V</u>
.25	3660000	5740000	7220000	365000
.50	900000	1380000	1560000	30606
.75	390000	595000	614000	6080
1.00	216000	325000	313000	1800
1.25	136000	204000	184000	660
1.50	87000	128000	100000	150
1.75	63500	92000	68000	70
2.00	48100	69200	48600	40
2.25	37600	53700	36000	20
2.50	30200	42800	27500	10
2.75	24700	34900	21500	7
3.00	20600	28900	17200	4
3.25	17500	24200	13900	3
3.50	14900	20700	11500	2
3.75	13000	17800	9580	1
4.00	11300	15400	8060	<1
4.25	9900	13500	6860	<1
4.50	8800	11900	5890	<1
4.75	7800	10600	5090	<1
5.00	7070	9500	4440	<1
5.50	5790	7700	3430	<1
6.00	4820	6350	2700	<1
6.50	4080	5330	2170	<1
7.00	3490	4530	1760	<1
7.50	3010	3880	1460	
8.00	2630	3370	1220	
8.50	2320	2950	1030	
9.00	2050	2600	880	
9.50	1840	2300	750	
10.00	1640	2050	650	
10.50	1480	1840	560	
11.00	1350	1660	490	
11.50	1220	1500	430	
12.00	1120	1370	380	
12.50	1030	1250	340	
13.00	950	1140	300	
13.50	870	1050	270	
14.00	810	970	240	
14.50	750	900	220	
15.00	700	830	200	
15.50	650	770	180	
16.00	610	720	160	
16.50	570	670	150	
17.00	530	630	140	
17.50	500	590	130	
18.00	470	550	120	

<u>DISTANCE</u> <u>(MILES)</u>	<u>DISPERSION FACTOR BY TURBULENCE CLASS</u>			
	<u>CLASS I OR III</u>	<u>CLASS II</u>	<u>CLASS IV</u>	<u>CLASS V</u>
18.50	450	520	110	
19.00	420	490	100	
19.50	400	460	90	
20.00	380	430	80	
21.00	340	390	70	
22.00	310	350	60	
23.00	280	320	50	<1
24.00	260	290	50	<1
25.00	240	260	40	<1
30.00	160	170	20	<1
35.00	120	120	10	<1
40.00	90	90	10	<1
45.00	70	70	6	<1
50.00	50	50	5	<1

# CALCULATION TABLE

Basis:

Centerline of release path only.  
These calculations are valid only for a constant  
hours in sector, constant wind speed, and  
turbulence class. If any of these factors change  
significantly NEW VALUES MUST be calculated.

A	B	C	D	E	F	G	H	I
Desired Distance	Downwind Direction	Wind Chart Direction	Hours In Wind Chart Direction	Release Period	Wind Speed	Turbulence Class	Dispersion Factor	Met. Factor
				1/	1/			
				1/	1/			
				1/	1/			
				1/	1/			
				1/	1/			
				1/	1/			
				1/	1/			
				1/	1/			
				1/	1/			
				1/	1/			
				1/	1/			
				1/	1/			

10. Multiply columns D x E x F x H, enter answer in column I.

11. Calculate the plume centerline iodine dose in the following manner. This is the infant thyroid dose in all cases.

Choose the desired location "Met Factor" from column I of the Calculation Table.

_____	Downwind	_____
Met. Factor	Direction	miles
(Column I)	(Column B)	(Column A)

a. I-131 Dose

Inhalation:

$$\frac{\text{(Item 1a, uCi I-131)}}{\text{(Met. Factor)}} \times 4.7 \times 10^{-12} = \text{_____ mrem}$$

Calculate ingestion dose if April through November,  
otherwise dose = 0

Ingestion:

$$\frac{\text{(Item 1a, uCi I-131)}}{\text{(Met. Factor)}} \times 3.3 \times 10^{-9} = \text{_____ mrem}$$

Add inhalation + ingestion doses

$$\text{Total I-131 dose} = \text{_____} + \text{_____} = \text{_____ mrem (11a)}$$

b. I-133 Dose

Inhalation:

$$\frac{\text{(Item 1b, uCi I-133)}}{\text{(Met. Factor)}} \times 1.13 \times 10^{-12} = \text{_____ mrem}$$

Calculate ingestion dose if April through November,  
otherwise dose = 0

Ingestion:

$$\frac{\text{(Item 1b, uCi I-133)}}{\text{(Met. Factor)}} \times 3.11 \times 10^{-11} = \text{_____ mrem}$$

Add inhalation + ingestion doses

$$\text{Total I-133 dose} = \text{_____} + \text{_____} = \text{_____ mrem (11b)}$$

Total iodine dose

$$\text{(Item 11a, I-131 Dose)} + \text{(Item 11b, I-133 Dose)} = \text{_____ mrem}$$

12. Repeat Step 11 for each desired location on the Calculation Table.

#### OFF CENTERLINE DOSE CALCULATIONS

13. Overlays are not applicable to off-centerline roof vent data. Any estimate of off-centerline dose rates for roof vent releases would have to be a judgment based on weather conditions.
14. A population rose, EP-316- Figure 5, is attached to provide information if man-rem calculations are required.

*RSP*  
*3/31/81*

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

Emergency Plan Implementing Procedures

EP-317 DIRECT RECOMMENDATIONS TO COUNTY EMERGENCY MANAGEMENT AGENCIES

PURPOSE:

To prescribe procedures for making recommendations for protective actions directly to local emergency management agencies.

REFERENCES:

1. Emergency Plan, Sec. 6 (Emergency Measures)
2. Pennsylvania Department of Environmental Resources, Bureau of Radiation Protection Plan for Nuclear Power Generation Station Incidents, Section VIII.

APPENDICES:

Table of Recommended Protective Actions

ACTION LEVEL:

Both of the following occur:

1. Dose rates (as measured or as calculated in accordance with EP-316) exceed 500 mR/hr (whole body) or 2500 mR/hr (child's thyroid).
2. Neither the Pennsylvania Emergency Management Agency (PEMA) nor the Bureau of Radiation Protection respond to the initial notification within 15 minutes of the initial notifications.

PROCEDURE:

Immediate Actions:

The Interim Emergency Director shall:

1. Calculate the projected off-site dose by multiplying the calculated or measured off-site dose rate by the expected duration of exposure. The estimated duration of exposure is the elapsed time from the time of the initial release from the plant until the time the release is terminated. If the time that the release is terminated cannot be determined, assume an expected duration of 2 hours.



2. Using the Appendix, determine the recommended protective actions based on the calculated projected dose.
3. Determine the immediate response area. This area is approximately a 90-degree sector of arc centered along the direction of plume travel to a distance of 10 miles from the plant. If the wind direction is variable, the immediate response area is the entire EPZ out to 10 miles from the plant.
4. Contact the five plume exposure EPZ counties (Lancaster, Cecil, Harford, York, and Chester Counties; see EP-209 for telephone numbers) and provide the following information:
  - a. That a General Emergency has been declared.
  - b. Current meteorological conditions (especially wind direction).
  - c. Identify the immediate response area.
  - d. Projected doses in the immediate response area.
  - e. Recommended protective actions for the counties within the immediate response area (as described in the Appendix, including the comments listed in the Appendix).
  - f. That EPZ counties not in the immediate response area are to stand by on alerted status pending changes in the emergency conditions.

FOLLOWUP ACTIONS:

1. The Interim Emergency Director or Emergency Director shall continue to refine the off-site dose projections and the immediate response area as plant and meteorological conditions change. Off-site dose projections as a function of range from the plant should be determined. The results of these actions and changes in the recommended protective actions shall be provided to the EPZ counties. This responsibility shall be turned over to the Site Emergency Coordinator when the ECC is functional.
2. When PEMA, BRP, and the NRC respond to initial notification, inform these agencies of the status of protective actions recommended to the counties.

TABLE OF RECOMMENDED PROTECTIVE ACTIONS

<u>PROJECTED DOSE (REM) TO THE POPULATION</u>	<u>RECOMMENDED ACTIONS</u>	<u>COMMENTS</u>
Whole Body < .5 or Child's Thyroid < 2.5	No planned protective actions are necessary. Monitor environmental radiation levels. Inform county and local agencies responsible for disaster response of the event.	Officials may implement low-impact protective actions to maintain exposures as low as reasonable achievable.
Whole Body .5 to < 1 or Child's Thyroid 2.5 to < 5	Population must seek shelter indoors. consider evacuation. Evacuate especially if projected dose is at high end of exposure range and unless constraints (e.g. weather conditions) make evacuation impossible.  Control access to the affected area.	If iodine and particulate contamination fallout is expected, showering and changing clothing after seeking shelter is recommended for the population in the immediate response area.
Whole Body $\geq 1$ or Child's Thyroid $\geq 5$	Evacuation is mandatory.  Monitor environmental radiation levels and adjust area for mandatory evacuation based on these levels. Control access to the affected area.	If evacuation is not immediately possible, seeking shelter is an alternative. If iodine and particulate contamination fallout is expected, sheltering and changing clothing after seeking shelter or evacuating is recommended for the population in the immediate response area.

*M. Wilbur*  
*Eff 4/1/81*

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 & 3

EP - 320      PROCEDURE FOR LEAKING CHLORINE

PURPOSE:

This procedure addresses to methods that are to be used to stop or contain chlorine container leaks.

REFERENCES:

1. Emergency Plan.
2. Contingency plan for spills of oil or other hazardous materials for inland waters of Region III - EPA.
3. Pollution Incident Report.
4. Pollution Incident Prevention Plan.
5. Chlorine Manual, 4th ed., The Chlorine Institute.
6. Instruction Booklets for Emergency Capping Kits.
  - a. Kit "B" Ton Containers
  - b. Kit "C" Tank Cars & Tank Trucks

PREREQUISITE:

Indication of Leaking Chlorine.

MATERIALS OR EQUIPMENT REQUIRED:

Chemox Mask or Air Mask.  
Chlorine Emergency Kit "C" for Tank Cars & Trucks.      Location inside Chlorinator Room.  
Ammonium Hydroxide (NH<sub>4</sub>OH).

ACTION LEVELS:

Minor Leaks - Handled by Station Personnel.  
Major Leaks - Requiring Offsite Assistance.

SPECIAL PRECAUTIONS:

1. Never attempt to work around leaking chlorine without a chemox or air mask.
2. Do not work alone. Work at least in a pair.
3. Notify Shift Supervision or Control Room immediately if a significant leak is discovered.
4. Keep chlorine from contacting the skin by being properly clothed.
5. Do not spray water on leaking chlorine. This will only make the leak worse because the acids formed will attack metal.

PROCEDURE:A - Minor Leaks.

Leaking chlorine can be located by attaching a cloth saturated with ammonia solution to a pole and passing it over the suspected area. A leak will be indicated by the white vapor that is formed.

- A.1. Angle Valve Stem Leak: Use wrench 110 from capping kit to pull up on packing nuts.
- A.2. Valve or Manway Gasket Leaks: Use wrench 112 to pull up on stud nuts.

B - Leaks Requiring the Use of Other Capping Kit "C" Devices.B.1. Angle Valve Hood.

- a) Remove the vent valve outlet cap and open the vent valve.
- b) Assemble the yoke, block, and screw assembly.
- c) Remove the hand wheel from the leaking valve.
- d) Disconnect piping.
- e) Remove the valve outlet plug.
- f) Place the plug against the upper part of the valve-if chain is in the way, cut it off.
- g) Place the gasket on the manway cover plate around the base of the leaking valve.
- h) Place hood over the gasket.
- i) Place yoke hooks into the ports of manway housing.
- j) Center the screw over the hood and tighten the screw forcing the hood against the gasket and the manway cover.
- k) Close the vent valve on hood.
- l) Test for leaks.

B.2. Safety Valve Hood.

THERE ARE TWO TYPES OF SAFETY VALVES THAT MAY BE ENCOUNTERED, ACF OR CHLORINE INSTITUTE TYPE.

B.3. ACF Type Valve Hood.

- a) Remove the vent valve outlet cap & open the valve
- b) Insert the gasket into the cap.
- c) Remove the regular safety valve cap or remove the cap and casing together.
- d) If the regular safety valve cap comes off without the casing: remove the diaphragm. Apply the cap with the contained gasket to the regular safety valve casing and tighten. Close the vent valve on the valve hood and test for leaks.
- e) If the regular safety valve cap & casing come off together: remove the base gasket and clean the surface. Place the new gasket on the safety valve base and center it. Screw the casing (from kit) over this gasket. Then screw the cap with the gasket and tighten. Close the vent valve and test for leaks.
- f) If the leak persists remove the emergency cap & apply the hood and the yoke device.

#### B.4. Chemical Institute Standard Valve Hood.

- a) Remove the vent valve outlet cap and open the vent valve.
- b) Insert the gasket into cap.
- c) Cut the seal wire and remove the regular safety valve cap or remove the cap and casing together.
- d) If the regular safety valve cap comes off without the casing: remove the diaphragm, apply the cap with contained gasket to the regular safety valve casing and tighten. Close the vent valve on the emergency cap and test for leaks.
- e) If the regular safety valve cap and casing come off together: remove the base gasket and clean the surface, place the new gasket on the safety valve base and center it; screw the casing over this gasket, then screw the cap with the gasket to the casing and tighten. Close the vent valve on the emergency cap and test for leaks.
- f) If the leak persists, remove the capping device and apply the hood and yoke device.

#### B.5. Hood and Yoke for Safety Valve.

This assembly is similar and its method of application is similar to the procedure in paragraph B.1.

#### C - Major Leaks - Requiring Offsite Assistance.

If a chlorine leak develops which cannot be handled properly by station personnel, the following procedure should be followed:

1. Notify the station superintendent or staff individual on call.
2. Notify the load dispatcher.
3. Notify the vendor.
  - a. Chlorine supplier
  - b. Company, address, phone no. supply the following information to the vendor
  - c. Directions to the plant.
  - d. Type, size, and serial number of container.
  - e. What has been done to contain the leaking chlorine.

Telephone numbers for requesting emergency assistance:

##### Pennwalt Chemical Corporation

9:00 a.m. to 5:00 p.m. Monday through Friday

B. E. Cooper-Phila. 215-587-7706  
H. F. Rice -Wayne 215-688-2601  
M. J. Nelson-Phila. 215-587-7704

##### Emergency 24 hours

B. E. Cooper -- 215-265-2570  
M. J. Nelson - 215-355-5933  
T. J. Doyle - 215-431-2164  
C. M. Weil - 215-687-1816  
R. F. Andrews- 215-343-0177



Columbia Southern - Pittsburgh Plate Glass

9:00 a.m. to 5:00 p.m. Monday through Friday

1-412-434-2426

1-412-434-2427

Emergency 24 hours

1-412-434-3131

Plant Numbers

Barberton, Ohio 1-216-753-5461

Natrium, W. Va. 1-304-455-2200

Area Sales

J. J. Burke 1-609-667-2881

Allied Chemicals

Syracuse, New York 1-315-468-1633

1-315-468-1611

CHEMTREC

CHEMTREC stands for Chemical Transportation Emergency Center, a public service of the Manufacturing Chemists Association at its offices in Washington, D.C. It provides immediate advice for those at the scene of emergencies, then promptly contacts the shipper of the chemicals involved for more detailed assistance and appropriate follow-up.

CHEMTREC operates around the clock-seven days a week to receive direct dial toll-free calls from any point in the U.S.

WATTS Telephone Number 800-424-9300

TO CALL THIS NUMBER, DIAL OUTSIDE OPERATOR AND ASK HER  
TO GET IT FOR YOU. IT CANNOT BE DIRECT DIALED FROM THIS  
EXCHANGE



*W. M. M. M.*  
*EP 4/1/81*

PHILADELPHIA ELECTRIC COMPANY

Peach Bottom Units 2 and 3

Emergency Plan Implementing Procedure

EP-401 RE-ENTRY AND RECOVERY (EMERGENCY DIRECTOR FUNCTIONS)

PURPOSE:

To prescribe the steps for re-entering a hazardous area following an evacuation.

REFERENCES:

Emergency Plan, Sec. 5 (Organizational Control of Emergencies)

APPENDICES:

None

ACTION LEVEL:

1. Evacuation has been completed in accordance with EP-303, 304, or 305.
2. The condition causing the emergency is under control.
3. Accounting and surveying of personnel and care for injured persons is in progress or completed.
4. Initial off-site radiation surveys to define the extent and severity of any hazard to the public have been completed.

PROCEDURE:

Re-entry is a deliberate post-emergency action directed by the Emergency Director, Interim Emergency Director, or the Assistant Station Superintendent (if delegated by the Emergency Director) and typically initiated from the assembly areas. This basic procedure is applicable regardless of the type of evacuation.

The primary objective of the Re-Entry Team is to define the level and extent of radiation and contamination.

The primary objective of the Recovery Team is to recover the plant to an operable condition.

IMMEDIATE ACTIONS:

1. The Interim Emergency Director or Emergency Director shall:
  - a. Review off-site and on-site radiation area survey data and in-plant radiation instrument data.
  - b. Determine the preferred direction for approaching the plant and select survey points for checking radiation conditions.
  - c. Establish two-way radio communications between the Radiation Survey Team and the Interim Emergency Director or Emergency Director.
  - d. Direct re-entry by directing the Radiation Survey Team Leader to dispatch teams to the survey points.
  - e. Review the re-entry survey data and control the degree of penetration into the hazardous area.

CAUTION: PLANNED RADIATION EXPOSURE IN EXCESS OF NORMAL STATION ADMINISTRATIVE GUIDES, HPO/CO-100, MUST BE SPECIFICALLY AUTHORIZED BY THE EMERGENCY DIRECTOR.

FOLLOW-UP ACTIONS:

Based on the report from the Radiation Survey Team, the Emergency Director shall organize and direct a Recovery Team. The Team shall enter the hazard area to recover the plant. Recovery operations shall be carefully planned and individuals assigned shall be properly equipped and trained for their particular functions. Recovery operations shall be developed as necessary based on the particular situation and shall be authorized by Electric Production Management. Direction of the Recovery Team can be delegated by the Emergency Director to the Assistant Station Superintendent.

*W. J. Williams*  
*Eff 4/1/81*

PHILADELPHIA ELECTRIC COMPANY

Peach Bottom Units 2 and 3

EP-500 REVIEW AND REVISION OF EMERGENCY PLAN (FSAR Appendix O)

PURPOSE:

This procedure describes the method which shall be used for annual review of the Emergency Plan and the incorporation of any necessary revision.

REFERENCES:

Emergency Plan, Sec. 2 (Scope and Applicability) and Sec. 8 (Maintaining Emergency Procedures)

PREREQUISITES:

N/A

PROCEDURE:

1. The Superintendent, Generation Division - Nuclear, shall appoint one member of the Electric Production Department staff to conduct the annual review of the Peach Bottom Emergency Plan.
2. The staff member shall review the Plan and recommend revisions which are required as a result of the following considerations:
  - a. Written critiques and evaluations of drills and exercises, especially recommended corrective actions.
  - b. Changes in plant organization.
  - c. Changes in function or organization of supporting agencies.
  - d. Changes in state or federal regulations.
  - e. Changes in state or local emergency plans.
  - f. Modifications to the plant or site which could affect emergency planning.
  - g. Recommendations from other organizations, such as state and federal agencies and other utilities.
  - h. Changes in construction or operating status.

PROCEDURE: (continued)

- i. Significant changes in areas surrounding the site, such as changes in population density or land usage.
  - j. Changes in capabilities of supporting organizations, including Radiation Management Corporation and local hospitals.
  - k. Changes in other plant operating or administrative procedures.
3. The reviewer shall document the results of his review in a letter to the Station Superintendent. The letter shall state the areas reviewed (with those listed above, as a minimum), the results for each area, and the recommended revisions.
  4. If in the opinion of the person reviewing the plan, that only minor changes are needed, the reviewer shall formalize the proposed changes and submit them for review by the Plant Operations Review Committee (PORC).
  5. If in the opinion of the person reviewing the plan, that substantial changes are needed, a three-person review committee shall be convened by the Superintendent, Generation Division-Nuclear to develop the necessary changes. The committee shall consist of one member from the PBAPS staff, one member from the Electric Production Department not on the PBAPS staff, and one member appointed by the O&SR Committee. The review committee shall recommend the necessary changes to the Plant Operations Review Committee (PORC), based on the considerations of Step 2, Items a thru k. The committee shall specifically direct attention to an up-date of letters of agreement.
  6. The recommended changes and any additional PORC recommendations shall be presented to the O&SR Committee for approval.
  7. Proposed changes approved by the O&SR Committee shall be incorporated into the Emergency Plan by the person or persons who reviewed the Plan or their designees.
  8. Revised pages of the Emergency Plan shall be prepared within one month of O&SR Committee approval and shall be distributed to personnel and groups on the Emergency Plan Distribution List. Holders of the Emergency Plan will be requested to acknowledge receipt of the revised pages. The receipts shall be returned to the Engineer, Health Physics and Chemistry, who will place them in the General Office File.
  9. Emergency Plan Implementing Procedures shall be revised to reflect any changes in the Emergency Plan (the Implementing Procedures are also reviewed and revised, independent of the annual plan review, according to other prescribed administrative procedures). Controlled copies of revisions should be distributed to ensure all copies of the Implementing Procedures, including posted copies of specific procedures, are updated.

PROCEDURE: (continued)

10. If changes to the Emergency Plan affect contractor support groups or support personnel, a meeting shall be arranged with the persons or groups concerned to discuss the changes. Contractor groups will be responsible for apprising their personnel of these changes.
11. Station Supervision shall inform station personnel of the changes in the Emergency Plan and the Implementing Procedures. Discussion of all changes shall be incorporated into training programs, as appropriate.

SURVEILLANCE TEST/EMERGENCY PLAN PROCEDURES INDEX  
PEACH BOTTOM UNITS 2 AND 3

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*Knapp*

<u>Number</u>	<u>Title</u>	RECEIVED APR 1 1981 W. J. KNAPP	<u>Review Date</u>	<u>Rev. No.</u>	<u>Revision Date</u>
ST/EP-1	Evacuation Alarm Test		04/01/81	12	04/01/81
ST/EP-2	Evacuation Drill		04/01/81	10	04/01/81
ST/EP-3A	Emergency Equipment Operational Check		04/01/81	8	04/01/81
ST/EP-3B	Emergency Equipment Calibration		04/01/81	4	04/01/81
ST/EP-3C	Emergency Equipment Inventory		04/01/81	8	04/01/81
ST/EP-4	Medical Drill		04/01/81	9	04/01/81
ST/EP-5	Fire Drill		08/03/79	5	08/03/79
ST/EP-7	Class IV Emergency Drill, Initial Response Phase		D E L E T E D		
ST/EP-8	General Emergency Annual Exercise		04/01/81	9	04/01/81
ST/EP-10	Local Fire Department (Delta-Cardiff) Training		11/22/77	0	11/22/77
ST/EP-11A	Technical Support Center Mask and Iodine Canister Replacement		01/14/81	0	01/14/81
ST/EP-12	Emergency Telephone List (EP-209) Review		04/01/81	0	04/01/81
ST/EP-13	Monthly Communications Drill		04/01/81	0	04/01/81
ST/EP-14	Quarterly Communications Drill		04/01/81	0	04/01/81
ST/EP-39	First Aid Drill		01/14/80	6	01/14/80



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<u>Number</u>	<u>Title</u>	RECEIVED APR 3 1981 W. J. KNAUER	<u>Review Date</u>	<u>Rev. No.</u>	<u>Revision Date</u>
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ST/EP-3B	Emergency Equipment Calibration		04/01/81	4	04/01/81
ST/EP-3C	Emergency Equipment Inventory		04/01/81	8	04/01/81
ST/EP-4	Medical Drill		04/01/81	9	04/01/81
ST/EP-5	Fire Drill		08/03/79	5	08/03/79
ST/EP-8	General Emergency Annual Exercise		04/01/81	9	04/01/81
ST/EP-10	Local Fire Department (Delta-Cardiff) Training		11/22/77	0	11/22/77
ST/EP-11A	Technical Support Center Mask and Iodine Canister Replacement		01/14/81	0	01/14/81
ST/EP-12	Emergency Telephone List (EP-209) Review		04/01/81	1	04/01/81
ST/EP-13	Monthly Communications Drill		04/01/81	0	04/01/81
ST/EP-14	Quarterly Communications Drill		04/01/81	0	04/01/81
ST/EP-39	First Aid Drill		01/14/80	6	01/14/80

JJY:jkc

*RBK*  
EFFECTIVE 4/1/81

PHILADELPHIA ELECTRIC COMPANY

Peach Bottom Units 2 & 3

SI/EP-1 EVACUATION ALARM TEST

Emergency Plan Requirement

TEST FREQUENCY:

Test should be performed every ~~two~~ weeks. Performance of the test must be performed at least once each month to comply with the Emergency Plan.

TEST RESULTS:

A. All of the test steps were completed SATISFACTORILY.

PERFORMED BY:

\_\_\_\_\_  
SIGNATURE (OPERATOR)

\_\_\_\_\_  
TIME/DATE

\_\_\_\_\_  
SIGNATURE (SHIFT SUPERVISION)

\_\_\_\_\_  
TIME/DATE

B. One or more of the test steps was completed UNSATISFACTORILY.  
Action required to resolve discrepancies encountered in test:

1. MRF \_\_\_\_\_

2. OTHER: \_\_\_\_\_

\_\_\_\_\_  
SIGNATURE (OPERATOR)

\_\_\_\_\_  
TIME/DATE

\_\_\_\_\_  
SIGNATURE (SHIFT SUPERVISION)

\_\_\_\_\_  
TIME/DATE

REVIEWED BY:

\_\_\_\_\_  
STATION SUPERINTENDENT

\_\_\_\_\_  
DATE

PURPOSE:

This procedure describes the method which shall be used to test the evacuation alarm equipment and to verify its operability.

REFERENCE:

1. Bechtel Electrical Drawing E-1048.
2. EP-301 Operation of the Evacuation Alarm/Pond Page System.
3. Emergency Plan.

PREREQUISITES:

1. Mgr. Public Information-(R.L. Harper, 4122 or alternate) notified that this test shall be performed on \_\_\_\_\_ (date) \_\_\_\_\_ (Shift). Notification given to \_\_\_\_\_ (name) on \_\_\_\_\_ (date) THIS PREREQUISITE SHALL BE PERFORMED ON THE DAY OF THE DRILL.

PROCEDURE:

THIS PROCEDURE IS TO BE PERFORMED ONCE EVERY TWO WEEKS UNDER DIRECTION OF SHIFT SUPERVISION.

PREREQUISITE MUST BE COMPLETED PRIOR TO START OF TEST.

DO NOT CONDUCT THIS TEST DURING A PERIOD OF CRITICAL PLANT OPERATIONS.

1. Notify the Director of the Information Center (as necessary) of the impending test (extension 311 or 456-5101) \_\_\_\_\_

2. Notify Unit 1 personnel (and is at 312). \_\_\_\_\_

3. Notify Load Dispatcher of drill. \_\_\_\_\_

4. The shift supervisor shall obtain an evacuation alarm test form (attached). \_\_\_\_\_

5. Shift supervision shall station individuals at strategic points for the purpose of monitoring the alarms and flashing beacon lights. \_\_\_\_\_

Suggested stations for adequate monitoring of the sirens are:

- a. Each refuel floor \_\_\_\_\_
- b. Each drywell, if unit is shutdown \_\_\_\_\_
- c. Turbine building \_\_\_\_\_
- d. Administration Building \_\_\_\_\_
- e. River side of screen structure \_\_\_\_\_
- f. River side of "B" cooling tower \_\_\_\_\_

6. Announce evacuation alarm test on P.A. Shift Supervision shall activate the alarm system according to the alarm test form. (Refer to EP-6 - Operating the Evacuation Alarm and Pond Page System). \_\_\_\_\_

Stations that require visual verification of beacon lights operability are:

- A. Unit #2 Condensate Pp. Pit.  
(light located above 2B Condensate Pp.)
  - B. Unit #3 Condensate Pp. Pit.  
(light located above 3B Condensate Pp.)
  - C. Diesel/Generator Bays E-1, E-2, E-3 and E-4.  
(lights located on North Wall of Respective bays.)
- 
- 6. Announce evacuation alarm test on P.A. Shift Supervision shall activate the alarm system according to the alarm test form. (Refer to EP-301 - Operating the Evacuation Alarm and Pond Page System).
  - 7. When all equipment has been tested, shift supervision shall announce an all clear over the P.A. System.
  - 8. Shift Supervision shall complete the evacuation alarm test form based on his own observations and reports from individuals stationed around the plant.
  - 9. Report malfunctioning equipment (via MRF) to the Administrative Engineer who is responsible for effecting repairs via the telephone company.
  - 10. The completed form attached to this ST/EP, shall be signed by shift supervision and forwarded to the Station Superintendent (via the Surveillance Test Coordinator) for his review and signature.

ST/EP-1.1 EVACUATION ALARM TEST REPORT - UNITS 2 and 3

This form shall be used to initiate and document the results of a test of the evacuation alarm system.

Station Superintendent Approval \_\_\_\_\_

Director of the Information Center Notified \_\_\_\_\_

Unit 1 Guard Notified \_\_\_\_\_

"THIS IS A TEST" announced over P.A. \_\_\_\_\_

<u>SW</u> <u>POSITION</u>	<u>DESCRIPTION</u>	<u>REPORT</u> <u>FORM</u>	<u>RESULTS</u>
1	Taped message, river speakers (intake and B cooling tower)	River Edge	
2	Microphone, river speakers (intake and B cooling tower)	River Edge	
3	OFF		
4	Drywell Unit 2	Drywell Unit 2	
5	Drywell Unit 3	Drywell Unit 3	
6	Plant	Refuel Floor Turbine Bldg Admin Bldg	

"TEST COMPLETE" announced over P.A. \_\_\_\_\_

CRITIQUE:

Record below a critique of the Evacuation Alarm Test. Point out any problems encountered or unusual circumstances and plant personnel response to them. Include any suggestions for improvement of this drill.

Written By: \_\_\_\_\_  
Shift Supervisor or Staff Member

*W. K. L. L.*  
*EH 4/1/81*

## PHILADELPHIA ELECTRIC COMPANY

Peach Bottom Units 2 &amp; 3

EMERGENCY PLAN SURVEILLANCE TESTST/EP-2 EVACUATION DRILL

Emergency Plan Requirement

TEST FREQUENCY:Once Each Quarter (except during that calendar quarter when an ST/EP-8  
General Emergency Annual Exercise is held.)TEST RESULTS:

A. All of the test steps were completed SATISFACTORILY.

PERFORMED BY:

\_\_\_\_\_  
SIGNATURE (OPERATOR)\_\_\_\_\_  
TIME/DATE\_\_\_\_\_  
SIGNATURE (SHIFT SUPERVISION)\_\_\_\_\_  
TIME/DATEB. One or more of the test steps was completed UNSATISFACTORILY.  
Action required to resolve discrepancies encountered in test:

1. MRF \_\_\_\_\_

2. OTHER: \_\_\_\_\_

\_\_\_\_\_  
SIGNATURE (OPERATOR)\_\_\_\_\_  
TIME/DATE\_\_\_\_\_  
SIGNATURE (SHIFT SUPERVISION)\_\_\_\_\_  
TIME/DATE

REVIEWED BY:

\_\_\_\_\_  
STATION SUPERINTENDENT\_\_\_\_\_  
DATE



PURPOSE:

This procedure shall be used to familiarize personnel with the evacuation alarms and with the actions to be taken in the event of a serious plant radiation emergency.

REFERENCE:

Emergency Plans

- EP-301 Operating the Evacuation Alarm and Pond Page System
- EP-207 Search and Rescue Section
- EP-209 Telephone List for Emergency Use
- EP-207 Personnel Accounting Section
- EP-303 Plant Evacuation
- EP-304 Assembly for Possible Site Evacuation
- EP-305 Site Evacuation

PREREQUISITES:

1. Test personnel have reviewed the action levels of EP-303, 304 & 305.
2. The Station Superintendent or his alternate approved performance of this drill.
3. The following notifications have been made prior to the drill.

	Person	Notified		
	Notified	By	Date	Time
a)	Load Dispatcher			
b)	Mgr Public Info (R.L. Harper 8-4122)			
c)	Sta. Supt./Asst. Sta. Supt.			
d)	Information Center (311 or 9-6-5101)			
e)	Unit 1 personnel (Guard is stationed at Ext. 312)			
f)	Pa. Emergency Management Agency (PEMA) (1-783-8150) and request notification of Pa. Bureau of Rad. Health			

NOTIFICATIONS SHALL BE MADE ON THE DAY OF THE DRILL. NOTIFICATION SHALL INCLUDE WHEN DRILL IS TO BE PERFORMED. THIS TEST MAY BE PERFORMED IN CONJUNCTION WITH ST/EP-1, EVACUATION ALARM TEST.

PROCEDURE:

THIS PROCEDURE SHALL BE IMPLEMENTED QUARTERLY UNDER DIRECTION OF SHIFT SUPERVISION. DO NOT CONDUCT THIS TEST DURING A PERIOD OF CRITICAL PLANT OPERATIONS. P.E.Co. MAINTENANCE, P.E. CO CONSTRUCTION, VENDORS, OR OUTSIDE CONTRACTORS CRAFTS MAY PARTICIPATE IN THIS DRILL AT THE DISCRETION OF THE STATION SUPERINTENDENT.

Immediate Action:

Shift Supervision shall:

1. Verify that prerequisites conditions have been satisfied. \_\_\_\_\_
2. Announce the evacuation drill as follows:

"NOW HEAR THIS. THIS IS THE SHIFT SUPERINTENDENT. THIS IS A PLANT EVACUATION DRILL. I REPEAT, THIS IS ONLY A DRILL. P.E.CO. MAINTENANCE, P.E. CO. CONSTRUCTION, VENDORS, OR OUTSIDE CONTRACTOR CRAFTS ARE NOT INVOLVED. ALL OTHER PERSONNEL EVACUATE THE PLANT AND ASSEMBLE IN THE ADMINISTRATION BUILDING ON THE GROUND FLOOR. SHIFT PERSONNEL REPORT TO THE CONTROL ROOM. "THIS IS ONLY A DRILL"

THIS ANNOUNCEMENT MAY BE MODIFIED TO GIVE INSTRUCTIONS TO P.E.Co MAINTENANCE, P.E.Co CONSTRUCTION, VENDORS OR OUTSIDE CONTRACTOR CRAFTS IF THEY ARE TO PARTICIPATE IN THIS DRILL.

3. Activate the evacuation siren in the "PLANT" position.  
If also performing an evacuation alarm test, activate the remaining functions of the alarm system and complete the evacuation alarm test form. Refer to ST/EP-1.

Follow-Up Action:

1. Shift Supervision shall:

- a) Receive personnel accountability reports.
- b) Verify that guards have initiated their emergency procedure PP-2.
- c) Designate an area of simulated accident conditions and request the Radiation Survey Team to survey the area.  
Designated area \_\_\_\_\_  
HP Survey completed by \_\_\_\_\_
- d) Announce an "ALL CLEAR" at the conclusion of alarm testing or within 15 minutes.
- e) During the 2nd and 4th quarters of each year, authorize the Personnel Safety Team Leader to form a Search and Rescue Team and conduct a simulated search and rescue in accordance with EP-207.
- f) Report on this drill to the Station Superintendent on the attached test report form ST/EP-2.2.

2. The Personnel Safety Team shall:

- a) Secure a frisker on the way to the assembly area.
- b) Survey the assembly area.
- c) Survey and account for evacuees per EP-207.
- d) Form a Search and Rescue Team when requested by Shift Supervision.

3. The Radiation Survey Team shall:

- a) Survey the simulated accident area as requested by Shift Supervision.

4. The Security Team (Guards) shall:

- a) Initiate emergency admittance procedure PP-2.
- b) Assist in personnel accounting per EP- 208.

5. Non-Shift personnel shall:

- a) Evacuate the plant and assemble as directed.
- b) Perform functions as emergency team members or other duties as directed by Shift Supervision.
- c) Return to assigned duties upon announcement of the "ALL CLEAR".

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ST/EP-2.2 PRACTICE EVACUATION REPORT

Station Superintendent approval \_\_\_\_\_  
PEMA notified & requested to notify Pa. \_\_\_\_\_  
Bureau of Rad. Health \_\_\_\_\_  
Information Center notified \_\_\_\_\_  
Manager, Public Information notified \_\_\_\_\_  
Load Dispatcher notified \_\_\_\_\_  
Unit 1 notified \_\_\_\_\_  
Practice evacuation announced on \_\_\_\_\_ at \_\_\_\_\_ by \_\_\_\_\_  
date time shift  
supervision

Evacuation alarm system activated \_\_\_\_\_  
Area of simulated radiation hazard \_\_\_\_\_  
Personnel Safety Team alerted \_\_\_\_\_  
Radiation Survey Team alerted \_\_\_\_\_  
Personnel accounted for \_\_\_\_\_  
Personnel Safety Team leader reports back \_\_\_\_\_  
Radiation Survey Team leader reports back \_\_\_\_\_  
Security Team leader reports \_\_\_\_\_  
Search and Rescue completed \_\_\_\_\_

All clear announced at \_\_\_\_\_ by \_\_\_\_\_  
time shift  
supervision

CRITIQUE:

Record below a critique of the Plant Radiation Emergency Drill. Point out any problems encountered or unusual circumstances and plant personnel response to them. Include suggestions for improvement of this drill.

Written By: \_\_\_\_\_  
Shift Supervision or  
Staff Member

*M. J. Hill*  
*Eff 4/1/81*

PHILADELPHIA ELECTRIC COMPANY  
PEACH BOTTOM UNITS 2 and 3  
Emergency Plan Surveillance Test

ST-EP 3A EMERGENCY EQUIPMENT OPERATIONAL CHECK

Emergency Plan Requirement

Test Frequency:

MONTHLY - Battery operated survey instrumentation operational  
check (ECC and TSC)

Test Results:

A. All of the test steps were completed SATISFACTORILY.

PERFORMED BY \_\_\_\_\_  
SIGNATURE TIME/DATE

REVIEWED BY \_\_\_\_\_  
SIGNATURE (HP Supervision) TIME/DATE

\_\_\_\_\_  
SIGNATURE (SHIFT SUPERVISION) TIME/DATE

B. Action required to resolve discrepancies encountered in test:

1. MRF \_\_\_\_\_

2. Other \_\_\_\_\_

\_\_\_\_\_  
SIGNATURE TIME/DATE

\_\_\_\_\_  
SIGNATURE (HP SUPERVISION) TIME/DATE

\_\_\_\_\_  
SIGNATURE (SHIFT SUPERVISION) TIME/DATE

REVIEWED BY: \_\_\_\_\_  
PLANT STAFF SUPERVISION DATE

PURPOSE:

This procedure is used to check the availability and operability of necessary emergency survey instrumentation.

REFERENCE:

Emergency Plan

PREREQUISITES:

1. Lead seals and seal pliers for renewing locker seals.

PROCEDURE:

1. Battery operated survey instrumentation stored at the ECC and TSC shall be checked, on a monthly basis. \_\_\_\_\_
2. If any instrument does not respond as expected, remove this instrumentation from locker and replace it with a functional instrument. Document this exchange by attaching current calibration documentation of replacement instrument to this procedure. \_\_\_\_\_
3. Reseal lockers. \_\_\_\_\_



TABLE ST-EP 3A-1

A OFF-SITE SURVEY TEAM KIT

EQUIPMENT LOCKER SEALED PRIOR TO CHECK \_\_\_\_\_

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
1.	Car battery operated air sampler	1		
	a) Flow checked at 1 cfm or more			
	b) Supply of filter papers & I <sub>2</sub> cartridges			
	c) Sampling head	1		
2.	Geiger Counter Vendor Ser. No. _____	1		
	a) Battery check, OK			
	b) Calibration date on instrument, ok			
	c) Response to check source, OK			
3.	Ion Chamber Vendor Ser. No. _____	1		
	a) Battery check, OK			
	b) Calibration date on instrument, ok			
	c) Response to check source, OK			
4.	Frisker Vendor Ser. No. _____	1		
	a) Sample holder SH-4	1		
	b) Hand probe HP 210	1		
	c) Battery check, OK			
	d) Battery on charge			
	e) Calibration date on Instrument, ok			

TABLE ST-EP 3A-1  
A OFF-SITE SURVEY TEAM KIT

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
	f) Response to check source both probes			
	g) Alarm check, OK			
5.	SAM-2 Vendor Ser. No. _____	1		
	a) Shield with RD19 probe	1		
	b) Battery pack with cable	1		
	c) Battery check, OK			
	d) BA-133 check source No. _____	1		
	Expected check source range (from	Min _____		
	e) HPO/CO-67) (cpm)	Max _____		
	Check source response per HPO/CO-67			
	f) (cpm)			
	g) Check source, OK			
	h) Battery on trickle charge			
6.	All instruments turned OFF.			
7.	Check operation of outside line telephone, locked in emergency locker.			
8.	Check operation of company phone (#316) in PUB.			

TABLE ST-EP 3A-2

B OFF-SITE SURVEY TEAM KIT

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
1.	Car battery operated air sampler	1		
	a) Flow checked at 1 cfm or more	-		
	b) Supply of filter papers & I <sub>2</sub> cartridges			
	c) Sampling head			
2.	Geiger Counter Vendor Ser. No. _____	1		
	a) Battery check, OK			
	b) Calibration date on instrument, ok			
	c) Response to check source, OK			
3.	Ion Chamber Vendor Ser. No. _____	1		
	a) Battery check, OK			
	b) Calibration date on instrument, ok			
	c) Response to check source, OK			
4.	Frisker with Probe Vendor Ser. No. _____	1		
	a) Sample holder SH-4	1		
	b) Hand probe HP 210	1		
	c) Battery check, OK			
	d) Battery on charge			
	e) Calibration date on instrument, ok			
	f) Response to check source both probes			
	g) Alarm check, ok			

TABLE ST/EP 3A-2

B OFF-SITE SURVEY TEAM KIT

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
5. SAM-	Vendor Ser. No. _____			
a)	Shield with KD-19 probe			
b)	Battery pack with cable			
c)	Battery check, OK			
d)	BA-133 check source no. _____			
e)	Expected check source range (cpm) (from HPO/CO-67)	Min _____ Max _____		
f)	Check source response per HPO/CO-67 (cpm)			
g)	Check source, OK			
h)	Battery on trickle charge			
6.	All instruments turned OFF			

ST/EP 3A

ECC ON-SITE SURVEY TEAM KIT "A"

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
1.	Vendor Ion Chamber Ser. No. _____	1		
	a) Battery check, OK			
	b) Calibration date on instrument, OK			
	c) Response to check source, OK			
2.	Frisker with probe			
	Vendor Serial No. _____	1		
	a) Sample holder SH-4	1		
	b) Hand probe HP-210	1		
	c) Battery check, OK			
	d) Response to check source, both probes			
	e) Alarm check, OK			
	f) Calibration date on instrument, OK			
	g) Battery on charge			

ST/EP 3A

ECC ON-SITE SURVEY TEAM KIT "B"

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
1.	Vendor Ion chamber Ser. No.	1		
	a) Battery check, OK			
	b) Calibration date on instrument, OK			
	c) Response to check source, OK			
2.	Frisker with probe	1		
	Vendor Serial No.			
	a) Sample holder SH-4	1		
	b) Hand probe HP-210	1		
	c) Battery check, OK			
	d) Response to check source, both probes			
	e) Alarm check, OK			
	f) Calibration date on instrument, OK			
	g) Battery on charge			
3.	Vendor PING-2A Ser. No.	1		
	a) Battery check, OK			
	b) Response to check			
	c) Alarm check, OK			
	d) Battery on charge			



## ST/EP 3A

TSC SURVEY INSTRUMENTS  
EQUIPMENT LOCKER SEALED PRIOR TO INVENTORY \_\_\_\_\_

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
1.	Vendor Geiger Counter Ser. No.	1		
	a) Battery check, OK			
	b) Calibration date on instrument, OK			
	c) Response to check source, OK			
2.	Vendor Ion chamber Ser. No.	1		
	a) Battery check, OK			
	b) Calibration date on instrument, cOK			
	c) Response to check source, OK			
3.	Vendor Ion chamber Ser. No.	1		
	a) Battery check, OK			
	b) Calibration date on instrument, OK			
	c) Response to check source, OK			
4.	Frisker with probe	1		
	Vendor Ser. No.			
	a) Sample holder SH-4	1		
	b) Hand probe HP-210	1		

ST/EP 3A

TSC SURVEY INSTRUMENTS  
EQUIPMENT LOCKER SEALED PRIOR TO INVENTORY \_\_\_\_\_

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
	c) Battery check, OK			
	d) Response to check			
	source, both probes			
	e) Alarm check, OK			
	f) Calibration date on			
	instrument, OK			
	g) Battery on charge			
5.	Vendor PING-2A Ser. No.			
	a) Battery check, OK			
	b) Response to check			
	c) Alarm check, OK			
	d) Battery on charge			

*P. J. H. R. L.*  
*EH 4/1/81*

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNIT 2 and 3

Emergency Plan Surveillance Test

ST-EP 3B EMERGENCY EQUIPMENT CALIBRATION

Emergency Plan Requirement

Test Frequency:

Semi-Annually - Survey instrumentation calibration (ECC and TSC)

Test Results:

A. All of the test steps were completed SATISFACTORILY.

PERFORMED BY \_\_\_\_\_  
SIGNATURE TIME/DATE

REVIEWED BY \_\_\_\_\_  
SIGNATURE (HP Supervision) TIME/DATE

\_\_\_\_\_  
SIGNATURE (SHIFT SUPERVISION) TIME/DATE

B. Action required to resolve discrepancies encountered in test:

1. MRF \_\_\_\_\_

2. Other: \_\_\_\_\_

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
TIME/DATE

REVIEWED BY: \_\_\_\_\_  
PLANT STAFF SUPERVISION DATE

PURPOSE:

This procedure is used to check the calibration and operability of necessary emergency survey instrumentation.

REFERENCES:

Appropriate HPA procedures for calibrating the specific instrumentation involved.  
Emergency Plan.

PREREQUISITES:

1. Lead seals and seal pliers for renewing locker seals.
2. Calibration source of known strength.

PROCEDURE:

I. Off-Site Survey Kits

1. Observe that emergency kit seals are intact. A\_\_\_\_\_ B\_\_\_\_\_
2. Survey instruments shall be calibrated semi-annually.  
Obtain Instruments from emergency kits. A\_\_\_\_\_ B\_\_\_\_\_
3. Initiate an RWP to use the appropriate source if required  
by HPO/CO-100. The storage area for emergency survey  
instruments shall be the ECC. Additional survey  
instruments shall be stored at the TSC. \_\_\_\_\_

EMERGENCY SURVEY INSTRUMENTS SHALL BE CALIBRATED DURING PERFORMANCE  
OF THIS PROCEDURE OR MAYBE REPLACED WITH PREVIOUSLY CALIBRATED INSTRUMENTS.

4. Off-Site Survey Team Kit

A B

a. Gieger counter

- (1) Calibration date
- (2) Instrument serial number
- (3) Calibration data sheet attached

\_\_\_\_/\_\_\_\_/\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

b. Ion chamber

- (1) Calibration date
- (2) Instrument serial number
- (3) Calibration data sheet attached

\_\_\_\_/\_\_\_\_/\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

		<u>A</u>	<u>B</u>
c.	Frisker		
	(1) Calibration date	<u>  /  /  </u>	<u>  /  /  </u>
	(2) Instrument serial number	<u>          </u>	<u>          </u>
	(3) Calibration data sheet attached	<u>          </u>	<u>          </u>
	(4) Source checked with HP-210 probe	<u>          </u>	<u>          </u>
d.	SAM-2		
	(1) Calibration date	<u>  /  /  </u>	<u>  /  /  </u>
	(2) Instrument serial number	<u>          </u>	<u>          </u>
	(3) Calibration data sheet attached	<u>          </u>	<u>          </u>
	(4) Sourced checked per HPO/CO-67 within spec	<u>          </u>	<u>          </u>
5.	On-Site Survey Team Kits :		
	a. Ion Chamber		
	(1) Calibration date	<u>  /  /  </u>	<u>  /  /  </u>
	(2) Instrument Serial Number	<u>          </u>	<u>          </u>
	(3) Calibration data sheet attached	<u>          </u>	<u>          </u>
	b. Frisker		
	(1) Calibration date	<u>  /  /  </u>	<u>  /  /  </u>
	(2) Instrument serial number	<u>          </u>	<u>          </u>
	(3) Calibration data sheet attached	<u>          </u>	<u>          </u>
	(4) Source checked with HP-210 probe	<u>          </u>	<u>          </u>
6.	Reseal the Emergency Kits	<u>          </u>	<u>          </u>
7.	PING-2A	<u>          </u>	<u>          </u>
	(1) Calibration date	<u>  /  /  </u>	
	(2) Instrument serial number	<u>          </u>	
	(3) Calibration data sheet attached	<u>          </u>	
8.	TSC Emergency Survey Instruments		
	a. Geiger Counter		
	(1) Calibration date		<u>  /  /  </u>
	(2) Instrument serial number		<u>          </u>
	(3) Calibration data sheet attached		<u>          </u>

A

B

b. Ion Chamber

- (1) Calibration date
- (2) Instrument serial number
- (3) Calibration data sheet attached

///  
\_\_\_\_\_  
\_\_\_\_\_

c. Frisker

- (1) Calibration date
- (2) Instrument serial number
- (3) Calibration data sheet attached
- (4) Source checked with HP-210 probe

///  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

d. PING-2A

- (1) Calibration date
- (2) Instrument serial number
- (3) Calibration data sheet attached

///  
\_\_\_\_\_  
\_\_\_\_\_

9. Information Center

a. Frisker

- (1) Calibration date
- (2) Instrument serial number
- (3) Calibration data sheet attached
- (4) Source checked with HP-210 probe

///  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



*27 Mllumb*  
*EH 4/1/81*

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 and 3

Emergency Plan Surveillance Test

ST/EP-3C EMERGENCY EQUIPMENT INVENTORY

Emergency Plan Requirement

Test Frequency:

- ☐ SEMI-ANNUALLY - Emergency equipment inventory, battery, and respirator replacement
- ☐ When emergency equipment is used, perform only those sections indicated by HP supervision.

Test Results:

A. All of the test steps were completed SATISFACTORILY.

PERFORMED BY

SIGNATURE

TIME/DATE

REVIEWED BY

SIGNATURE (HP Supervision)

TIME/DATE

SIGNATURE (SHIFT SUPERVISION)

TIME/DATE

B. Action required to resolve discrepancies encountered in test:

1. MRF \_\_\_\_\_  
2. Other: \_\_\_\_\_

SIGNATURE

SIGNATURE (H.P. SUPERVISOR)

TIME/DATE

SIGNATURE (SHIFT SUPERVISION)

TIME/DATE

REVIEWED BY:

PLANT STAFF SUPERVISION

DATE

PURPOSE:

This procedure is used to check the availability of necessary emergency health physics and medical equipment.

REFERENCE:

Emergency Plan

PREREQUISITES:

1. Lead seals and seal pliers for renewing locker seals.
2. Batteries for replacement (for semi-annual inventory only):

Flashlight (72)  
Flasher (18)

3. Respirators newly inspected (6).

PROCEDURE:

1. A complete inventory, battery, and respirator replacement shall be performed twice a year. \_\_\_\_\_
2. The storage areas are:
  - a. Units 2 and 3 medical room (medical and decon supplies) \_\_\_\_\_
  - b. ECC (survey instruments, decisional aids, search and rescue equipment, decon supplies) \_\_\_\_\_
  - c. TSC (survey instruments, decisional aids) \_\_\_\_\_
  - d. North Sub Station (decisional aids, search and rescue equipment, decon supplies) \_\_\_\_\_
  - e. Delta Service Building (decisional aids, search and rescue equipment, decon supplies) \_\_\_\_\_
  - f. Harford Memorial Hospital, Havre de Grace, Maryland (medical and decontamination supplies) \_\_\_\_\_

HOSPITAL SUPPLIES SHALL BE INVENTORIED BY R.M.C. A COPY OF THE COMPLETE INVENTORY SHALL BE FILED AS PART OF THIS PROCEDURE.

3. If this ST is being done after emergency equipment is used and a complete inventory is not required; perform section \_\_\_\_\_.

\_\_\_\_\_  
HP Supervision

EP-3--Medical Room

INVENTORY MEDICAL STATION PEACH BOTTOM UNITS 2 & 3

A. Health Physics Supplies & Equipment (Section 1)

	<u>QUANTITY</u>	<u>CHECKED</u>
1. Decontamination Table Top, w/splash guards, stretcher, hose, faucet and bucket.	1 each	_____
2. Kits, Decontamination/Sample taking; consisting of three canvas containers w/supplies and equipment.	1 each	_____
3. Moveable Protective Shield, RMC model, w/adjustable 4" thick lead glass optical viewing window.	1 each	_____
4. Lead Container, High activity specimen.	1 each	_____
5. Ring Dosimeters, TLD.	4 each	_____
6. Plastic Sheeting, 4-mils.	1 roll	_____
7. Aprons, plastic, disposable.	3 each	_____
8. Shoe Covers.	6 pair	_____
9. Cap, Gown, Mask, Gloves (surgical, disposable)	6 sets	_____
10. Hose, low pressure with shower head and valve	1 each	_____
11. Kraft Paper	1 roll	_____
12. Masking Tape, 2"	3 rolls	_____

B. Medical, Surgical, and Nursing Supplies & Equipment (Section 2)

1. Examination Table	1 each	_____
2. Mayo Stand	1 each	_____
3. IV Stand	1 each	_____

\* See Section D for component list.

INVENTORY MEDICAL STATION PEACH BOTTOM UNITS 2 & 3 (Cont.)B. Medical, Surgical, and Nursing Supplies & Equipment (Section 2)(Cont)

4. Cart, SN 04866 less bucket	1 each	_____
5a. Spotlight, surgical, portable	1 each	_____
5b. Spotlight is operable		_____ INITIALS
6. Sheets	6 each	_____
7. Pillows	2 each	_____
8. Pillow Cases	6 each	_____
9. Blankets	2 each	_____
10. Suction Unit	1 each	_____
11. 1 H Tank of O <sub>2</sub> w/reduction valve and masks	1 each	_____
12. 1 Ambulance Resuscitation Unit	1 each	_____
13. Emesis Basin	1 Stainless Steel 2 Plastic	3 _____
14. Tourniquet	6 each	_____
15. Thermometer	6 oral 6 rectal	12 _____
16. Measuring Tape or Rule	1 each	_____
17. Sphygmomanometer	1 each	_____
18. Hammer, Reflex Testing	1 each	_____
19a. Otoscope/Ophthalmoscope/Rhinoscope	1 each	_____
b. Battery charged, operable & returned to charge		_____ INITIALS
20a. Flashlight, w/batteries	1 each	_____
b. Flashlight is operable		_____ INITIALS
21. Stethoscope	1 each	_____

INVENTORY MEDICAL STATION PEACH BOTTOM UNITS 2 & 3 (Cont.)

B. Medical, Surgical, and Nursing Supplies & Equipment (Section 2)(Cont)

22. Tracheostomy Set, w/assorted airway tubes	1 each	_____
23. Catheter Tray, 14-16 french plain	1 set	_____
24. Thomas Leg Splints	1 set	_____
25. Splints, aluminum, assorted sizes	1 set	_____
26. I.V. Administration Sets, sterile	9 each	_____
27. Barrier Basic Pack, for minor surgery*	1 each	_____
28. Barrier Lap Pack, for major surgery*	1 each	_____
29. Syringes, disposable, sterile, assorted sizes w/needles	1 set	_____
30. Minor Surgery Tray Sterilized DO NOT OPEN Consisting of:	EXP. DATE	_____ _____
a. Four towels		
b. Four towel clips		
c. Sponges		
d. Sponge Forceps (2)		
e. Solution Cups (1)		
f. Medicine Glass (1)		
g. Syringes 2 ml		
h. Needles, 25G, 5/8"; 22G, 1/2"; 18G, 1 1/2"		
i. Drape Sheet		
j. Knife Handle, No. 3 with No. 15 blades (1)		
k. Tissue Forceps (1)		
l. Two Straight Mosquito Forceps		
m. Two Curved Mosquito Forceps		
n. Two Allis Forceps		
o. Four Curved Hemostats, small		
p. Suture Needles, with silk and catgut, assorted		
q. Needle Holder (1)		
r. Dressing		
s. Suture Scissors (2)		
* (In Tray 15 1/2 x 9 1/2 x 2 ") Wrapper size 36 X 36 Sterilization Indicator		
31. Gloves, surgical, assorted sizes	12 pair	_____
32. Gowns, patient	2 each	_____

INVENTORY MEDICAL STATION PEACH BOTTOM UNITS 2 & 3 (Cont.)B. Medical, Surgical, and Nursing Supplies & Equipment (Section 2)(Cont)

33. Towels, bath	6 each	_____
34. Arm Board for IV	2 each	_____
35. Dressings, assorted sizes	As req.	_____
36. Adhesive Tape, assorted sizes	As req.	_____
37. Paper Towels	2 pk	_____
38. Paper Tissue	2 boxes	_____
39. Brush, hand, surgical	2 each	_____
40. Alcohol Wipes	1 box	_____
41. Applicators cotton tip	1 box	_____
42. Hygenic Napkins	2 boxes	_____

C. Solutions & Chemicals (Section 3) EXPIRATION DATE

1. Normal saline 500 ML	_____	3 each	_____
2. 5% Dextrose 500 ML	_____	3 each	_____
3. Ringers Lactated 500 ML	_____	3 each	_____
4. 70% Alcohol	N/A	1 gallon	_____
5. Soda Bicarb Ampules	_____	5 vials	_____
6. Metaramwol Bitartrate	_____	1 vial	_____
7. Ethyl Chloride	N/A	4	_____
8. Xyllocaine 1%	N/A	5 vials	_____
9. Levophed	_____	10 vials	_____
10. Calcium Gluconate	N/A	4	_____



INVENTORY MEDICAL STATION PEACH BOTTOM UNITS 2 & 3 (Cont.)

C. Solutions & Chemicals(Sect 3)(Cont) EXPIRATION DATE

11. H <sub>2</sub> O <sub>2</sub> Bethadine Solution	<u>N/A</u>	1 gallon	<u>                    </u>
12. Phisohex	<u>N/A</u>	1 gallon	<u>                    </u>
13. Merthiolate, tincture	<u>N/A</u>	1 pint	<u>                    </u>

Solutions and Chemicals which have passed their expiration date shall be replaced as soon as possible but no later than the next inventory.

The expired solutions and chemicals shall not be discarded until replaced with fresh solutions and chemicals.

HP & C supervision shall notify the Company Medical Director of the need for replacement solutions and chemicals.

D. DECONTAMINATION KIT (SECTION 4)

Parts list/instructions for use

1. Skin Decontamination

CODE CHECKED

Yellow round labels  
marked:

(a) Utensils:

Absorbent balls, extra large	100	DSK1	_____
Sponge - holding forceps	1	DSK2	_____
Solution bowl, plastic (to hold decontaminant)	1	DSK3	_____
Plastic beaker, large (to discard used sponges)	2	DSK4	_____
Pre-op Sponges (for large area decontamination)	6	DSK5	_____
Surgical hand brushes (for hands/feet decontamination)	2	DSK6	_____
Wash bottle (to hold water for decontamination)	1	DSK7	_____

(b) Decontaminants

(see instructions on bottle)	{	TURCO decon soap, bottles (for first decon effort, general)	2	DSK8	_____
		Clorox, bottle (for second decon effort)	1	DSK9	_____
		Phisoex, bottle (for decon of skin around wounds, abrasions, etc.)	1	DSK10	_____

2. Wound Cleansing

(a) Utensils:

Sterile gauze pads, 4 x 4-in, in box	25	DW1	_____
Surgical gloves, assorted sizes, sterile, pair	5	DW2	_____

Solution bowl,	1	DW3	_____
Plungerless syringes, 50 cc,	2	DW4	_____
Aperture drapes, sterile	2	DW5	_____
Sponge - holding forceps, sterile	1	DW6	_____
Cotton tipped applicators, sterile, in box	25	DW7	_____

(b) Cleansing agents:

Saline solutions, normal, sterile, bottle	1	DW8	_____
Hydrogen peroxide, 3% solution, bottle	1	DW9	_____

3. Miscellaneous materials

Collodion, bottle (to seal residual skin contamination)	1	DM1	_____
Nivea cream, jar (apply on dry skin after complete decon)	1	DM2	_____
Prep kit (for clipping and shaving)	1	DM4	_____
Nail clippers, pair	1	DM5	_____

		<u>CODE</u>	<u>CHECKED</u>
Bandage scissors, LISTER, large, pair	1	DM6	_____
Patient Radiation and Medical Status Record Sheets (for recording essential data on patients' medical and radiation Status)	5	DM7	_____
Skin marker (to mark contaminated areas on skin)	1	DM8	_____
Cardboard containers	10	DM9	_____
Plastic bags, assortment (to hold decon materials after use)	1	DM10	_____
Tags, with wire (to indicate contents of containers and bags)	10	DM11	_____
Tissue paper, box	1	DM12	_____
Notebook	1	DM13	_____
Pencils	5	DM14	_____

## ST/EP-3C ECC OFF-SITE SURVEY TEAM KIT "A" (SECTION 5)

EQUIPMENT LOCKER SEALED PRIOR TO INVENTORY \_\_\_\_\_

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
1.	Car battery operated air sampler	1		
	a) Filter paper	20		
	b) I <sub>2</sub> sampling cartridges AgX (SAI-cp-100 gray cable)	10		
	c) Sampling head	1		
2.	Geiger Counter	1		
	a) Instruction manual	1		
	b) Battery check, OK			
	c) Calibration date on instrument, OK			
	d) Headset			
3.	Ion Chamber	1		
	a) Instruction manual	1		
	b) Battery check, OK			
	c) Calibration date on instrument, OK			
4.	Frisker	1		
	a) Sample holder SH-4	1		
	b) Hand probe HP 210	1		
	c) Batteries check, OK			
	d) Batteries on charge			
	e) Calibration date on instrument, OK			

ST/EP-3C ECC OFF-SITE SURVEY TEAM KIT "A" (SECTION 5)

EQUIPMENT LOCKER SEALED PRIOR TO INVENTORY \_\_\_\_\_

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
5.	SAM-2	1		
	a) Shield & probe	1		
	b) Battery pack	1		
	c) Battery pack cable	1		
	d) Battery charger	1		
	e) BA-133 check source	1		
	f) Battery check, ok	1		
	g) Calibration date on instrument, OK			
	h) Battery on trickle charge			
6.	All instruments turned off			
7.	Flash light (w) batteries (Replace Batteries)	1		
8.	Flash light batteries (New)	6		
9.	Radiation ribbon 100' roll	1		
10.	Radiation tape roll	1		
11.	Clip board	1		
12.	Radiation survey forms			
13.	Pencils, sharpened	3		
14.	Radiation signs	3		
15.	Radiation sign insert cards	various		
16.	Grease pencils	3		
17.	Smears	10 Books		



ST/EP-3C ECC OFF-SITE SURVEY TEAM KIT "A" (SECTION 5)

EQUIPMENT LOCKER SEALED PRIOR TO INVENTORY \_\_\_\_\_

ITEM	DESCRIPTION	QUANTITY	CIKD.	REMARKS
18.	Towel swipes	Pkg.		
19.	Maps			
20.	Envelopes for filters (stamped)	20		
21.	Plastic bag for transporting 12 cart.	20		
22.	Felt-tipped marker	1		
23.	Plastic wrap (saran wrap or equal)	1		
24.	Tape			
25.	Locker resealed			

## ST/EP-3C ECC OFF-SITE SURVEY TEAM KIT "B" (SECTION 6)

EQUIPMENT LOCKER SEALED PRIOR TO INVENTORY \_\_\_\_\_

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
1.	Car battery operated air sampler	1		
	a) Filter paper	20		
	b) I <sub>2</sub> sampling cartridge AgX (SAI-cp-100 gray cable)	10		
	c) Sampling head	1		
2.	Geiger Counter	1		
	a) Instruction manual	1		
	b) Battery check, OK			
	c) Calibration date on instrument, OK			
	d) Headset			
3.	Ion Chamber	1		
	a) Instruction manual	1		
	b) Battery check, OK			
	c) Calibration date on instrument, OK			
4.	Frisker with probe	1		
	a) Sample holder SH-4	1		
	b) Hand probe HP 210	1		
	c) Batteries check, OK			
	d) Batteries on charge			
	e) Calibration date on instrument, OK			

ST/EP-3C ECC OFF-SITE SURVEY TEAM KIT "B" (SECTION 6)

EQUIPMENT LOCKER SEALED PRIOR TO INVENTORY \_\_\_\_\_

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
5.	SAM-2	1		
	a) Shield & probe	1		
	b) Battery pack	1		
	c) Battery pack cable	1		
	d) Battery charger	1		
	e) BA-133 check source	1		
	f) Battery check, ok	1		
	g) Calibration date on instrument, OK			
	h) Battery on trickle charge			
6.	All instruments turned off			
7.	Flash light	1		
8.	Flash light batteries (New)	6		
9.	Radiation ribbon 100'roll	1		
10.	Radiation tape roll	1		
11.	Clip board	1		
12.	Radiation survey forms			
13.	Pencils, sharpened	3		
14.	Radiation signs	3		
15.	Radiation sign insert cards	various		
16.	Grease pencils	3		
17.	Snare	10 Books		

## ST/EP-3C ECO SURVEY TEAM KIT "B" (SECTION 6)

EQUIPMENT LOCKER SEALED PRIOR TO INVENTORY

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
18.	Towel swipes	Pkg.		
19.	Maps			
20.	Envelopes for filters (stamped)	20		
21.	Plastic bag for transporting 12 cart.	20		
22.	Felt-tipped marker	1		
23.	Plastic wrap (saran wrap or equal)	1		
24.	Tape			
25.	Locker resealed			

## ST/EP-3C ECC ON-SITE SURVEY TEAM KIT "A"

EQUIPMENT LOCKER SEALED PRIOR TO INVENTORY \_\_\_\_\_

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
1.	Lo-Vol air sampler	1		
	a) Filter paper	20		
	b) I2 sampling cartridge AgX	10		
	c) Sampling head	1		
2.	Ion Chamber	1		
	a) Instruction Manual	1		
	b) Battery check, OK			
	c) Calibration date on instrument, OK			
3.	Frisker with probe	1		
	a) Sample holder SH-4	1		
	b) Hand probe HP-210	1		
	c) Batteries check, OK			
	d) Batteries on charge			
	e) Calibration date on instrument, OK			

ST/EP-3C ECC ON-SITE SURVEY TEAM KIT "B"

EQUIPMENT LOCKER SEALED PRIOR TO INVENTORY \_\_\_\_\_

ITEM	DESCRIPTION	QUANTITY	CHKD	REMARKS
1.	Lo-Vol Air Sampler	1		
	a) Filter paper	20		
	b) I2 sampling cartridge AgX	10		
	c) Sampling Head	1		
2.	Ion Chamber	1		
	a) Instruction Manual	1		
	b) Battery check, OK			
	c) Calibration date on instrument, OK			
3.	Frisker with probe	1		
	a) Sample holder SH-4	1		
	b) Hand probe HP-210	1		
	c) Batteries check, OK			
	d) Batteries on charge			
	e) Calibration date on instrument, OK			
4.	PING - 2A	1		
	a) Battery Check, OK			
	b) Batteries on charge			
	c) Calibration date on instrument OK			



ST/EP-3C

ENC (CONT.)

FOOT LOCKERS (Section 7)

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
1.	Lockers sealed prior to inventory			
2.	Self-reader dosimeters 500 Mr	12		
3.	Self-reader dosimeter 100 R	1		
4.	TLD badges	35		
5.	Radiation rope			
6.	Poly rope			
7.	Disc smears with booklet	20 Booklets		
8.	Towel swipes	1 pkg.		
9.	Plastic bags, various sizes			
10.	Masking tape, 2" roll	5 rolls		
11.	Radiation tape	2 rolls		
12.	Anti "C" clothing			
	a) coveralls	12		
	b) Shoe covers	12 pairs		
	c) caps or hoods	12		
	d) gloves	12 pairs		
	e) respirators - Inspected and tested 2			
	f) respirator filters	6		
13.	Battery operated flasher with key	3		Is flasher Opera.
14.	Batteries for flasher (Replace)	6		
15.	Yellow pads	2		
16.	Pencils, sharpened	6		
17.	Grease pencils	3		
18.	Clip boards	3		
19.	Buckets	2		
20.	Sponges	6		

ST/EP 3C

ECC (CONT.)

FOOT LOCKERS (Section 7) (Cont)

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
21.	Soap, EDTA, or Phisoderm	1 box		
22.	Stretcher			
23.	Blankets with stretcher			
24.	First aid box, complete inventory			
25.	Stringed tags			
26.	Radiation Ribbon (rolls)	2		
27.	Radiation Signs	3		
28.	Radiation Sign Insert Cards			
	a) Radiation Area			
	b) High Radiation Area			
	c) Radioactive Contamination			
	d) Exclusion Area			
	e) Airborne Contamination			
	f) Health Physics Clearance			
	required for Entry			
29.	Radiation Survey Forms			
30.	Flashlight (w) batteries (replace batteries)	3		
31.	Flashlight batteries (New)	12		Is flashlight oper
32.	Cyalume Flares, (Exp. date)	4		
33.	Pinch Bar	1		
34.	EP Procedures			
35.	Maps - Prints of Plant			
36.	Scissors	1		

ST/EP 3C

ECC (CONT.)

FOOT LOCKERS (Section 7)(Cont)

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
37.	Log Book	1		
38.	Fog Free	1		
39.	Dosimeter Charger Unit	1		
40.	Slide Rule	1		
41.	PECo telephone directory	1		
42.	HPO/CO procedures for operation of Health Physics instruments			
43.	Instructions stating the air sampler & Rap monitor locations			
44.	Check-off lists of suit case contents			
45.	Equipment lockers resealed			

ST/EP-3C

TSC EMERGENCY EQUIPMENT

EQUIPMENT. LOCKER SEALED PRIOR TO INVENTORY \_\_\_\_\_

ITEM	DESCRIPTION	QUANTITY	CHKD	REMARKS
1.	Lo-Vol Air Sampler	1		
	a) Filter paper	100		
	b) I2 sampling cartridge AgX	50		
	c) Sampling head	1		
2.	Geiger Counter	1		
	a) Instruction Manual	1		
	b) Battery check, OK			
	c) Calibration date on instruments, OK			
3.	Ion Chamber	2		
	a) Instruction Manual	2		
	b) Battery check, OK			
	c) Calibration dates on instrument, OK			
4.	Frisker with probe	1		
	a) Hand probe, HP-210 shielded	1		
	b) Hand probe, HP-210 unshielded	1		
	c) Batteries check, OK			
	d) Batteries on charge			
	e) Calibration date on instrument, OK			
5.	PING - 2A	1		
	a) Battery check, OK			
	b) Batteries on charge			
	c) Calibration date on instrument OK			
6.	Flashlights w/batteries	3		
	Flashlight batteries (new)	12		
7.	TLD's	25		

ST/EP 3C

North Sub (Section 9)

EQUIPMENT LOCKER SEALED PRIOR TO INVENTORY \_\_\_\_\_

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
1.	Self-reader dosimeter 500 Mr	12		
2.	Self-reader dosimeter 100 R	1		
3.	TLD badges	12		
4.	Radiation rope	1		
5.	Poly rope			
6.	Disc smears with booklet	20 Booklets		
7.	Towel swipes	1 pkg.		
8.	Plastic bags, various sizes			
9.	Masking tape, 2" roll	5 rolls		
10.	Radiation tape	2 rolls		
11.	Anti "C" clothing			
	a) coveralls	12		
	b) Shoe covers	12 pairs		
	c) caps or hoods	12		
	d) gloves	12 pairs		
	e) respirators -Replace with newly -Inspected and tested	2		
	f) respirator filters	6		
12.	Battery operated flasher with key	3		Is flasher opera.
13.	Batteries for flasher (Replace)	6		
14.	Yellow pads	2		
15.	Pencils, sharpened	6		
16.	Grease pencils	3		
17.	Clip boards	3		



ST/EP 3C

North Sub (Section 9)(Cont)

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
18.	Buckets	2		
19.	Sponges	6		
20.	Soap, EDTA, or Phisoderm	1 box		
21.	Stretcher			
22.	Blankets with stretcher			
23.	First aid box, complete inventory			
24.	Stringed tags			
25.	Radiation Ribbon (rolls)	2		
26.	Radiation Signs			
27.	Radiation Sign Insert Cards			
	a) Radiation Area			
	b) High Radiation Area			
	c) Radioactive Contamination			
	d) Exclusion Area			
	e) Airborne Contamination			
	f) Health Physics Clearance			
	required for entry			
28.	Radiation Survey Forms			
29.	Flashlight (w) Batteries (replace batteries)			Is flashlight
30.	Flashlight batteries (New)	12		
31.	Cyalume flares, Exp. Date	4		
32.	Pinch Bar	1		
33.	EP Procedures			
34.	Maps - Prints of Plant			
35.	Scissors	1		



ST/EP

North Sub (Section 9) (Cont)

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
36.	Log Book	1		
37.	Fog Free	1		
38.	Dosimeter Charger Unit	1		
39.	Slide rule			
40.	PECo telephone directory			
41.	HPO/CO procedures for operation of Health Physics instruments			
42.	Check-off lists of suit case contents			
43.	Equipment locker resealed			

ST/EP 3C

Delta Service Building (Section 8)

EQUIPMENT LOCKER SEALED PRIOR TO INVENTORY \_\_\_\_\_

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
1.	Self-reader dosimeter 500 Mr.	12		
2.	Self-reader dosimeter 100 R	1		
3.	TLD badges	12		
4.	Radiation rope			
5.	Poly rope			
6.	Disc smears with booklet	20 Booklets		
7.	Towel swipes	1 pkg.		
8.	Plastic bags, various sizes			
9.	Masking tape, 2" roll	5 rolls		
10.	Radiation tape	2 rolls		
11.	Anti "C" clothing			
	a) coveralls	12		
	b) Shoe covers	12 pairs		
	c) caps or hoods	12		
	d) gloves	12 pairs		
	e) respirators -Inspected and tested 2			
	f) respirator filters	6		
12.	Battery operated flasher with key	3		Is flasher oper.
13.	Batteries for flasher (replace)	6		
14.	Yellow pads	2		
15.	Pencils, sharpened	6		
16.	Grease pencils	3		
17.	Clip boards	3		
18.	Buckets	2		

ST/EP 3C

Delta Service Building (Section 8)(Cont)

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
19.	Sponges	6		
20.	Soap, EDTA, or Phisoderm	1 box		
21.	Stretcher			
22.	Blankets with stretcher			
23.	First aid box, complete inventory			
24.	Stringed tags			
25.	Radiation Ribbon (rolls)	2		
26.	Radiation Signs	3		
27.	Radiation Sign Insert Cards			
	a) Radiation Area			
	b) High Radiation Area			
	c) Radioactive Contamination			
	d) Exclusion Area			
	e) Airborne Contamination			
	f) Health Physics Clearance			
	required for Entry			
28.	Radiation Survey Forms			
29.	Flashlight (w) batteries (replace batteries)	3		Is flashlight oper.
30.	Flashlight batteries (New)	12		
31.	Cyalume flares, Exp. Date	4		
32.	Pinch Bar	1		
33.	EP Procedures			
34.	Maps - Prints of Plant			
35.	Scissors	1		
36.	Log Book	1		

ST/EP 3C

Delta Service Building (Section 8)(Cont)

ITEM	DESCRIPTION	QUANTITY	CHKD.	REMARKS
37.	Fog Free	1		
38.	Dosimeter Charger Unit	1		
39.	Slide rule	1		
40.	PECo telephone directory			
41.	HPO/CO procedures for operation of Health Physics instruments			
42.	Check-off lists of suit case contents			
43.	Equipment locker resealed	1		

RSFL  
EFFECTIVE  
9/1/81

PHILADELPHIA ELECTRIC COMPANY  
PEACH BOTTOM UNITS 2 AND 3

SURVEILLANCE TEST

ST/EP-4 MEDICAL DRILL

EMERGENCY PLAN REQUIREMENT:

TEST FREQUENCY:

Once During Each Calendar Year.

TEST RESULTS:

PERFORMED BY: \_\_\_\_\_  
SIGNATURE TIME/DATE

REVIEWED BY: \_\_\_\_\_  
SIGNATURE (SHIFT SUPERVISION) TIME/DATE

REVIEWED BY: \_\_\_\_\_  
PLANT STAFF SUPERVISION TIME/DATE

Prerequisites:

1. This drill shall not be initiated during critical plant operations.
2. The Station Supt or his alternate has approved performance of this drill.
3. The following notifications have been made prior to the drill.

	Person Notified	Notified By	Time	Date
a) Load Dispatch Shift Supervisor (8-5141)	_____	_____	_____	_____
b) Mgr. Corp. Comm. (W. R. Taylor 8-4102)	_____	_____	_____	_____
c) Mgr., Public Info. (R. L. Harper 8-4122)	_____	_____	_____	_____
d) Sta Supt / Asst. Sta Supt.	_____	_____	_____	_____
e) Supt., Gen Div-Nuclear (M. J. Cooney 8-5020)	_____	_____	_____	_____
f) Supt. Services Div. (W. B. Willsey 8-5030)	_____	_____	_____	_____
g) Mgr., Elec Prod. (J. W. Gallagher 8-5003)	_____	_____	_____	_____
h) V. P. Elec. Prod. (S. L. Daltroff 8-5001)	_____	_____	_____	_____
i) Chairman, O & S.R.C.	_____	_____	_____	_____
j) Mgr., Eng and Research (J. S. Kemper 8-4502)	_____	_____	_____	_____
k) RMC Emergency Hotline (1-243-2990)	_____	_____	_____	_____
l) Harford Memorial Hospital (1-939-3575)	_____	_____	_____	_____
m) Harford County Control (9-452-5111)	_____	_____	_____	_____
n) Local Physician (Dr. Hunt 9-456-5511, or Dr. Phillips 1-457-4771)	_____	_____	_____	_____
* o) Medical Director (Dr. Hushion 8-4370)	_____	_____	_____	_____
p) Pa Emergency Management Agency (1-783-8150) and request notification of Pa Bureau of Rad Health	_____	_____	_____	_____
q) NRC Region I Office of Insp. and Enf. (1-337-5000)	_____	_____	_____	_____
r) Delta Ambulance (9-456-7133) ask for Ambulance Captain	_____	_____	_____	_____
s) Information Center (311 or 9-456-5101) as deemed necessary.	_____	_____	_____	_____

- \* THE MEDICAL DIRECTOR SHALL BE NOTIFIED, PERSONALLY IF POSSIBLE, A MINIMUM OF ONE WEEK PRIOR TO THE DRILL AND AT THAT TIME SHALL BE INVITED TO SUBMIT THE NAME(S) OF PARTICIPANT(S) OR OBSERVER(S).



NOTIFICATIONS SHALL BE MADE WITHIN 24 HOURS OF THE DRILL.  
NOTIFICATION SHALL INCLUDE WHEN THE DRILL IS TO BE PERFORMED.

PURPOSE:

This procedure describes a method of conducting a simulated accident involving radiation related injury to personnel to test the adequacy of equipment and personnel training.

REFERENCE:

1. Emergency Plan
2. EP-207 - Excessive Radioactive Contamination with serious injury.
3. Hospital's procedure entitled "Procedure for Handling Radiation Accidents at Harford Memorial Hospital, Havre de Grace, MD"
4. EP-209 (Telephone list for Emergency use).

PROCEDURE:

ALL COMMUNICATIONS WITH ALL ON SITE OR OFF SITE PARTIES SHALL CLEARLY ESTABLISH THAT "THIS IS A DRILL".

THIS PROCEDURE IS TO BE PERFORMED UNDER THE JOINT DIRECTION OF SHIFT SUPERVISION AND RMC. INSTRUCTIONS PROVIDED BY RMC ON THE NATURE OF THE DRILL MAY BE IN THE FORM OF A SCENARIO, CUE CARDS, SIGNS ETC.

1. Verify that prerequisites have been satisfied. \_\_\_\_\_
2. A personnel injury involving radioactive contamination shall be simulated. \_\_\_\_\_
3. Proper first aid and transport of the injured from the site of the injury to the medical room shall be demonstrated in accordance with EP-.207. \_\_\_\_\_

4. Contact with the following off site medical support shall be demonstrated. Refer to EP-209 for telephone list.

Name of person  
Contacted

- a. Local Physician
- b. Local Ambulance
- c. Harford Memorial Hospital
  - 1. Number of casualties
  - 2. Condition of No. 1
  - Condition of No. 2
  - Condition of No. 3

d. RMC

e. Pennsylvania Department of Health via  
Pennsylvania Emergency Management Agency.

f. PE Co. Medical Department.

5. On-site first aid, including decontamination procedures, may be continued at the medical room.
6. Off-site medical support (local physician and ambulance drivers) arriving on site shall be provided with personnel dosimetry and escorted to the casualty pickup point. A guard shall escort the physician to the medical room when required.
7. Precautions against spread of contamination from the patient to the ambulance shall be demonstrated. This consists of loosely wrapping the injured to contain contamination without affecting the injured's physiology.
8. The ambulance shall be driven to the hospital accompanied by a Health Physics Qualified Station Representative. The hospital staff shall initiate their own emergency procedure when called by the plant supervision. The hospital procedure involves: alerting appropriate staff members (physicians, nurses and maintenance); the Emergency Decontamination Treatment Room is unlocked; and the surrounding area, elevator and passageways are prepared. this last item may involve laying down papercoverings on the floor, restricting access to certain passageways and placing a frisker station at a buffer zone.
9. RMC personnel respond to the call from Shift Supervision by going to the hospital to assist the hospital staff and to determine if more intensive care for the injured is required under radiation controlled conditions. If such were the case, the injured would be transported via automobile or helicopter to the RMC/HUP medical facilities in Philadelphia.

10. Upon arrival at the hospital, the injured is transferred from the ambulance to the Emergency Decontamination-Treatment room. The Health Physics representative advises the physicians and nurses of the hazards.
11. The ambulance is held until release after a survey for simulated contamination.
12. The simulation in the Emergency Decontamination Treatment Room continues until the patient is "out of danger" and has been decontaminated.
13. At the conclusion of the drill equipment and supplies are checked and re-stocked as necessary. Refer to ST/EP-3C for inventory check list. Document this action by attaching the appropriate completed check-list.
14. Dosimetry of outside personnel shall be processed and names of supporting personnel documented on the attached form. The actual drill may be dramatized by several types of injuries.
15. The test shall be evaluated, and a report written by RMC and reviewed by the Engineer-Health Physics or his designee. The report shall be forwarded, attached to this test, to the surveillance test co-ordinator. Copies of the report shall be sent to the Principal Parties involved.
16. CRITIQUE:

Record below or attach a critique of the Medical Drill. Point out any problems encountered or unusual circumstances and plant personnel response to them. Include any suggestions for improvement of this drill.

Written by: \_\_\_\_\_

Shift Supervision or  
Staff Member

# DISPOSITION OF SUPPORT PERSONNEL

	DISP *			PE EMPL	NAME	ADDRESS (Non-Employee Only)	CONTAMINATION	
	D	R	Yes				No	LEVEL
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

D = DETAINED: R = RELEASED

\* Disposition

*W. M. M. M.*  
*EH 4/1/81*

PHILADELPHIA ELECTRIC COMPANY  
PEACH BOTTOM UNITS 2 AND 3  
EMERGENCY PLAN SURVEILLANCE TEST

ST/EP-8 GENERAL EMERGENCY ANNUAL EXERCISE

Emergency Plan Requirement

TEST FREQUENCY:

Once in each calender year.

TEST RESULTS:

The required exercise was completed in accordance with the scenario prepared for this test.

\_\_\_\_\_  
SIGNATURE (EXERCISE COORDINATOR)

\_\_\_\_\_  
TIME/DATE

\_\_\_\_\_  
SIGNATURE (SHIFT SUPERVISION)

\_\_\_\_\_  
TIME/DATE

TEST FOLLOW-UP ACTIONS:

Check the following actions and record the date:

Post-exercise critique complete.

\_\_\_\_\_  
Initials      Date

Exercise scenario attached.

\_\_\_\_\_  
Initials      Date

Exercise initiated plant procedures attached.

\_\_\_\_\_  
Initials      Date

Exercise critique summary attached.  
(Following PORC review)

\_\_\_\_\_  
Initials      Date

Observer critique sheets attached.  
(Following PORC review)

\_\_\_\_\_  
Initials      Date

Training coordinator contacted for review class.

\_\_\_\_\_  
Initials      Date

Provisions have been made to implement the final  
approved list of recommended actions.

\_\_\_\_\_  
Initials      Date

\_\_\_\_\_  
REVIEWED BY

\_\_\_\_\_  
STATION SUPERINTENDENT

\_\_\_\_\_  
DATE



PURPOSE:

The purpose of this procedure is to exercise plant personnel in performing the actions necessary to properly respond to a simulated plant emergency. In addition, this exercise will also serve as the required annual Radiation Monitoring Drill to observe response to a simulated off-site radioactive release and also the annual Health Physics Drill to observe actions taken in response to simulated high in-plant radiation levels or high airborne or liquid radioactivity levels in plant areas or process system.

REFERENCE:

Emergency Plan, Sec. 8

NUREG-0654

EP-209 Telephone List for Emergency Use

EP-312 Post Emergency Environmental Station Sampling

ST/EP-3 Emergency Equipment Inventory and Operational Check

PREREQUISITES:

1. The previously prepared exercise scenario has been approved by the station superintendent and adheres to the following guidelines;

ALL RADIO OR TELEPHONE COMMUNICATIONS WITH OFF-SITE ORGANIZATIONS OR PERSONNEL SHALL STRESS THAT THIS IS A SIMULATED DRILL SITUATION.

IF ANY SIMULATED CONTROL ROOM OPERATIONS ARE A PART OF THE DRILL SCENARIO THEY SHALL BE OBSERVED AND/OR SUPERVISED BY A DESIGNATED OBSERVER.

NO MAN SHALL LEAVE THE CONTROL ROOM TO PERFORM A SIMULATED PLANT OPERATION WITHOUT HAVING OBTAINED INSTRUCTIONS AS TO HIS SIMULATED ACTIONS, AND WITHOUT HAVING OBTAINED THE CHIEF OPERATOR'S PERMISSION.

AT LEAST ONE OBSERVER WILL BE ASSIGNED TO INSURE THAT THE SIMULATED DRILL ACTIVITIES DO NOT ENDANGER THE OPERATING PLANTS OR DETRACT SIGNIFICANTLY FROM THE OPERATIONAL SURVEILLANCE OF SAME.

and contains but is not limited to the following information:

- a. The type of exercise - announced or unannounced.
- b. The basic objective of the exercise.
- c. The date and time the exercise is to be performed.
- d. A description of the simulated event.
- e. Assignment and identification of the event observers.

Check-Off

2. An actual contaminated sample, of known activity levels, has been prepared in advance of the drill, to test Health Physics Survey procedures.
-



CHECK-OFF

3. Observer critique sheets have been prepared and contain the following provision, if applicable (critique sheet content will, of necessity, be event and assignment area dependent);
  - a. The particular observer's assignment and location(s).
  - b. A listing of the response and/or actions expected for that observer's critique area. (See Appendix I).
  - c. A means of recording elapsed time till responses or actions are realized.
  - d. Cutoff times that require the observer to implement the next phase of the exercise should the expected responses fail to occur within the designated time interval.
  - e. A means of recording those responses that do not occur within the designated time interval, and those responses that were not anticipated (general remarks).
  - f. A general remarks section.
4. An exercise "EVENT SCHEDULE" has been prepared that details the overall time schedule and pace of the exercise, expected personnel responses, and cutoff times for those responses to be performed (so that the exercise can be moved forward to the next phase without wasting time on a now identified personnel or equipment response problem).
5. An "Exercise Initiation Sheet" has been prepared and contains the necessary information to enable the person or persons to whom it is presented to correctly evaluate and initiate the exercise (this prerequisite is optional).
6. The Exercise Coordinator shall conduct a pre-exercise conference with observers, representatives of participating off-site organizations (see EP-209 telephone list for phone numbers), and other drill staff personnel. The scenario shall be discussed, as well as the conduct of the drill, necessary precautions, and safety considerations (not required for communications drills). Observer checklists shall be distributed.
7. Provisions have been made for a post-exercise critique, and arrangements and notifications (verbal) have been made for those personnel required to attend.

8. Plant management has invited those off-site organizations it desires to observe this exercise to do so, if any. \_\_\_\_\_
9. The observer team has been provided with arm bands or patches identifying them as observers (this prerequisite is optional). \_\_\_\_\_
10. An "Exercise Coordinator" has been appointed to direct the observer team's functions and guide the overall exercise. The "Exercise Coordinator" should be selected from the plant management staff (this prerequisite is optional). \_\_\_\_\_
11. A "Shift Supervision Exercise Guideline" statement has been prepared to inform Shift Supervision of any special limitations or actions that are to be adhered to during the drill (this prerequisite is optional). \_\_\_\_\_
12. Mr. Fleischmann has been informed of the test date so that he may advise those nearby civilian residents of the impending drill on a "need to know" basis. \_\_\_\_\_
13. The following notifications (of the event exercise) have been made on the working day prior to the drill. If the drill is the unannounced type, inform the below not to inadvertantly inform the plant personnel.

	PHONE NUMBE	CENTREX	PERSON NOTIFIED	TIME	DATE	NOTIFIED BY
a) Load Dispatcher		5141				
Shift Supervisor		4102				
b) Mgr. Corp. Comm.		4122				
c) Mgr. Public Info.		244				
d) Station Supt or Asst Supt		245				
		5020				
e) Supt Gen Div-Nuclear		5030				
f) Supt Services Div		5003				
g) Mgr Elect. Prod.		5001				
h) V.P. Elect. Prod.						
i) Chairman O&SR Committee		4502				
j) Mgr Eng & Research	215-243-2990					
k) RMC Hotline						
		4280				
l) Mgr Claims & Sec	215-337-5000					
m) NRC Region I	Red Phone					
n) NRC Headquarters Bethesda						
o) PA Emerg. Management Agency -		783-8150				
Request Notification of the	215-431-6160					
Bureau of Radiation Health	843-5111					
p) Chester County EMA	767-5228					
q) York County EMA	299-8373					
	301-486-4422					
r) Lancaster County EMA	301-838-3336					
s) MD Civil Defense Agency	301-398-3815					
t) Harford Co. EMA	767-6848					
u) Cecil Co. EMA	301-486-3101					
v) PA State Police		311				
w) MD State Police		312				
x) Info. Center (As Required)						
y) Unit 1 Personnel						

CHECK-OFF

PROCEDURE:

THIS PROCEDURE SHALL BE HALTED SHOULD ANY ABNORMAL PLANT CONDITIONS OCCUR.

1. Initiate and complete the exercise scenario. \_\_\_\_\_
2. Collect all procedures filled out in response to the exercise scenario. \_\_\_\_\_
3. Convene a post-exercise critique utilizing the following guidelines: \_\_\_\_\_
  - a. Have the observer team comment individually on group and equipment performance. (Use the exercise scenario to guide the order of presentation.)
  - b. Obtain the impressions of the remaining critique members (if any).
  - c. Based on the above comments develop a brief summation of the exercise's overall performance.
  - d. Obtain the critique's comments and recommendations on improving performance and develop a written summation.
  - e. Open the discussion for comments on the procedures initiated by the exercise.
  - f. Request that each observer document his remarks and recommendations in the section provided on his critique sheet.
  - g. Assign an individual to develop a written summary of the critique's recommendations and the exercise's overall performance, including any proposed procedure revisions. This summary to be presented to the PORC for evaluation and review.
  - h. Collect the observer critique sheets and provide for their review by the PORC.
4. Prior to adjourning the post-exercise critique, make arrangements to have the training coordinator schedule an "exercise review class" at which time any training recommendations approved by PORC can also be implemented. \_\_\_\_\_

THIS COMPLETS THE PROCEDURE. FILL OUT THE FRONT PAGE OF THIS TEST. THE OBSERVER CRITIQUE SHEETS AND THE EXERCISE CRITIQUE SUMMARY WILL BE ATTACHED FOLLOWING REVIEW BY PORC. ATTACH ALL COMPLETED PLANT PROCEDURES INITIATED BY THE SCENARIO TO THIS TEST. ATTACH THE SCENARIO.

## APPENDIX I

Appendix I lists areas of concern which are to be covered within observer critique sheets.

### a. Control room response:

- 1) Classification of event
- 2) Notifications
- 3) Activation of Interim Emergency Teams
- 4) Control of disposition of evacuees
- 5) Corrective Actions
- 6) Dose Calculations
- 7) Communications
- 8) Awareness of personnel accountability and control of search and rescue operations
- 9) Activation of evacuation alarm (if applicable)

### b. Emergency Control Center response:

- 1) Timeliness of activation
- 2) Adequacy of training
- 3) Adequacy of emergency equipment and decisional aids
- 4) Effectiveness of communications and control of survey teams
- 5) Log-keeping
- 6) Calculation of projected off-site doses
- 7) Calculation of plume path

### c. Technical Support Center response:

- 1) Timeliness of activation
- 2) Adequacy of training
- 3) Adequacy of emergency equipment and decisional aids
- 4) Effectiveness of communications and control of emergency teams
- 5) ALARA considerations (time, distance, shielding)
- 6) Interpretation of sample results

d. Personnel Safety Team response:

- 1) Assembly area procedures
- 2) Use of survey instruments
- 3) Personnel accountability efforts
- 4) Search and rescue efforts
- 5) Communications
- 6) Control of disposition of evacuees
- 7) Log-keeping

e. Radiation Survey Team response:

- 1) Timeliness of activation and deployment
- 2) Knowledge of procedures and adequacy of training
- 3) Performance of emergency equipment
- 4) Personnel dosimetry and health physics measures (use of protective clothing, etc.)
- 5) Collection and analysis of environmental and in-plant samples
- 6) Log-keeping and use of survey forms
- 7) Consideration of ALARA measures
- 8) Communications between field survey teams and the Emergency Control Center

f. Security Team response:

- 1) Control of plant access
- 2) Communications
- 3) Assistance in personnel accounting
- 4) Log-keeping



*RSR*  
*EFFECTIVE 4/1/81*

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

ST/EP-12 EMERGENCY TELEPHONE LIST (EP-209) REVIEW

TEST FREQUENCY:

Quarterly per procedure A-21

TEST RESULTS:

A. All of the steps were completed SATISFACTORILY.

PERFORMED BY: \_\_\_\_\_  
SIGNATURE DATE/TIME

\_\_\_\_\_  
SIGNATURE (ENGINEER-ADMIN) DATE/TIME

B. One or more of the steps was completed UNSATISFACTORILY.

\_\_\_\_\_  
SIGNATURE DATE/TIME

\_\_\_\_\_  
SIGNATURE (ENGINEER-ADMIN) DATE/TIME

Action taken by supervision:

\_\_\_\_\_  
REVIEWED BY:

\_\_\_\_\_  
PLANT STAFF SUPERVISION DATE/TIME

PURPOSE:

To ensure the quarterly review of EP-209 TELEPHONE LIST FOR EMERGENCY USE as required by Procedure A-21.

PROCEDURE:

The Engineer-Admin shall ensure EP-209 is reviewed to ensure its contents are correct as to:

1. Names
2. Titles
3. Addresses
4. Phone numbers

1. EP-209 reviewed, no changes required. \_\_\_\_\_
2. EP-209 reviewed, revision initiated. \_\_\_\_\_
3. EP-209 review date in index updated. \_\_\_\_\_

*ASR*  
*4/1/81*

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

ST/EP-12 EMERGENCY TELEPHONE LIST (EP-209) REVIEW

TEST FREQUENCY:

Quarterly per procedure A-21

TEST RESULTS:

A. All of the steps were completed SATISFACTORILY.

PERFORMED BY: \_\_\_\_\_  
SIGNATURE DATE/TIME

\_\_\_\_\_  
SIGNATURE (ENGINEER-ADMIN) DATE/TIME

B. One or more of the steps was completed UNSATISFACTORILY.

\_\_\_\_\_  
SIGNATURE DATE/TIME

\_\_\_\_\_  
SIGNATURE (ENGINEER-ADMIN) DATE/TIME

Action taken by supervision:

\_\_\_\_\_  
REVIEWED BY:

\_\_\_\_\_  
PLANT STAFF SUPERVISION DATE/TIME

PURPOSE:

To ensure the quarterly review of EP-209 TELEPHONE LIST FOR EMERGENCY USE as required by Procedure A-21.

PROCEDURE:

The Engineer-Admin shall ensure EP-209 (except Appendix 0) is reviewed to ensure its contents are correct as to:

1. Names
2. Titles
3. Addresses
4. Phone numbers

1. EP-209 reviewed, no changes required. \_\_\_\_\_
2. EP-209 reviewed, revision initiated. \_\_\_\_\_
3. EP-209 review date in index updated. \_\_\_\_\_

The Supervising Engineer, Generation Division-Nuclear, Responsible for Radiation Protection shall ensure EP-209 Appendix 0 is reviewed to ensure its contents are correct as to:

1. Names
2. Titles
3. Addresses
4. Phone Numbers

Revisions to Appendix 0 shall be initiated by personnel at Peach Bottom, upon notification by the Supervising Engineer, Generation Division-Nuclear, Responsible for Radiation Protection.

1. EP-209, Appendix 0 reviewed, no changes required. \_\_\_\_\_
2. EP-209, Appendix 0 reviewed, revision initiated. \_\_\_\_\_
3. EP-209, Appendix 0 review date in index updated. \_\_\_\_\_

PHILADELPHIA ELECTRIC COMPANY

Peach Bottom Units 2 & 3

ST/EP-13 - MONTHLY COMMUNICATIONS DRILL

Emergency Plan Requirement

TEST FREQUENCY:

Once Each Month

TEST RESULTS:

A. All of the test steps were completed SATISFACTORILY.

PERFORMED BY:

SIGNATURE

TIME/DATE

SIGNATURE (SHIFT SUPERVISION)

TIME/DATE

B. One or more of the test steps was completed UNSATISFACTORILY.  
Action required to resolve discrepancies encountered in test:

1. MRF

2. OTHER:

SIGNATURE

TIME/DATE

SIGNATURE (SHIFT SUPERVISION)

TIME/DATE

REVIEWED BY:

STATION SUPERINTENDENT

DATE

PURPOSE:

To test communication channels linking the Control Room to state and local agencies within the plume exposure EPZ and to verify adequate on-shift communications training.

REFERENCES:

Emergency Plan Figure 7.3

PREREQUISITES:

1. Conduct of this drill at the scheduled time has been approved by the Station Superintendent.

Scheduled Date/Time: \_\_\_\_\_ / \_\_\_\_\_  
\_\_\_\_\_  
(Station Superintendent)

PROCEDURE:

NOTE: NO ACCIDENT SCENARIO IS NECESSARY TO FULFILL THE OBJECTIVE OF THIS DRILL.

NOTE: ALL COMMUNICATIONS WITH ON-SITE AND OFF-SITE PARTIES SHALL CLEARLY ESTABLISH THAT THIS IS A DRILL.

Initials/Time

1. Verify prerequisites are met.

2. From the Control Room:

- a. Establish communications with the following agencies and announce:

"THIS IS A TEST OF THE NOTIFICATION CHANNELS FROM PEACH BOTTOM ATOMIC POWER STATION. HOW DO YOU HEAR ME?"

After receiving a reply, say:

"I HEAR YOU (SAME, WEAK, ETC.) END OF TEST."

1. Pennsylvania Emergency Management Agency (783-8150)
2. Maryland Civil Defense and Disaster Preparedness Agency (301-486-4122)
3. York County Emergency Management Agency (843-5111 or 843-4641 - After 4:00 PM 727-5228)

Person Notified	Notified By	Time	Date
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____



PROCEDURE: (Continued)

4. Lancaster County Emergency Management Agency (299-8373 or 299-8374)
5. Chester County Emergency Management Agency (215-431-6160)
6. Cecil County Emergency Management Agency (301-398-3815)
7. Harford County Emergency Management Agency (301-838-3336)
8. DER/BRP (787-2480 - After 4:00 PM 783-8150)

<u>Person Notified</u>	<u>Notified By</u>	<u>Time</u>	<u>Date</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

3. Shift Supervision shall conduct a critique of the drill with the participant. List deficiencies encountered (personnel, equipment, training). Include recommended corrective actions.

CRITIQUE:

RECOMMENDED CORRECTIVE ACTIONS:

\_\_\_\_\_  
Shift Supervision

*John M. L.*  
*EP 7/11/81*

PHILADELPHIA ELECTRIC COMPANY

Peach Bottom Units 2 and 3

ST/EP-14 QUARTERLY COMMUNICATIONS DRILL

Emergency Plan Requirement

TEST FREQUENCY:

Once During a calendar quarter.

TEST RESULTS:

A. All of the test steps were completed SATISFACTORILY.

PERFORMED BY: \_\_\_\_\_  
SIGNATURE TIME/DATE

\_\_\_\_\_  
SIGNATURE (SHIFT SUPERVISION) TIME/DATE

B. One or more of the test steps was completed UNSATISFACTORILY.  
Action required to resolve discrepancies encountered in test:

1. MRF \_\_\_\_\_

2. OTHER \_\_\_\_\_

\_\_\_\_\_  
SIGNATURE TIME/DATE

\_\_\_\_\_  
SIGNATURE (SHIFT SUPERVISION) TIME/DATE

REVIEWED BY:

\_\_\_\_\_  
STATION SUPERINTENDENT DATE

PURPOSE:

To test communications channels linking the Control Room to the Nuclear Regulatory Commission and to state agencies within the ingestion pathway EPZ.

REFERENCES:

Emergency Plan, Figure 7.3  
NUREG - 0654

PREREQUISITES:

1. Conduct of this drill at the scheduled time has been approved by the Station Superintendent.

Scheduled date/time: \_\_\_\_\_ / \_\_\_\_\_

\_\_\_\_\_  
Shift Supervision

2. Shift Supervision shall designate two personnel to perform Section B.

PROCEDURE:

NOTE: NO ACCIDENT SCENARIO NEED BE ASSUMED TO FULFILL THE OBJECTIVE OF THIS DRILL.

NOTE: ALL COMMUNICATIONS WITH ON-SITE AND OFF-SITE PARTIES SHALL CLEARLY ESTABLISH THAT THIS IS A DRILL.

1. Verify prerequisites are met.

2. From the Control Room:

- a. Establish communications with the following agencies and announce:

"THIS IS A TEST OF THE NOTIFICATION CHANNELS FROM PEACH BOTTOM ATOMIC POWER STATION. HOW DO YOU HEAR ME?"

After receiving a reply, say:

"I HEAR YOU (SAME, WEAK, ETC.)  
END OF TEST."

- (1) NRC, Region I, King of Prussia,  
PA. (215-337-5000)

(After normal working hours, calls to NRC  
IE Regional Offices are diverted to IE  
Headquarters, Bethesda, MD)

Person	Notified			
Notified	By	Time	Date	

	Person Notified	By	Time	Date
(2) NRC Headquarters Incident Response Center, Bethesda, MD (Red Phone)	_____	_____	_____	_____
b. Establish telephone communications with the following agencies (Repeat message in 2.a. above):				
(1) New Jersey Civil Defense Agency (609-882-4200)	_____	_____	_____	_____
(2) Delaware Civil Defense Agency (302-736-4489 or 736-4487)	_____	_____	_____	_____
c. Establish radio communications with the Pennsylvania State Police.	_____	_____	_____	_____

SECTION B: Unit 1 Communications

1. Check the operability of the "Ring Down" phones between the second floor of Unit 1 and the following locations:

RESULTS

- |                                 |       |
|---------------------------------|-------|
| a. Operational Support Center   | _____ |
| b. South Utility Building (SUB) | _____ |
| c. North Sub                    | _____ |
| d. Unit 2 & 3 Control Room      | _____ |
| e. NRC Headquarters, Bethesda   | _____ |
| f. Load Dispatcher              | _____ |

Shift Supervision shall conduct a critique of the drill with the participants. List deficiencies encountered (personnel, equipment, training). Include recommended corrective actions are as follows:

CRITIQUE:

RECOMMENDED CORRECTIVE ACTIONS:

---

SHIFT SUPERVISION

*J. J. Allred*  
*11/14/80*

PHILADELPHIA ELECTRIC COMPANY  
PEACH BOTTOM UNITS 2 & 3  
EMERGENCY PLAN SURVEILLANCE TEST

ST/EP-39 FIRST AID DRILL

Emergency Plan Requirement

Test Frequency:

Monthly

Test Results:

An actual injury has been  
used \_\_\_\_\_ times this year  
for this drill. See Step 10.

A. All of the test steps were completed SATISFACTORILY.

PERFORMED BY:

\_\_\_\_\_  
SIGNATURE (SHIFT SUPERVISOR)

\_\_\_\_\_  
TIME/DATE

B. One or more of the test steps was completed UNSATISFACTORILY.  
Action required to resolve discrepancies encountered in test.

\_\_\_\_\_  
SIGNATURE (SHIFT SUPERINTENDENT) TIME/DATE

\_\_\_\_\_  
REVIEWED BY:

\_\_\_\_\_  
STATION SUPERINTENDENT

\_\_\_\_\_  
DATE



PURPOSE:

This procedure describes the actions which shall be taken to demonstrate the ability of the First Aid Team.

REFERENCE:

Red Cross Multi-media Course  
PECo. First Aid Handbooks  
Procedures EP-31, EP-32  
ST/EP-3

PREREQUISITES:

Stable plant conditions.

PROCEDURE:

1. This procedure shall be implemented monthly under the direction of the Shift Supervisor for shift personnel. First Aid refresher discussion shall be held for the assigned injury treatment.

Type of simulated injury \_\_\_\_\_

Location of drill \_\_\_\_\_

2. Announce over the public address system the First Aid Drill as follows:

NOW HEAR THIS. THIS IS THE SHIFT SUPERVISOR. THIS IS A FIRST AID DRILL. I REPEAT, THIS IS ONLY A DRILL. PERSONNEL SAFETY TEAM WILL REPORT TO (LOCATION SPECIFIED ABOVE). THIS IS ONLY A DRILL.

3. Shift Supervisor shall proceed to the location and meet the Personnel Safety Team.
4.
  - a. Plant Operator shall report with blankets.
  - b. Assistant Plant Operator shall report with a stretcher.
  - c. Auxiliary Operators shall report with first aid kits.
  - d. Operations H.P. shall report with survey equipment.
5. Discuss with the team the actions necessary to care for the patient with the assigned injuries. Review necessary first aid steps with individuals who are first aid qualified.
6. Discuss the procedures that pertain to radiation or decontamination that may have effected the patient or area.
7. Request the assistance of the Health Physics Technician if required; see Procedure EP-31.

8. Personnel participating in this drill who are first aid qualified shall go to the medical room and locate and identify pertinent medical equipment per the attached list "Medical Station Peach Bottom Units 2 & 3". Check or initial the list for each item and submit with Form ST/EP-39 of this procedure. Items which cannot be located or identified shall be noted on the list. If a group of items are in a sealed package, the package need not be opened for inventory.
9. Report this drill to Station Superintendent on the attached Form ST/EP-39.
10. From time to time incidents involving actual injuries occur requiring the response of the First Aid Team. If at the discretion of the Station Superintendent certain of these responses provide an equivalent first aid drill situation, they can, up to a maximum of 4 per year, be used to meet this procedure. The detailed documentation required by this procedure need not be completed under these situations because the normal Philadelphia Electric Company Accident Report requirements will provide adequate documentation and review of the incident. Substitution of a response to an actual injury shall be documented on this page by listing of the date and a brief description of the injury, and by filling out the appropriate PECO Accident Report Forms.

MONTHLY FIRST AID DRILL

DATE OF DRILL \_\_\_\_\_

1. Type of Injury: \_\_\_\_\_
2. Location of Drill: \_\_\_\_\_
3. Drill Scanded (Time): \_\_\_\_\_ Team Responded (Time): \_\_\_\_\_
4. Number of Men Responding: \_\_\_\_\_
5. Time Consumed for Drill: \_\_\_\_\_
6. Team Responded: \_\_\_\_\_

First Aid Qualified\*

<u>Name</u>	<u>Yes</u>	<u>No</u>
P.O. - _____		
A.P.O. - _____		
A.O. - _____		
**Others - _____		

7. Detail the post drill refresher training. Give a short discussion of all topics discussed with participants. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8. Indicate Any Changes in Your Team Since Last Report:  
Removed \_\_\_\_\_ Replacement \_\_\_\_\_  
Removed \_\_\_\_\_ Replacement \_\_\_\_\_

9. Have These New Men Been Instructed as to Their Duties? \_\_\_\_\_
10. Medical Station Peach Bottom Units 2 & 3 list attached \_\_\_\_\_
11. HP & C supervision notified to reseal Medical Station \_\_\_\_\_

\_\_\_\_\_  
Shift Supervisor

\* At least one of these three men must be First Aid Qualified.

\*\* List additional personnel on back

INVENTORY MEDICAL STATION PEACH BOTTOM UNITS 2 & 3

<u>A. Health Physics Supplies &amp; Equipment</u>		<u>QUANTITY</u>	<u>CHECKED</u>
1.	Decontamination Table Top, w/splash guards, stretcher, hose, faucet and bucket.	1 each	_____
* 2.	Kits, Decontamination/Sample taking; consisting of three plastic containers w/supplies and equipment.	1 each	_____
3.	Moveable Protective Shield, RMC model, w/adjustable 4" thick lead glass optical viewing window.	1 each	_____
4.	Lead Container, High activity specimen.	1 each	_____
5.	Ring Dosimeters, TLD.	4 each	_____
6.	Plastic Sheeting, 4-mils.	1 roll	_____
7.	Aprons, plastic, disposable.	3 each	_____
8.	Shoe Covers.	6 pair	_____
9.	Cap, Gown, Mask, Gloves (surgical, disposable)	6 sets	_____
10.	Hose, low pressure with shower head and valve	1 each	_____
11.	Kraft Paper	1 roll	_____
12.	Masking Tape, 2"	3 rolls	_____
<u>B. Medical, Surgical, and Nursing Supplies &amp; Equipment</u>			
1.	Examination Table	1 each	_____
2.	Mayo Stand	1 each	_____
3.	IV Stand	1 each	_____

\* See Section D for component list.

INVENTORY MEDICAL STATION PEACH BOTTOM UNITS 2 & 3 (Cont.)

B. Medical, Surgical, and Nursing Supplies & Equipment (Cont.)

4. Cart, SN 04866 less bucket	1 each	_____
5a. Spotlight, surgical, portable	1 each	_____
5b. Spotlight is operable		_____
		INITIALS
6. Sheets	6 each	_____
7. Pillows	2 each	_____
8. Pillow Cases	6 each	_____
9. Blankets	2 each	_____
10. Suction Unit	1 each	_____
11. 1 H Tank of O <sub>2</sub> w/reduction valve and masks	1 each	_____
12. 1 Ambulance Resuscitation Unit	1 each	_____
13. Emesis Basin	1 Stainless Steel 2 Plastic	3
14. Tourniquet	6 each	_____
15. Thermometer	6 oral 6 rectal	12
16. Measuring Tape or Rule	1 each	_____
17. Sphygmomanometer	1 each	_____
18. Hammer, Reflex Testing	1 each	_____
19a. Otoscope/Ophthalmoscope/Rhinoscope	1 each	_____
b. Battery charged, operable & returned to charge		_____
		INITIALS
20a. Flashlight, w/batteries	1 each	_____
b. Flashlight is operable		_____
		INITIALS
21. Stethoscope	1 each	_____



INVENTORY MEDICAL STATION PEACH BOTTOM UNITS 2 & 3 (Cont.)

B. Medical, Surgical, and Nursing Supplies & Equipment (Cont.)

22.	Tracheostomy Set, w/assorted airway tubes	1 each	_____
23.	Catheter Tray, 14-16 french plain	1 set	_____
24.	Thomas Leg Splints	1 set	_____
25.	Splints, aluminum, assorted sizes	1 set	_____
26.	I.V. Administration Sets, sterile	9 each	_____
27.	Barrier Basic Pack, for minor surgery*	1 each	_____
28.	Barrier Lap Pack, for major surgery*	1 each	_____
29.	Syringes, disposable, sterile, assorted sizes w/needles	1 set	_____
30.	Minor Surgery Tray Sterilized DO NOT OPEN Consisting of:	EXP. DATE	_____ _____
a.	Four towels		
b.	Four towel clips		
c.	Sponges		
d.	Sponge Forceps (2)		
e.	Solution Cups (1)		
f.	Medicine Glass (1)		
g.	Syringes 2 ml		
h.	Needles, 25G, 5/8"; 22G, 1/2"; 18G, 1 1/2"		
i.	Drape Sheet		
j.	Knife Handle, No. 3 with No. 15 blades (1)		
k.	Tissue Forceps (1)		
l.	Two Straight Mosquito Forceps		
m.	Two Curved Mosquito Forceps		
n.	Two Allis Forceps		
o.	Four Curved Hemostats, small		
p.	Suture Needles, with silk and catgut, assorted		
q.	Needle Holder (1)		
r.	Dressing		
s.	Suture Scissors (2)		
*	(In Tray 15 1/2 x 9 1/2 x 2 ") Wrapper size 36 X 36 Sterilization Indicator		
31.	Gloves, surgical, assorted sizes	12 pair	_____
32.	Gowns, patient	2 each	_____



INVENTORY MEDICAL STATION PEACH BOTTOM UNITS 2 & 3 (Cont.)B. Medical, Surgical, and Nursing Supplies & Equipment (Cont.)

33. Towels, bath	6 each	_____
34. Arm Board for IV	2 each	_____
35. Dressings, assorted sizes	As req.	_____
36. Adhesive Tape, assorted sizes	As req.	_____
37. Paper Towels	2 pk	_____
38. Paper Tissue	2 boxes	_____
39. Brush, hand, surgical	2 each	_____
40. Alcohol Wipes	1 box	_____
41. Applicators cotton tip	1 box	_____
42. Hygenic Napkins	2 boxes	_____

C. Solutions & ChemicalsEXPIRATION DATE

1. Normal saline 500 ML	_____	3 each	_____
2. 5% Dextrose 500 ML	_____	3 each	_____
3. Ringers Lactated 500 ML	N/A	3 each	_____
4. 70% Alcohol	N/A	1 gallon	_____
5. Soda Bicarb Ampules	_____	5 vials	_____
6. Aramine Ampules	_____	1 vial	_____
7. Ethyl Chloride	N/A	4	_____
8. Xylocaine 1%	N/A	5 vials	_____
9. Levophed	_____	10 vials	_____
10. Calcium Gluconate	N/A	4	_____

INVENTORY MEDICAL STATION PEACH BOTTOM UNITS 2 & 3 (Cont.)

C. <u>Solutions &amp; Chemicals (Cont.)</u>	<u>EXPIRATION DATE</u>		
11. H <sub>2</sub> O <sub>2</sub> Bethadine Solution	<u>N/A</u>	1 gallon	_____
12. Phisohex	<u>N/A</u>	1 gallon	_____
13. Merthiolate, tincture	<u>N/A</u>	1 pint	_____

Solutions and Chemicals which have passed their expiration date shall be replaced as soon as possible but no later than the next inventory.

The expired solutions and chemicals shall not be discarded until replaced with fresh solutions and chemicals.

HP & C supervision shall notify the Company Medical Director of the need for replacement solutions and chemicals.

D. DECONTAMINATION KIT

Parts list/instructions for use

1. Skin Decontamination

CODE CHECKED

Yellow round labels  
marked:

(a) Utensils:

Absorbent balls, extra large	100	DSK1	_____
Sponge - holding forceps	1	DSK2	_____
Solution bowl, plastic (to hold decontaminant)	1	DSK3	_____
Plastic beaker, large (to discard used sponges)	2	DSK4	_____
Pre-op Sponges (for large area decontamination)	6	DSK5	_____
Surgical hand brushes (for hands/feet decontamination)	2	DSK6	_____
Wash bottle (to hold water for decontamination)	1	DSK7	_____

(b) Decontaminants

(see instructions on bottle)	TURCO decon soap, bottles (for first decon effort, general)	2	DSK8	_____
	Clorox, bottle (for second decon effort)	1	DSK9	_____
	PhisoHex, bottle (for decon of skin around wounds, abrasions, etc.)	1	DSK10	_____

2. Wound Cleansing

(a) Utensils:

Sterile gauze pads, 4 x 4-in, in box	25	DW1	_____
Surgical gloves, assorted sizes, sterile, pair	5	DW2	_____

Solution bowl,	1	DW3	_____
Plungerless syringes, 50 cc,	2	DW4	_____
Aperture drapes, sterile	2	DW5	_____
Sponge - holding forceps, sterile	1	DW6	_____
Cotton tipped applicators, sterile, in box	25	DW7	_____

(b) Cleansing agents:

Saline solutions, normal, sterile, bottle	1	DW8	_____
Hydrogen peroxide, 3% solution, bottle	1	DW9	_____

3. Nose irrigation

(a) Utensils:

Irrigator, plastic	1	DN1	_____
Tubing and applicator, set	1	DN2	_____
Paper container (to collect irrigation fluid)	(see 4)		

(b) Irrigation fluids

(Use water or saline (from 2b))

4. Miscellaneous materials

Collodion, bottle (to seal residual skin contamination)	1	DM1	_____
Nivea cream, jar (apply on dry skin after complete decon)	1	DM2	_____
Hair clippers, pair	1	DM3	_____
Prep kit (for clipping and shaving)	1	DM4	_____
Nail clippers, pair	1	DM5	_____

		<u>CODE</u>	<u>CHECKED</u>
Bandage scissors, LISTER, large, pair	1	DM6	_____
Patient Radiation and Medical Status Record Sheets (for recording essential data on patients' medical and radiation Status)	5	DM7	_____
Skin marker (to mark contaminated areas on skin)	1	DM8	_____
Cardboard containers	10	DM9	_____
Plastic bags, assortment (to hold decon materials after use)	1	DM10	_____
Tags, with wire (to indicate contents of containers and bags)	10	DM11	_____
Tissue paper, box	1	DM12	_____
Notebook	1	DM13	_____
Pencils	5	DM14	_____

CORPORATE EMERGENCY PLAN PROCEDURES INDEX

Peach Bottom Units 2 and 3

EP-C-201	Emergency Control Officer/Headquarters Emergency Control Center
EP-C-202	Site Emergency Coordinator/Emergency Control Center
EP-C-203	Recovery Manager
EP-C-204	Corporate Support Functions
EP-C-205	Emergency Medical Director
EP-C-206	Administrative and Logistics Manager
EP-C-207	Crews Procurement Group Director
EP-C-208	Crews Accommodation Group Chief Administrator
EP-C-209	Purchasing Coordinator
EP-C-210	Transportation Coordinator
EP-C-211	Communications Coordinator
EP-C-212	Stores Division Coordinator
EP-C-213	T&D Support Coordinator
EP-C-214	Emergency Information Officer

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EP-C-215	Emergency Security Officer
EP-C-216	Design and Construction Support Officer
EP-C-217	Quality Assurance/Quality Control Coordinator
EP-C-218	Health Physics and Chemistry Coordinator
EP-C-219	Procedure Support Coordinator
EP-C-220	Instrument and Control Coordinator
EP-C-221	Licensing Support Coordinator
EP-C-222	Systems Engineering Coordinator
EP-C-223	Construction Coordinator
EP-C-224	Planning and Scheduling Coordinator
EP-C-225	Rad Waste Coordinator
EP-C-226	Core Physics Coordinator

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Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-201 Emergency Control Officer/Headquarters Emergency  
Control Center (Headquarters ECC)

Purpose

To delineate the responsibilities and actions of the Emergency Control Officer and to prescribe procedures for establishment and functioning of the Headquarters Emergency Control Center.

References

Emergency Plan, Sec. 5 (Organizational Control of Emergencies)  
Emergency Plan, Sec. 6 (Activation of Emergency Organization)  
Emergency Plan, Sec. 7 (Emergency Facilities and Equipment)

Action Level

The Headquarters Emergency Control Center is activated at the direction of the Emergency Control Officer. This would be expected for the following classes of emergencies:

- 1) Site Area Emergency (EP-104)
- 2) General Emergency (EP-105)

Procedure

The Headquarters Emergency Control Center is located at the Main Office Building of the Philadelphia Electric Company, 2301 Market Street, Philadelphia. It is the main location where Corporate Support personnel report when activated and is the central location from which Corporate Support functions are carried out. Communications, plant drawings and procedures are available. The hub of the Headquarters ECC is on the 7th floor. A map of the Peach Bottom Atomic Power Station area for tracking wind direction and radiological data is located on this floor.

Immediate Actions

1. The designated representative from the office of the Vice President of the Electric Production Department shall:
  - a. Assume the role of Emergency Control Officer.
  - b. Proceed to the Headquarters Emergency Control Center.

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- c. Activate Corporate Support personnel as appropriate (see EP-209 for telephone numbers). For a General Emergency, the Emergency Control Officer shall verify activation of:

- (1) Emergency Information Officer,
- (2) Emergency Security Officer,
- (3) Medical Director,
- (4) Administrative and Logistics Manager.

These personnel are notified directly by the Site Emergency Coordinator in accordance with EP-C-202.

- d. Review the procedures for the following support functions.

- (1) Administrative and Logistics Manager (EP-C-206)
- (2) Transmission and Distribution Support Coordinator (EP-C-213)
- (3) Emergency Security Officer (EP-C-215)
- (4) Medical Director (EP-C-205)
- (5) Design and Construction Support Officer (EP-C-216)
- (6) Emergency Information Officer (EP-C-214)

These personnel will report directly to the Emergency Control Officer. Based on this review, and the recommendations of the personnel listed above, determine which major items are of the highest priority because of the urgency of the requirements, the long lead times involved, or the complexity of the tasks to be undertaken by the support organizations.

- e. Conduct meetings as necessary with appropriate persons performing corporate support functions to accomplish the following:

- (1) Assign responsibility for fulfilling the priority requirements.
- (2) Assign the priorities of the major tasks.
- (3) Assign deadlines and establish a schedule for periodic progress reports.

- f. Direct that phone lines be checked out.

#### Follow-up Actions

- 1) The Emergency Control Officer has overall responsibility for the following:

- a. Management of the Corporate Support functions.

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- b. Ensuring effective liaison with General Electric Company, Bechtel, other contractors, and other utilities which provide support to the plant.
  - c. Serving as the management level interface with government agencies.
  - d. Coordinating with the Emergency Director and Site Emergency Coordinator in determining when to modify the Emergency Organization for the recovery phase.
- 2) Personnel performing Corporate Support functions shall refer to their respective procedures.
- 3) Depending on the nature and duration of the emergency, conditions at the plant site, and other factors, the Emergency Control Officer may direct that specific support functions be moved to the plant site.

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Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-202 Site Emergency Coordinator/Emergency Control  
Center (ECC)

Purpose

To delineate the responsibilities and actions of the Site Emergency Coordinator and to prescribe procedures for establishment and functioning of the ECC.

References

Emergency Plan, Sec. 5 (Organizational Control of Emergencies)  
Emergency Plan, Sec. 6 (Activation of Emergency Organization)  
Emergency Plan, Sec. 7 (Emergency Facilities and Equipment)

Appendices

List of Emergency Equipment and Documents

Action Level

The Site Emergency Coordinator is activated for the following classes of emergencies:

1. Site Area Emergency (EP-104)
2. General Emergency (EP-105)

The ECC is activated for the same classes of emergencies.

Procedure

The ECC is located in the Unit 1 Administration Building, on the second floor. The ECC is the central location for coordinating response activities of on-site and off-site organizations. The major functions of this facility include:

- 1) environmental and radiological surveys
- 2) analysis of off-site samples
- 3) electric power coordination and planning
- 4) dose projection calculations
- 5) coordination with off-site agencies.

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The ECC function is possible under any of the emergency classifications.

Immediate Actions

1. The Superintendent, Generation Division-Nuclear (or alternately the Station Superintendent, Limerick Generating Station) shall:
  - a. Assume the role of Site Emergency Coordinator.
  - b. Proceed to the ECC.
  - c. Notify the following (see EP-209) for telephone numbers):
    - (1) Emergency Control Officer. (S. Daltroff/J. Gallagher)
    - (2) Nuclear Regulatory Commission, Region I, Office of Inspection and Enforcement.
    - (3) Department of Energy, Brookhaven Area Radiological Assistance Program (if hazards extend outside the site boundary) - (516-345-2200)

For a General Emergency, also notify the following:

  - (4) Emergency Information Officer. (W. Taylor/R. Harper)
  - (5) Medical Director (W. Hushion)
  - (6) Emergency Security Officer (J. McGoldrick/R. Denson)
  - (7) Administrative and Logistics Manager (J. Friderichs/R. Holman/R. Williams)
  - d. Proceed to the ECC and supervise the activation of the ECC. The Radiation Survey Team shall perform the initial steps in activating the ECC on their arrival.
  - e. Request the collection of environmental station samples per EP-315, if necessary.
  - f. Through the Radiation Survey Team Leader, direct all radiation surveys conducted in off-site areas.
2. The Radiation Survey Team Leader shall:
  - a. Initiate and supervise initial activation of the ECC.

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- b. Direct that phone lines be checked out.
  - c. Check that the emergency equipment and documents listed in Appendix EP-C-203-1 are in the ECC.
7. The maximum occupancy limit of the ECC should be held to 35 to limit congestion and confusion.

The following personnel normally report to the ECC:

- a. Site Emergency Coordinator (if not at the Headquarters Emergency Control Center)
  - b. Radiation Survey Team Leader
  - c. BRP Liaison personnel
  - d. Other engineers and technicians, as determined by the Site Emergency Coordinator
  - e. Record log keeper/communicator
  - f. NRC personnel (3; separate space provided)
  - g. TV monitor operator
4. The Site Emergency Coordinator shall assign relief rotation for the Site Emergency Coordinator.
5. The ECC staff shall:
- a. Make appropriate notifications or verify notifications in accordance with EP-102, 103, 104, or 105, as directed by the Site Emergency Coordinator.
  - b. Maintain logs and record pertinent data and events including radiation survey data and calculational procedures.

#### Follow-up Actions

1. The Site Emergency Coordinator is responsible for the following:
- a. Maintaining awareness of plant status and being alert to potential off-site consequences of the emergency.
  - b. Coordinating between the On-Site Emergency Organization and the Off-Site Emergency Organization, when activated, to obtain necessary additional facilities, equipment, supplies, personnel, or technical services.

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- c. Coordinating with the Emergency Control Officer concerning personnel, equipment, and materials expected to arrive at the plant site.
  - d. Ensuring preparations are made for check-in of incoming personnel, especially with regard to site area access control, indoctrination of visiting personnel, maintenance of proper security, issuing dosimeters and preparing exposure records, and distribution of protective clothing and equipment. For a Site Area Emergency or General Emergency, visiting personnel should normally be directed to check-in at the Emergency Support Center when first on-site, per EP-211.
  - e. Providing management direction for the establishment and functioning of the Emergency Support Center per EP-204.
  - f. Supervising the functioning of the Emergency Control Center.
  - g. Reviewing with the Emergency Director the current status of information provided to agencies of the Off-Site Emergency Organization and relieving the Emergency Director of this responsibility. The Site Emergency Coordinator will then serve as the primary on-site contact for Federal, State, and local emergency response agencies which dispatch personnel to the plant vicinity, and will provide status and assessment information to agencies of the Off-Site Emergency Organization.
  - h. Providing direction for Philadelphia Electric Emergency Organization personnel who are dispatched to the plant site and for foreign crews activated by Philadelphia Electric Company.
  - i. Keeping the Emergency Control Officer and the Emergency Director apprised of actions taken and of consequences off-site.
  - j. Coordination with the Emergency Director and the Emergency Control Officer in determining when to modify the Emergency Organization for the recovery phase, and informing various agencies and organizations when the modification is to be implemented.
2. The ECC staff shall monitor plant and site conditions and provide data and direction to management and to off-site agencies as appropriate, including the Muddy Run News Center.
3. The ECC staff shall continue operations after notification that the recovery phase organization is in effect until disbanded at the direction of the Recovery Manager.

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Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-203 Recovery Manager

Purpose

To delineate the responsibilities and actions of the Recovery Manager.

References

Emergency Plan, Sec. 5 (Organizational Control of Emergencies)  
Emergency Plan, Sec. 6 (Activation of Emergency Organization)  
Emergency Plan, Sec. 7 (Emergency Facilities & Equipment)

Action Level

After deliberation with the Emergency Director (Station Superintendent) and the Site Emergency Coordinator (Superintendent, Generation Division-Nuclear) the Emergency Control Officer (a representative of the Vice President, Electric Production Department or the Vice President, Engineering and Research) announces the initiation of the Recovery phase and assumes the title of Recovery Manager.

Procedure

1. The designated representative of the Office of the Vice President, Electric Production or the Vice President, Engineering and Research Department shall:
  - a. Assume the role of Recovery Manager and all the functions of the Emergency Control Officer.
  - b. Operate from the Emergency Control Center or the Emergency Support Center.

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c. Activate corporate support personnel as appropriate (see EP-209 for telephone numbers).

d. Review the procedures for the following support functions.

- 1) Medical Director (EP-C-205)
- 2) Administration and Logistics Manager (EP-C-206)
- 3) Emergency Information Officer (EP-C-204)
- 4) Emergency Security Officer (EP-C-215)
- 5) Design and Construction Support Officer (EP-C-216)
- 6) Planning and Scheduling Coordinator (EP-C-224)
- 7) Rad Waste Coordinator (EP-C-225)
- 8) Core Physics Coordinator (EP-C-206)

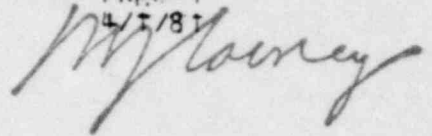
These personnel will report directly to the Recovery Manager. Based on this review, and the recommendations of the personnel listed above, determine which major items are of the highest priority.

e. Conduct meetings as necessary with appropriate persons performing corporate support functions.

2. The Recovery Manager has overall responsibility for the following:

- a. Design, analysis, construction and implementation of activities associated with recovery from the emergency.
- b. Ensuring that plans and significant actions have the concurrence of managers of affected support organizations.

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Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-204 Corporate Support Functions

Purpose

To delineate the responsibilities and actions of personnel performing Corporate Support functions.

References

Emergency Plan, Sec. 5 (Organizational Control of Emergencies)

Action Level

The Emergency Control Officer (designated from the Office of the Vice President, Electric Production Department) shall activate Corporate Support personnel upon notification by the Interim Emergency Director or Site Emergency Coordinator. For a General Emergency, the Site Emergency Coordinator directly notifies the Emergency Information Officer, Medical Director, Emergency Security Officer, and Administrative and Logistics Manager per EP-C-202.

Procedure

1. Corporate Support functions shall be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site. Usually the various corporate emergency functions will be conducted at the normal work areas for those individuals with emergency support functions.
2. Corporate Support personnel are designated as follows:

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- a. Administrative and Logistics Manager - designated in the Emergency Plan.
- b. Personnel Procurement Group Director - the Engineer-In-Charge, Nuclear Section of the Electric Production Department, or designated alternate from the Nuclear Section.
- c. Personnel Support Accommodating Director - designated from the Commercial Operations Department.
- d. Transportation Coordinator - designated member of the Electric Transmission and Distribution Department.
- e. Purchasing Coordinator - designated Nuclear Fuel Section buyer in the Purchasing Department, or designated alternate.
- f. Communications Coordinator - the General Superintendent of the Office Systems and Communications Division, or designated alternate.
- g. Stores Division Coordinator - designated member of the Stores Division or designated alternate.
- h. Transmission and Distribution Support Coordinator - designated member of the Electric Transmission and Distribution Department, or designated alternate.
- i. Emergency Security Officer - the Manager of Claims - Security, or his alternate, the Director of Security.
- j. Medical Director - the Company Medical Director and/or alternate.
- k. Design and Construction Support Officer - the Chief Mechanical Engineer, Engineering and Research Department or his alternate, the Chief Electrical Engineer, Engineering and Research Department.
- l. Emergency Information Officer - the Manager, Corporate Communications, or his alternate, the Manager, Public Information.
- m. Quality Assurance/Quality Control Coordinator - the Superintendent Electric Production O.A.

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- n. Health Physics and Chemistry Coordinator - Supervising Engineer, Generation Division-Nuclear, responsible for Radiation Protection.
- o. Procedure Support Coordinator - Senior Engineer, Licensing, Generation Division-Nuclear.
- p. Instrument and Control Coordinator - Supervising Engineer, Plant Control Systems Branch, E&R Department.
- q. Licensing Support Coordinator - Engineer-In-Charge, Nuclear and Environmental Section of the E&R Department.
- r. Systems Engineering Coordinator - Engineer-In-Charge, Power Plant Design Section of the Mechanical Engineering Division, E&R Department, and Supervising Engineer-In-Charge of Nuclear Generation of the Electrical Engineering Division of the E&R Department.
- s. Construction Coordinator - General Superintendent, Construction Division of the E&R Department.

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Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-205 Medical Director

Purpose

To delineate the responsibilities and actions of the Medical Director.

References

Emergency Plan, Sec. 5.3.1.11

Action Level

The Emergency Control Officer (designated from the Office of the Vice President, Electric Production Department) shall activate Corporate Support personnel upon notification by the Interim Emergency Director or Site Emergency Coordinator. For a General Emergency, the Site Emergency Coordinator directly notifies the Emergency Information Officer, Medical Director, Emergency Security Officer, and Administrative and Logistics Manager per EP-C-203.

Procedure

Corporate Support functions shall be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site.

The Medical Director or his alternate shall:

1. Report to the Headquarters normal work area.

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2. Obtain as clear an understanding as possible of the nature of the emergency and the conditions at the site (especially regarding radiological and safety hazards). Attempt to determine how many casualties are in each of the following categories (Listed in priority of treatment):

- |    |                              |   |                   |
|----|------------------------------|---|-------------------|
| a. | Excessive contamination      | - | serious injury    |
| b. | Excessive radiation exposure | - | serious injury    |
| c. | No radiation involved        | - | serious injury    |
| d. | Excessive contamination      | - | no serious injury |
| e. | Excessive radiation exposure | - | no serious injury |

Initial estimates of the numbers and categories of casualties are sufficient.

3. Contact Radiation Management Corporation in all cases involving radiation exposure or contamination. If necessary, dispatch the Radiation Emergency Medical Team (REM Team) to the site to provide emergency treatment and evaluation.
4. Casualties should be handled with respect to their priority of treatment:

a. Excessive Contamination - Serious Injuries

- (1) If there are large numbers of seriously injured contaminated persons, efforts to decontaminate injured personnel should be expedited, if possible, so that they can be moved to the conventional portion of the hospital.
- (2) If transporting victims to Philadelphia is possible (depending on the nature of the person's injuries, available transportation, and traffic conditions) contaminated injured personnel can be diverted to Radiation Management Corporation facilities.
- (3) If the capacity of Harford Memorial Hospital for handling contaminated injured patients is exceeded, and there are a number of seriously injured persons requiring immediate attention, patients can be dispatched to York Hospital. York Hospital must make preparations to handle contaminated patients and will require assistance from qualified Radiation Management Corporation personnel or health physics personnel.

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- (4) Subsequent testing and evaluation of contamination exposure must be carefully followed up for all victims so affected.

b. Excessive Radiation Exposure - Serious Injuries, and No Radiation Involved - Serious Injuries

- (1) These patients should be handled by conventional hospital admittance procedures. If there are contaminated injured personnel, it is especially critical that injured patients with only radiation exposure do not contribute unnecessarily to overloading the Harford Memorial Hospital's capacity for handling contaminated injured patients.
- (2) Subsequent treatment for excessive radiation exposure must be carefully followed up for all patients so affected.

c. Excessive Contamination - No Serious Injuries

- (1) These patients can be handled by on-site decontamination teams, including, if necessary, the RMC REM Team.
- (2) Subsequent testing and evaluation of contamination exposure must be carefully followed up for all victims so affected.

d. Excessive Radiation Exposure - No Serious Injury

Subsequent treatment for excessive radiation exposure must be carefully followed up for all patients so affected.

5. Coordinate with the Emergency Director or Site Emergency Coordinator, local hospitals, physicians, and the Radiation Management Corporation to ensure proper care for affected personnel. In event of large numbers of casualties, try to optimize use of the available facilities. If necessary, establish temporary treatment centers using local physicians and/or the Radiation Management Corporation REM Team.
6. Consider long-term medical assistance requirements which have significant lead times, including, for example, the following:

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- a. Establish on-site medical treatment and evaluation centers
  - b. Restocking medical supplies
  - c. Preparing large numbers of emergency medical records
  - d. Administratively tracking large numbers of patients being treated in various facilities
  - e. Establishing follow-up contamination and radiation exposure evaluation and treatment.
7. Coordinate with the Administrative and Logistics Manager for transportation, stores, and purchasing requirements.
  8. Notify the Site Emergency Coordinator of actions taken and other actions planned. The On-Site Emergency Organization should be aware of what personnel are expected to arrive at the site so that preparations can be made for site area access control, plant access control, indoctrination of visiting personnel, maintenance of proper security, issuance of dosimetry and preparation of exposure records, and distribution of protective clothing and equipment.
  9. Coordinate with the Emergency Security Officer for clearance through roadblocks and traffic control points.

CAUTION: Radiological or safety hazards at the plant or site area mandate special considerations and arrangements. Visiting personnel must be properly instructed concerning directions to the plant or site, hazards at the plant, access and security requirements, and applicable precautions. Visiting personnel should normally be directed to check-in at the Emergency Support Center when first on-site. Escorts may be necessary.

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Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-206 Administrative and Logistics Manager

Purpose

To delineate the responsibilities and actions of the Administrative and Logistics Manager.

References

Emergency Plan, Sec. 5.3.1.2

Action Level

The Emergency Control Officer (designated from the Office of the Vice President, Electric Production Department) shall activate Corporate Support personnel upon notification by the Interim Emergency Director or Site Emergency Coordinator. For a General Emergency, the Site Emergency Coordinator directly notifies the Emergency Information Officer, Medical Director, Emergency Security Officer, and Administrative and Logistics Manager per EP-C-202.

Procedure

Corporate Support Functions shall be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site.

The Administrative and Logistics Manager shall:

1. Report to the Headquarters, normal work area.

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2. Activate or verify activated the following personnel, as necessary (see EP-209 for telephone numbers):

- a. Foreign Crews Procurement Group Director
- b. Foreign Crews Accommodations Group Chief Administrator
- c. Transportation Coordinator
- d. Purchasing Coordinator
- e. Communications Coordinator
- f. Stores Division Coordinator
- g. T&D Support Coordinator

These personnel will report directly to the Administrative and Logistics Manager.

3. Obtain as clear an understanding as possible of the nature of the emergency, the conditions at the site (especially regarding radiological and safety hazards), and anticipated support requirements. This is best done by discussion with the Emergency Control Officer and/or the Site Emergency Coordinator.
4. Review the checklists for the support functions listed in step 2. As soon as possible, recommend to the Emergency Control Officer which items should be of highest priority either because of the urgency of the requirements, the long lead times involved, or the complexity of the tasks to be undertaken by the support organizations. Examples include the following:

a. Urgent Requirements:

- (1) Contracting for or arranging for support services and equipment immediately required at the site.
- (2) Transportation for corporate, contractor, or government personnel proceeding to the site immediately, including arrangements for vehicles, drivers, fuel, escorts, and maps or directions to the site.
- (3) Accommodations for corporate, contractor, or government personnel proceeding to the site

POOR ORIGINAL

immediately, including reservations at local motels/hotels.

- (4) Feeding plant shift, plant staff and contractor personnel currently at the site, including preparation and delivery of food and beverages.

b. Long-Term Requirements with Long Lead Times:

- (1) Obtaining large or specialized tools and equipment.
- (2) Contracting for or arranging for support services and equipment required at the site.
- (3) Establishing shuttle service to the site and in the general area near the site.
- (4) Providing maintenance, repairs, and fuel for large numbers of vehicles.
- (5) Providing accommodations for large groups at or near the site.
- (6) Providing temporary office space and office supplies.
- (7) Establishing long-term food services at or near the site.
- (8) Providing temporary toolsheds, outdoor workshops, or temporary storage sheds.
- (9) Activating temporary sanitary facilities at the site.
- (10) Staffing designated stores issue points and establishing temporary storerooms.

6. Conduct a meeting with the persons listed in Step 2 (this may be done coincidentally with the meeting conducted by the Emergency Control Officer per EP-C-201) and accomplish the following:

- a. Assign responsibility for fulfilling the priority requirements.

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- b. Establish the priorities of the tasks, as assigned by the Emergency Control Officer. Assign the priorities of tasks not addressed by the Emergency Control Officer.
- c. Assign deadlines and establish a schedule for periodic progress reports.
7. Direct the actions of the personnel listed in Step 3 in fulfilling the requirements in their order of priority.
8. Coordinate with the Emergency Security Officer for clearance through roadblocks and traffic control points.
9. Coordinate with the Transmission and Distribution Support Coordinator for emergency site electric power.
17. Periodically notify the Emergency Control Officer and the Site Emergency Coordinator of actions taken and of other actions planned. The On-Site Emergency Organization should be aware of what personnel are expected to arrive at the site so that preparations can be made for site area access control, plant access control, indoctrination of visiting personnel, maintenance of proper security, issuance of dosimetry and preparation of exposure records, and distribution of protective clothing and equipment.

CAUTION: Radiological or safety hazards at the plant or site area mandate special considerations and arrangements. Personnel proceeding to the site must be properly instructed concerning directions to the plant or site, hazards at the plant, access and security requirements, and applicable precautions. All visiting personnel should be directed to check-in at the Emergency Support Center when first on-site. Escorts may be necessary.

POOR ORIGINAL

*Mylaney*

Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-207 Foreign Crews Procurement Group Director

Purpose

To delineate the responsibilities and actions of the Foreign Crews Procurement Director.

References

Emergency Plan, Sec. 5.3-1.3

Action Level

The Emergency Control Officer (designated from the Office of the Vice President, Electric Production Department) shall activate Corporate Support personnel upon notification by the Interim Emergency Director or Site Emergency Coordinator. For a General Emergency, the Site Emergency Coordinator directly notifies the Emergency Information Officer, Medical Director, Emergency Security Officer, and Administrative and Logistics Manager per EP-C-202. The Foreign Crews Procurement Group Director shall be activated by the Administrative and Logistics Manager.

Procedure

Corporate Support functions shall be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site.

The Foreign Crews Procurement Group Director shall:

1. Report to the Headquarters, normal work area.

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2. Obtain as clear an understanding as possible of the nature of the emergency; the conditions at the site.
3. The general responsibility of the Foreign Crews Procurement Group Director is to fulfill requirements which cannot be fulfilled directly by the Philadelphia Electric Company. Specific examples include the following:
  - a. Engineering expertise - as would be necessary to perform engineering analysis or for planning design modifications (this will probably require contracting with General Electric, Bechtel, Westinghouse, or engineering consulting firms).
  - b. Contract maintenance personnel - including electrical contractors, construction contractors, pipefitters, boilermakers, steamfitters, painters, cleaning personnel, welders, and other tradesmen (this will probably require a purchase order to Catalytic, Inc.).
  - c. Other temporary personnel - including secretarial personnel and clerks, security personnel, bus or truck drivers, and automotive maintenance personnel.
  - d. Radiological support services and equipment - environmental monitoring services as necessary.
  - e. Miscellaneous support services and equipment:
    - (1) Portable instrumentation and instrument calibration/repair.
    - (2) Water processing, storage, and purification, including ion exchangers, filtration devices, etc.
    - (3) Auxiliary electric power, as from a temporary substation.
    - (4) Compressed gases (oxygen, nitrogen, acetylene, etc.).
    - (5) Temporary outdoor lighting.
    - (6) Cryogenic services and equipment.
    - (7) Additional tools, welding equipment, brazing equipment, rigging and lifting equipment, sandblasting equipment, forklifts, cranes, etc.

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NOTE: THE INSTITUTE OF NUCLEAR POWER OPERATIONS CAN PROVIDE ASSISTANCE IN LOCATING SOURCES OF EMERGENCY MANPOWER AND EQUIPMENT (SEE EP-209 FOR INPO HOTLINE TELEPHONE NUMBER).

4. Coordinate with the Purchasing Coordinator to arrange for required crews, materials, and services and to fulfill the requirements in the order of their priority, as established by the Administrative and Logistics Manager.
5. Coordinate with the Transportation Coordinator to ensure arrangements are made for transportation of equipment and materials from their initial point of arrival to their final destination.
6. Coordinate with the Central Foreign Crews Accommodations Group Chief Administrator to ensure arrangements are made for accommodations, escorts (if necessary), and transportation of personnel from their initial point of arrival to their final destination.
7. Coordinate with the Transmission and Distribution Support Coordinator, through the Administrative and Logistics Manager, for emergency site electric power.
8. Coordinate with the Emergency Security Officer, through the Administrative and Logistics Manager, for clearance through roadblocks and traffic control points.

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Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-208 Foreign Crews Accommodation Group  
Chief Administrator

Purpose

To delineate the responsibilities and actions of the Foreign Crews Accommodation Group Chief Administrator.

References

Emergency Plan, Sect. 5.3.1.4

Action Level

The Emergency Control Officer (designated from the Office of the Vice President, Electric Production Department) shall activate Corporate Support personnel upon notification by the Interim Emergency Director or Site Emergency Coordinator. For a General Emergency, the Site Emergency Coordinator directly notifies the Emergency Information Officer, Medical Director, Emergency Security Officer, and Administrative and Logistics Manager per EP-C-202. The Foreign Crews Accommodation Group Chief Administrator shall be activated by the Administrative and Logistics Manager.

Procedure

Corporate Support Functions shall be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site.

The Foreign Crews Accommodation Group Chief Administrator shall:

**POOR ORIGINAL**

1. Report to the Headquarters, normal work area.
2. Activate, or verify activated the following personnel, as necessary (see EP-209 for telephone numbers):
  - a. Central Foreign Crews Accommodations Group Assistant Chief Administrator
  - b. Transportation Director
  - c. Housing Director
  - d. Food Director
3. Obtain as clear an understanding as possible of the nature of the emergency, the conditions at the site (especially regarding radiological and safety hazards), and anticipated support requirements. The Administrative and Logistics Manager and the Emergency Control Officer will conduct meetings and assign responsibilities, establish priorities, assign deadlines, and establish a schedule for periodic progress reports.
4. The general responsibilities of the Central Foreign Crews Accommodations Group Chief Administrator are to provide transportation, lodging, and temporary work space for foreign crews. Specific examples include the following:
  - a. Urgent Requirements:
    - (1) Accommodations for government, contractor, or support personnel proceeding to the site immediately, including reservations at local hotels/motels.
    - (2) Transportation for contractor or government personnel proceeding to the site immediately including drivers, escorts, and maps or directions to the site.
    - (3) Feeding plant shift, plant staff, and contractor personnel currently at the site, including preparation and delivery of food and beverages.
  - b. Long-Term Requirements with Long Lead Times:
    - (1) Accommodations for large groups at or near the site.

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- (2) Long-term food services and drinking water at or near the site (food preparation would normally be located at the Emergency Support Center (ESC)).
  - (3) Temporary office space and office supplies (office machines, administrative supplies, office furniture, interior lighting, etc.). (Temporary offices should normally be established at the ESC.)
  - (4) Temporary toolsheds, outdoor workshops, or temporary storage sheds.
  - (5) Temporary sanitary facilities (existing facilities should be activated, if possible).
  - (6) Non-contaminated trash removal service.
  - (7) Designated areas at airports or railroad stations to enable assembling personnel for movement to the site.
6. Conduct a meeting with the persons listed in step 2 to accomplish the following:
    - a. Assign responsibility for fulfilling the requirements, in the order of priority established by the Administrative and Logistics Manager.
    - b. Assign deadlines and establish a schedule for periodic progress reports.
  7. Direct the actions of the personnel listed in step 2 in fulfilling the requirements in their order of priority.
  8. Coordinate with the Purchasing Coordinator for contracting requirements.
  9. Coordinate with the Transportation Coordinator in fulfilling transportation requirements for transportation of personnel from their initial point of arrival to their final destination.
  10. Coordinate with the Emergency Security Officer, through the Administrative and Logistics Manager, for clearance through roadblocks and traffic control points.
  11. Coordinate with the Communications Coordinator for providing telephone service in temporary office spaces and work spaces.

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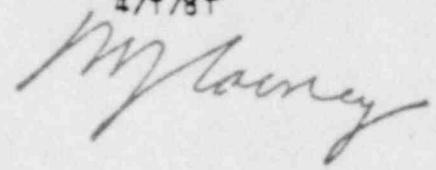
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CAUTION: Radiological or safety hazards at the plant or site area mandate special considerations and arrangements. Personnel proceeding to the site must be properly instructed concerning directions to the plant or site, hazards at the plant, access and security requirements, and applicable precautions. Visiting personnel should normally be directed to check-in at the Emergency Support Center when first on-site. Escorts may be necessary.

POOR ORIGINAL



Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-209 Purchasing Coordinator

Purpose

To delineate the responsibilities and actions of the Purchasing Coordinator.

References

Emergency Plan, Sec. 5.3.1.6

Action Level

The Emergency Control Officer (designated from the Office of the Vice President, Electric Production Department) shall activate Corporate Support personnel upon notification by the Interim Emergency Director or Site Emergency Coordinator. For a General Emergency, the Site Emergency Coordinator directly notifies the Emergency Information Officer, Medical Director, Emergency Security Officer, and Administrative and Logistics Manager per EP-C-202. The Purchasing Coordinator shall be activated by the Administrative and Logistics Manager.

Procedure

Corporate Support functions shall be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site.

The Purchasing Coordinator shall:

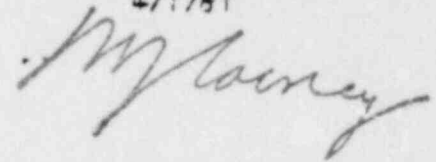
1. Report to normal work area.

POOR ORIGINAL

2. Send representative to the Headquarters Emergency Control Center.
3. Obtain as clear an understanding as possible of the nature of the emergency, the conditions at the site, and anticipated contract requirements. The Administrative and Logistics Manager and the Emergency Control Officer will conduct meetings and will assign responsibilities, establish priorities, assign deadlines, and establish a schedule for periodic progress reports.
4. Review the contract files and general services agreements in force and determine if there are any requirements not covered by existing agreements. Necessary new contracts must be drafted as soon as practical. Standardized letters of intent can be issued in lieu of contracts to expedite fulfillment of requirements.
5. Coordinate with the Administrative and Logistics Manager and other members of his staff in fulfilling the requirements in the order of their priority, as established by the Administrative and Logistics Manager.
6. Coordinate with Stores Division Coordinator concerning availability of supplies for corporate stock. Initiate purchase of non-stock items.

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Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-210 Transportation Coordinator

Purpose

To delineate the responsibilities and actions of the Purchasing Coordinator.

References

Emergency Plan, Sec. 5.3.1.5

Action Level

The Emergency Control Officer (designated from the Office of the Vice President, Electric Production Department) shall activate Corporate Support personnel upon notification by the Interim Emergency Director or Site Emergency Coordinator. For a General Emergency, the Site Emergency Coordinator directly notifies the Emergency Information Officer, Medical Director, Emergency Security Officer, and Administrative and Logistics Manager per EP-C-202. The Transportation Coordinator shall be activated by the Administrative and Logistics Manager.

Procedure

Corporate Support functions shall be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2701 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site.

The Transportation Coordinator shall:

1. Report to normal work area.

POOR ORIGINAL

2. Send representative to the Headquarters Emergency Control Center.
3. Obtain as clear an understanding as possible of the nature of the emergency, the conditions at the site, and anticipated contract requirements. The Administrative and Logistics Manager and the Emergency Control Officer will conduct meetings and will assign responsibilities, establish priorities, assign deadlines, and establish a schedule for periodic progress reports.
4. The general responsibilities of the Transportation Coordinator is to provide transportation for incoming materials and equipment. Specific examples include the following:
  - a. Urgent Requirements:

Transportation for materials and equipment required at the site immediately, including arrangements for vehicles, drivers, fuel, and maps or directions to the site.
  - b. Long-Term Requirements with Long Lead Times:
    - (1) Obtaining necessary vehicles or transportation services for future transportation needs, including autos, trucks, buses, and helicopters.
    - (2) Transportation for materials and equipment from their initial point of arrival to their final destination.
    - (3) Maintenance, repairs, and fuel for large numbers of vehicles.
    - (4) Shuttle service to the site and in the general area near the site.
    - (5) Designated areas at airports or railroad stations to enable staging equipment and materials for movement to the site.
    - (6) Accommodate requests for transportation direct from county and state agencies.
5. Coordinate with the Central Foreign Crews Accommodations Group Chief Administrator in determining personnel

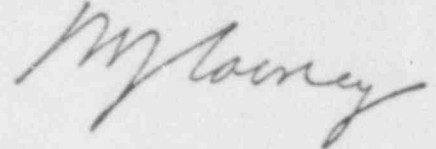
POOR ORIGINAL

transportation requirements and provide necessary vehicles and support.

6. Coordinate with the Emergency Security Officer, through the Administrative and Logistics Manager, for clearance through roadblocks and traffic control points.
7. Coordinate with the Purchasing Coordinator to fulfill the requirements in the order of their priority, as established by the Administrative and Logistics Manager.

CAUTION: Radiological or safety hazards at the plant or site area mandate special considerations and arrangements. Personnel proceeding to the site must be properly instructed concerning directions to the plant or site, hazards at the plant, access and security requirements, and applicable precautions. Visiting personnel should normally be directed to check-in at the Emergency Support Center when first on-site. Escorts may be necessary.

POOR ORIGINAL



Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-211 Communications Coordinator

Purpose

To delineate the responsibilities and actions of the Communications Coordinator.

References

Emergency Plan, Sec. 5.3.1.7

Action Level

The Emergency Control Officer (designated from the Office of the Vice President, Electric Production Department) shall activate Corporate Support personnel upon notification by the Interim Emergency Director or Site Emergency Coordinator. For a General Emergency, the Site Emergency Coordinator directly notifies the Emergency Information Officer, Medical Director, Emergency Security Officer, and Administrative and Logistics Manager per EP-C-202. The Communications Coordinator shall be activated by the Administrative and Logistics Manager.

Procedure

Corporate Support Functions shall be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site.

The Communications Coordinator shall:

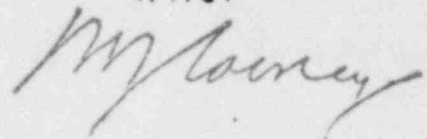
1. Report to the Headquarters, normal work area.

POOR ORIGINAL

2. Obtain as clear an understanding as possible of the nature of the emergency, the conditions at the site (especially regarding radiological and safety hazards), and anticipated communications requirements. The Administrative and Logistics Manager and the Emergency Control Officer will conduct meetings and will assign responsibilities, establish priorities, assign deadlines, and establish a schedule for periodic progress reports.
3. Carry out applicable steps of the Emergency Contingency Plan.
4. Coordinate with the Foreign Crews Accommodations Group Chief Administrator in fulfilling requirements for telephone service in temporary office spaces in the order of their priority.
5. Coordinate with the Purchasing Coordinator in fulfilling communications requirements, in the order of their priority, as established by the Administrative and Logistics Manager.
6. Coordinate with the Emergency Security Officer, through the Administrative and Logistics Manager, for clearance through roadblocks and traffic control points.

CAUTION: Radiological or safety hazards at the plant or site area mandate special considerations and arrangements. Personnel proceeding to the site must be properly instructed concerning directions to the plant or site, hazards at the plant, access and security requirements, and applicable precautions. Visiting personnel should normally be directed to check-in at the Emergency Support Center when first on-site. Escorts may be necessary.

POOR ORIGINAL



Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-212 Stores Division Coordinator

Purpose

To delineate the responsibilities and actions of the Stores Division Coordinator.

References

Emergency Plan, Sec. 5.3.1.8

Action Level

The Emergency Control Officer (designated from the Office of the Vice President, Electric Production Department) shall activate Corporate Support personnel upon notification by the Interim Emergency Director or Site Emergency Coordinator. For a General Emergency, the Site Emergency Coordinator directly notifies the Emergency Information Officer, Medical Director, Emergency Security Officer, and Administrative and Logistics Manager per EP-C-202. The Stores Division Coordinator shall be activated by the Administrative and Logistics Manager.

Procedure

Corporate Support functions shall be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site.

The Stores Division Coordinator shall:

1. Report to normal work area.

POOR ORIGINAL



2. Send representative to the Headquarters Emergency Control Center.
3. Obtain as clear an understanding as possible of the nature of the emergency, the conditions at the site (especially regarding radiological and safety hazards), and anticipated communications requirements. The Administrative and Logistics Manager and the Emergency Control Officer will conduct meetings and will assign responsibilities, establish priorities, assign deadlines, and establish a schedule for periodic progress reports.
4. Staff-designated stores issue points on a 24-hour-a-day basis and establish and operate temporary storerooms, as deemed necessary.
5. Coordinate with the Purchasing Coordinator in fulfilling resupply requirements and with the Transportation Coordinator for transportation requirements.
6. Coordinate with the Emergency Security Officer, through the Administrative and Logistics Manager, for clearance through roadblocks and traffic control points.

CAUTION: Radiological or safety hazards at the plant or site area mandate special considerations and arrangements. Personnel proceeding to the site must be properly instructed concerning directions to the plant or site, hazards at the plant, access and security requirements, and applicable precautions. Visiting personnel should normally be directed to check-in at the Emergency Support Center when first on-site. Escorts may be necessary.

POOR ORIGINAL

*M. J. Loney*

Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-G-213 Transmission and Distribution Coordinator

Purpose

To delineate the responsibilities and actions of the Transmission and Distribution Support Coordinator.

References

Emergency Plan, Sec. 5.3-1.9

Action Level

The Emergency Control Officer (designated from the Office of the Vice President, Electric Production Department) shall activate Corporate Support personnel upon notification by the Interim Emergency Director or Site Emergency Coordinator. For a General Emergency, the Site Emergency Coordinator directly notifies the Emergency Information Officer, Medical Director, Emergency Security Officer, and Administrative and Logistics Manager per EP-G-202. The Administrative and Logistics Manager will activate the Transmission and Distribution Support Coordinator.

Procedure

Corporate Support functions shall be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site.

The Transmission and Distribution Support Coordinator shall:

1. Report to the Headquarters, normal work area.

**POOR ORIGINAL**

2. Obtain as clear an understanding as possible of the nature of the emergency, the conditions at the site (especially regarding radiological and safety hazards), and anticipated communications requirements. The Administrative and Logistics Manager and the Emergency Control Officer will conduct meetings and will assign responsibilities, establish priorities, assign deadlines, and establish a schedule for periodic progress reports.
3. Fulfill emergency or temporary manpower and equipment needs using personnel from the Electric Transmission and Distribution Department, as directed by the Administrative and Logistics Manager.
4. Coordinate with the Administrative and Logistics Manager in providing emergency site electric power.

POOR ORIGINAL

*Mylooney*

Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-214 Emergency Information Officer

Purpose

To delineate the responsibilities and actions of the Emergency Information Officer.

References

Emergency Plan, Sec. 5.3.1.13

Action Level

The Emergency Control Officer (designated from the Office of the Vice President, Electric Production Department) shall activate Corporate Support personnel upon notification by the Interim Emergency Director or Site Emergency Coordinator. For a General Emergency, the Site Emergency Coordinator directly notifies the Emergency Information Officer, Medical Director, Emergency Security Officer, and Administrative and Logistics Manager per EP-C-202.

Procedure

Corporate Support functions shall be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site.

The Emergency Information Officer shall:

1. Two Emergency Information Officers are designated, one will report to the ECC, the other to Muddy Run News Center.

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2. A representative will report to the Corporate Officer.
3. Supervise the establishment and staffing of the news center at Muddy Run Park.
4. Discuss the situation with the Emergency Control Officer, Site Emergency Coordinator, and Emergency Director. Obtain as clear an understanding as possible of the nature of the emergency and the conditions at the site (especially regarding radiological and safety hazards). Attempt to determine the following:
  - a. The cause of the incident.
  - b. The current status of the plant (operating at full load, operating at reduced load, shutdown).
  - c. Any radiological or safety hazards including radiation dose rates (in millirem per hour) at specific locations, airborne contamination concentrations (in microcuries per cubic centimeter) and surface contamination (in microcuries per square centimeters) and the time the measurements were made. Also, attempt to obtain radioactivity release rates (if applicable) in terms of a percentage of allowable Technical Specification limit. Compare this information to the data on the last page of this Appendix and determine the dose rate or contamination concentration relative to some of the reference levels listed.

For example, a dose rate of 0.1 mR/hr (whole body) compares to the average annual radiation dose from natural sources as follows:

Normal radiation dose rate  
from background radiation  
(cosmic rays, building materials,  
naturally-occurring radioactivity) = 150 mR/year  
(0.0171 mR/hour)

Measured dose rate = 0.1 mR/hour

Ratio =  $\frac{0.1 \text{ mR/hour}}{150 \text{ mR/year}}$

=  $\frac{0.1 \text{ mR/hr}}{0.017 \text{ mR/hr}}$

= 5.8

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0.1 mR/hr is 5.3 times the radiation dose rate received from natural sources.

- d. If there were any personnel injured, exposed to radiation, or contaminated (for radiation or contamination exposure, attempt to determine the estimated amount of exposure in millirem). Compare this information to the data on the last page of this Appendix and determine the dose relative to some of the reference levels listed.

For example, a radiation dose of 50 mREM (whole body) compares to the average annual radiation dose and the legal limit as follows:

$$\frac{50 \text{ mREM}}{150 \text{ mREM}}$$

= 1/3 of normal yearly background dose

$$\frac{50 \text{ mREM}}{500 \text{ mREM}}$$

= 10% of maximum radiation dose (whole body) allowed by law for the public.

5. Determine which government agencies have been notified. Contact the responsible spokespersons for the agencies and ensure they have the latest correct information (see EP-209 for telephone numbers). The complete list of agencies which may have been notified include the following:

- a. Pennsylvania Emergency Management Agency (PEMA)
- b. Maryland Civil Defense Agency
- c. York County Emergency Management Agency
- d. Lancaster County Emergency Management Agency
- e. Chester County Emergency Management Agency
- f. Harford County Civil Defense Agency
- g. Cecil County Civil Defense Agency
- h. NRC, Region I, Office of Inspection and Enforcement
- i. Department of Energy, Brookhaven Area, Radiological Assistance Program
- j. Pennsylvania State Police
- k. Bureau of Radiation Protection, Pennsylvania Department of Environmental Resources (BRP)
- l. Delaware Civil Defense Agency
- m. New Jersey Civil Defense Agency

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Determine if any protective actions are planned, including evacuation, access control, and protection of food products.

6. General responsibilities include the following:
  - a. Verifying news releases and statements, and obtaining release approval from the Emergency Control Officer prior to release.
  - b. Arranging for interviews, statements, and press conferences, and distributing approved news releases and statements.
  - c. Continued coordination with local, state, and Federal public information representatives to ensure a "single spokesman" concept and to avoid contradictions in information.
  - d. Ensuring that adequate supplies of literature regarding Philadelphia Electric, PBAPS, and general nuclear power plant design and terminology are available for the media as background material.
  - e. Carrying out additional procedures as specified in the Corporate Communications Plan.
7. Coordinate with the Central Foreign Crews Accommodation Group Chief Administrator for feeding News Center personnel, and with the Transportation Coordinator for transportation requirements.
8. Coordinate with the Emergency Security Officer for clearance through roadblocks and traffic control points.

CAUTION: Radiological or safety hazards at the plant or site area mandate special considerations and arrangements. Personnel proceeding to the site must be properly instructed concerning directions to the plant or site, hazards at the plant, access and security requirements, and applicable precautions. Visiting personnel should normally be directed to check-in at the Emergency Support Center when first on-site. Escorts may be necessary.

NOTE: If the event has stirred public concern or if an evacuation of off-site areas has been directed, expect the roads near the site to be more crowded with traffic.

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than normal. This situation could significantly impede transportation to the site.

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1. Examples of Typical Radiation Dose Rates\*

Approximate radiation dose rate  
(whole body) from natural sources: 150 mREM/year  
(0.0177 mR/hr)

2. Examples of Radiation Doses\*\*

Approximate annual radiation dose  
(whole body) from natural sources: 150 mREM in one year  
0.017 mREM in one hour

Annual radiation dose (whole body)  
allowed by law (10CFR20) for members  
of the public: 500 mREM in one year

Annual radiation dose to hands,  
forearms, feet, and ankles allowed  
by law (10CFR20) for members of the  
public: 7500 mREM in one year

Annual radiation dose allowed by  
law (10CFR20) for radiation which  
only damages the skin (for members  
of the public): 3000 mREM in one year

Approximate radiation dose (whole  
body) from one dental x-ray: 150 mREM

Approximate radiation dose (whole  
body) for 50% probability of dying  
within a month: 450,000 mREM in a  
short time

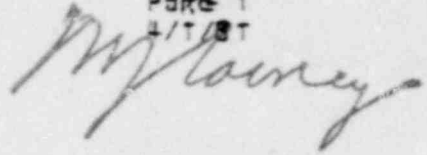
\*A dose of 1 mREM is equivalent to a dose of 1 mR of gamma or  
x-ray radiation.

3. Examples of Radioactivity Concentrations in Air (Above  
Background)

The maximum radioactivity concentrations in air (above  
background) allowed by law for some representative materials  
are listed below:

Cesium - 137:	5x10	MicroCuries per cubic centimeter
Iodine - 135:	1x10	MicroCuries per cubic centimeter
Krypton - 88:	2x10	MicroCuries per cubic centimeter
Xenon - 135:	1x10	MicroCuries per cubic centimeter

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Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-215 Emergency Security Officer

Purpose

To delineate the responsibilities and actions of the Emergency Security Officer.

References

Emergency Plan, Sec. 5.3.1.10

Action Level

The Emergency Control Officer (designated from the Office of the Vice President, Electric Production Department) shall activate Corporate Support personnel upon notification by the Interim Emergency Director or Site Emergency Coordinator. For a General Emergency, the Site Emergency Coordinator directly notifies the Emergency Information Officer, Medical Director, Emergency Security Officer, and Administrative and Logistics Manager per EP-C-202.

Procedure

Corporate Support functions shall be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site.

The Emergency Security Officer shall:

1. Report to the Headquarters Emergency Control Center.

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2. Obtain as clear an understanding as possible of the nature of the emergency, the conditions at the site (especially regarding radiological and safety hazards), and anticipated communications requirements. The Administrative and Logistics Manager and the Emergency Control Officer will conduct meetings and will assign responsibilities, establish priorities, assign deadlines, and establish a schedule for periodic progress reports.
3. When directed by the Emergency Control Officer, dispatch personnel to the site and direct them to report to the Security Team Leader for assignments (additional security personnel will probably be needed to assist in site area access control, plant access control, indoctrination of visiting personnel, and maintenance of proper security).
4. Maintain liaison with the Pennsylvania State Police and local law enforcement agencies. If traffic controls are imposed, coordinate with participating agencies to ensure clearance is authorized for personnel proceeding to the site.
5. Coordinate with the Emergency Security Team Leader at the plant, through the Emergency Control Officer, in fulfilling emergency security requirements in their order of priority as established by the Emergency Control Officer.
6. Periodically notify the Emergency Control Officer and Site Emergency Coordinator of actions taken and of other actions planned. The on-Site Emergency Organization should be aware of what personnel are expected to arrive at the site so that preparations can be made for site area access control, plant access control, indoctrination of visiting personnel, maintenance of proper security, issuance of dosimetry and preparation of exposure records, and distribution of protective clothing and equipment.
7. Coordinate with the Transportation Coordinator for transportation requirements.
8. Recommend to the Emergency Control Officer when to relax plant security requirements for the affected plant, as permitted by 10 CFR 73.55.

CAUTION: Radiological or safety hazards at the plant or site upon mandate special considerations and arrangements. Personnel proceeding to the site must be properly instructed concerning directions to the plant or site, hazards at the plant, access and security requirements,

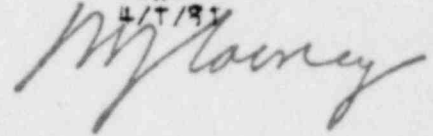
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and applicable precautions. Visiting personnel should normally be directed to check-in at the Emergency Support Center when first on-site.

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Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-216 Design and Construction Support Officer

Purpose

To delineate the responsibilities and actions of the Design and Construction Support Officer.

References

Emergency Plan, Sec. 5.3.1.12

Action Level

The Emergency Control Officer (designated from the Office of the Vice President, Electric Production Department) shall activate Corporate Support personnel upon notification by the Interim Emergency Director or Site Emergency Coordinator. For a General Emergency, the Site Emergency Coordinator directly notifies the Emergency Information Officer, Medical Director, Emergency Security Officer, and Administrative and Logistics Manager per EP-C-202. The Design and Construction Coordinator will usually be activated by the Recovery Manager but this does not preclude activation of this function in the initial phase.

Procedure

Corporate Support functions shall be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site.

The Design and Construction Support Officer shall:

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1. Report to the Headquarters, normal work area.
2. Obtain as clear an understanding as possible of the nature of the emergency, the conditions at the site (especially regarding radiological and safety hazards), and anticipated support requirements. This is best done by discussion with the Emergency Control Officer.
3. As soon as possible recommend to the Emergency Control Officer which actions are of highest priority either because of the urgency of the requirements, the long lead times involved, or the complexity of the tasks to be undertaken by support organizations. Examples include the following:

a. Urgent Requirements:

- (1) Providing engineering and technical specialists to staff the Emergency Support Center.
- (2) Establishing direct contact with General Electric, Bechtel, or other engineering/construction firms to resolve technical matters which must be immediately resolved.

b. Long-Term Requirements with Long Lead Times:

- (1) Ensuring engineering, design, and construction activities are adequately staffed in a timely manner.
- (2) Obtaining necessary temporary facilities for the Emergency Support Center.
- (3) Resolving technical or administrative matters with General Electric, Bechtel, or other engineering/construction firms.

NOTE: THE INSTITUTE OF NUCLEAR POWER OPERATIONS CAN PROVIDE ASSISTANCE IN PROVIDING EMERGENCY SUPPORT PERSONNEL (SEE EP-200 FOR INPO HOTLINE TELEPHONE NUMBERS).

4. Take steps to satisfy the requirements in the order of their priority, as determined by the Emergency Control Officer.
5. Coordinate with the Administrative and Logistics Manager for contracting, temporary facilities, and transportation requirements.

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6. Periodically notify the Emergency Control Officer and Site Emergency Coordinator of actions taken and of other actions planned. The On-Site Emergency Organization should be aware of what personnel are expected to arrive at the site so that preparations can be made for site area access control, plant access control, indoctrination of visiting personnel, maintenance of proper security, issuance of dosimetry and preparation of exposure records, and distribution of protective clothing and equipment.
7. Additional responsibilities include the following:
  - a. Directing, coordinating, and approving engineering, design, and construction activities.
  - b. Ensuring that design and review activities are controlled and that cognizant portions of the emergency organization are aware of planned actions.
  - c. Coordinating the integration of General Electric, Bechtel, or other engineering/construction firm personnel into the Emergency Organization.
  - d. Ensuring that construction activities are adequately staffed in a timely manner.

To execute these responsibilities, the Design and Construction Support Officer has the technical expertise of the entire Company and its consultants available to him. These organizations include:

- (1) Mechanical Engineering Division
- (2) Electrical Engineering Division
- (3) Construction Division
- (4) Engineering Design Division
- (5) Quality Assurance Section of the Engineering and Research Department
- (6) Research and Testing Division
- (7) Nuclear Section of the Electric Production Department
- (8) Quality Assurance Division
- (9) Maintenance Division
- (10) Services Division
- (11) General Electric, Bechtel, and Radiation Management Corporation
- (12) Other contractors
- (13) Institute of Nuclear Power Operations

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The following support personnel report to the Design and Construction Support Officer in the recovery phase:

- (1) QA/QC Coordinator
- (2) HP&C Coordinator
- (3) Procedure Support Coordinator
- (4) I&C Coordinator
- (5) Licensing Support Coordinator

- 8. Notify the Site Emergency Coordinator of actions taken and other actions planned. The On-Site Emergency Organization should be aware of what personnel are expected to arrive at the site so that preparations can be made for site area access control, plant access control, indoctrination of visiting personnel, maintenance of proper security, issuance of dosimetry and preparation of exposure records, and distribution of protective clothing and equipment.
- 9. Coordinate with the Emergency Security Officer for clearance through roadblocks and traffic control points.

CAUTION: Radiological or safety hazards at the plant or site area mandate special considerations and arrangements. Visiting personnel must be properly instructed concerning directions to the plant or site, hazards at the plant, access and security requirements, and applicable precautions. Visiting personnel should normally be directed to check-in at the Emergency Support Center when first on-site. Escorts may be necessary.

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*M. J. Loney*

Philadelphia Electric Company  
Penn. Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-217 Quality Assurance/Quality Control Coordinator

Purpose

To delineate the responsibilities and actions of the Quality Assurance/Quality Control Coordinator.

References

Emergency Plan, Sec. 5.4.6.5

Action Level

The Design and Construction Support Officer shall activate the Quality Assurance/Quality Control Coordinator upon notification by the Recovery Manager. This does not preclude activation of the Quality Assurance/Quality Control Coordinator in the initial phase if it is deemed necessary.

Procedure

Corporate Support functions shall usually be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site. The QA/QC Coordinator reports to the Design and Construction Support Officer.

1. The QA/QC Coordinator shall report to the Headquarters, normal work area, and obtain as clear an understanding as possible of the nature of the emergency and the conditions at the site.

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2. The general responsibilities of the QA/QC Coordinator include:
  - a. Timely staffing of QA/QC functions to support any construction or modification activities using resources primarily from the QA Division, QA section of the E&R Department, and QC personnel from the Construction Division of the E&R Department or from the Maintenance Division of the Electric Production Department.
  - b. Interface with Construction Coordinator, Systems Engineering Coordinator and I&C Coordinator in establishing installation inspection requirements.
  - c. Supervising the performance of installation inspections.
  - d. Monitoring administrative systems and practices used by on-site groups to ensure proper controls and efficient methods exist.
  - e. Provide primary interface with and necessary escorts for NRC representatives.

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*Mylooney*

Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-218 Health Physics and Chemistry Coordinator

Purpose

To delineate the responsibilities and actions of the Health Physics and Chemistry Coordinator.

References

Emergency Plan, Sec. 5.4.6.6

Action Level

1. During the initial phase, the Health Physics and Chemistry Coordinator may be contacted by either the Emergency Director or the Site Emergency Coordinator.
2. During the recovery phase, the Health Physics and Chemistry Coordinator may be contacted by the Design and Construction Support Officer.

Procedure

Corporate Support functions shall usually be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site.

1. The HP&C Coordinator shall report to Emergency Control Center and obtain as clear an understanding as possible of the nature of the emergency and the conditions at the site.
2. The major responsibilities of the HP&C Coordinator are:

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- a. Timely staffing of on-site and off-site radiological sampling and analysis activities. Additional resources necessary shall be identified to the Administrative and Logistics Manager in the initial phase and the Design and Construction Support Officer in the recovery phase.
- b. Providing manpower and supervision assistance to support Emergency Control Center activities.
- c. Providing technical assistance to in-plant and off-site health physics and chemistry activities.
- d. Reviewing recovery plans and procedures for ALARA, health physics, and chemistry considerations and developing necessary plans for shielding, special light, dry runs on mockups, access to control/clothing change areas, special radiation surveys, and special sampling techniques.
- e. Coordinating with the plant staff health physics and chemistry personnel and assisting in resolving problems.
- f. Providing technical support and manpower to the Rad Waste Coordinator.

POOR ORIGINAL

*M. Lowrey*

Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-219 Procedure Support Coordinator

Purpose

To delineate the responsibilities and actions of the Procedure Support Coordinator.

References

Emergency Plan, Sec. 5.4.6.7

Action Level

The Design and Construction Support Coordinator shall activate the Procedure Support Coordinator upon notification by the Recovery Manager. This does not preclude activation of the Procedure Support Coordinator in the initial phase if it is deemed necessary.

Procedure

Corporate Support functions shall be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site. The Procedure Support Coordinator will usually report to the Emergency Control Center.

1. The Procedure Support Coordinator shall report to the Emergency Control Center and obtain as clear an understanding as possible of the emergency and the conditions at the site.
2. The major responsibilities of the Procedure Support Coordinator are:

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- a. Timely staffing of procedure development activities using resources primarily from the plant staff Technical Engineers organization and the Mechanical or Electrical Engineering Division.
- b. Identification of additional resources necessary to the Design and Construction Support Officer.
- c. Revising existing operating and other procedures as necessary to reflect existing emergency conditions.
- d. Preparing recovery procedures based upon approved plans and methods.
- e. Coordinating with other emergency organization and plant staff groups to obtain the necessary technical inputs for the procedures.
- f. Coordinating the overall procedure development, review, and approval process.
- g. Coordinating with Administrative Engineer on the plant staff to obtain required materials and clerical support.

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*My name*

Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-220 Instrument and Control Coordinator

Purpose

To delineate the responsibilities and actions of the Instrument and Control coordinator.

References

Emergency Plan, Sec. 5.4.6.1

Action Level

The Design and Construction Support Coordinator activates the Instrument and Control Coordinator upon notification by the Recovery Manager. This does not preclude activation of the Instrument and Control Coordinator in the initial phase if it is deemed necessary.

Procedure

Corporate Support functions shall be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site. The Procedure Support Coordinator will usually report to the Emergency Control Center.

1. The Instrument and Control Coordinator shall report to the Headquarters, normal working area, and obtain as clear an understanding as possible of the nature of the emergency and the conditions at the site.
2. The major responsibilities of the I&C Coordinator are:

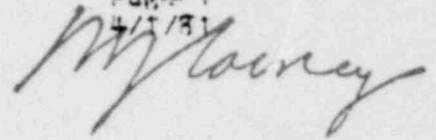
POOR ORIGINAL

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- a. Timely staffing of I&C technical analysis and design activities using resources primarily from the Electrical Engineering Division and Susquehanna Test Branch. The Coordinator identifies additional resources needed, including General Electric or Bechtel resources, to the D&C Support Officer.
- b. Analysis of I&C problems and development of plans or methods for continued capability to monitor and control plant parameters.
- c. Design and coordinate the installation of modifications required for monitoring and controlling plant parameters.
- d. Analysis of failed or questionable instruments and controls to identify corrective actions or to determine alternate measurement techniques.
- e. Coordination with the plant staff I&C group in aspects which affect normal plant instrument and control work, including problem analysis, repair, and modification.

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Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
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EP-C-221 Licensing Support Coordinator

Purpose

To delineate the responsibilities and actions of the Licensing Support Coordinator.

References

Emergency Plan, Sec. 5.4.6.2

Action Level

The Design and Construction Support Coordinator will activate the Licensing Support Coordinator upon notification by the Recovery Manager. This does not preclude activation of the Licensing Support Coordinator during the initial phase.

Procedure

Corporate Support functions shall be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site.

1. The Licensing Support Coordinator shall report to Headquarters, normal working area, and obtain as clear an understanding as possible of the nature of the emergency and the conditions at the site.
2. The major responsibilities of the Licensing Support Coordinator are:

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- a. Timely staffing of licensing-related activities using resources primarily from the Nuclear Section and from the Nuclear and Environmental Section of the Mechanical Engineering Division. The Coordinator identifies additional resources needed, including GE or Bechtel resources, to the NAC Support Officer.
- b. Working with NRC representatives to resolve questions concerning Final Safety Analysis Report and Technical Specification commitments in light of existing plant conditions and to resolve licensing requirements associated with proposed abnormal operating modes or plant modifications.
- c. Serving as a consultant to the Plant Operations Review Committee on licensing matters. Coordinate with General Electric, Bechtel, and Philadelphia Electric Company Legal Department on licensing matters.

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*M. J. Loney*

Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-222 Systems Engineering Coordinator

Purpose

To delineate the responsibilities and actions of the Systems Engineering Coordinator.

References

Emergency Plan, Sec. 5.4.6.3

Action Level

The Design and Construction Support Coordinator shall activate the Systems Engineering Coordinator upon notification by the Recovery Manager. This does not preclude activation of the Systems Engineering Coordinator during the initial phase.

Procedure

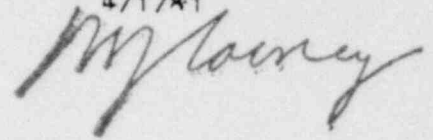
Corporate Support Functions shall be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site.

1. The Systems Engineering Coordinator shall report to Headquarters, normal working area, and obtain as clear an understanding as possible of the nature of the emergency and the conditions at the site.
2. The major responsibilities of the Systems Engineering Coordinator are:

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- a. Timely staffing of technical analysis, design, and construction requirement identification activities using resources primarily from the Mechanical Engineering Division. The Coordinator identifies additional resources needed, including GE or Bechtel resources, to the D&C Support Officer.
- b. Analysis of problems associated with plant piping systems, equipment, and structures and develop corrective actions or special procedures.
- c. Supervising and coordinating the design and design review activities associated with modifications and new equipment or systems needed in the recovery process.
- d. Coordinate with the plant staff Technical Engineer, General Electric, Bechtel, and the Construction Coordinator in developing design and construction requirements.

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Philadelphia Electric Company  
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EP-C-223 Construction Coordinator

Purpose

To delineate the responsibilities and actions of the Construction Coordinator.

References

Emergency Plan, Sec. 5.4.6.4

Action Level

The Design and Construction Support Coordinator shall activate the Construction Coordinator upon notification by the Recovery Manager. This does not preclude activation of the Construction Coordinator during the initial phase.

Procedure

Corporate Support functions shall be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site.

1. The Construction Coordinator shall report to Headquarters, normal working area, and obtain as clear an understanding as possible of the nature of the emergency and the conditions at the site.
2. The major responsibilities of the Construction Coordinator are:

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- a. Timely assembly of construction forces using resources primarily from the Construction Division of the Engineering and Research Department, and the Maintenance Division of the Electric Production Department. The Coordinator identifies additional resources needed, including General Electric, Bechtel, or other construction firms, to the D&C Support Officer.
- b. Providing direct contact with, and supervision of, all construction forces involved in the recovery operation.
- c. Coordinating with the Systems Engineering Coordinator in establishing and implementing construction requirements and with the QA/QC Coordinator in establishing and implementing installation QC requirements.
- d. Supervising the procurement and expediting functions for necessary equipment and materials, utilizing the Administrative and Logistics Manager, the PRAPS Stores Division office, or contractors such as GE or Bechtel.

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*Mylooney*

Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-224 Planning and Scheduling Coordinator

Purpose

To delineate the responsibilities and actions of the Planning and Scheduling Coordinator.

References

Emergency Plan, Sec. 5.4.9

Action Level

The Planning and Scheduling Coordinator is activated by the Recovery Manager; this does not preclude his activation during the initial phase if it is deemed necessary.

Procedure

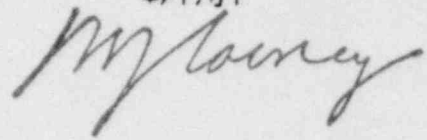
1. The Planning and Scheduling Coordinator shall report to the Emergency Control Center and obtain as clear an understanding as possible of the nature of the emergency and the conditions at the site.
2. The major responsibilities of the Planning and Scheduling Coordinator are:
  - a. Developing schedules for implementing recovery plans and sequencing work and operational activities.
  - b. Coordinating plant operations with the Station Superintendent and Operations Engineer.
  - c. Follow-up with all organizations to ensure that commitments and milestones are kept.

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- d. Participating in Recovery Manager meetings, tabulate and follow-up on assigned action items.

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Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
Emergency Plan Implementing Procedure

EP-C-225 Rad Waste Coordinator

Purpose

To delineate the responsibilities and actions of the Rad Waste Coordinator.

References

Emergency Plan, Sec. 5.4.10.

Action Level

The Recovery Manager activates the Rad Waste Coordinator; this does not preclude his activation in the initial phase if it is deemed necessary.

Procedure

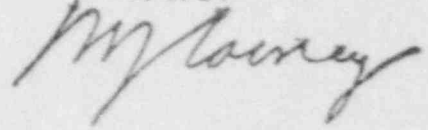
1. Corporate Support functions shall be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site.
2. The Rad Waste Coordinator shall report to Headquarters, normal working area, and obtain as clear an understanding as possible of the nature of the emergency and the conditions at the site.
3. The major responsibilities of the Rad Waste Coordinator are:
  - a. Timely staffing of health physics and technical support activities related to radwaste processing by liaison

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with the Health Physics and Chemistry Coordinator and by using primarily the resources of the Power Plant Services Section. The Coordinator identifies additional resource needs to the Recovery Manager of HP&C Coordinator.

- b. Establishing schedules and priorities for radwaste processing and coordinating with the Operations Engineer to implement the schedules. This includes solid, liquid, and gaseous wastes.
- c. Monitoring radwaste processing loadings and rates to provide early identification of problem areas.
- d. Taking the lead in developing any necessary modifications or making repairs to radwaste equipment. Coordinating this activity with the Systems Engineering Coordinator.
- e. Coordinating with the plant staff health physics group regarding radwaste shipping.

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Philadelphia Electric Company  
Peach Bottom Units 2 and 3  
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EP-C-226 Core Physics Coordinator

Purpose

To delineate the responsibilities and actions of the Core Physics Coordinator.

References

Emergency Plan, Sec. 5.4.7

Action Level

The Recovery Manager activates the Core Physics Coordinator; this does not preclude his activation in the initial phase if it is deemed necessary.

1

Procedure

1. Corporate Support functions shall be coordinated from the Headquarters Emergency Control Center (located at Philadelphia Electric Headquarters, 2301 Market Street, Philadelphia). Depending on the nature and duration of the emergency and conditions at the plant site, specific support functions can be moved to the plant site.
2. The Core Physics Coordinator shall report to Headquarters, normal work area and obtain an clear an understanding as possible of the nature of the emergency and the conditions at the site.
3. The major responsibilities of the Core Physics Coordinator are:

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- a. Timely staffing of core monitoring and analysis activities using resources primarily from the Nuclear Section, Generation Division-Nuclear. Immediate steps, likely during the initial response phase, shall be taken to activate General Electric technical assistance if the safety of core conditions is in question.
- b. Analyzing core parameters to determine conditions in the core on an on-going basis and to achieve and/or maintain safe conditions.
- c. Reviewing proposed plant operations with respect to the effect on core conditions.
- d. Providing direction to General Electric personnel on-site and in their home office support group regarding needed analyses.
- e. Keeping the Recovery Manager appraised of core conditions.

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