6.0 EMERGENCY MEASURES

This section identifies the specific measures to be taken for each class of emergency defined in Section 4.0 of this plan. The logic presented in this section is used as the basis for detailed EPI's which define the emergency actions to be taken for each emergency classification. Emergency measures begin with the following:

1. The recognition and declaration of an emergency classification.

2. Notification of the applicable agencies.

3. Mobilization of the appropriate portions of the emergency organization.

The additional measures are organized into the following categories:

1. Assessment Actions.

2. Corrective Actions.

3. Protective Actions.

4. Aid to Affected Personnel.

These measures are described in the sections below for each emergency classification. Figure 6-1 indicates the individuals and organizations which may be notified as required within each emergency classification.

6.1 Activation of Emergency Organizations

When it becomes apparent that a predetermined value or condition specified as an EAL in EPI-A1 may be met or exceeded, implementation of the provisions of this plan is required.

The Perry Plant EALs for each emergency classification are defined in Section 4.0. The Shift Manager, in implementing this plan, initially classifies the emergency and notifies the local counties, the State of Ohio, the NRC, and the Perry Plant ERO.

The Perry Plant, in conjunction with the State of Ohio, Ashtabula, Geauga, and Lake County EMAs, has established initial notification and follow-up emergency messages to be sent from the plant in the event that an emergency condition is declared.

The initial notification will be sent to the OEMA and local counties within fifteen (15) minutes of the declaration of an emergency condition at the Perry Plant or upon the decision to issue or revise an offsite protective action recommendation (PAR) for the general public, using the Initial Notification form contained in the <EPI-B1>. The Initial Notification Form includes information about the class of emergency, a brief description of the cause of the emergency, whether a release is taking or has taken place, potentially affected population and areas, and protective measures that may be necessary.

The Perry Plant will send a follow-up message to the OEMA and the local counties no later than one hour after the declaration or reclassification of an emergency event to keep the responsible agencies/organizations informed of the emergency condition. Subsequent follow-up messages will be sent on approximately an hourly basis, unless an alternative is agreed upon at the time by all parties concerned.

Follow-up messages will utilize the Follow-up Notification form, also provided in EPI-B1, and will contain the following information if it is known and appropriate:

1. Location of incident, and name and telephone number of caller.

2. Date/Time of incident.

3. Class of emergency.

4. Type of actual or projected abnormal release (airborne or liquid) and estimated duration/impact times.

5. Estimate of quantity of radioactive material released or being released and the points of releases.

6. Meteorological conditions wind speed, direction (from), stability class, precipitation, if any.

7. Actual or projected dose rates and integrated dose at the projected peak and at the Site Boundary 2, 5 and 10 miles, including sector(s) affected.

8. Estimate of any abnormal surface radioactive contamination in plant, onsite or offsite.

9. Perry Plant emergency response actions underway.

10. Recommended public protective actions.

11. Request for onsite support by offsite organizations.

12. Prognosis for event based on plant information.

If notifications are made using other than dedicated telephone lines, a separate verification response will be made by the notified persons/ agency to the notifier to verify authenticity.

6.1.1 Shift Manager/Unit Supervisor/Reactor Operator(s)

If emergency conditions (real or potential) arise, the Reactor Operator(s) and/or the Unit Supervisor will be initially made aware of the situation by alarms, instrument readings, reports, etc. The Reactor Operator(s) shall ensure that the Unit Supervisor and the Shift Manager are immediately informed of the situation.

The Shift Manager, when informed of an emergency situation, is responsible for the assessment of the emergency in the following manner:

1. Determine the immediate actions that must be taken to ensure the safe and proper operation of the plant. The Shift Engineer is available to assist the Shift Manager on matters pertaining to nuclear safety.

2. If the situation requires implementation of the Perry Plant Emergency Plan, the Shift Manager shall classify the emergency and implement the appropriate event EPI which will direct the following:

   a. Ensure that the appropriate alarm, and the Exclusion Area Paging system if required, are sounded.

   b. Announce the location, type and classification of the emergency on the plant public address system.

   c. Ensure the following agencies and organizations are notified of the emergency conditions as shown on Figure 6-1.

      1) Perry Plant ERO via the SAS Operator, or the on-call Emergency Response Unit (ERU) representative.

      2) Lake County, Ashtabula County, Geauga County, and State of Ohio. These notifications are to be made within fifteen (15) minutes of the declaration or reclassification of the emergency condition or upon the decision to issue or revise an offsite protective action recommendation (PAR) for the general public, using the Initial Notification form contained in the <EPI-B1>.

      3) NRC Headquarters Operations Center, White Flint, Maryland. This notification is to be made as soon as possible upon completion of the notifications to the State of Ohio, and the local counties, but must be made within one (1) hour of the declaration or reclassification of an emergency.

3. Due to the numerous responsibilities assigned to the Shift Manager at the onset of an emergency, he shall perform the following actions in the priority listed below:

   a. Ensure the safe operation of the plant.

   b. Ensure that immediate notification requirements are met.

   c. Make appropriate protective action recommendations to offsite authorities.

   d. Dispatch, in the event of radiological emergencies, Health Physics personnel to locations onsite.

e. Perform additional emergency actions as time and conditions permit.

6.1.2 Local Counties

Upon receipt of notification from the Perry Plant, each of the three county Sheriff's Dispatchers will initiate their notification procedures. The Counties will notify their response personnel based on the classification of the emergency. The County Commissioners and the EMA/DES Directors for each county will be notified by the Sheriff's Dispatchers, who begin the notifications. The EOCs will complete these notifications.

The notifications by the counties of their response agencies will be by radio and/or telephone depending on each agency's communications capabilities. Further detail regarding these notifications is contained in each local County Radiological Emergency Response Plan.

The local counties will also notify the general public as required by their respective response plans. The primary means of public notification is through the use of the Prompt Alert Siren System, discussed in Section 7.4. These sirens alert the public to turn to the Emergency Alert System (EAS) for further information. It is expected that this method will notify essentially 100 percent of the population within 10 miles of the Perry Plant within 15 minutes after the decision is made to implement a protective action by the appropriate government officials.

Boaters on Lake Erie will be notified by either the United States Coast Guard (USCG), Ohio Department of Natural Resources (ODNR), Ohio Department of Transportation (ODOT), or National Oceanic and Atmospheric Administration (NOAA) in accordance with the appropriate State and local county response plans.

Information available to the general public, which describes actions to be taken in the event of an emergency at the Perry Plant, are discussed in Section 8.6.

6.1.3 State of Ohio

Upon receipt of notification of an emergency at the Perry Plant, the OEMA will notify the appropriate officials and agencies in the State of Ohio, the Commonwealth of Pennsylvania, and the Province of Ontario, as well as other organizations as described in the State Emergency Plan. The State of Ohio will also notify the USCG of an emergency at the Perry Plant involving USCG territorial jurisdiction.

6.1.4 Federal Agencies

Upon receipt of notification of an emergency at the Perry Plant, the NRC will notify other federal agencies when and if deemed appropriate. Federal agencies may also be contacted by their state counterparts should it become necessary.

If it becomes necessary for the Perry Plant to request federal assistance, the Emergency Coordinator will make this request.

6.2 Assessment Actions

Effective coordination and direction of all elements of the emergency organization requires continuing accident assessment throughout an emergency situation. Each emergency class shall invoke similar assessment methods; however, each classification imposes a different magnitude of assessment effort. In the following sections, assessment actions to be taken for each emergency classification are outlined. During an emergency, conditions will be periodically evaluated to determine if the emergency should be reclassified.

6.2.1 Assessment Actions for Unusual Events

The detection of an Unusual Event arises from either exceeding a specific emergency action level for this case, or as a result of alarms, instrument readings, recognition through experience, or any combination thereof. The continuing assessment action to be performed for this classification of emergency shall be in accordance with the EPIs. This consists of monitoring Control Room and other plant instrumentation and status indication until the situation is resolved. The Shift Engineer assists the Shift Manager by providing independent assessments and technical advice. If a fire is the reason for the declaration of an Unusual Event, the Shift Manager will direct the SAS to request offsite fire fighting support.

6.2.2 Assessment Actions for Alerts

Once an accident has been classified as an Alert, assessment actions shall be performed in accordance with the EPIs for an Alert. These actions include:

1. Increased surveillance of in-plant instrumentation.

2. If possible, the dispatching of shift personnel to the identified problem area for confirmation and visual assessment of the problem.

3. The mobilization of two RMTs to monitor for possible releases.

4. If a radiological accident is occurring, surveillance of the in-plant instrumentation necessary to obtain meteorological and radiological data required for calculation or estimating projected doses. This dose assessment activity continues until termination of the emergency in order that the updating of initial assessments may be provided to all concerned offsite agencies by the acting Emergency Coordinator. EPIs are provided to allow a rapid, consistent projection of doses.

6.2.3 Assessment Actions for Site Area Emergencies

The assessment actions for the Site Area Emergency classification are similar to the actions for an Alert; however, due to the increased magnitude of the possible release of radioactive material, a significantly larger assessment activity shall occur.

Specifically:

1. An increased amount of plant instrumentation shall be monitored. In particular, indications of core status shall be monitored.

2. Radiological monitoring efforts shall be greatly increased. An additional RMT shall be mobilized to obtain air samples and perform beta-gamma field measurements. The collection of environmental media for assessment of material, transport and deposition shall be performed, as necessary, by qualified FirstEnergy personnel.

3. Dose assessment activities shall be conducted more frequently, with an increased emphasis on dose projection for use as a factor in determining the necessity for protective actions. Radiological and meteorological instrumentation readings shall be used to project the dose rate at predetermined distances from the plant, and to determine the integrated dose received. In reporting the dose projections to offsite agencies, the dose rate, dose, and basis for the time used for the dose estimate should be provided. Any confirmation of dose rates by RMTs shall be reflected in reporting and/or revising dose estimate information provided to offsite agencies.

   Dose projections shall be considered by plant personnel in relation to the EPA PAGs. Reporting of assessments to offsite authorities shall include the relationship of dose to these guidelines. EPIs are provided for recording all pertinent information.

6.2.4 Assessment Actions for General Emergencies

Assessment actions for the General Emergency classification are to be the same as for the Site Area Emergency with some possible shift of emphasis to greater offsite monitoring efforts and dose projection efforts extending to distances much further from the plant. Additionally, since the projected doses are likely to be much closer to the EPA PAGs, greater emphasis is placed on the assessment of release duration.

6.2.5 State and County Accident Assessment

The OEMA may send field monitoring teams, equipped with all necessary field monitoring equipment, to the local area upon declaration of an Alert. Upon arrival, teams will report to a staging area designated by OEMA. Monitoring teams will then be deployed to designated field monitor locations. Additionally, Lake County Health District deploys two field monitoring teams; these teams are utilized until the OEMA teams arrive and also supplement the State teams. The Lake County teams are equipped to perform plume monitoring, including air sampling.

They will report these readings, by radio, to the State EOC in Columbus, the EOF, and the local County EOC. The readings from the Lake County teams are reported to the Lake County EOC, which relays this data to the State EOC and EOF.

Based on OEMA and Lake County monitoring as well as data from the Perry Plant, the State EOC will assess the hazard consequences of the radiological releases from the Perry Plant. This assessment will guide the decision making group at the Ohio EOC on the protective actions to be recommended to the local Counties.

6.3 Onsite Personnel Accountability <S00554>

In the event of a Site Area or General Emergency, or in the judgment of the acting Emergency Coordinator based on emergency conditions, site personnel will be instructed to begin personnel accountability. This notification will be performed essentially immediately using the Plant Public Address (PA) System and Exclusion Area Paging System as described in Section 7.2.1.2. To accomplish personnel accountability within 30 minutes, all personnel without an emergency response function will be directed to exit the site areas via normal exit routes and exit procedures. <S00560>

For the Protected Area, a list will be provided by the Fire/Security Computer of the personnel remaining within the area. This list will be compared to lists of personnel within emergency facilities to ascertain the names of missing individuals. If personnel are missing, security will begin searching at the individuals last known location.

Outside the Protected Area, personnel will be directed to exit the site by means of the Plant PA System and Exclusion Area Paging System. Security will then perform a sweep of controlled areas to locate any individuals who have not yet evacuated.

At the Training and Education Center (TEC), the EOF Manager using the EOF staff will establish access control and then search the building, removing personnel who are not assembling in support of the TSC, OSC or EOF staffing.

Personnel accountability will be performed concurrently with the evacuation of personnel from the Perry Plant site. Monitoring of plant personnel exiting the Protected Area will be accomplished at the Primary Access Control Point, and appropriate decontamination measures implemented as needed per Section 6.5.

If a significant release of radioactive materials occurs onsite, personnel evacuating the Perry Plant site may be directed to monitoring and decontamination centers located outside the 10-mile EPZ. These centers are activated and staffed in accordance with their respective county response plans. Figure 6-2 illustrates the location of these centers in relation to the Perry Plant. Specific directions to the centers are contained in EPI-B5, posted in specific site locations, and provided as part of Plant Access Training (PAT).

6.4 Offsite Protective Actions

A wide range of protective actions for the public have been developed including evacuation, sheltering, administering of potassium iodide (KI) and placing the EPZ on heightened awareness. Possible protective action recommendations made by the Perry Plant may range from no action necessary, to the evacuation of the entire 10-mile EPZ. The appropriate protective action recommendation (PAR) is determined using a decision flowchart per <EPI-B8>. The flowchart provides protective actions based on plant status, EPA protective action guidelines (PAGs), and short duration, controlled releases as described below.

6.4.1 Protective Action Based on Plant Status <S00541>

In addition to the PAGs established by the EPA, the following plant status PAGs have been established. These PAGs are based on the potential for major radioactive material releases from the Perry Plant rather than the projected dose approach used by the EPA's PAGs per the guidance set forth in Supplement 3 to NUREG-0654/FEMA-REP. Implicit in these recommendations is that assessment activities will continue to determine what additional protective actions should be recommended for the entire EPZ.

The minimum plant status PAGs, as applicable, for Subareas 1 through 3 and Lake Erie (as identified on Figure 2-1), are as follows:

WIND DIRECTION - "FROM" (in degrees)	AFFECTED SUBAREAS
102 to 213	EVACUATE 1 & Lake
214 to 281	EVACUATE 1, 2 & Lake
282 to 11	EVACUATE 1, 2 & 3
12 to 33	EVACUATE 1 & 3
34 to 101	EVACUATE 1, 3 & Lake

Administering KI to the general public and placing the remainder of the EPZ on heightened awareness will also be recommended. These protective action recommendations assume that conditions listed in Table 4-1 for a General Emergency have been met or exceeded.

The following table summarizes these additional protective actions above the minimum plant status PAGs, which may be recommended based on a projected or actual dose of ≥ 1 rem TEDE or ≥ 5 rem CDEct from 5 to 10 miles:

WIND DIRECTION - "FROM" (in degrees)	AFFECTED SUBAREAS
102 to 213	EVACUATE 1 & Lake
214 to 258	EVACUATE 1, 2, 4 & Lake
259 to 281	EVACUATE 1, 2, 4, 5 & Lake
282 to 304	EVACUATE 1, 2, 3, 4 & 5
304 to 326	EVACUATE 1, 2, 3, 4, 5 & 6
327 to 348	EVACUATE 1, 2, 3, 5 & 6
349 to 11	EVACUATE 1, 2, 3, 5, 6 & 7
12 to 33	EVACUATE 1, 3, 6 & 7
34 to 56	EVACUATE 1, 3, 6, 7 & Lake
57 to 101	EVACUATE 1, 3, 7 & Lake

Administering KI to the general public and placing the remainder of the EPZ on heightened awareness will also be recommended.

Recommended protective actions may be extended or modified depending on population distribution, meteorological conditions, and condition of roads and major traffic ways, following discussions with County and State officials.

6.4.2 Protective Actions based on a Short Duration, Controlled Release

A protective action of sheltering will be recommended during a General Emergency for a short duration, controlled release of radioactive material from containment.

The following conditions will result in the recommendation to shelter a 2 mile radius and 5 miles downwind, administer KI to the general public, place the general public on heightened awaredness of the remainder of the EPZ and evacuate Lake Erie:

1. A controlled release from containment will last less than one or equal to one hour, AND
2. Evacuation has not been initiated; AND
3. The time until the release begins is less than ½ the fastest evacuation time according to the latest Evacuation Time Estimated study; AND
4. Dose projections at the site boundary are greater than or equal to 1 Rem TEDE or greater than or equal to 5 Rem child thyroid.

The following table summarizes these protective actions in terms of subareas:

WIND DIRECTION - "FROM" (in degrees)	AFFECTED SUBAREAS
102 to 213	SHELTER 1 & EVACUATE Lake
214 to 281	SHELTER 1, 2 & EVACUATE Lake
282 to 11	SHELTER 1, 2 & 3
12 to 33	SHELTER 1 & 3
34 to 101	SHELTER 1, 3 & EVACUATE Lake

6.4.3 Accident Assessment and Decision-Making

The responsibility for actions to protect persons in offsite areas rests with the State of Ohio and the local government officials. The chain of events which precede protective actions for the general public are described here and illustrated in Figure 6-3. Information is gathered by the EOF Plant Operations Advisor and the EOF Offsite Radiation Advisor to begin formulating PARs. The Plant uses the Integrated Computer System (ICS), described in Section 7.5.1 to obtain information concerning the status of plant systems and to estimate the duration of any release of radioactive material. The Plant Operations Advisor can also contact the TSC to obtain further assistance and assessment information. This estimate of release duration is then provided to the Offsite Radiation Advisor for use in dose projection calculations.

The Offsite Radiation Advisor will be simultaneously using the Computer-Aided Dose Assessment Program (CADAP) software program, described in Section 7.5.10, to obtain information concerning the present meteorological conditions, release rates from the effluent monitors, and other applicable data source to perform offsite dose projections. In addition, the Offsite Radiation Advisor will utilize the field information obtained by the RMTs to verify an estimated offsite dose or dose rate projections which may have been made.

In the event that CADAP is unavailable, the Offsite Radiation Advisor can obtain meteorological and release information directly from the ICS or locally at the on-site meteorological tower. The Offsite Radiation Advisor will also have a manual method for performing dose projections. This manual method, described in Section 7.5.10.2, provides several levels of assumptions for available data and allows projections to be performed with minimal information if necessary.

Evacuation time estimates (ETE) for areas near the Perry Plant have been generated and are contained in PSI-0013, "Control and Revision of the Evacuation Time Estimates for Areas Near the Perry Plant." The ETE was developed in accordance with Appendix 4 of NUREG-0654 and provides evacuation estimates for various areas, times, and weather conditions. These estimates represent the times required for completing the following actions:

1. public notification,

2. preparation and mobilization, and

3. actual movement out of the 10-mile EPZ (i.e., on-road travel time including delays associated with vehicle queuing).

Using the offsite dose projection, the evacuation time estimates, representative shielding factors, known or estimated isotopic compositions and projected exposure periods, the Offsite Radiation Advisor will determine an estimated dose for both Total Effective Dose Equivalent (TEDE) and Committed Dose Equivalent (CDE) - child thyroid exposures. These doses will then be compared to the EPA-400 protective action guidelines (PAGs) to arrive at a PAR. All recommendations will then be reviewed and approved by the Emergency

Coordinator. The recommendation will be transmitted to the EMAs in each of the local Counties and State via the dedicated telephone system.

In the event that immediate offsite dose projections are required, they can be performed by the on-shift chemistry technician(s). During this initial phase, the Shift Manager, in his capacity of Emergency Coordinator, will evaluate the available information and recommend appropriate protective actions to the offsite agencies in accordance with Section 6.4.1.

In parallel with the activities at the Perry Plant, the State of Ohio will also develop PARs. The OEMA and Department of Health will establish a Radiological Assessment Team at the State EOC to develop a recommendation. The State will deploy field monitoring teams to the vicinity of the Perry Plant to collect field monitoring data and will use a computerized link to the Perry Plant to obtain site meteorological and release data. Should this data link be unavailable, the State can also obtain meteorological and release information directly from the Perry Plant via the dedicated communications line.

The State Radiological Assessment Team will develop a protective action recommendation using meteorological and release information similar to that used by the Offsite Radiation Advisor. The State PAR will be reviewed and approved by the Office of the Governor per the State's response plan prior to being transmitted to the three counties for consideration.

In accordance with the emergency plans for each of the three counties, their respective county EROs will receive the recommendations from the Perry Plant and the State of Ohio. The County EOC Executive Groups will coordinate with one another via a telephone conference network and make a final decision on protective actions to be implemented for the general public. Lake County will develop the appropriate Emergency Alert System (EAS) message and will coordinate the transmission and broadcasting of the appropriate message over EAS.

While the EAS message is being sent, Lake County will activate the Prompt Alerting System for the entire EPZ. This activation of the Prompt Alerting System is a signal to the public that an important message is being broadcast by EAS. By procedure, the County EOCs will implement the Radiological Emergency Response Plans and applicable SOPs to carry out the agreed upon protective actions.

In the event of a rapidly escalating emergency, the county plans and procedures direct the dispatcher to attempt to contact a higher authority to make the protective action decision. If a higher authority cannot be contacted, the dispatcher has the authority and responsibility to activate the Prompt Alerting System and to place a message on EAS implementing a protective action recommendation. <S00539>

Detailed discussions of the specific actions to be taken by the State and local county agencies are contained in the respective county Radiological Emergency Response Plans and the corresponding SOPs.

6.4.4 Ingestion Pathway Control Measures

Provisions are made for implementing protective measures against excessive radiation exposure within the 10-mile EPZ due to direct radiation exposure and inhalation of radioactive material from the plume, in addition to exposure via the food ingestion pathway. The ingestion pathway control measures extend to a 50-mile radius. Table 6-2 provides guidance for the control of water and agricultural products within the Ingestion EPZ.

State and local agencies will implement ingestion exposure control measures in accordance with these tables, based on field monitoring data and/or projected surface contamination concentrations. Interface with the Pennsylvania Emergency Management Agency (PEMA) for ingestion pathway exposure control measures is provided by the State of Ohio.

6.5 Contamination Control Measures <S00560>

This section describes provisions for preventing or minimizing direct exposure to radiation or subsequent ingestion exposure to radioactive materials deposited on the ground or other surfaces.

6.5.1 Site Areas

Access to the site area is controlled. In-plant contamination control is exercised in accordance with PAPs and Health Physics Instructions (HPIs). The methods include isolation of contaminated areas to the extent feasible. Necessary occupancy of contaminated areas requires the use of appropriate protective equipment. If contamination is suspected outside the Protected Area, a personnel monitoring control point will be established at the EOF entrance.

Contamination control measures for equipment, tools, and other materials will be implemented in accordance with the Radiation Protection Program procedures and instructions. These measures may include decontamination, marking for controlled use, or disposal as radioactive waste.

6.5.2 Offsite Areas

Measures available to minimize radiation exposure due to offsite surface contamination include evacuation, sheltering, or relocation of the affected population, and control of drinking water and agricultural products. Federal government guidance for implementation of these measures is contained in Tables 6-1 and 6-2. The Emergency Coordinator will provide projected and/or measured offsite surface contamination concentrations to Federal, State and local agencies based on the Perry Plant emergency environmental monitoring activities. These sampling activities, as well as the transfer of analyses results, will be coordinated with Federal and State monitoring efforts.

6.5.3 Decontamination <S00564>

Individuals are considered contaminated when any area of the body surface is contaminated to levels of 1000 dpm/100 cm^2 beta-gamma and/or 100 dpm/100 cm^2 alpha or greater. Personnel found to be contaminated will undergo decontamination by Health Physics personnel or other qualified personnel, in accordance with approved plant instructions. It is preferred that personnel decontamination be performed by trained HP personnel, however, other Perry Plant personnel are instructed in both decontamination and first aid procedures.

Measures will be taken to prevent the spread of contamination. Such measures may include isolating the affected areas, placing contaminated personnel in "clean" clothing before moving them, and decontamination of affected personnel, their clothing and equipment prior to release. Contaminated equipment and items generated as a result of the accident or decontamination process will be disposed of as radioactive waste.

Provisions have been made to ensure contaminated and injured personnel receive specialized medical treatment if necessary. Refer to Section 5.3.3 for contamination control and decontamination efforts associated with a radiologically contaminated injury. If contaminated injured personnel must be transported, measures shall be taken to prevent the spread of contamination. Such measures may include placing the affected person in "clean" protective clothing, wrapping in blankets or plastic sheeting, and alerting the organizations which provide transportation and treatment.

6.6 Emergency Personnel Dose Control

Emergency measures may warrant the acceptance of above-normal radiation exposures. Saving a life, measures to circumvent substantial exposures to population groups, or even preservation of a valuable installation, may all be sufficient cause for above normal exposures.

The Perry Plant's Radiation Protection Program provides procedural guidance for increased administrative dose control level authorization during emergency circumstances, and provides specific emergency exposure guides for the following situations:

1. Emergency conditions where immediate action is required to prevent destruction of equipment.

2. Emergency conditions where immediate action is required for life-saving actions.

While specific exposure limits can be difficult to specify under emergency circumstances, exposures should be commensurate with the significance of the objective and held to the lowest practicable level that the emergency permits.

The TSC Operations Manager, or the Operations Shift Manager, acting as Emergency Coordinator, if the TSC is not activated, is responsible for authorizing plant personnel to receive doses in excess of 10CFR20 limits

under emergency situations. The procedural guidance provides for permitting onsite volunteers to receive radiation exposures in the course of carrying out lifesaving and other emergency activities.

Dose rates during emergency situations will be evaluated utilizing normally available survey equipment. Special portable survey instruments with an extended range to 1000 rem/hr are also available for conditions involving abnormally high radiation fields.

Respiratory equipment is available for issuance by Radiation Protection (RP) Section during emergency conditions. This equipment includes full-faced particulate and iodine respirators, and self-contained breathing apparatus.

Emergency dosimetry, stored in emergency response facilities, will be issued, accounted for, and maintained in accordance with EPIs. Each emergency worker will be issued a permanent recording dosimeter and a direct reading dosimeter prior to either: (1) entering a RRA, (2) leaving or if located outside of the Control Room, TSC or EOF upon the declaration of a Site Area Emergency, or (3) as conditions warrant. The emergency personnel dosimetry program includes the capability to determine individual exposure on a 24-hour per day basis. <S00566>

Conduct of normal operations and maintenance inside the RRA requires utilization of a radiological work permit (RWP). During emergency conditions, provisions have been made to direct radiological surveillance and perform emergency work without a RWP. Radiological conditions and other applicable information will be documented as soon as possible after the emergency.

6.7 Thyroid Blocking

6.7.1 Members of the General Public

Upon declaration of a General Emergency, the Emergency Coordinator will recommend to the State and Counties that KI be issued to the General Public in accordance with the State Plan.

6.7.2 Perry Emergency Workers

A KI dose of 130 mg per day (one tablet) will be recommended for Perry Plant ERO personnel, who have no known thyroid problems or iodine allergies, if the potential exists for a radioiodine exposure to the thyroid at the following levels:

1. Radiation Monitoring Teams (RMTs) - 10 Rem Committed Dose Equivalent to Adult Thyroid

2. ERO personnel onsite - Derived Airborne Concentration (DAC) of 4000 (Corresponds to 10 Rem CDE Adult Thyroid)

Approval for the issuance of KI and its distribution shall be in accordance with EPI-B8.

A sufficient quantity of KI to allow administration to onsite emergency workers for a period of ten days will be available.

TABLE 6-1

GUIDELINE FOR PROTECTIVE ACTIONS AGAINST INGESTION OF CONTAMINATION

1. Response Levels for Emergency PAG:

Isotope	DIL (1) (Bq/kg) (2)
Sr-90	160
I-131	170
Cs-134 + 137	1,200
Pu-238 + Pu-239 + Am-241	2
Ru-103 + 106	(Ru-103)/6800 + (Ru-106)/450 <1 (3)
Sr-89	1400
Y-91	1200
Zr-95	4000
Nb-95	12000
Te-132	4400
I-129	56
I-133	7000
Ba-140	6900
Ce-141	7200
Ce-144	500
Np-237	4
Np-239	28000
Pu-241	120
Cm-242	19
Cm-244	2

(1) DIL (Derived Intervention Level) is the concentration in food, in the absence of intervention, which could lead to an individual receiving a radiation dose equal to the PAG (0.5 Rem CEDE or 5 Rem CDE).

(2) 1 bequerel = 27 pCi

(3) Divide the concentration of Ru-103 by 6800, then divide the concentration of Ru-106 by 450. If the sum is less than 1, the food is edible; if the sum is equal to or greater than 1, then the food is inedible.

TABLE 6-2

RECOMMENDED PROTECTIVE ACTIONS

Approximate Initiation Time	Exposure of Pathway	Action to be Initiated
0-4 hours	inhalation of gases or particulates	evacuation, shelter, access control, respiratory protection, prophylaxis (thyroid protection)
	direct radiation	evacuation, shelter, access control
4-48 hours	milk	take cows off pasture, prevent cows from drinking surface water, quarantine contaminated milk
	harvested fruits and vegetables	wash all produce, or impound produce
	drinking water	cut off contaminated supplies, substitute from other sources
	unharvested produce	delay harvest until approved
2-14 days	harvested produce	substitute uncontaminated produce
	milk	discard or divert to stored products, as cheese
	drinking water	filter, demineralize

FIGURE 6-1 - EMERGENCY NOTIFICATION

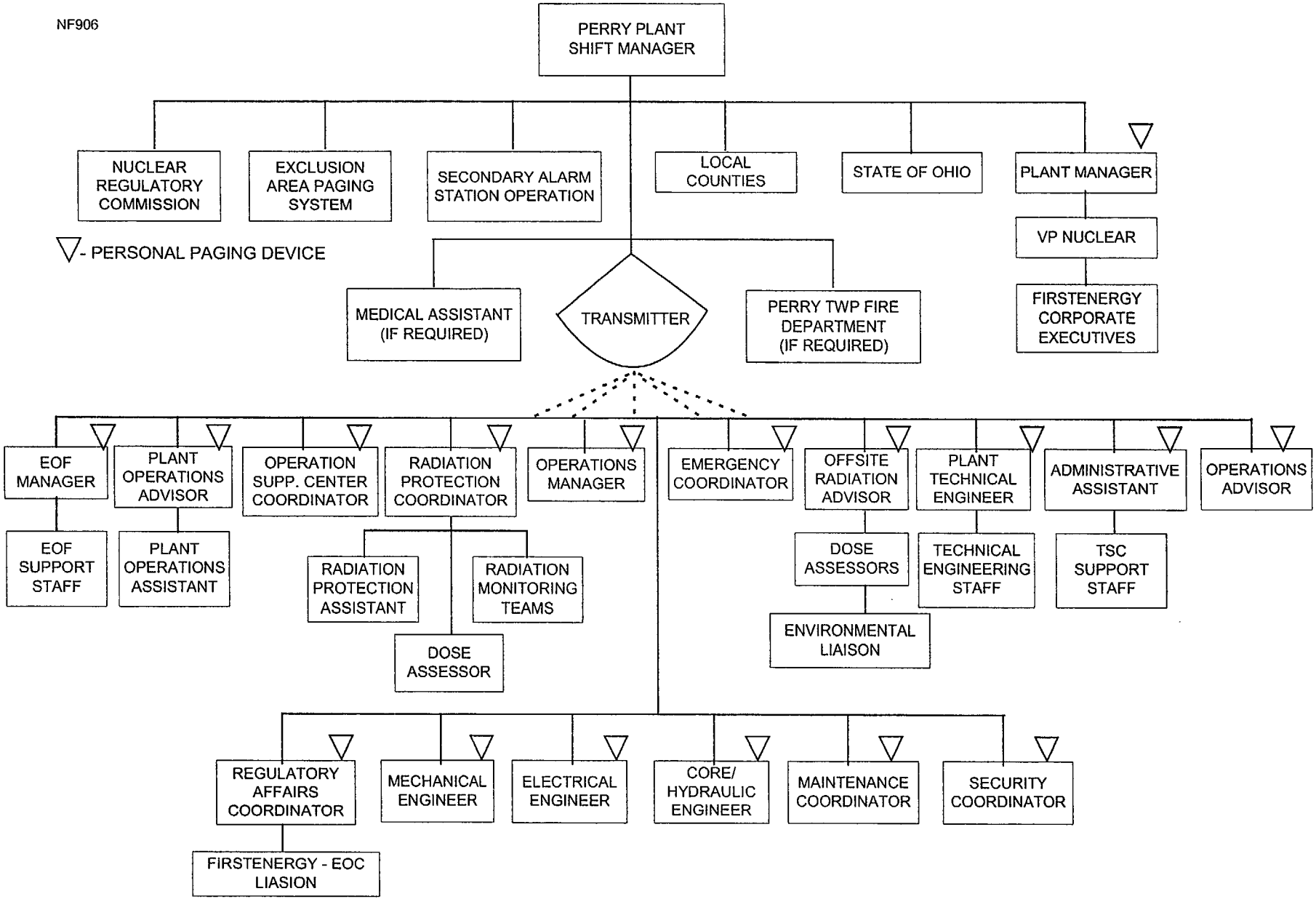


FIGURE 6-2 - OFFSITE MONITORING/DECONTAMINATION CENTER LOCATIONS

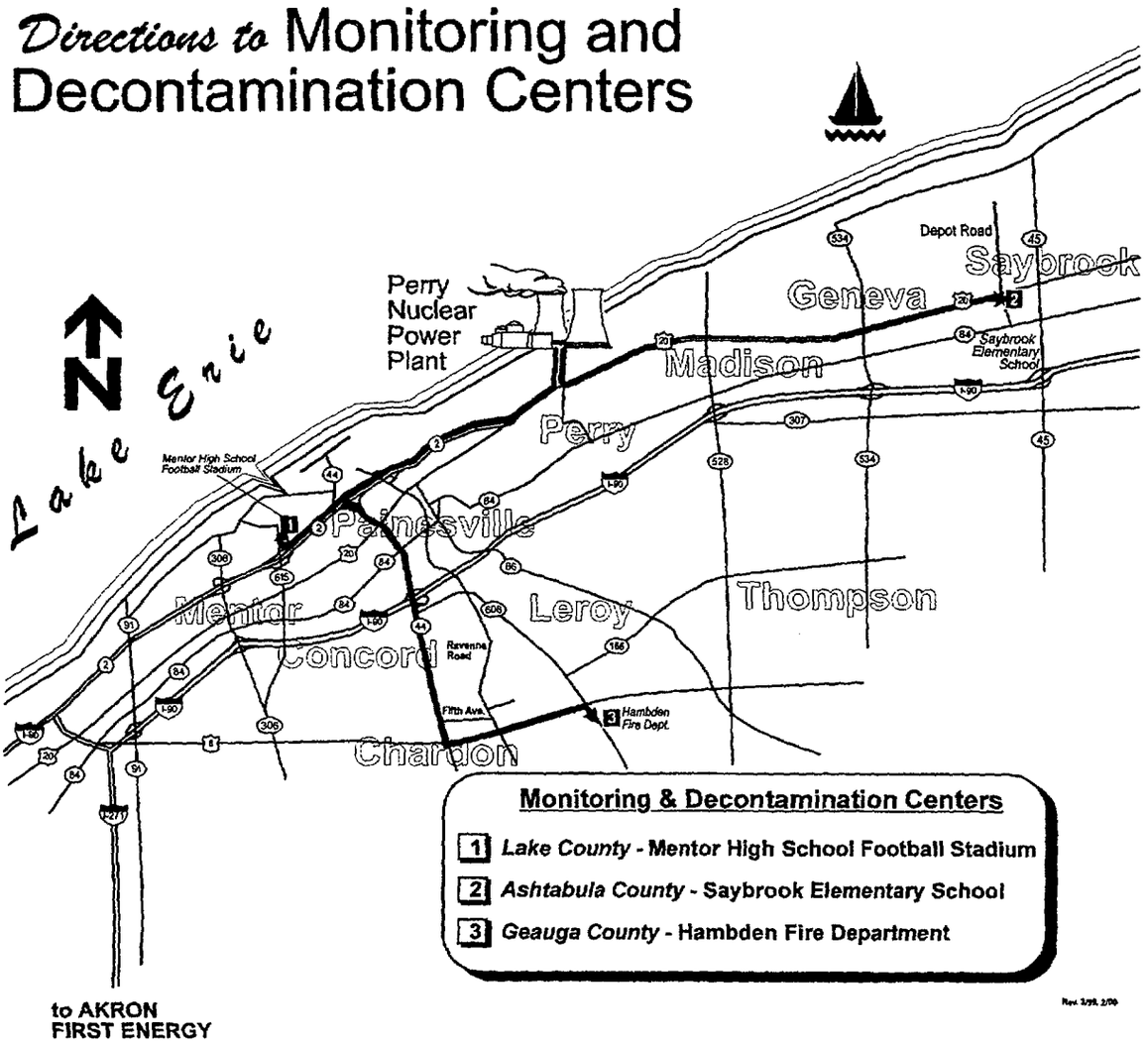


FIGURE 6-3 - PROTECTIVE ACTION FLOW CHART

PROTECTIVE ACTION FLOW CHART

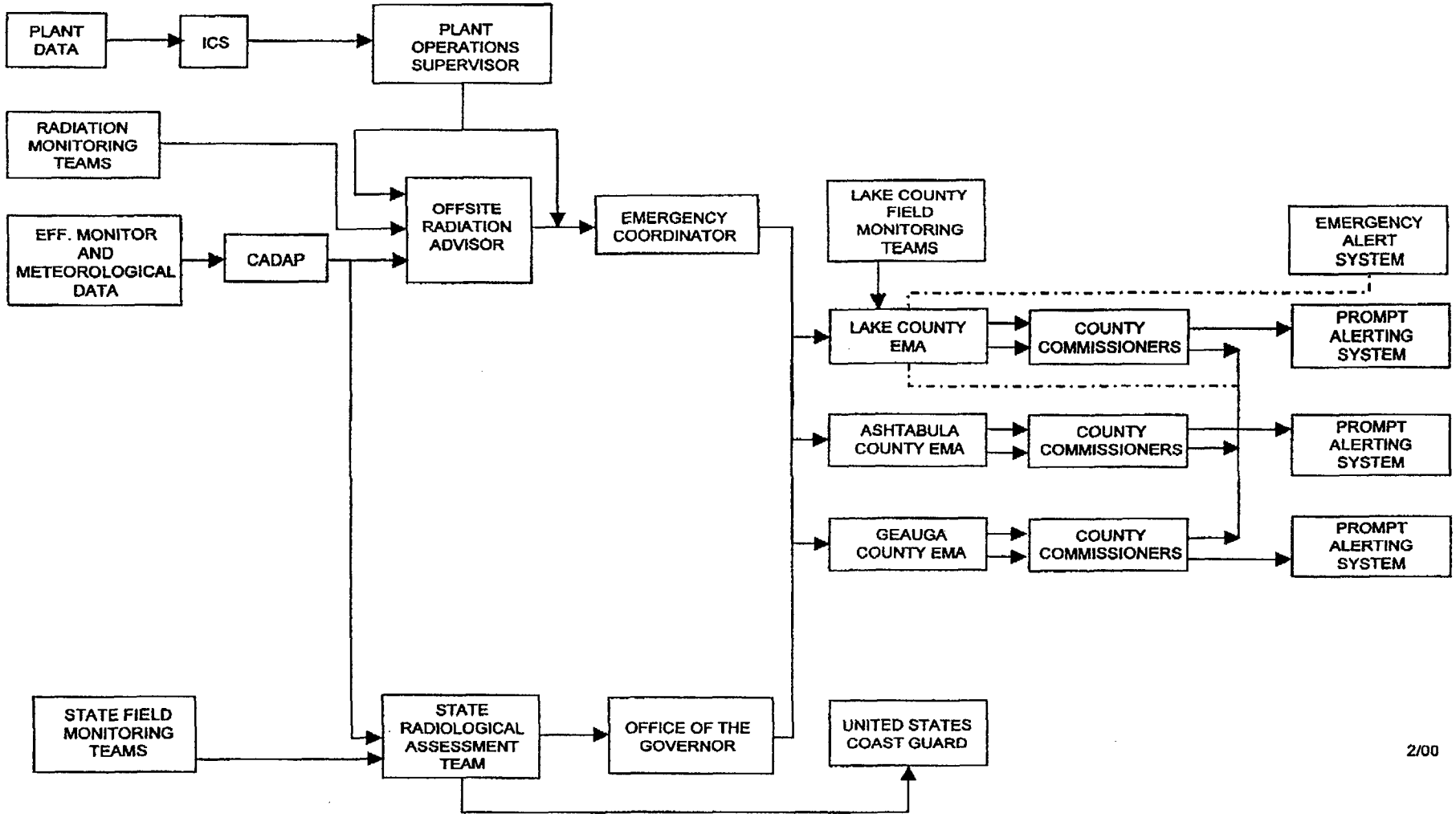


FIGURE 6-4 - CONTAINMENT RADIATION PLOT

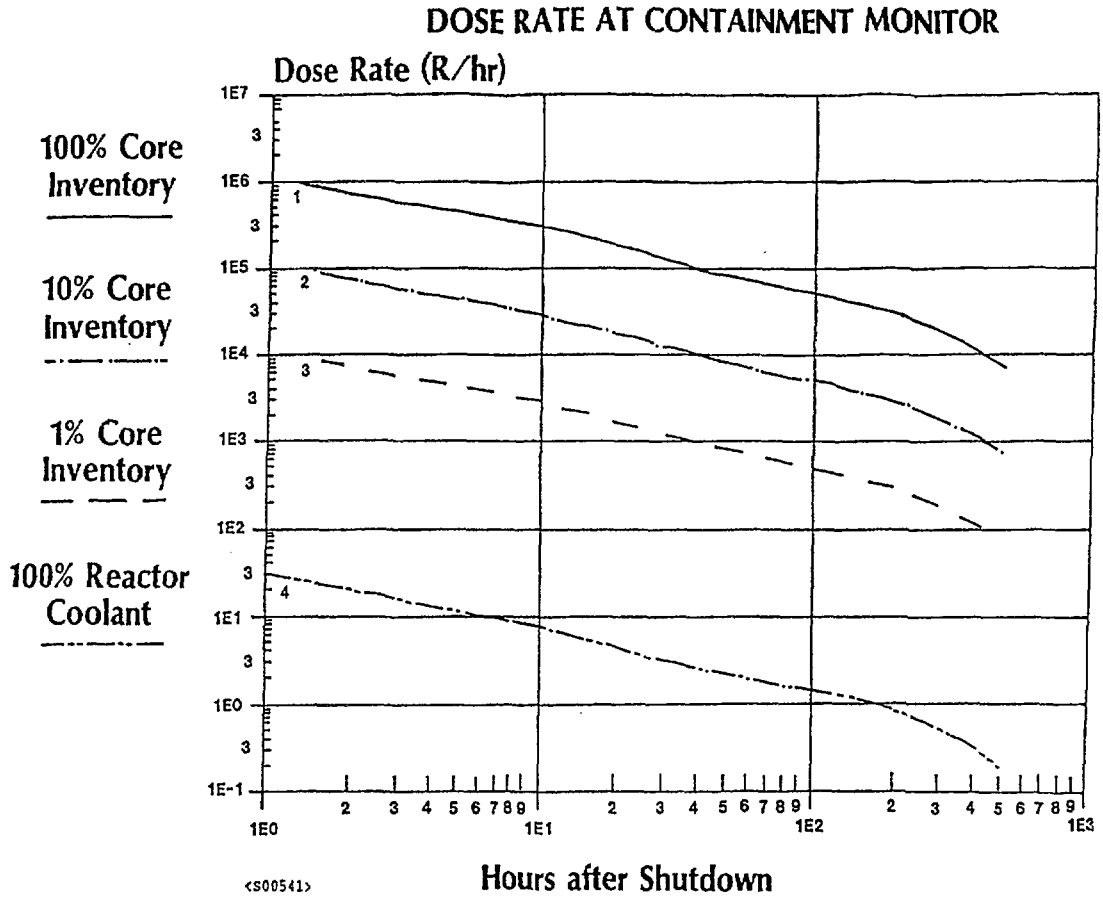


FIGURE 6-4 - CONTAINMENT RADIATION PLOT (Cont.)

<S00541>
Figure 6-4 provides theoretical curves of gross gamma dose rate versus time for a range of potential source terms. To determine the meaning of the measured dose rates:

1. Determine the Time after reactor shutdown.

2. Locate the radiation monitor Dose Rate Reading on the graph for the time after shutdown.

3. Determine the percent fuel inventory released to the containment air corresponding to the measured dose rate by taking the ratio of the measured dose rate to the dose rate given on one of the curves for a known percent inventory, i.e., interpolate between curves.

4. Relate the percent fuel inventory released, as calculated in the previous step, to the approximate source and damage estimate.

Curve No. Estimate	% Fuel (4) Inventory (1,2,3) Released	Approximate Source and Damage
1	100	100% Fuel Damage, potential core melt
2	10	Total clad failures, core partially uncovered
3	1	Approximately 10% clad failure
4	-	100% coolant release

NOTE:

(1) The curves represent direct readings from the Containment Post Accident Radiation Monitors (D19-K100 & K200), at elevation 689 feet, inside containment.

(2) The curves account for the finite containment volume seen by the detector but do not account for any physical or shielding characteristics or calibration uncertainties of the radiation monitor.

(3) The curves assume that only airborne noble gases and iodines are significant. Sprays (if used) would make the iodine and any particulate contribution insignificant. However, particulate plateout on surfaces and direct shine doses from components may make the readings unreliable.

(4) 100% Fuel Inventory = 100% Noble Gas, 25% Iodine

The calculation of monitor response did not include any particulates since the noble gases and iodine are the most significant contributors to dose rate in the containment.

6.3 Evacuation Times for Response Areas

Predicted 100 percent evacuation times to evacuate different response areas for each scenario are summarized in Table 6-2. The results show that the evacuation of Sub-Areas 6 and 7 generally controls the evacuation times for the entire EPZ, as expected, since Sub-Area 7 contains the largest population.

For the Response Areas within 5 miles of PNPP, the primary factor that controls predicted evacuation times is competing local traffic demands on the capacity of US 20. Evacuation times for the 2-mile response area (Sub-Area 1) are very short. Evacuation of Sub-Area 2 controls evacuation times for the 5-mile response area (Sub-Areas 1, 2, and 3). The Winter Day scenarios generally have the longest evacuation times for Response Areas within 5 miles. For these Sub-Areas, population and vehicle demand are highest for the Winter Day scenarios, as shown in Table 3-5.

For the Winter Night scenarios, the evacuation times for the EPZ east Response Area (Sub-Areas 1, 2, 4, 5) are approximately the same as evacuation times for the EPZ west Response Area (Sub-Areas 1, 3, 6, 7). This reflects the time required to evacuate Geneva City (with competing demand from the population evacuating to the east along US 20 and OH 84 from Madison and Perry Townships).

Table 6-2: Perry EPZ Evacuation Times by Scenario for Each Response Area

Response Area	Winter Day		Winter Night		Summer Weekend	
	Fair weather	Adverse weather	Fair weather	Adverse weather	Fair weather	Adverse weather
Sub-Area 1 (0-2 miles)	2 hr 20 min	2 hr 20 min	2 hr 20 min	2 hr 20 min	2 hr 20 min	2 hr 20 min
Sub-Areas 1,2 (0-5 miles E)	3 hr 22 min	4 hr 2 min	3 hr 17 min	3 hr 43 min	3 hr 17 min	3 hr 33 min
Sub-Areas 1,3 (0-5 miles W)	3 hrs	3 hr 30 min	3 hrs	3 hr 20 min	3 hr 10 min	3 hr 20 min
Sub-Areas 1,2,3 (0-5 miles)	3 hr 22 min	4 hr 2 min	3 hr 17 min	3 hr 43 min	3 hr 17 min	3 hr 33 min
Sub-Areas 1,2,4,5 (EPZ east)	3 hr 50 min	5 hr 30 min	3 hr 31 min	4 hr 54 min	3 hr 40 min	4 hr 40 min
Sub-Areas 1,3,6,7 (EPZ west)	4 hr 13 min	6 hr 3 min	3 hr 30 min	4 hr 50 min	4 hr 56 min	6 hr 4 min
Full EPZ	4 hr 13 min	6 hr 3 min	3 hr 31 min	4 hr 54 min	4 hr 56 min	6 hr 4 min

PERRY OPERATIONS MANUAL

Emergency Plan Implementing Instruction

TITLE: PROTECTIVE ACTIONS AND GUIDES

REVISION: 11 EFFECTIVE DATE: 1-20-05

PREPARED: L. VanDerHorst 12-8-04
/ Date

PROTECTIVE ACTIONS AND GUIDES

Table of Contents

SCOPE OF REVISION:

Periodic Review - Required

Rev. 11 - 1. Added a paragraph to the Purpose to discuss the different types of protective actions recommended for the general public.
2. The reference to PAP-0114 was deleted under the definition of Derived Air Concentration (DAC) to avoid potential confusion. DAC is defined by the regulatory requirement, not PAP-0114. (CA 04-05922-01)
3. Added a definition of the Sheltering PAR to explain the basis behind it.
4. Added the definition of the recommendation of administering KI to the general public. This information previously was located incorrectly in Section 5.2. The note located in Section 5.2 was deleted because the information is now in the definitions section.
5. Added a definition of Heightened Awareness which is a new recommended action with the implementation of the sheltering guidelines.
6. Added the definition of a release.

SCOPE OF REVISION (Cont.):

Rev. 11 - 7. Divided the first bullet in Section 5.1.1.1 into two bullets for clarity. The first bullet was revised to clarify how to proceed using the PAR flowchart if dose projections are not available. The second bullet was clarified to ensure an initial notification form is used if the PAR is revised. These changes were also carried through to Section 5.1.3.1.

8. The note in Section 5.3.2 was deleted because it contained incorrect information. The correct information, regarding the control and movement of the radiation monitoring teams, is located in EPI-B3. (CA 04-05922-01)

9. Section 5.2.1.1 was revised to clarify the dose for issuing potassium iodide.

10. The conditions under which sheltering should be recommended for the general public were added to the PAR flowchart in Attachment 1 and associated steps in the procedure. This change is being made in response to industry experience and the issuance of Regulatory Issue Summary (RIS) 2004-13 issued August 2, 2004. (CA 04-02593-01, 04-02593-03)

11. Added commitment B00800 to the procedure and underlined it to denote that the entire procedure meets the commitment. (CA 04-05417-02)

12. Changed Emergency Planning Unit (EPU) to Emergency Response Unit (ERU) due to organizational change.

PROTECTIVE ACTIONS AND GUIDES

1.0 PURPOSE

This instruction provides guidelines for the formulation of protective actions for the plume exposure pathway to be recommended to State of Ohio and local county Emergency Management Agencies in the event of an emergency involving the possibility of an abnormal release of radioactive material(s) at the Perry Plant.

This procedure outlines several different protective actions that can be recommended for the general public including sheltering, evacuation, administering potassium iodide (KI), and heightened awareness.

Development of ingestion pathway protective action recommendations will be the responsibility of the State of Ohio and Federal response agencies. The Perry Plant will assist in the collection and analysis of environmental samples using <EPI-B10>.

2.0 REFERENCES

2.1 Source References:

1. 10CFR20, Standards for Protection Against Radiation
2. EPA-400-R-92, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents (May 1992)
3. U.S. Nuclear Regulatory Commission Response Technical Manual (RTM) - 92 (October 1992)
4. Emergency Plan for PNPP Docket Nos. 50-440, 50-441
5. EPI-B7a: Automated Offsite Dose Calculations
6. EPI-B7b: Manual Offsite Dose Calculations
7. Patient Package Insert for THYRO-BLOCK^{TM}, Wallace Laboratories (10/79)
8. Regulatory Information Summary (RIS) 2004-13, Consideration of Sheltering in Licensee's Range of Protective Action Recommendations

2.2 Use References:

1. EPI-B10: Emergency Radiological Environmental Monitoring Program
2. EPI-B3: Radiological Surveys for Emergencies

3. EPI-B1: Emergency Notification System

4. EPI-A1: Emergency Action Levels

5. EPI-A2: Emergency Actions Based On Event Classification

6. EPI-A11: Activation of the Backup Emergency Operations Facility

7. Supplement 3 to NUREG-0654/FEMA-REP-1 (Revision 1): Criteria for Protective Action Recommendations for Severe Accidents

8. PAP-0114: Radiation Protection Program

9. Commitments addressed in this document:

H00022	P00005	P00029	P00046
H00024	P00011	P00037	B00800

3.0 DEFINITIONS

3.1 Protective Actions

Those emergency measures taken before or after an uncontrolled release of radioactive material has occurred to prevent or minimize radiological exposure to persons that would likely be exposed, if the actions were not taken.

3.2 Protective Action Guides (PAGs)

Projected radiological doses to individuals in the general population that warrant Protective Actions following a release of radioactive material. Protective Actions would be warranted provided the reduction in individual dose is not offset by excessive risks to individual safety in taking the Protective Action. The Protective Action Guide (PAG) does not include the dose that has unavoidably occurred prior to the assessment.

3.3 Deep Dose Equivalent (DDE)

The dose equivalent measured at a tissue depth of 1 cm (1000 mg/cm^2). DDE is the external component of TEDE.

3.4 Committed Dose Equivalent (CDE)

The dose equivalent to organs or tissues of reference that will be received from an intake of radioactive material by an individual during the 50 year period following the uptake.

3.5 Committed Effective Dose Equivalent (CEDE)

The sum of the products of the weighting factors applicable to each of the body organs or tissues and the CDE to these organs or tissues. CEDE is the internal dose component of TEDE.

3.6 Total Effective Dose Equivalent (TEDE)

Sum dose of DDE (external dose) and CEDE (internal dose).

3.7 Derived Air Concentration (DAC)

The concentration of a given radionuclide in air which, if breathed by the reference man for a working year of 2,000 hours under conditions of light work (inhalation rate of 1.2 cubic meters of air per hour), results in an intake of one Annual Limit on Intake (ALI).

3.8 Radiation Emergency Assistance Center/Training Site (REAC/TS)

REAC/TS is operated by the Medical Sciences Division of the Oak Ridge Institute for Science and Education for the U.S. Department of Energy (DOE). REAC/TS provides 24-hour direct or consultative assistance with medical and health physics problems associated with radiation accidents in local, national, and international incidents.

3.9 Subarea 1

Subarea 1 is defined as the area within two miles from the Perry Nuclear Power Plant which includes two miles of Lake Erie.

3.10 "Lake" Evacuation Subarea

If an affected area evacuation includes "Lake", it means that Lake Erie should be evacuated out to 10 miles.

3.11 General Emergency Default PARs

General Emergency Default Protective Action Recommendations (PARs) are based on the potential for a major release of radioactive material from the Perry plant per the guidance set forth in Supplement 3 to <NUREG-0654/FEMA-REP-1>. The intent of these PARs is to provide a means of promptly implementing a minimum evacuation for the general public within 5 miles downwind of the Perry Plant until a detailed assessment can be performed. Implicit in these PARs is that assessment actions will continue to determine what additional protective actions are required to ensure the health and safety of the general public.

3.12 Sheltering PAR

A sheltering PAR is recommended when a controlled release via containment vent is occurring or expected to start within 2 hours and will last less than or equal to 1 hour AND the projected dose to the public is greater than or equal to 1 rem TEDE or 5 rem CDE Child Thyroid at the site boundary. The intent of the sheltering PAR is to minimize the dose to the public (i.e., the dose received during sheltering will be less than or equal to the dose received when evacuating through the plume) and position the public to receive additional instructions.

3.13 KI for the General Public

Recommending the use of KI for the general public is the responsibility of the State of Ohio Department of Health. The Perry Plant will recommend administering KI in accordance with the State procedures upon a declaration of a General Emergency.

3.14 Heightened Awareness

A protective action recommendation that the general public monitor the radio or television broadcasts for additional information about protective actions.

3.15 Release

A release is defined as a radiological release attributable to the emergency event.

4.0 RESPONSIBILITIES

4.1 **Emergency Coordinator**

1. Approve plume exposure pathway protective action recommendations (PARs) for the general public.

2. Notify the State of Ohio, local counties, and Nuclear Regulatory Commission (NRC) of changes in PARs for the general public developed by the Perry Plant.

3. Approve the use of Potassium Iodide (KI) by Radiation Monitoring Team (RMT) personnel.

4.2 **TSC Operations Manager**

1. Assume the responsibilities of the Emergency Coordinator prior to the Emergency Operations Facility (EOF) being operational.

2. Approve the usage of Potassium Iodide (KI) for all onsite Emergency Response Organization (ERO) personnel. <P00011>

4.3 **Shift Manager**

1. Assume the responsibilities of the TSC Operations Manager prior to the Technical Support Center (TSC) being operational.

4.4 **EOF Offsite Radiation Advisor**

1. Supervise the development of plume exposure pathway PAR for the general public.

2. Review PAR developed for the general public and recommend approval.

3. Recommend approval for the use of KI for RMT personnel.

4.5 **TSC Radiation Protection Coordinator** <P00046>

1. Assume the responsibilities of the EOF Offsite Radiation Advisor prior to the EOF being operational.

2. Recommend approval for the use of KI for all onsite ERO personnel.

4.6 **Shift Engineer**

1. Review PARs developed for the general public prior to the TSC being operational.

2. Assist in estimating the duration of a release and the prognosis for the restoration or failure of plant equipment/structures which may result in a release being terminated or (re)initiated.

4.7 **TSC/EOF Dose Assessor(s)**

1. Develop plume exposure pathway PARs for the general public per this instruction.

4.8 **Shift Lead Chemistry Technician**

1. Assume responsibility for developing PARs for the general public prior to the TSC being operational.

4.9 **TSC Operations Advisor/EOF Plant Operations Advisor**

1. Assist in estimating the duration of a release and the prognosis for the restoration or failure of plant equipment/structures which may result in the release being terminated or (re)initiating.

5.0 ACTIONS

5.1 Protective Action Logic

5.1.1 **Shift Lead Chemistry Technician/Dose Assessor:**

1. Use the PAR Decision Flow Chart (Attachment 1), to determine the appropriate PAR.

   -- If a dose projection cannot be completed within 10 minutes of the declaration of the General Emergency, use the PAR decision flowchart using the "UNKNOWN" decision path per Attachment 1.

   -- A change in PAR based on projected or actual dose shall be issued as part of a subsequent initial offsite notification per <EPI-B1>.

   -- If the release has not been terminated and an estimate on release duration is not immediately available from the Shift Engineer (SE)/TSC Operations Advisor/EOF Plant Operations Advisor, a 6 hour default release duration shall be used.

2. Submit the PAR, along with supporting data, for review and subsequent approval to the SE/TSC Radiation Protection Coordinator (RPC)/EOF Offsite Radiation Advisor (ORA).

   -- If the SE is not stationed (prior to transferring PAR responsibilities to the TSC), forward the PAR directly to the Shift Manager for approval.

3. Assist, when directed, in completing appropriate portions of the Initial Notification (PNPP No. 7794) and Follow-Up Notification (PNPP No. 7795).

4. Monitor potential upgrades or changes in the PAR based on degrading plant conditions or changes in wind direction or other meteorological conditions, and if warranted, recommend required PAR changes to the SE/TSC RPC/EOF ORA in accordance with logic contained in Attachment 1.

   NOTE: Once a subarea is included in a PAR, it shall not be removed for subsequent PARs based on changes in conditions.

   NOTE: A sheltering PAR should not be recommended if evacuation has already been recommended for the same subareas.

5. Turnover PAR development duties from the Control Room to the TSC, and subsequently to the EOF, when directed.

5.1.2 **Shift Engineer (SE)/TSC Radiation Protection Coordinator (RPC)/EOF Offsite Radiation Advisor (ORA):**

1. Review PARs developed for the general public and recommend their approval based on the PAR Decision Flowchart (Attachment 1).

2. Ensure that changes in PARs, including their effect on existing subarea protective actions, are adequately reflected in a timely manner on offsite notifications conducted per <EPI-B1>.

   -- If the release has not been terminated and an estimate on release duration is not immediately available from the Shift Engineer (SE)/TSC Operations Advisor/EOF Plant Operations Advisor, a 6 hour default release duration shall be used.

3. Provide clarification when required to facility staff on the factors considered in developing the PAR.

4. Periodically review the PAR based on degrading plant conditions or changes in wind direction or other meteorological conditions to ensure that required protective actions are being considered in accordance with the PAR logic outlined in Attachment 1. <P00029>

   NOTE: Once a subarea is included in a PAR, it shall not be removed for subsequent PARs based on changes in conditions.

   NOTE: A sheltering PAR shall not be recommended if evacuation has already been recommended for the same subareas.

5. Assist in completing appropriate portions of the Initial Notification (PNPP No. 7794) and Follow-Up Notification (PNPP No. 7795).

6. Ensure the coordinated turnover of PAR development and review duties from the Control Room to the TSC, and subsequently to the EOF.

5.1.3 **Emergency Coordinator:**

1. Determine if the appropriate method was used to determine the PAR using the PAR Decision Flow Chart (Attachment 1).

2. Approve PARs for the general public developed utilizing Attachment 1 and ensure that the State of Ohio, local counties, and the NRC are notified per <EPI-B1>.

   -- If a dose projection cannot be completed within 10 minutes of the declaration of the General Emergency, use the PAR decision flowchart using the "UNKNOWN" decision path per Attachment 1.

   -- A change in PAR based on projected or actual dose shall be issued as part of a subsequent initial offsite notification per <EPI-B1>.

3. Ensure that PAR is periodically evaluated based on degrading plant conditions or changes in wind direction or other meteorological conditions using Attachment 1. <P00029>

   NOTE: Once a subarea is included in a PAR, it shall not be removed for subsequent PAR's based on changes in conditions.

   NOTE: A sheltering PAR shall not be recommended if evacuation has already been recommended for the same subareas.

4. Ensure the timely and coordinated turnover of PAR approval duties from the Control Room to the TSC, and subsequently to the EOF, when the non-delegatable Emergency Coordinator responsibilities are transferred per <EPI-A2>.

5.2 Potassium Iodide (KI) Distribution to Onsite Emergency Response Organization (ERO) Personnel <H00022, H00024>

5.2.1 **TSC Radiation Protection Coordinator:**

1. Direct that the following information be recorded on a Potassium Iodide (KI) Tracking Form (PNPP No. 9177, Attachment 3) for each Control Room, TSC, Operations Support Center (OSC) and EOF staff member who has exceeded or may exceed a dose of 4000 DAC-hrs AND can not be relocated, dismissed, or have work activities altered to avoid receiving a dose of 10 Rem CDE to the adult thyroid (CDE - child thyroid x 2):

   a. Full name,

   b. Social Security No.,

   c. Employee's Section/Unit, and

d. Estimated date/time of exposure.

NOTE: KI is 90% effective if administered within 1 hour after inhalation or ingestion, and 50% effective if administered within 4 hours after inhalation or ingestion.

2. Review completed form(s) and forward to TSC Operations Manager for approval.

5.2.2 **TSC Operations Manager:**

1. Discuss with TSC Radiation Protection Coordinator whether sufficient As Low As Reasonably Achievable (ALARA) precautions have been taken in lieu of KI.

NOTE: Activation of the Backup EOF per <EPI-A11> should be initiated in lieu of issuing KI to EOF staff. KI should only be issued to EOF staff when necessary to allow for movement of personnel from the EOF, if needed, once deactivated.

2. Once a need for KI is determined, approve the distribution of KI by signing the KI Tracking Form(s).

3. Contact the Ohio Emergency Management Agency (OEMA), using the telephone number listed in the Emergency Response Telephone Directory, to obtain guidance from the Radiation Emergency Assistance Center/Training Site (REAC/TS) on further issuance of KI to those individuals who were already issued the drug.

NOTE: A dosage of one tablet per day for ten days should be followed unless instructed otherwise after consulting with REAC/TS.

4. Order additional quantities of KI through the ODH, as required, using the telephone number listed in the Emergency Response Telephone Directory.

NOTE: Sufficient KI is available onsite for three shifts per day for ten days (except for the EOF which only has limited quantities of KI for evacuation purposes). <P00011>

5.2.3 **Shift Manager/OSC Health Physics Supervisor/TSC Radiation Protection Coordinator/EOF Offsite Radiation Advisor:**

1. Brief facility staff to be issued KI on the possible side effects using the manufacturer's patient package insert located on the back of the KI Tracking Forms, and ensure that each individual has no known allergies to iodide.

   NOTE: Ingestion of KI, even as a precautionary measure, is a voluntary act and, therefore, at the discretion of each individual.

2. Instruct each employee receiving KI to initial the KI Tracking Form.

3. Distribute one KI tablet (130 mg.) to each authorized individual, and record the date/time issued on the KI Tracking Form.

   NOTE: KI is stored in the E-Plan equipment/supply cabinets in the Control Room, TSC Display Room, OSC Conference Room, and in the EOF Decontamination Room.

4. Do not dismiss staff members issued KI until guidance on further KI usage can be obtained from REAC/TS.

5.3 Potassium Iodide (KI) to RMT Members <H00022, H00024>

5.3.1 **TSC/EOF Dose Assessors:**

1. Identify to the EOF Offsite Radiation Advisor the need to consider issuing KI to RMT members who have exceeded or may exceed a dose of 10 Rem CDE to the adult thyroid (CDE - child thyroid x 2).

   -- If the EOF is not operational, this concern shall be brought to the attention of the TSC Radiation Protection Coordinator.

2. Once issuance of KI has been approved, ensure that RMT members are briefed on the possible side effects using the manufacturer's patient package insert located on the back of the KI Tracking Form, and ensure that each individual has no known allergies to iodide.

   NOTE: Ingestion of KI, even as a precautionary measure, is a voluntary act and, therefore, at the discretion of each individual.

3. Document RMT members' concurrence to taking KI by having each individual initial on the KI Tracking Form.

   a. If team is currently in the field, obtain a verbal concurrence from each RMT member and document response in RMT Log. Direct RMT members to initial KI Tracking Form upon their return to the Perry Plant site.

4. Direct authorized RMT member(s) to take one KI tablet each (130 mg.).

   NOTE: One bottle of KI (14 tablets) each is stored in RMT Sampling Kit.

5. Record the date/time issued block on the KI Tracking Form, when notified by RMT member that he/she has ingested KI tablet.

6. Do not dismiss RMT members issued KI until guidance on further KI usage can be obtained from REAC/TS by contacting the OEMA, using the telephone number listed in the Emergency Response Telephone Directory.

5.3.2 **EOF Offsite Radiation Advisor:**

1. Evaluate the need for KI and, if deemed necessary, direct that the following information be completed on a Potassium Iodide Tracking Form (PNPP No. 9177, Attachment 3) for each RMT member:

   a. Full Name,

   b. Social Security No.,

   c. Employee's Section/Unit, and

   d. Estimated date/time of exposure.

2. Review the KI Tracking Form to ensure that above information on each individual is recorded; then forward tracking form to Emergency Coordinator for approval.

   -- If the EOF is not yet operational, the TSC Operations Manager will be responsible for approving issuance of KI.

3. Notify the TSC/EOF Dose Assessor(s) when approval is obtained for issuing KI.

4. Contact the OEMA, using the telephone number listed in the Emergency Response Telephone Directory, to obtain guidance from REAC/TS on further issuance of KI to those individuals who were already issued the drug.

5.3.3 **EOF Emergency Coordinator:**

1. Discuss with EOF Offsite Radiation Advisor whether sufficient ALARA precautions have been taken in lieu of KI and that adequate justification exists for issuance of KI.

2. Once the need for KI is determined, approve the issuance of KI to RMT members by signing the completed KI Tracking Form(s).

5.4 Records

5.4.1 Records Handling

1. The records generated by emergency response personnel will be collected and maintained by Emergency Response Unit (ERU) pursuant to <EPI-B9>. The Emergency Records Package will be transferred to Records Management pursuant to <PAP-1701>.

5.4.2 Records Capture

The following records are generated by this document:

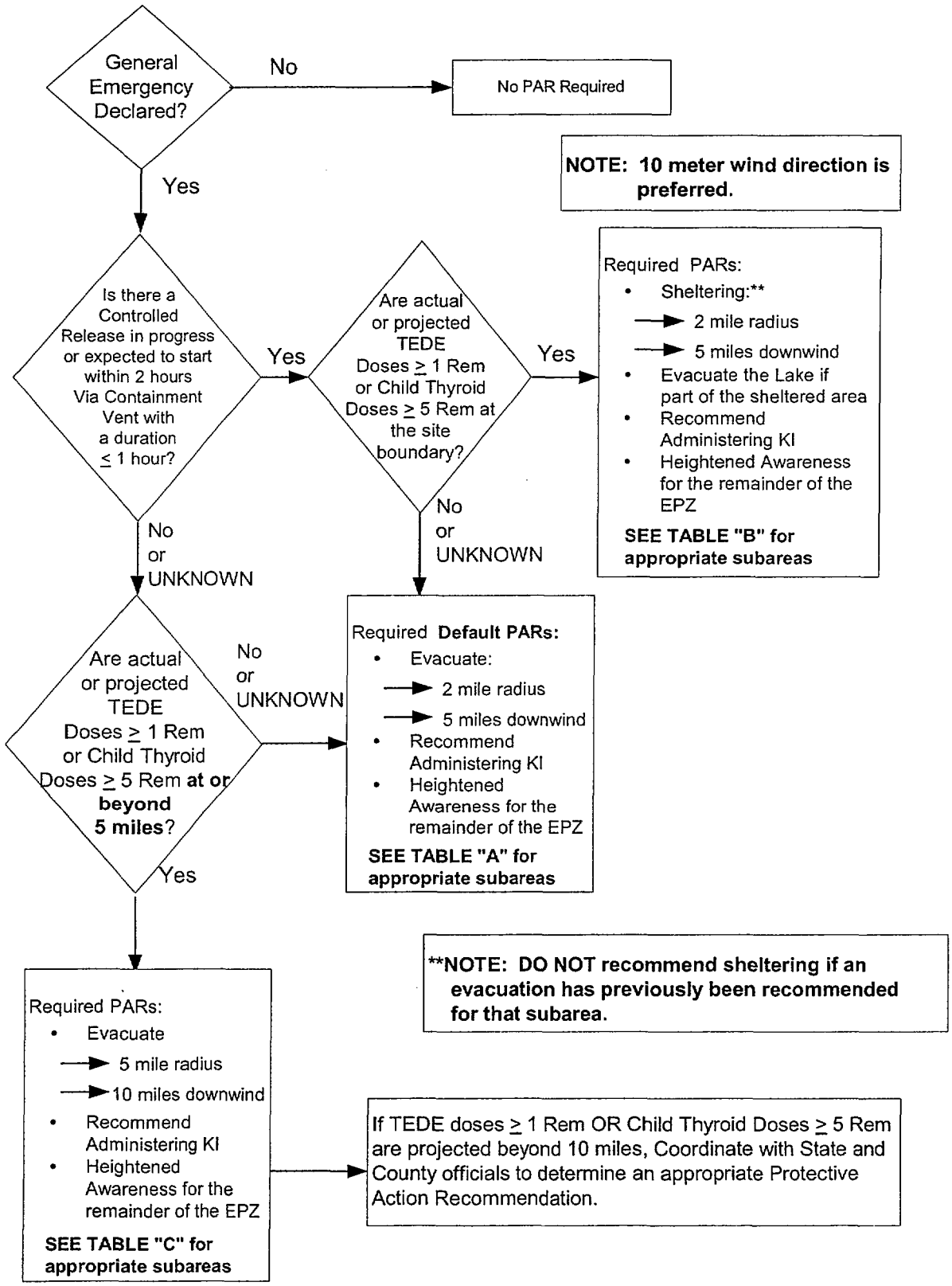
Quality Assurance Records

Potassium Iodide (KI) Tracking Form (PNPP No. 9177)

Non-Quality Records

None

PAR DECISION FLOWCHART



PAR DECISION FLOWCHART continued

TABLES CORRESPONDING SECTORS TO SUBAREAS FOR PROTECTIVE ACTION RECOMMENDATIONS

TABLE A:

Wind Direction	Affected Subareas
102° to 213°	EVACUATE 1 & Lake*
214° to 281°	EVACUATE 1, 2 & Lake*
282° to 11°	EVACUATE 1, 2 & 3
12° to 33°	EVACUATE 1 & 3
34° to 101°	EVACUATE 1, 3 & Lake*

TABLE B:

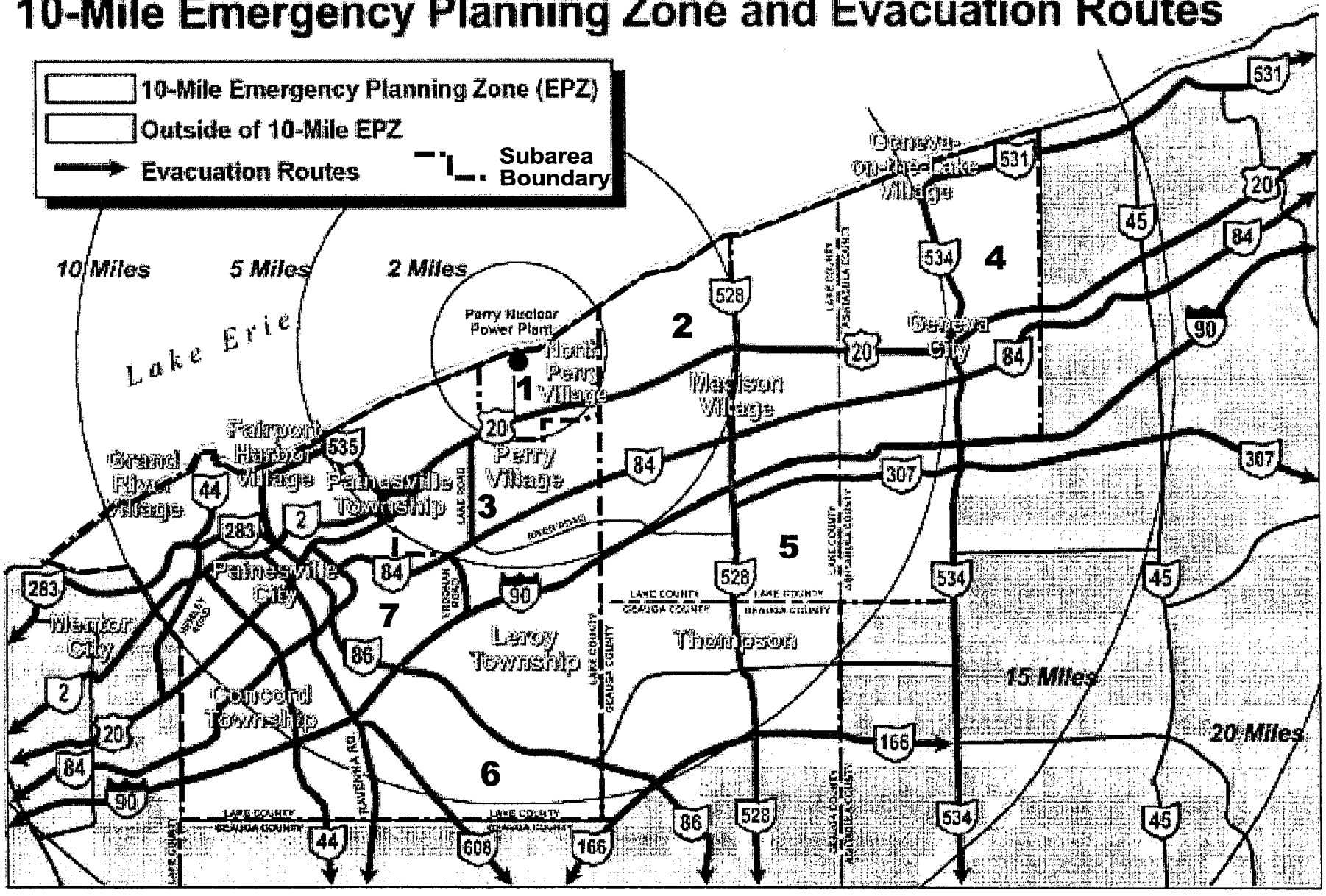
Wind Direction	Affected Subareas
102° to 213°	SHELTER 1 and EVACUATE Lake*
214° to 281°	SHELTER 1, 2 and EVACUATE Lake*
282° to 11°	SHELTER 1, 2 & 3
12° to 33°	SHELTER 1 & 3
34° to 101°	SHELTER 1, 3 and EVACUATE Lake*

TABLE C:

Wind Direction	Affected Subareas
102° to 213°	EVACUATE 1 & Lake*
214° to 258°	EVACUATE 1, 2, 4 & Lake*
259° to 281°	EVACUATE 1, 2, 4, 5 & Lake*
282° to 303°	EVACUATE 1, 2, 3, 4 & 5
304° to 326°	EVACUATE 1, 2, 3, 4, 5 & 6
327° to 348°	EVACUATE 1, 2, 3, 5, & 6
349° to 11°	EVACUATE 1, 2, 3, 5, 6 & 7
12° to 33°	EVACUATE 1, 3, 6 & 7
34° to 56°	EVACUATE 1, 3, 6, 7 & Lake*
57° to 101°	EVACUATE 1, 3, 7 & Lake*

*** Lake Evacuation is out to 10 miles**

10-Mile Emergency Planning Zone and Evacuation Routes



POTASSIUM IODIDE (KI) TRACKING FORM

PNPP No. 9177 Rev. 2/26/02

EPI-B8

Recommended dose: 1 tablet/day = 130 mg

This form shall be completed by the Shift Manager for Control Room staff, Radiation Protection Coordinator for TSC staff (and RMTs prior to EOF activation), OSC Health Physics Supervisor for OSC staff and Security personnel and Offsite Radiation Advisor for EOF staff and RMTs.

KI ISSUED TO: (FULL NAME)	SOCIAL SECURITY No.	EMPLOYEE'S SECTION/UNIT	EST DATE/TIME OF EXPOSURE		KI ISSUED AT		INITIALS OF EMPLOYEE RECEIVING KI*
			DATE	TIME	DATE	TIME	

Use Approved: _____ #

(per EPI-B8, Sect. 5.2)

Use of KI approved for only those individuals listed above. Complete a separate tracking form to approve and document further KI usage.

* Employee's initials indicate that he/she has read the information from the manufacturer's package insert located on the back of this form and understands that taking KI is voluntary. The employee also acknowledges that to the best of his/her knowledge he/she has no allergies to iodide.

DISTRIBUTION: WHITE – FACILITY RECORDS CANARY – DISPENSARY (CORPORATE MEDICAL DIRECTOR)

POTASSIUM IODINE (KI) TRACKING FORM (PNPP No. 9177)

Patient Package Insert For

THYRO-BLOCK®

TABLETS

(POTASSIUM IODIDE TABLETS, USP)
(pronounced poe-TASS-e-um EYE-oh-dyed)
(abbreviated: KI)

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

IF YOU ARE TOLD TO TAKE THIS MEDICINE, TAKE IT ONE TIME EVERY 24 HOURS. DO NOT TAKE IT MORE OFTEN. MORE WILL NOT HELP YOU AND MAY INCREASE THE RISK OF SIDE EFFECTS. *DO NOT TAKE THIS DRUG IF YOU KNOW YOU ARE ALLERGIC TO IODIDE.* (SEE SIDE EFFECTS BELOW.)

INDICATIONS

THYROID BLOCKING IN A RADIATION EMERGENCY ONLY.

DIRECTIONS FOR USE

Use only as directed by State or local public health authorities in the event of a radiation emergency.

DOSE

Tablets: ADULTS AND CHILDREN 1 YEAR OF AGE OR OLDER: One (1) tablet once a day. Crush for small children.
BABIES UNDER 1 YEAR OF AGE: One-half (½) tablet once a day. Crush first.

Take for 10 days unless directed otherwise by State or local public health authorities.

Store at controlled room temperature between 15° and 30°C (59° to 86°F). Keep container tightly closed and protect from light.

WARNING

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

DESCRIPTION

Each THYRO-BLOCK® TABLET contains 130 mg of potassium iodide. Other ingredients: magnesium stearate, microcrystalline cellulose, silica gel, sodium thiosulfate.

HOW POTASSIUM IODIDE WORKS

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

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

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

WHO SHOULD NOT TAKE POTASSIUM IODIDE

The only people who should not take potassium iodide are people who know they are allergic to iodide. You may take potassium iodide even if you are taking medicines for a thyroid problem (for example, a thyroid hormone or antithyroid drug). Pregnant and nursing women and babies and children may also take this drug.

HOW AND WHEN TO TAKE POTASSIUM IODIDE

Potassium Iodide should be taken as soon as possible after public health officials tell you. You should take one dose every 24 hours. More will not help you because the thyroid can "hold" only limited amounts of iodine. Larger doses will increase the risk of side effects. You will probably be told not to take the drug for more than 10 days.

SIDE EFFECTS

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

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

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

Taking iodide may rarely cause overactivity of the thyroid gland, underactivity of the thyroid gland, or enlargement of the thyroid gland (goiter).

WHAT TO DO IF SIDE EFFECT OCCUR

If the side effects are severe or if you have an allergic reaction, stop taking potassium iodide. Then, if possible, call a doctor or public health authority for instructions.

HOW SUPPLIED

THYRO-BLOCK® TABLETS (Potassium Iodide Tablets, USP) bottles of 14 tablets (NDC 0037-0472-20). Each white, round, scored tablet contains 130 mg potassium iodide.

WALLACE LABORATORIES
Division of
CARTER-WALLACE, INC.
Cranbury, New Jersey 08512

IN-0472-01 Rev 2/85

PERRY OPERATIONS MANUAL

Emergency Plan Implementing Instruction

TITLE: PERSONNEL ACCOUNTABILITY/SITE EVACUATION

REVISION: 10 EFFECTIVE DATE: 12-22-04

PREPARED: Lawrence Burgwald 12-3-04
/ Date

PERSONNEL ACCOUNTABILITY/SITE EVACUATION

Table of Contents

SCOPE OF REVISION:

Periodic Review - Required

Rev. 10 - 1. Changed Emergency Planning Unit (EPU) to Emergency Response Unit due to organizational change.
2. Changed Primary Access Control Point (PACP) to Primary Access Facility (PAF) to be consistent with current terminology.
3. Changed Supervisor, Nuclear Security Operations (SNSO) to Security Shift Supervisor to be consistent with the current titles.
4. Correct the title of SPI-0023.

SCOPE OF REVISION (Cont.):

Rev. 10 - 5. Removed the reference to commitment L00406 as it is not applicable to EPI-B5. (CA 04-05417)
6. Added and/or clarified definitions.
7. Added Public Information Response Team (PIRT) to Step 5.6.4.
8. The allowance for plant management not staffing an emergency response facility to remain onsite was deleted as it is contrary to the Emergency Plan. (CA 04-05815-01)
9. Replaced Operations Manager with TSC Operations Manager for clarity.

PERSONNEL ACCOUNTABILITY/SITE EVACUATION

1.0 PURPOSE

This instruction outlines actions to be taken during an emergency at the Perry Plant for the accountability of all FirstEnergy Nuclear Operating Company (FENOC) employees, contractors, consultants, and visitors within the site boundary, including those involved in Control Room activities or members of the Emergency Response Organization (ERO).

Personnel accountability will be implemented upon declaration of a Site Area Emergency, or based on the discretion of the Emergency Coordinator, with all personnel within the Protected Area being accounted for within 30 minutes. If the emergency escalates to a General Emergency without having been previously classified as a Site Area Emergency, accountability shall be initiated upon declaring the General Emergency. Once implemented, accountability is to be maintained continuously thereafter until the emergency is terminated or until otherwise directed by the Technical Support Center (TSC) Operations Manager.

2.0 REFERENCES

2.1 Source References:

1. Emergency Plan for PNPP Docket No. 50-440
2. Nuclear Regulation (NUREG) 0654: "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"

2.2 Use References:

1. EPI-A7: Operations Support Center Activation
2. EPI-B1: Emergency Notification System
3. EPI-B9: Emergency Records
4. SPI-0023: Site Evacuation/Personnel Accountability and Access Control Measures
5. PAP-1701: Records Management Program
6. Commitments addressed in this document:

   P00006 P00073

3.0 DEFINITIONS

3.1 Accountability

Actions taken to ascertain the whereabouts of persons within the Site Boundary either by means of evacuation or assembly.

NOTE: Protected Area (PA) accountability is achieved when the Shift Manager is notified of the number of personnel unaccounted for within thirty (30) minutes of the declaration of accountability. Owner Controlled Area (OCA) accountability is achieved when actions are initiated to sweep the OCA to locate individuals that have not yet evacuated.

3.2 Evacuation

The action(s) necessary to remove non-essential personnel from an area of immediate danger to an area of safety.

3.3 Owner Controlled Area

Areas owned by the FirstEnergy Corporation which are located within, or adjacent to, the Site Boundary security fence.

3.4 Protected Area

The area encompassing the vital areas, all areas inside the double perimeter barrier fence and the Primary Access Facility (PAF).

3.5 Site Boundary

The area within the owner-controlled Area, encompassed by a security fence surrounding the Perry Nuclear Power Plant (PNPP).

3.6 Assembly Area

Those areas designated as collection points for performing personnel accountability and evaluating available personnel resources.

3.7 Primary Access Facility (PAF)

On-site facility, which is used to control access to and maintain personnel accountability within the protected area. The facility is also employed in monitoring personnel exiting the protected area for radiological contamination.

4.0 RESPONSIBILITIES

4.1 **TSC Operations Manager**

1. As acting Emergency Coordinator, ensure the initiation of accountability as required by this instruction.

2. Assume overall authority for the accountability of personnel within the Site Boundary area.

4.2 **Shift Manager**

1. Assume the Technical Support Center (TSC) Operations Manager's duties prior to the TSC being declared operational.

2. Ensure the prompt accountability of Control Room staff and on-shift personnel.

4.3 **TSC Radiation Protection Coordinator:** Assess radiological conditions and recommend the use of the designated offsite monitoring/decontamination centers or other areas on-site.

4.4 **TSC Security Coordinator**

1. Coordinate the implementation of accountability measures by the Security Shift Supervisor (SSS) in support of the TSC Operations Manager.

2. Oversee accountability of TSC staff members.

4.5 **OSC Coordinator:** Direct the accountability of personnel responding to or already staffing the Operations Support Center (OSC).

4.6 **Security Shift Supervisor (SSS):** Direct the actions of the security force personnel in obtaining the accountability of onsite personnel in accordance with <SPI-0023>.

4.7 **Perry Plant Section Managers:** Ensure that Company, Contractor, and consultant personnel are trained in their appropriate response to accountability through Plant Access Training (PAT), this instruction, or other periodic training as deemed necessary.

4.8 **Perry Plant Personnel:** Follow the requirements of this instruction when personnel accountability is initiated.

4.9 **Regulatory Affairs Coordinator**: Notify local county Emergency Operations Centers (EOCs) when the activation of offsite monitoring/decontamination centers is required in support of site evacuation.

5.0 ACTIONS

5.1 **TSC Operations Manager** shall:

5.1.1 Determine, based on the TSC Radiation Protection Coordinator's recommendation, whether the offsite monitoring/decontamination centers should be activated to monitor personnel evacuating the site due to a significant radiological release or to assemble contractor/vendor support evacuated from the site during outages.

NOTE: It may be prudent to delay implementation of accountability in situations where personnel safety may be jeopardized, such as a security event or severe weather.

5.1.2 Direct the Shift Manager, or designee, to initiate the applicable pre-recorded "Emergency" (Accountability) Message (Attachment 1) or if the pre-recorded "Emergency" message is not available, read the "Emergency" message (Attachment 1) on the Exclusion Area Paging (R53) System.

1. Provide additional guidance, if required, to personnel evacuating the site, using the R53 PA feature, for the following:

   - designated evacuation routes due to a security contingency
   - use of offsite monitoring and decontamination centers

5.1.3 If the offsite monitoring/decontamination centers are being activated, direct the Administrative Assistant to notify the NRC, State of Ohio, and local counties on the next Follow-up Notification form (PNPP No. 7795) per <EPI-B1>.

5.2 **Shift Manager** shall:

5.2.1 Perform the actions outlined in Section 5.1 if the TSC is not yet operational, and utilize TSC staff as they become available to accomplish the actions listed in Sections 5.2 thru 5.4.

5.2.2 Activate the applicable pre-recorded "Emergency" message (Attachment 1) on the Exclusion Area Paging (R53) System or if the pre-recorded "Emergency" message is not available, read the "Emergency" message (Attachment 1) approximately every five (5) minutes until accountability is completed.

NOTE: The Shift Manager is responsible to ensure that the accountability message gets repeated approximately every 5 minutes until accountability is completed. The accountability message, once automatically initiated, will be repeated every 5 minutes for 45 minutes. The accountability message is announced via the microphone if the automated message is not available and must be manually repeated approximately every five minutes until accountability is completed. The Shift Manager may delegate this responsibility to another person.

1. Provide additional guidance, if required, to personnel evacuating the site, using the R53 PA feature, for the following:

   - designated evacuation routes due to a security contingency
   - use of offsite monitoring and decontamination centers

5.2.3 Direct all Control Room staff and Plant Operators (POs) located in the Unit 2 Control Room, to promptly use the designated accountability card readers.

5.2.4 If not yet relocated to the OSC, verify the location and status of POs presently dispatched in-plant.

After the OSC is operational, shift personnel such as the Shift I&C/HP/Chemistry Technicians and Plant Operators (POs) will be accounted for through the OSC.

1. Complete Personnel Accountability Checklist (PNPP No. 7957, Attachment 2) to account for on-shift POs outside the Control Room, and forward to the CAS via the Secondary Alarm Station (SAS). <P00073>

5.2.5 Obtain the number of unaccounted for people within the Protected Area from the CAS no later than 30 minutes after accountability was initiated.

5.3 **Radiation Protection Coordinator** shall:

5.3.1 When radiological conditions onsite pose a hazard to plant personnel evacuating the site, recommend the use of the offsite monitoring/ decontamination centers to the TSC Operations Manager.

5.3.2 Dispatch available Radiation Protection support to the Primary Access Facility (PAF) to aid in the monitoring and potential decontamination of personnel exiting the Protected Area.

5.3.3 Designate and set-up an alternate monitoring area onsite for personnel exiting the Protected Area if radiological conditions in the immediate vicinity of the PAF render the portal monitors useless, and activation of the offsite decontamination centers is not warranted.

5.3.4 Periodically apprise the TSC Operations Manager and Security Coordinator of radiological conditions onsite which may affect accountability actions.

5.4 **TSC Security Coordinator** shall:

5.4.1 Ensure the SSS has initiated applicable accountability actions per <SPI-0023>.

5.4.2 Request that the TSC Operations Manager make an announcement over the facility PA directing TSC and OSC personnel, whom have not yet done so, to log into the TSC Hallway "accountability" card reader.

-- If the TSC "accountability" card reader is not operational, use available TSC staff to complete a Personnel Accountability Checklist using TSC Staffing Board and forward completed form to CAS.

5.4.3 Direct the SSS to allow immediate access to the Protected Area for on-call ERO responders caught outside the Protected Area upon initiation of accountability.

1. Relay requests to the PAF from TSC staff and the OSC Coordinator for Protected Area access for craft, technicians, or support staff members caught outside the Protected Area upon initiation of accountability.

Protected Area access to all but on-call ERO responders may be restricted until personnel accountability is obtained or adequate security officers are available to man PAF access.

5.4.4 During normal working hours or outage situations, traffic control points should be established at the main traffic arteries leading from the Perry Plant by contacting the Law Enforcement Coordinator at (440) 953-5477/5478, at the Lake County Emergency Operations Center (EOC).

1. If the EOC is not yet in operation, contact the Lake County Sheriff's Department directly.

5.4.5 Notify the TSC Operations Manager of the accountability results once completed, and keep him informed of on-going search and rescue activities.

5.4.6 Coordinate the sheltering and relocation of non-essential personnel without transportation by performing the following:

1. Direct the SSS to:

   a. Notify the Security Officers at the PAF that they should direct any individuals without transportation to Warehouse 1 - Receiving Area.

   b. Dispatch a Security Officer, when available, to the Warehouse 1 - Receiving Area and report back to the TSC the number of people that require offsite transportation.

2. When only a small number of individuals require assistance, arrange for interim sheltering and monitoring through the Radiation Protection Coordinator until site/company transportation can be arranged.

3. Perform the following if the number of individuals assembled precludes the use of site/company transportation.

   a. Contact the Transportation Officer in the Lake County EOC at (440) 953-5480 or Emergency Management Agency (EMA) Director at (440) 953-5455, and request bus support in transporting individuals to the monitoring and decontamination center at Mentor High School Football Stadium.

b. Contact the Fire Coordinator in the Lake County EOC at (440) 953-5489, and request the activation and staffing of the emergency worker monitoring and decontamination facility at the Mentor High School Football Stadium.

4. Notify the Security Officer(s) at the Center Road Traffic Post, if dispatched, to divert buses to Warehouse 1 - Receiving Area.

5.5 **OSC Coordinator** shall:

5.5.1 Direct OSC staff to utilize the "accountability" card reader located in the TSC hallway, as part of OSC activation process per <EPI-A7> upon arrival at the OSC.

5.5.2 Maintain accountability of personnel staffing the OSC utilizing the OSC personnel/repair team status boards and the OSC Team Briefing/ Debriefing Sheet (PNPP No. 7793) per <EPI-A7>.

1. If informed that the "accountability" card readers are NOT operational, a "working copy" of the Personnel Accountability Checklist can be maintained at the OSC Coordinator's discretion in conjunction with the OSC status boards in expediting accountability of OSC personnel.

5.5.3 When the Plant PA announcement initiating accountability is heard, perform the following: <P00073>

1. Verify that OSC staff members have logged into the TSC "accountability" card reader.

-- If an OSC team member has not used the "accountability" card reader and is located in-plant, complete a Personnel Accountability Checklist and forward to the CAS.

2. When notified by Security that the "accountability" card readers are NOT operational, forward a completed Personnel Accountability Checklist to the CAS.

5.6 Emergency Response Organization (ERO) Personnel Response

5.6.1 **Control Room/Shift Staffing** shall:

1. Respond as outlined in Control Room Shift Staff and General Site Accountability actions (Attachment 3).

5.6.2 **Technical Support Center (TSC) Staff** shall:

1. Use the TSC Hallway "accountability" card reader upon entering the TSC for accountability purposes.

2. Log into and out of the TSC using the hallway Staffing Board, indicating location/destination upon leaving facility.

3. Respond as outlined in TSC Staff Accountability Actions (Attachment 4), when personnel accountability is initiated.

5.6.3 **Operations Support Center (OSC) Staff** shall:

1. Use the TSC Hallway "accountability" card reader upon responding to the OSC.

2. Respond as outlined in OSC Staff Accountability Actions (Attachment 5), when personnel accountability is initiated.

5.6.4 **Public Information Response Team (PIRT)/Emergency Operations Facility (EOF) Staff** shall:

1. Respond as outlined in PIRT/EOF Staff Accountability Actions (Attachment 6).

5.6.5 **Joint Public Information Center (JPIC) Staff** shall:

1. Respond as outlined in Attachment 3.

5.7 Non-ERO Personnel Response

5.7.1 **Plant Personnel not assigned to ERO** shall:

1. Exit the Protected Area and Perry Plant Site using normal exiting procedures once accountability announcement is heard over the Plant PA, Exclusion Area Paging System or via another employee.

   a. If directed, report to one of the designated offsite monitoring and decontamination centers listed below, using directions provided in Attachment 7.

      (1) **LAKE COUNTY** - MENTOR HIGH SCHOOL FOOTBALL STADIUM, located off Civic Center Blvd. on Munson Road behind school (State Route 615).

      (2) **ASHTABULA COUNTY** - SAYBROOK ELEMENTARY SCHOOL, located on Depot Road, south of State Route 20 intersection.

      (3) **GEAUGA COUNTY** - HAMBDEN FIRE DEPARTMENT, located on State Route 608 (old State Road), south of State Route 6.

Copies of the directions to Offsite Monitoring/Decontamination Centers are available at the TEC lobby and PAF exit lane. Postings providing directions to centers are also available throughout the site on Company bulletin boards.

2. If you do not have offsite transportation, report to the Warehouse 1 - Receiving Area and await a Security Officers arrival.

Transportation support will be requested from Lake County to relocate these individuals to the Mentor High School Football Stadium, where radiological monitoring/ decontamination can be performed if required and further arrangements made.

5.8 **Regulatory Affairs Coordinator** shall:

5.8.1 Notify the local county EOCs if radiological conditions warrant the activation of offsite monitoring and decontamination centers listed below to support plant personnel evacuating the Perry Plant site.

(1) **LAKE COUNTY** - MENTOR HIGH SCHOOL FOOTBALL STADIUM, located off Civic Center Blvd. on Munson Road behind school (State Route 615).

(2) **ASHTABULA COUNTY** - SAYBROOK ELEMENTARY SCHOOL, located on Depot Road, south of State Route 20 intersection.

(3) **GEAUGA COUNTY** - HAMBDEN FIRE DEPARTMENT, located on State Route 608 (old State Road), south of State Route 6.

5.9 Records

5.9.1 Records Handling

1. The records generated by emergency response personnel will be collected and maintained by Emergency Response Unit (ERU) pursuant to <EPI-B9>. The Emergency Records Package will be transferred to Records Management pursuant to <PAP-1701> under Record Type 9J100.

5.9.2 Records Capture

The following records are generated by this document:

Quality Assurance Records

Personnel Accountability Checklist (PNPP No. 7957)

Non-Quality Records

None

PRE-RECORDED "EMERGENCY" (ACCOUNTABILITY) MESSAGE

"ATTENTION ALL SITE PERSONNEL. ACCOUNTABILITY IS NOW IN EFFECT. PERSONNEL PERFORMING A PLANT OPERATING OR EMERGENCY FUNCTION, REPORT YOUR LOCATION TO THE CONTROL ROOM OR APPROPRIATE EMERGENCY FACILITY. ALL OTHER PERSONNEL EXIT THE SITE USING NORMAL EXITING PROCEDURES."

PERSONNEL ACCOUNTABILITY CHECKLIST

PNPP No. 7957 Rev. 2/88 EPI-B5

Facility: ______________________________ Date: ____________

Time Initiated: __________________ Completed: ________________

Badge No.	Name	Badge No.	Name

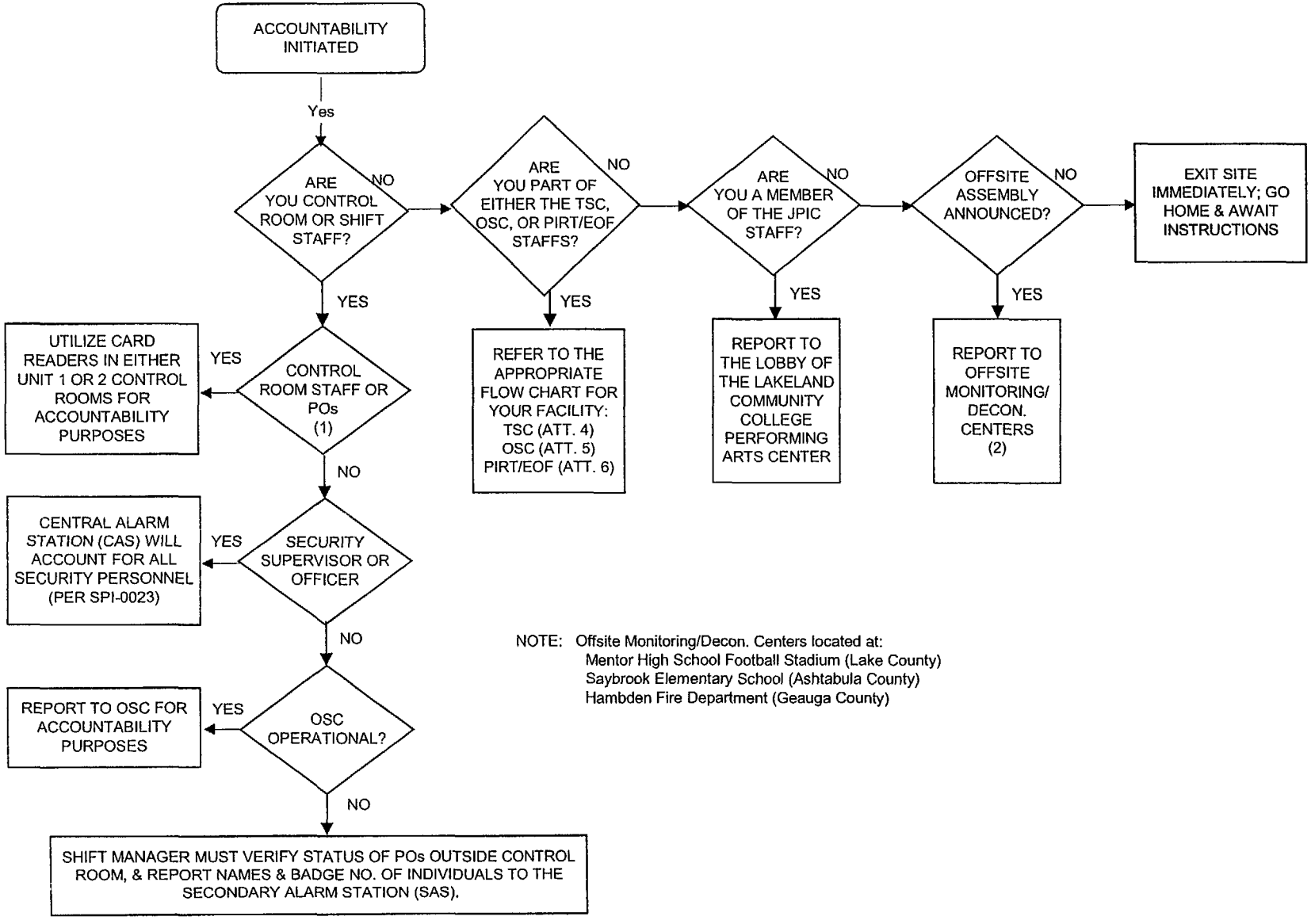
Deliver immediately to CAS when completed!

Page _____ of _____

CONTROL ROOM/SHIFT STAFF & GENERAL SITE ACCOUNTABILITY GUIDELINES

NF972 Rev. 12/8/04

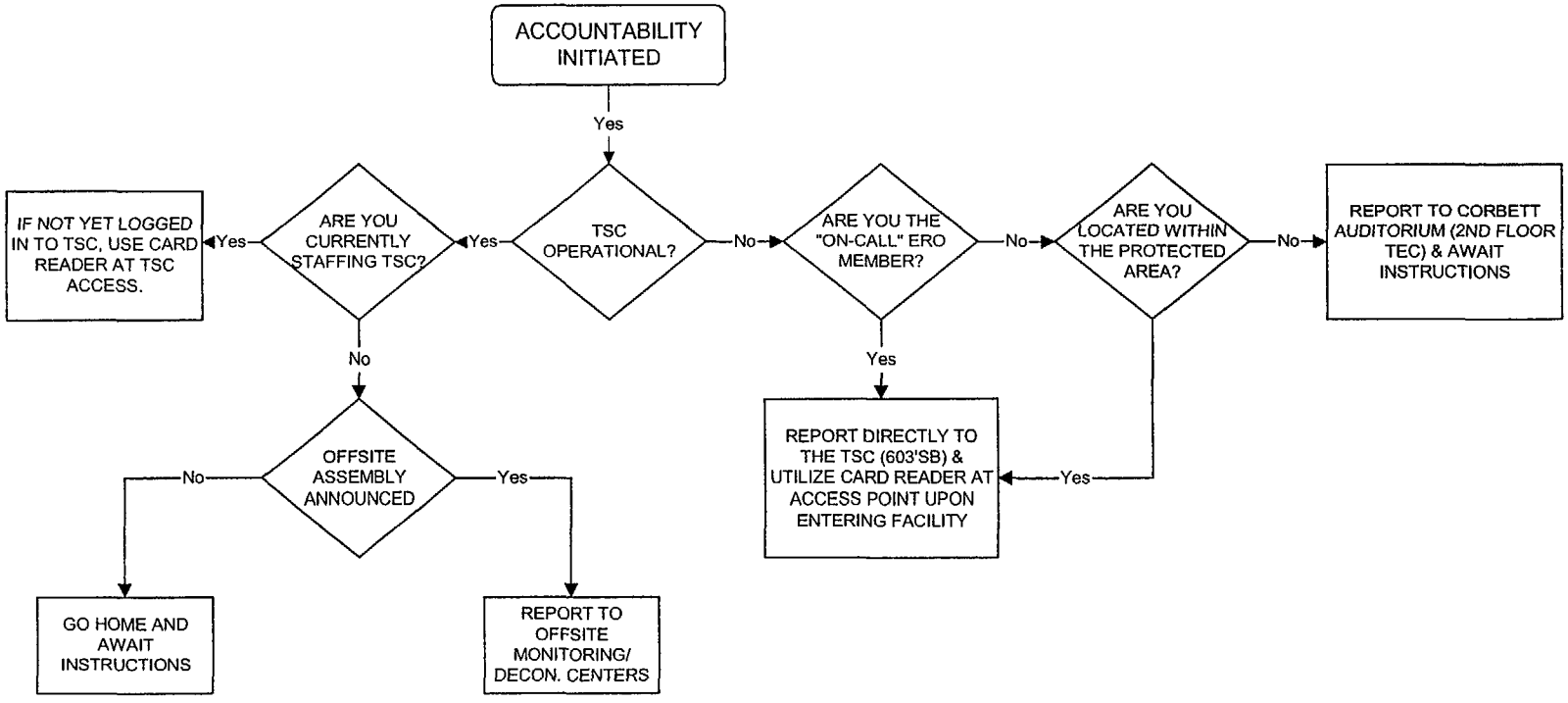
EPI-B5



NOTE: Offsite Monitoring/Decon. Centers located at:
Mentor High School Football Stadium (Lake County)
Saybrook Elementary School (Ashtabula County)
Hambden Fire Department (Geauga County)

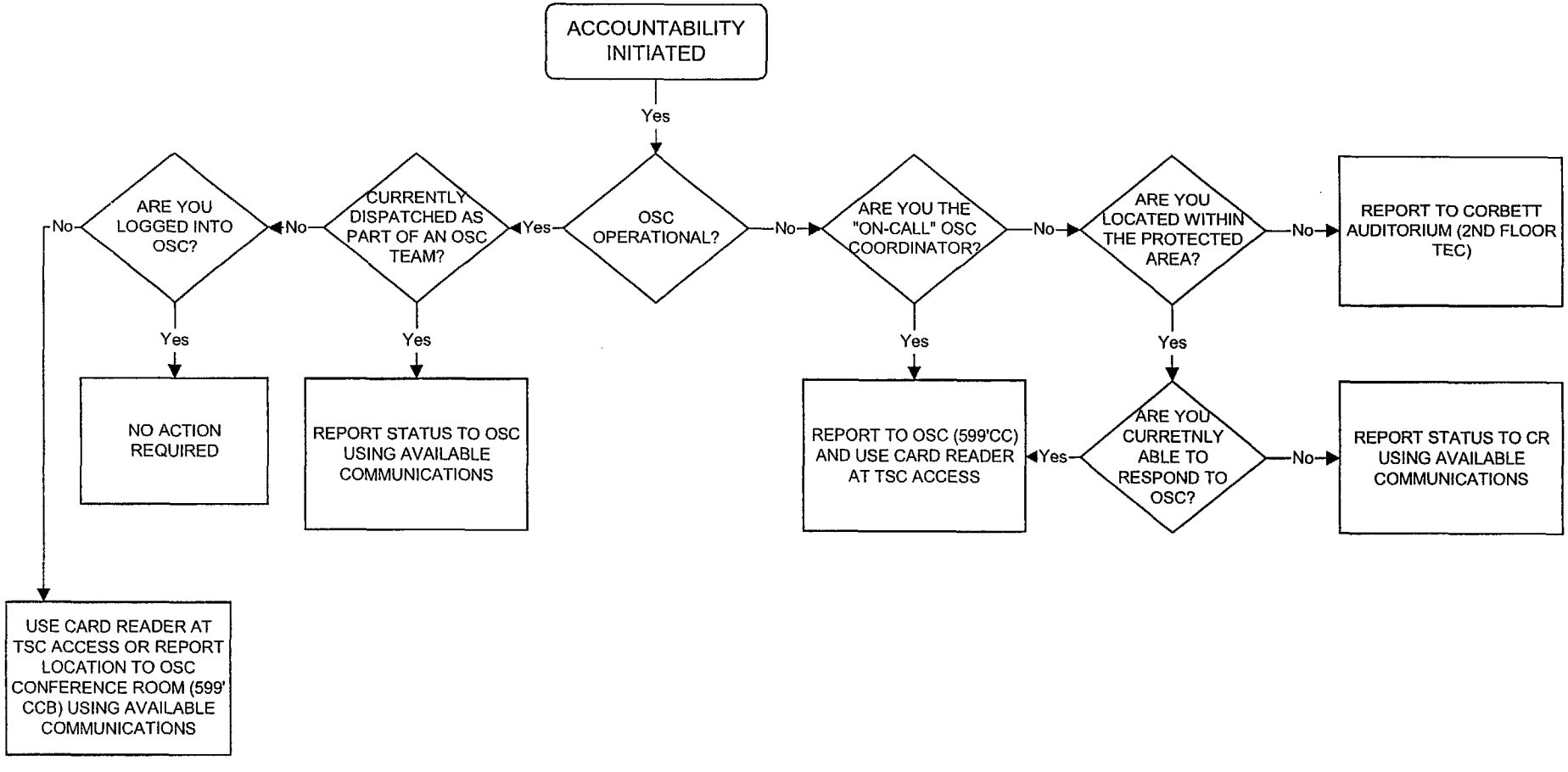
NF975

TSC STAFF ACCOUNTABILITY ACTIONS



NF974

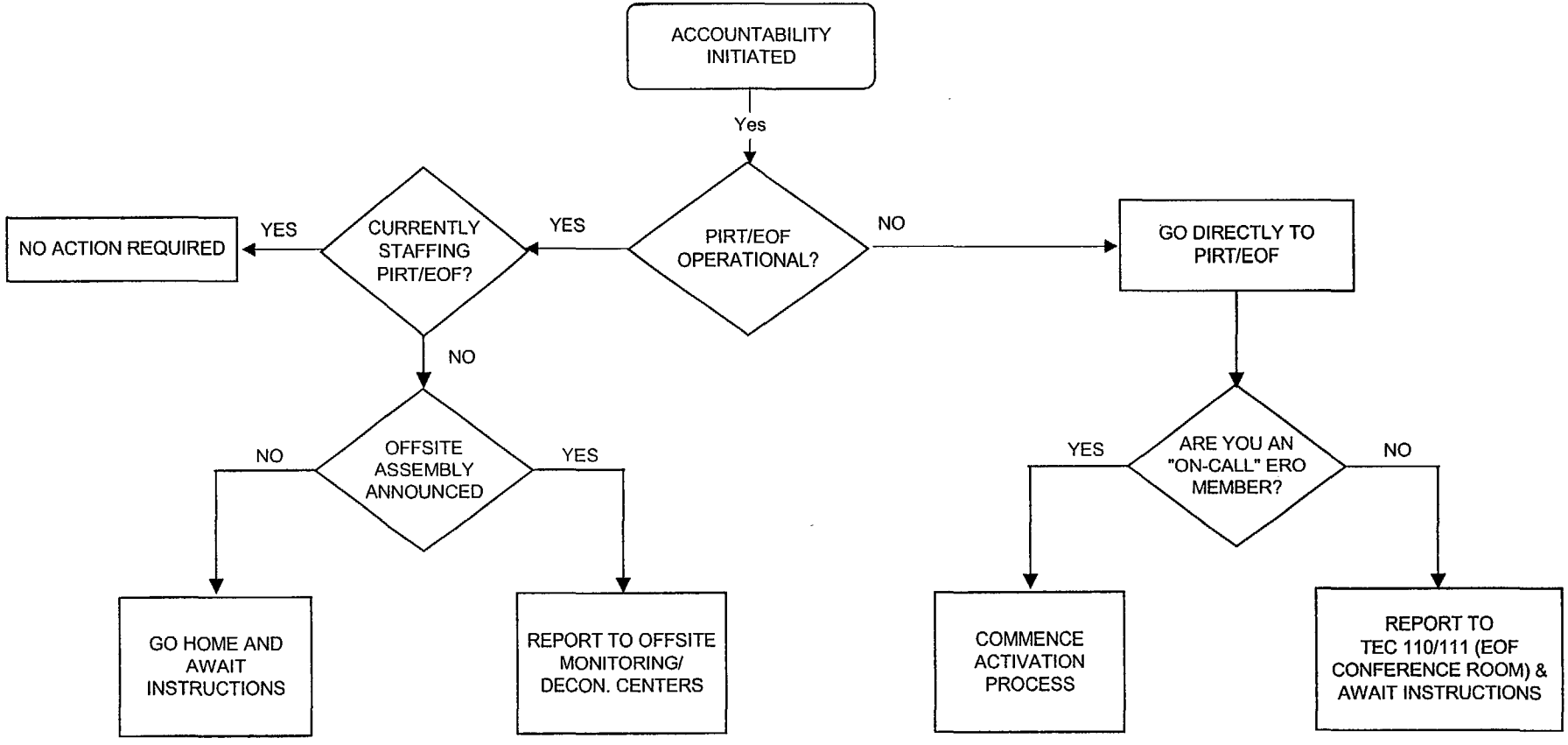
OSC STAFF ACCOUNTABILITY ACTIONS



PIRT/EOF STAFF ACCOUNTABILITY ACTIONS

NF973

EPI-B5



OFFSITE MONITORING & DECONTAMINATION CENTER LOCATIONS