10 CFR 50 Appendix E,
Section V

PHILADELPHIA ELECTRIC COMPANY
NUCLEAR GROUP HEADQUARTERS
955-65 CHESTERBROOK BLVD.
WAYNE, PA 19087-5691
(215) 640-6000

NUCLEAR ENGINEERING & SERVICES DEPARTMENT

January 27, 1991

Docket Nos. 50-277
50-278

License Nos. DPR-44
DPR-56

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

SUBJECT: Peach Bottom Atomic Power Station, Units 2 and 3
Emergency Plan Implementing Procedures

Dear Sir:

Enclosed are revisions 71, 72, and 73 to the Emergency Response Procedures for Peach Bottom Atomic Power Station, Units 2 and 3. These procedures are being submitted in accordance with 10 CFR 50.54(q), 10 CFR 50 - Appendix E, and 10 CFR 50.4. The following revised procedures are enclosed.

AMENDMENT 71

*	ERP-101		Rev. 8	"Classification of Emergencies"
*	ERP-110		Rev. 5	"Emergency Notifications"
*	ERP-110	App. 1	Rev. 20	"Emergency Classification Notification Telephone List For An Unusual Event Or Alert"
*	ERP-110	App. 2	Rev. 17	"Emergency Classification Notification Telephone List For A Site Emergency or General Emergency"

140003

*	ERP-140	Rev. 7	"Telephone Lists For Emergency Use"
*	ERP-200	Rev. 8	"Emergency Director" (ED)
*	ERP-230	Rev. 8	"Operations Support Center (OSC) Activation"
*	ERP-250	Rev. 9	"Technical Support Center (TSC) Activation"
*	ERP-315	Rev. 5	"Operation of the Peach Bottom Computer Dose Assessment System"
*	ERP-316	Rev. 3	"Cumulative Population Dose Calculations For Airborne Releases - Manual Method" Cancelled - Replaced By ERP-315
*	ERP-317	Rev 3	"Determination of Protective Action Recommendations" - Cancelled - Replaced By ERP-200 & ERP-101
*	ERP-320	Rev. 2	"Use Of The Containment Radiation Monitor To Estimate Release Source Term And Noble Gas Monitor Readings" - Cancelled - Replaced By ERP-315
*	ERP-600	Rev. 5	"Personnel Safety Team Leader" (PSTL)
*	ERP-670	Rev. 1	"Emergency Radiation Exposure Guidelines and Controls"
*	ERP-680	Rev. 2	"Control Of Thyroid Blocking Potassium Iodide (KI) Tablets"

AMENDMENT 72

*	ERP-610	Rev. 4	"First Aid/Search and Rescue Group"

AMENDMENT 73

*	ERP-400	Rev. 2	"Chemistry Sampling And Analysis Team Leader" (CSATL)

In accordance with 10 CFR 2.790(a)(6), we request that names and telephone numbers contained in these procedures be withheld from public disclosure since such disclosures would constitute an unwarranted invasion of the personal privacy of the individuals involved.

If you have any questions or require additional information, please contact us.

Sincerely,

G. J. Beck, Manager
Licensing Section
Nuclear Engineering & Services

Enclosure
cc: T. T. Martin, Administrator, Region I, USNRC (2 copies)
J. J. Lyash, USNRC Senior Resident Inspector, PBAPS

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

February 14, 1992

DOCKET PEACH BOTTOM
MEMORANDUM FOR: Chief, Document Control Branch, IRM

FROM: Director, Division of Freedom of Information and Publications Services, ADM

SUBJECT: REVIEW OF UTILITY EMERGENCY PLAN DOCUMENTATION

The Division of Freedom of Information and Publications Services has reviewed the attached document and has determined that it may now be made publicly available.

Donnie H. Grimsley

Donnie H. Grimsley, Director
Division of Freedom of Information
and Publications Services
Office of Administration

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

CCESSION NBR:9202030081 DOC.DATE: 92/01/27 NOTARIZED: NO DOCKET #
FACIL:
AUTH.NAME AUTHOR AFFILIATION
BECK,G.J. Philadelphia Electric Co.
RECIP.NAME RECIPIENT AFFILIATION
Document Control Branch (Document Control Desk)

SUBJECT: Forwards Central Files version of revised Emergency Response Procedures (ERP),including Rev 8 to ERP-101,Rev 5 to ERP-110,Rev 20 to ERP-110,App 1,Rev 17 to ERP-110,App 2,Rev 7 to ERP-140,Rev 8 to ERP-200 & Rev 8 to ERP-230.Withheld.

DISTRIBUTION CODE: AX45D COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 3+150
TITLE: Emergency Plan or Implementing Procedures (Proprietary)

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL
	PD	1	1	PM	1	1
INTERNAL:	ADM/FIPS P-378	1	1	AEOD/DOA/IRB	1	1
	NRR/DREP/PEPB9D	1	1	REG FILE 01	1	1

NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE! CONTACT THE DOCUMENT CONTROL DESK, ROOM P1-37 (EXT. 20079) TO ELIMINATE YOUR NAME FROM DISTRIBUTION LISTS FOR DOCUMENTS YOU DON'T NEED!

TOTAL NUMBER OF COPIES REQUIRED: LTTR 6 ENCL 6

R I D S / A D D S

R I D S / A D D S

Number	Title	Sponsor Number	Review Date	Rev. No.	Revision Date
ERP-101	CLASSIFICATION OF EMERGENCIES	(000000)	05/16/90	8	12/31/91*
ERP-110	EMERGENCY NOTIFICATIONS	(000000)	03/27/90	5	12/31/91*
ERP-110 APPENDIX 1	EMERGENCY CLASSIFICATION NOTIFICATION TELEPHONE LIST FOR AN UNUSUAL EVENT OR ALERT	(000000)	06/22/90	20	12/31/91*
ERP-110 APPENDIX 2	EMERGENCY CLASSIFICATION NOTIFICATION TELEPHONE LIST FOR A SITE EMERGENCY OR GENERAL EMERGENCY	(000000)	06/20/90	17	12/31/91*
ERP-120	PARTIAL PLANT EVACUATION	(000000)	03/27/90	2	07/22/91
ERP-130	SITE EVACUATION	(000000)	03/27/90	4	07/22/91
ERP-140	TELEPHONE LISTS FOR EMERGENCY USE	(000000)	04/30/90	7	12/31/91*
ERP-140 APPENDIX 1	EMERGENCY DIRECTOR (ED) (CALL IN 2)	(900000)	06/20/90	16	10/16/91
ERP-140 APPENDIX 2	TECHNICAL SUPPORT TEAM LEADER (TSTL)	(900000)	03/27/90	19	10/16/91
ERP-140 APPENDIX 3	DOSE ASSESSMENT TEAM LEADER (DATL)	(000000)	07/11/90	21	10/16/91
ERP-140 APPENDIX 4	CHEMISTRY SAMPLING & ANALYSIS TEAM LEADER (CSATL)	(000000)	03/16/90	14	10/16/91
ERP-140 APPENDIX 5	DAMAGE REPAIR TEAM LEADER (DRTL)	(000000)	03/16/90	13	10/16/91
ERP-140 APPENDIX 6	SECURITY TEAM LEADER (STL)	(000000)	03/16/90	12	10/16/91
ERP-140 APPENDIX 7	PERSONNEL SAFETY TEAM LEADER (PSTL)	(000000)	03/16/90	16	10/25/91
ERP-140 APPENDIX 8	COMPANY CONSULTANTS AND CONTRACTORS	(000000)	03/21/91	8	06/14/91

Number	Title	Sponsor Number	Review Date	Rev. No.	Revision Date
ERP-316	CUMULATIVE POPULATION DOSE CALCULATIONS FOR AIRBORNE RELEASES - MANUAL METHOD CANCELLED - REPLACED BY ERP-315	( )	/ /	3	12/31/91*
ERP-317	DETERMINATION OF PROTECTIVE ACTION RECOMMENDATIONS CANCELLED - REPLACED BY ERP-200 & ERP-101	( )	/ /	3	12/31/91*
ERP-318	LIQUID RELEASE DOSE CALCULATIONS AT DOWNSTREAM WATER INTAKE FACILITIES	(000000)	09/11/90	1	08/29/88
ERP-319	LIQUID RELEASE DOSE CALCULATIONS FOR FISH INGESTION	(000000)	05/03/90	1	08/29/88
ERP-320	USE OF THE CONTAINMENT RADIATION MONITOR TO ESTIMATE RELEASE SOURCE TERM AND NOBLE GAS MONITOR READINGS CANCELLED - REPLACED BY ERP-315	( )	/ /	2	12/31/91*
ERP-330	FIELD SURVEY GROUP LEADER (FSGL)	(000000)	09/06/90	5	09/06/90
ERP-340	FIELD SURVEY GROUP	(000000)	05/01/90	2	01/14/91
ERP-350	THYROID DOSE COMMITMENT USING TCS AIR SAMPLING SYSTEM	(000000)	04/18/90	0	04/18/90
ERP-400	CHEMISTRY SAMPLING AND ANALYSIS TEAM LEADER (CSATL)	(000000)	03/27/90	1	08/29/88
ERP-410	CHEMISTRY SAMPLING AND ANALYSIS TEAM	(000000)	03/27/90	1	08/29/88
ERP-500	SECURITY TEAM LEADER (STL)	(000000)	10/17/90	5	01/31/91

Number	Title	Sponsor Number	Review Date	Rev. No.	Revision Date

END OF REPORT FOR ERP INDEX

JBC:dlk

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY RESPONSE PROCEDURE

ERP-101 CLASSIFICATION OF EMERGENCIES

1.0 RESPONSIBILITIES:

1.1 Shift Management is responsible for:

1.1.1 Recognizing
AND classifying event OR condition.

1.1.2 Assuming duties of Emergency Director.

1.2 Plant Manager
OR designated alternate is responsible for:

1.2.1 Reporting to Technical Support Center
OR Control Room.

1.2.2 Relieving acting Emergency Director
AND continuing to implement procedure.

****
* CAUTION: *
* *
* THE JUDGEMENT OF THE EMERGENCY DIRECTOR IS VITAL FOR THE PROPER *
* CONTROL OF AN EMERGENCY. *
* *
****

2.0 INITIAL ACTIONS

NOTE:

ATTACHMENT 1, CLASSIFICATION OF EMERGENCIES FLOW CHART, MAY BE USED AS A GUIDE FOR THE FOLLOWING ACTIONS.

NOTE:

IDENTIFICATION AND CLASSIFICATION OF EMERGENCIES SHOULD BE ACCOMPLISHED WITHIN 15 MINUTES AFTER THE APPLICABLE EMERGENCY ACTION ACTION LEVELS (EAL'S) ARE MET.

2.1 Shift Management shall:

2.1.1 If an event trigger is known to be spurious, or an invalid indication of either the associated emergency classification or the plant condition occurs, THEN do not classify (see paragraph 6.3).

2.1.2 Select appropriate Emergency Classification Table(s) for observed event OR condition known.

EMERGENCY CLASSIFICATION TABLE INDEX

RADIATION EVENT	High Estimated Release Rates	Table 5
	High Rx Coolant Activity	Table 11
	High Containment Radiation	Table 11
	High Off Gas Radiation	Table 11
	High Main Stack Radiation	Table 5
	High Vent Stack Radiation	Table 5
	Unexpected Radiation	Table 5
	Spent Fuel Damage	Table 11
	Liquid Release	Table 5
REACTOR OR PLANT EVENT	ECCS Initiation	Table 15
	Failure to Scram	Table 15
	Rx Scram with Low Level	Table 2
	Rx Coolant Leakage	Table 15
	Loss of Primary Containment	Table 4
	Loss of Secondary Containment	Table 9
	Loss of Control Room Annunciators	Table 10
	Loss of Tech. Spec. Instrumentation	Table 10
	Loss of Power	Table 8
	Stuck Relief Valve	Table 15
	Turbine Failure	Table 15
SITE EVENT	Aircraft Crash	Table 12
	Any Explosion	Table 12
	Bomb or Sabotage Threat	Table 14
	Control Room Evacuation	Table 13
	Earthquake	Table 7
	Fire	Table 6
	Hostage or Extortion	Table 14
	Hurricane or Tornado	Table 7
	Loss of Communications	Table 10
	Loss of Conowingo Dam	Table 7
	Loss of Meterological Instrumentation	Table 10
	Personnel Injury	Table 3
	Security Threat	Table 14
	Toxic or Flammable Gas	Table 12

3.0 CONTINUING ACTIONS

3.1 IF emergency condition(s) dictate,
THEN escalate OR de-escalate emergency classification.

NOTE:

IT IS PREFERABLE TO OBTAIN CONCURRENCE OF EMERGENCY RESPONSE MANAGER FOR DE-ESCALATION OR ENTRY INTO THE RECOVER PHASE.

4.0 FINAL CONDITIONS

4.1 Assume role of Emergency Director
AND implement ERP-200, Emergency Director,
until relieved.

5.0 ATTACHMENTS AND APPENDICES

5.1 Attachment 1 - Classification of Emergencies Flow Chart

5.2 Attachment 2 - Emergency Classification Tables 1 thru 15

6.0 SUPPORTING INFORMATION

6.1 PURPOSE

To provide the method for classifying an event or condition into one of four (4) emergency classifications as described in the Emergency Plan.

6.2 CRITERIA FOR USE

Implement this procedure whenever Shift Management determines conditions meet the Emergency Classification criteria.

PAR information provided in the tables, is expected to be used by the ED when an event rapidly progresses to a General Emergency. Additionally, PAR information may be obtained from ERP-315 computer printout. In either case, it is expected that the ED will use the most conservative PAR available.

NOTE:

ISSUANCE OF A PAR AUTOMATICALLY CAUSES A GENERAL EMERGENCY CLASSIFICATION AND CONVERSELY A GENERAL EMERGENCY CLASSIFICATION REQUIRES THE ISSUANCE OF A PAR.

6.3 The following guidance is provided to assist the Emergency Director (ED) in making emergency classifications.

In most cases, the emergency classification process is a straight-forward comparison of important plant parameters to the emergency action levels (EAL's). The instruments and annunciators referred to in the Emergency Classification Tables are presented as primary indicators and should be validated by plant conditions or event conditons.

A broad spectrum of discretion in classifying events is provided to the ED under the "General Conditions" category. In using the "General Conditions" category and in classifying emergencies under circumstances which are not straight-forward use of the EAL's, the ED should be mindful that an approach is needed which is conservative with respect to public, plant, and personnel safety and with respect to ensuring the adequacy of personnel and technical support. Conservative decisions must be made if the ED has any doubt regarding the health and safety of the public.

The ED should also be mindful that declaring Unusual Events or Alerts provide the Company and off-site agencies the opportunity for early information regarding the event and for early activation of resources and should be considered a "no adverse consequence" decision. Conversely, not declaring an Unusual Event or Alert when there is credible (but, not clear) bases for doing so, would appear to be less than open or candid and could have serious adverse consequences.

At the Site and General Emergency levels, clearly the threat to the plant and to the public is at a heightened level. Rapid application of resources and preparation for providing for the public health and safety are appropriate. Because of the magnitude of resource mobilization and the potential disruption of normal public activities, an overly conservative or an inappropriately early declaration of these levels is not advisable.

In general, the EAL's are specific values of parameters and do not consider trends, rates of change, or status changes in equipment availability. In the event of rapidly changing parameters trending toward an increased emergency classification, the ED can appropriately decide that the higher level EAL will be exceeded and escalate the classification early. In the event of trends toward a decreased emergency classification, parameter values must be below the EAL's to de-escalate.

In the event of a "spike" which rapidly exceeds and then decreases below an EAL, entry into the Emergency Plan or escalation to the higher classification "in retrospect" is not appropriate unless the "spike" is indicative of continuing degrading conditions which will lead to an escalated emergency classification level. This statement does not apply if the EAL includes a "spike". Spurious alarms or parameters which are known to be invalid indicators of actual plant conditions or of the emergency classification, should not be used to declare emergency classifications.

6.4 REFERENCES

6.4.1 ERP-200, "Emergency Director (ED)"

6.4.2 NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans" and "Preparedness in Support of Nuclear Power Plants"

6.4.3 Peach Bottom Atomic Power Station (PBAPS) Emergency Plan, Sections 3, 4, 5 and 6

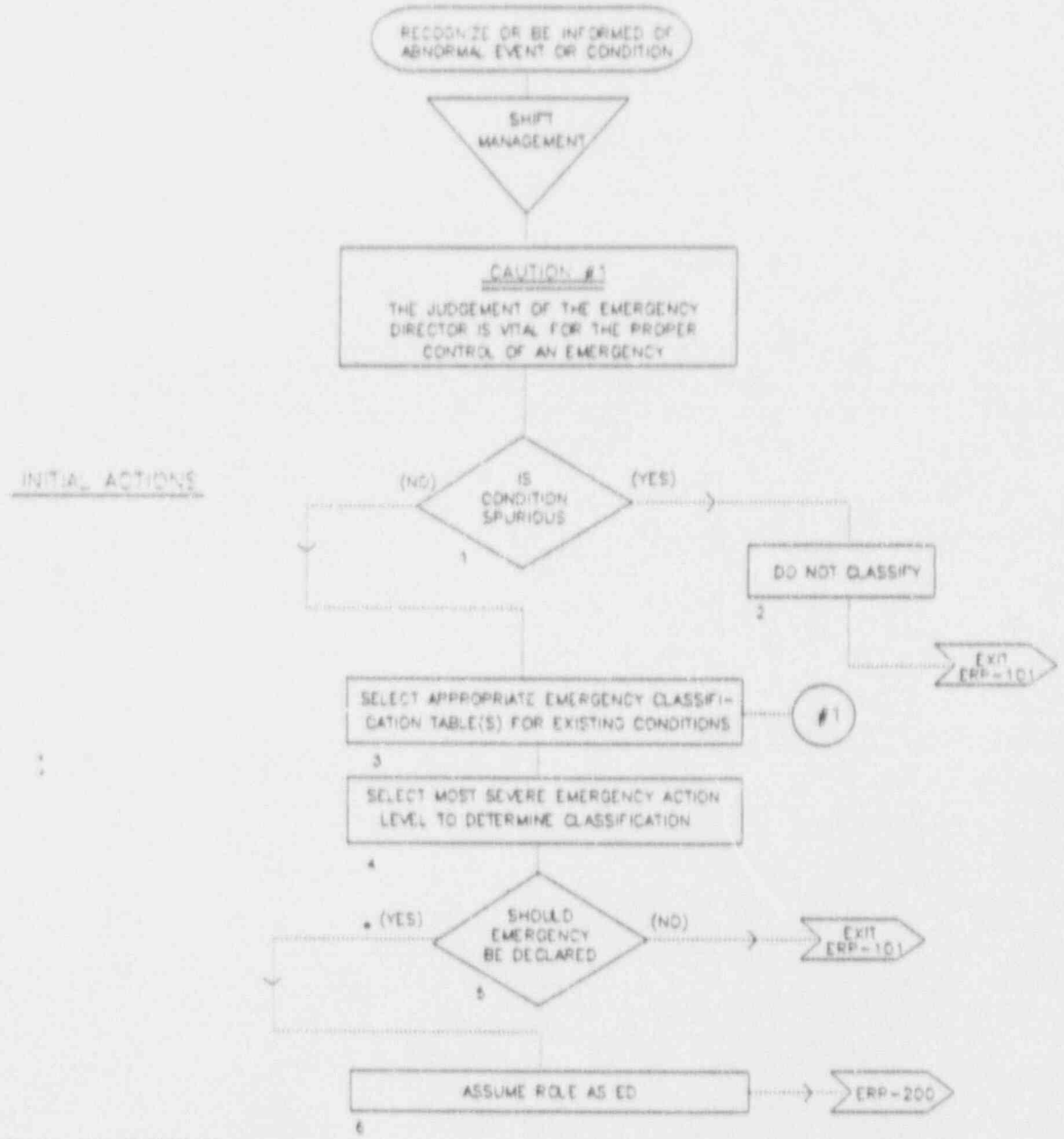
6.4.4 Nuclear Group Administrative Procedure NGAP-NA-02R001, "Identification and Evaluation of Potentially Reportable Items" and "Events of Potential Public Interest"

6.4.5 EPA-520/1-75-001, "Manual of Protective Action Guides" and "Protective Actions for Nuclear Incidents"

6.4.6. Regulatory Guide 1.190, "Calculation of Annual Dose to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10CRF Part 50, Appendix I"

ATTACHMENT 1
CLASSIFICATION OF EMERGENCIES FLOW CHART

(Page 1 of 1)



#1 NOTES

IDENTIFICATION AND CLASSIFICATION OF EMERGENCIES SHOULD BE ACCOMPLISHED WITHIN 15 MINUTES AFTER THE APPLICABLE EMERGENCY ACTION LEVELS ARE MET

TABLE 1
GENERAL CONDITIONS

NOTE:

This table is to be used as a guide for "big picture" emergency classification.
IF conditions listed are met
AND specific EALs of other tables do not address current emergency conditions,
THEN classify using this table.

UNUSUAL EVENT	1) Situation threatens normal level of plant safety. No releases of radioactive material off-site are expected.
ALERT	1) Situation does or could represent a substantial degradation in the level of plant safety 2) Conditions exist that warrant precautionary activation of Technical Support Center and placing Emergency Operations Facility and other key emergency personnel on standby 3) Release of radioactive material warrants off-site response or monitoring, but does not require protective actions.
SITE EMERGENCY	1) The level of safety has or could be degraded to the point of losing a plant function needed to protect the public 2) Conditions exist that warrant: (a) Activation of EOF/ENC AND (b) Activation of off-site monitoring teams OR Protective measures recommendations to public near the site 3) A significant release of radioactive material has occurred or could take place.
GENERAL EMERGENCY	1) Substantial core damage AND loss of, or high potential for loss of primary containment integrity 2) Conditions exist that warrant all on-site and off-site emergency facilities being activated to aid in implementation of protective actions 3) Large amounts of radioactive material have been or could be released in a short period of time 4) Protective actions recommendations for off-site areas are made for PBAPS * PAR shelter a full 360 degrees for 2 miles shelter affected and 2 adjacent sectors for 2-5 miles

TABLE 2
UNPLANNED SHUTDOWN (SCRAM)

UNUSUAL EVENT	UNPLANNED SHUTDOWN This is an Event of Potential Public Interest, but is not an Emergency Plan entry condition. (Refer to NGAP-NA-02R001)
ALERT	SCRAM WITH TRIPLE LOW LEVEL 1) Scram condition with Reactor level at or below triple low level (-160") (LI-2(3)-02-3-091) AND Containment pressure >1 psig but <10 psig (LI-2(3)-02-3-113) (PR-2-(3)508)
SITE EMERGENCY	SCRAM WITH LOCA 1) Scram condition with Reactor level at or below triple low level (-160") (LI-2(3)-02-3-091) AND Containment pressure 10 psig or greater (LI-2(3)-02-3-113) (PR-2-(3)508)
GENERAL EMERGENCY	SCRAM WITH LOCA & NO ECCS 1) Scram Condition with Reactor level <-226" on the active fuel range level for 3 minutes (LI-2(3)-02-3-091) AND Containment pressure >20 psig (LI-2(3)-02-3-113) (PR-2(3)-508) * PAR shelter a full 360 degree for 2 miles shelter affected and 2 adjacent sectors for 2-5 miles

TABLE 3
PERSONNEL INJURY

UNUSUAL EVENT	INJURY WITH EXCESS RADIATION EXPOSURE OR CONTAMINATION REQUIRING TRANSPORTATION TO AN OFF-SITE MEDICAL FACILITY NOTE: INJURED PERSONNEL TRANSPORTED OFFSITE SHALL MEET ALL UNCONTAMINATED RELEASE REQUIREMENTS OR BE CLASSIFIED AS CONTAMINATED. SEE ALSO SE-12, ERP-610 AND ERP-650.
ALERT	N/A
SITE EMERGENCY	N/A
GENERAL EMERGENCY	N/A

TABLE 4
LOSS OF PRIMARY CONTAINMENT INTEGRITY
(WHEN PRIMARY CONTAINMENT IS REQUIRED BY TECHNICAL SPECIFICATIONS)

UNUSUAL EVENT	1) Primary Containment leak rate greater than the requirement of Tech. Spec. 4.7.A.2 as identified by Tech. Staff. 2) Inability to maintain Primary Containment pressure above 0.25 psig (not due to lack of nitrogen) per Tech. Spec. 3.7.A.2. (PR-2(3)508) 3) Failure of a Primary Containment Penetration to isolate due to a valid isolation condition (both valves in a two valve penetration fail to close).
ALERT	1) Inability to maintain Primary Containment pressure above 0.25 psig with indication of high radiation (1mr/hr) on the Rx. Bldg. Zone Vent Exhaust. (PR-2(3)508) (RR-2(3)-17-45! 2) Torus room flood (6 inches) with a corresponding level decrease in the Torus. (panel 2(3)24, alarm E-5) (panel 2(3)0C003, LI-2(3)91
SITE EMERGENCY	1) Primary Containment pressure fluctuations above 1.5 psig with Group II and III isolation conditions existing and abnormally high radiation on any blue tagged ARM AND EITHER Rx. Bldg. Zone Vent Exhaust high radiation (1mr/hr) (RR-2(3)-17-45! OR Main Stack Rad. Effluent increasing due to SBGTS. (RR-0-17-051) 2) Primary Containment radiation >4E+3 R/hr on two independent indications with Containment pressure >2 psig. (RI-8(9)103A/C) (RI-8(9)103B/D)
GENERAL EMERGENCY	1) Primary Containment radiation >4E+4 R/hr on two independent indications with a known or probable failure of Primary Containment Integrity. (RI-8(9)103A/C) (RI-8(9)103B/D) * PAR (for Primary Containment Intact see Table 11) shelter a full 360 degree for 2 miles shelter affected and 2 adjacent sectors for 2-5 miles 2) Primary Containment radiation >3E+5 R/hr on two independent indications with a known or probable failure of Primary Containment Integrity. (RI-8(9)103A/C) (RI-8(9)103B/D) * PAR (for Primary Containment Intact see Table 11) shelter a full 360 degree for 2-5 miles shelter affected and 2 adjacent sectors for 10 miles

TABLE 5
RADIOACTIVE RELEASE

	INSTANTANEOUS RELEASE EXCEEDING TECHNICAL SPECIFICATIONS
UNUSUAL EVENT	1) Liquid release exceeding Tech. Spec. 3.8.B.1. 2) Gaseous release exceeding Tech. Spec. 3.8.C.1 from (a) Main Stack Spike > 1.8E+04 cps OR {RR-0-17-051} (b) Rx. Bldg. Vent Spike > 3.0E+05 cpm OR {RR-2(3)979} (c) Main Stack Spike > 6.0E+03 cps AND Rx. Bldg. Vent Spike > 1.0E+05 cpm
	ACTUAL OR POTENTIAL RELEASE 0.01 REM WHOLE BODY OR 0.05 REM THYROID
ALERT	1) Uncontrollable release for more than 20 minutes from (a) Main Stack > 2.0E+08 cps OR {RR-0-17-051} (b) Rx. Bldg. Vent > 3.4E+06 cpm {RR-2(3)979} 2) Continued particulate or iodine estimated release rates from analysis of particulate filter or charcoal cartridge. (a) Main Stack > 1.56E+04 uCi/sec OR (b) Rx. Bldg. Vent > 5.36E+02 uCi/sec 3) Unexpected radiation levels increasing by a factor of 1000 OR unexpected airborne contamination increasing by a factor of 1000 using direct radiation readings within any facility structure.
	ACTUAL OR POTENTIAL RELEASE 0.1 REM WHOLE BODY OR 0.5 REM THYROID
SITE EMERGENCY	1) Uncontrollable release for more than 20 minutes from (a) Main Stack > 2.0E+09 cps OR {RR-0-17-051} (b) Rx. Bldg Vent > 8.75E+08 cpm {RR-2(3)979} 2) Continued particulate or iodine estimated release rates from analysis of particulate filter or charcoal cartridge. (a) Main Stack > 1.56E+05 uCi/sec OR (b) Rx. Bldg. Vent > 5.36E+03 uCi/sec
	ACTUAL OR POTENTIAL RELEASE 1.0 REM WHOLE BODY OR 5.0 REM THYROID
GENERAL EMERGENCY	1) Uncontrollable release for more than 20 minutes from (a) Main Stack > 2.0E+10 cps OR {RR-0-17-051} (b) Rx. Bldg. Vent > 8.75E+09 cpm {RR-2(3)979} 2) Continued particulate or iodine estimated release rates from analysis of particulate filter or charcoal cartridge. (a) Main Stack > 1.56E+06 uCi/sec OR (b) Rx. Bldg. Vent > 5.36E+04 uCi/sec * PAR shelter 360 degrees for 2 miles shelter affected and 2 adjacent sectors for 2-10 miles
	ACTUAL OR POTENTIAL RELEASE 5 REM WHOLE BODY OR 25 REM THYROID
	* PAR evacuate 360 degrees for 5 miles evacuate affected and 2 adjacent sectors for 5-10 miles

TABLE 6
FIRE

UNUSUAL EVENT	1) Fire in protected area lasting 10 minutes or more after initial attempts to extinguish it.
ALERT	1) Fire which has lasted over 20 minutes after initial attempts to extinguish it and which could make any of the following safety systems INOPERABLE: - ADS - ECW - ESW - HPCI - HPSW - PCIS - RCIC - SBGTS - SLC - RHR - RPS - Core Spray - Control Rod Drive HCU's - Control Room Ventilation - 2 Emergency Diesel Generators - Loss of Emergency Switchgear - Primary Containment - Secondary Containment
SITE EMERGENCY	1) Fire which removes those Safety Systems required to perform a single plant function (i.e., both HPCI & ADS when required, all of Low Pressure ECCS when required).
GENERAL EMERGENCY	1) Fire which causes damage to plant systems sufficient to lead to other General Emergency conditions (e.g., LOCA symptoms, ECCS, or containment failure).

TABLE 7
SEVERE NATURAL PHENOMENA

UNUSUAL EVENT	1) Earthquake felt in plant or detected and confirmed on station seismic instrumentation per SO 67.7.A. 2) Conowingo pond level less than 104 feet without prior notification by the Power Director. (LI-2(3)278A,B,C) 3) Conowingo pond level greater than 113 feet with predicted flow in excess of 840,000 cfs. (LI-2(3)278A,B,C) 4) Hurricane or tornado, forecasted to hit the station with sustained winds of 75 mph or greater, as notified by the Power Director.
ALERT	1) "OPERATING BASIS EARTHQUAKE" exceeded per SE-5 and felt in the plant. 2) An uncontrollable loss of Conowingo pond level as confirmed by the Power Director. 3) Conowingo pond level greater than 114 feet as confirmed by the Power Director. 4) Hurricane or tornado which strikes the power block with identifiable plant damage.
SITE EMERGENCY	1) "MAXIMUM CREDIBLE EARTHQUAKE" detected on station seismic instrumentation (0.12g) per Tech. Spec. 5.6. 2) Conowingo pond level less than 87 feet as confirmed by the Power Director. 3) Conowingo pond level greater than 115 feet as confirmed by the Power Director.
GENERAL EMERGENCY	N/A

TABLE 8
LOSS OF POWER

UNUSUAL EVENT	1) SU2 and SU3 Transformers unavailable for > 60 seconds. 2) Loss of voltage on all four 4 KV emergency busses for > 60 seconds. 3) Loss of voltage on all four 480 V emergency busses for > 60 seconds.
ALERT	LOSS OF AC POWER FOR LESS THAN 15 MINUTES 1) SU2 and SU3 Transformers unavailable with failure of all four diesel generators to energize their busses. LOSS OF DC POWER FOR LESS THAN 15 MINUTES 2) Less than 105 volts on all four 125 V distribution panels AND (panel 2(3)09, alarms C-3 & C-4) Less than 21 volts on all four 24 V distribution panels (panel 2(3)20, alarms H-3 & H-4) (panel 2(3)10, alarms F-5 & G-5) (panel 2(3)10, alarms H-5 & J-5)
SITE EMERGENCY	LOSS OF AC POWER FOR LONGER THAN 15 MINUTES 1) SU2 and SU3 Transformers unavailable for > 15 minutes with failure of all four diesel generators to energize their busses for > 15 minutes. LOSS OF DC POWER FOR LONGER THAN 15 MINUTES 2) Less than 105 volts on all four 125 V distribution panels for > 15 minutes AND Less than 21 volts on all four 24 V distribution panels for > 15 minutes.
GENERAL EMERGENCY	N/A

TABLE 9
SECONDARY CONTAINMENT INTEGRITY

UNUSUAL EVENT	1) Loss of secondary containment integrity for greater than 12 hours when Secondary Containment is required by T 'cal Specifications.
ALERT	N/A
SITE EMERGENCY	N/A
GENERAL EMERGENCY	N/A

TABLE 10
INSTRUMENT OR COMMUNICATIONS FAILURE

UNUSUAL EVENT	1) Loss of communications capability including (refer to NGAP-NA-02R001) Loss of the ENS Network AND Loss of the OMNI Network AND Loss of the GTE System 2) Loss of ALL meteorological instrumentation (refer to NGAP-NA-02R001) 3) Loss of assessment capability from Loss of radiation monitoring or Loss of accident monitoring or Loss of effluent monitoring requiring Rx shutdown per Tech. Spec. Table 3.1.1 or Tech. Spec. 3.6.C Tech. Spec. Table 3.2.A or Tech. Spec. 3.7.A.6 Tech. Spec. Table 3.2.B or Tech. Spec. 3.8.C.6 Tech. Spec. Table 3.2.C or Tech. Spec. 3.8.C.7b Tech. Spec. Table 3.2.F or Tech. Spec. Table 3.2.G
ALERT	1) Loss of most or all alarms (annunciators).
SITE EMERGENCY	1) Loss of most or all alarms (annunciators) with plant transient in progress.
GENERAL EMERGENCY	N/A

TABLE 11
FUEL DAMAGE

UNUSUAL EVENT	1) Off-gas radiation increase of 500 mR/hr within 30 minutes 2) Off-gas radiation > 2.5E+03 mR/hr (RR-2(3)-17-152) 3) Reactor coolant activity > 4 uCi/gm dose equivalent I-131 per Tech. Spec. 3.6.B.1.
ALERT	1) Containment radiation > 4.0E+02 R/hr (RI-8(9)103 A/C) on two independent indicators (RI-8(9)103 B/D) 2) Off-gas radiation > 2.5E+04 mR/hr (RR-2(3)-17-152) 3) Reactor coolant activity > 300 uCi/gm dose equivalent I-131 with a Rx scram from main steam line high radiation. 4) Spent fuel damage resulting in refuel floor high radiation OR refuel floor ventilation exhaust (RIS-2(3)-17-458(A,B,C,D) high radiation. (RR-2-(3)-17-456)
SITE EMERGENCY	1) Containment radiation > 4.0E+03 R/hr (RI-8(9)103 A/C) on two independent indicators. (RI-8(9)103 B/D) 2) Major spent fuel damage or uncovering of spent fuel confirmed by high fuel floor (U/2 ARM 3-7,3-8,3-9,3-10) radiation levels AND (U/3 ARM 7-9,7-10,7-11,7-12) (a) observation OR (b) refuel floor high radiation OR (RIS-2(3)-17-458(A,B,C,D)) (c) refuel floor ventilation exhaust (RR-2(3)-17-456) high radiation
GENERAL EMERGENCY	1) Containment radiation > 4.0E+04 R/hr (RI-8(9)103 A/C) on two independent indications (RI-8(9)103 B/D) with containment pressure > 10 psig (PR-2(3)508) * PAR (for a known or probable failure of Primary Containment, see Table 4) - evacuate a full 360 degrees for 2 miles - evacuate affected and 2 adjacent sectors for 2-5 miles 2) Containment radiation > 3.0E+05 R/hr (RI-8(9)103 A/C) on two independent indications (RI-8(9)103 B/D) with containment pressure > 10 psig (PR-2(3)508) * PAR (for a known or probable failure of Primary Containment, see Table 4) - evacuate a full 360 degrees for 5 miles - evacuate affected and 2 adjacent sectors for 5-10 miles

TABLE 12
OTHER HAZARDS TO STATION OPERATION

UNUSUAL EVENT	1) Aircraft crash on or near site OR unusual aircraft activity over facility 2) Significant explosion on or near site 3) Significant toxic gas OR flammable gas release on or near site.
ALERT	1) Aircraft crash OR missile impact into the Turbine Building OR Radwaste Building 2) Significant explosion affecting plant operation 3) Uncontrolled significant release of toxic or flammable gas within protected area.
SITE EMERGENCY	HAZARDS WITH EITHER UNIT NOT IN COLD SHUTDOWN 1) Aircraft crash OR missile impact with major damage in: - U/2 or U/3 Reactor Buildings - Diesel Generator Buildings - HPSW Pump Structure 2) Explosion causing severe damage to 2 or more diesel generators OR to ECCS equipment such that the systems required to perform a single plant function become inoperable (i.e., both HPCI & ADS when required, all of low pressure ECCS when required). 3) Uncontrolled release of toxic or flammable gas detected in the Control Room (e.g., Chlorine, Cardox).
GENERAL EMERGENCY	N/A

TABLE 13
CONTROL ROOM EVACUATION

UNUSUAL EVENT	N/A
ALERT	1) Evacuation of Main Control Room is anticipated OR required AND control is established at Remote Shutdown Panels or Alternative Shutdown Panels.
SITE EMERGENCY	1) Evacuation of Main Control Room AND control of Reactor Shutdown Systems is not established at Remote Shutdown Panels or Alternative Shutdown Panels in 15 minutes.
GENERAL EMERGENCY	N/A

TABLE 14
THREAT TO SECURITY

UNUSUAL EVENT	SECURITY THREAT, ATTEMPTED ENTRY OR ATTEMPTED SABOTAGE 1) Credible sabotage or bomb threat 2) Credible intrusion and attack threat 3) Attempted intrusion and attack 4) Attempted sabotage discovered 5) Hostage situation or extortion threat.
ALERT	ONGOING SECURITY COMPROMISE 1) Actual attack and intrusion into a protected area 2) Suspected bomb or sabotage device discovered.
SITE EMERGENCY	IMMINENT LOSS OF PHYSICAL CONTROL OF THE PLANT 1) Actual attack and intrusion with imminent occupation of the Control Room or other vital areas.
GENERAL EMERGENCY	LOSS OF PHYSICAL CONTROL OF THE FACILITY 1) Actual attack and intrusion with occupation of the Control Room or other vital areas. * PAR evacuate 360 degrees for 2 miles

TABLE 15
PLANT SYSTEMS/EQUIPMENT OPERATIONS FAILURE

UNUSUAL EVENT	1) Reactor Coolant Leakage greater than the limits of Tech. Spec. 3.6.C.1. 2) ECCS initiated due to a valid signal and injecting, or should have resulted in ECCS injection into the vessel (Core Spray, RHR or HPCI). 3) Stuck open relief valve or safety valve. 4) Turbine rotating component failure causing rapid plant shutdown.
ALERT	1) Reactor Coolant Leakage greater than 50 gpm. 2) Cold shutdown unattainable (Rx coolant < 212 degrees F and Rx vented). 3) Failure to initiate a scram when required via the reactor protection system and via Rx mode switch and via manual scram pushbuttons and via alternate rod insertion (ARI). 4) Failure to complete a scram (ATWS - as defined in TRIP NOTES) 5) Turbine failure causing casing penetration.
SITE EMERGENCY	1) Hot shutdown unattainable (Rx coolant < 212 degrees F). 2) Failure to complete a scram (ATWS) and Torus temperature above 110 degrees F.
GENERAL EMERGENCY	N/A

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY RESPONSE PROCEDURE

ERP-110 EMERGENCY NOTIFICATIONS

1.0 RESPONSIBILITIES

1.1 Emergency Director (ED) Communicator is responsible for:

1.1.1 Making emergency classification notifications directed by ED.

1.1.2 Making call-outs of emergency response personnel, as directed by ED.

1.1.3 Make Protective Action Recommendation and/or Protective Measures Recommendation to PA Bureau of Radiation Protection and MD Radiological Health Program as directed by ED.

1.2 NRC Communicator is responsible for:

1.2.1 Making Station Public Address Announcement as directed by ED.

1.2.2 Contacting NRC per NA-02R001, Nuclear Group Administrative Procedure (NGAP), as directed by the ED.

1.2.3 Maintaining communication as directed by the NRC.

2.0 INITIAL ACTIONS

2.1 The ED Communicator(s) shall:

2.1.1 Receive completed Emergency Notification Form from Emergency Director.

2.1.2 IF Unusual Event OR Alert classification, SELECT and perform ERP-110 Appendix 1.

2.1.3 IF Site Emergency OR General Emergency classification, SELECT and perform ERP-110 Appendix 2.

2.1.4 IF initial call is not acknowledged, USE alternate telephone numbers.

2.1.5 WHEN initial 15 minute notifications are completed obtain completed Emergency Response Organization Form from ED, THEN initiate personnel call-outs per ERP-140.

2.1.6 WHEN personnel call-outs have been initiated, THEN complete "after 15 minutes" notifications.

3.2 The NRC Communicator shall:

3.2.1 Provide periodic updates on plant status or change in emergency classification as directed by Emergency Director OR as requested by NRC.

3.2.2 Remain on NRC telephone until NRC disconnects OR authorizes securing line.

4.0 FINAL CONDITIONS

4.1 Plant is in a stable condition AND station conditions do not meet any emergency classification as delineated in ERP-101, Classification of Emergencies.

4.2 All notification AND call-out records have been collected for filing in accordance with Administrative Procedure A-46, "Nuclear Records Management".

5.0 ATTACHMENTS AND APPENDICES

5.1 Attachment 1 - "Emergency Notifications Flow Chart"

5.2 Appendix 1 - "Emergency Classification Notification Telephone List for an Unusual Event OR Alert"

5.3 Appendix 2 - "Emergency Classification Notification Telephone List for Site Emergency OR General Emergency"

6.0 SUPPORTING INFORMATION

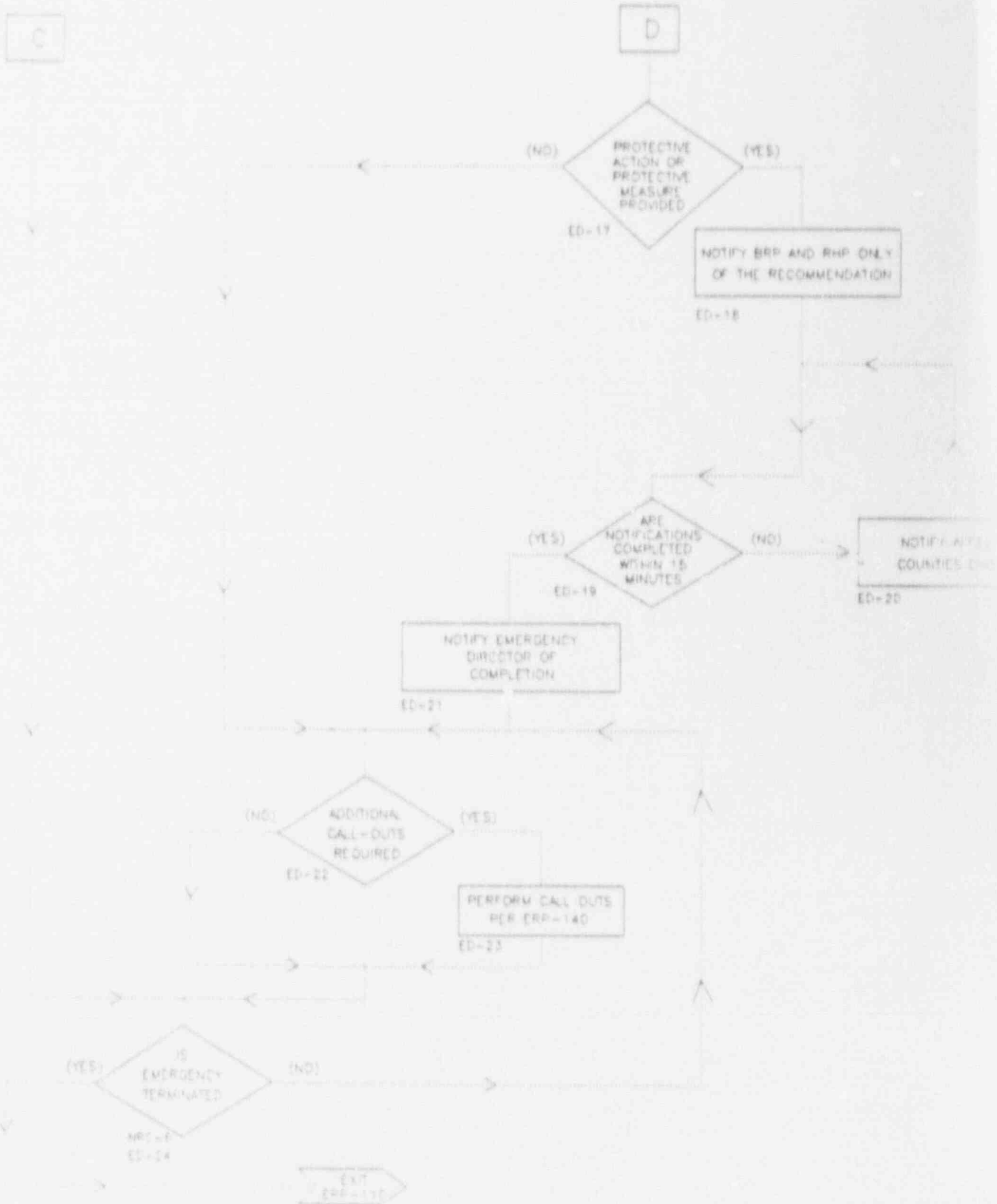
6.1 PURPOSE

Provide guidelines for Communicator(s) to perform notifications of emergency to off-site agencies AND plant personnel for the four (4) emergency classifications described in the Peach Bottom Atomic Power Station Emergency Plan.

6.2 CRITERIA FOR USE

Implement whenever the ED declares an emergency in accordance with ERP-101, Classification of Emergencies.

ATTACHMENT 1
EMERGENCY NOTIFICATIONS FLOW CHART
(Page 3 of 3)



PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY RESPONSE PROCEDURE

ERP-110 EMERGENCY NOTIFICATIONS

1.0 RESPONSIBILITIES

1.1 Emergency Director (ED) Communicator is responsible for:

1.1.1 Making emergency classification notifications directed by ED.

1.1.2 Making call-outs of emergency response personnel, as directed by ED.

1.1.3 Make Protective Action Recommendation and/or Protective Measures Recommendation to PA Bureau of Radiation Protection and MD Radiological Health Program as directed by ED.

1.2 NRC Communicator is responsible for:

1.2.1 Making Station Public Address Announcement as directed by ED.

1.2.2 Contacting NRC per NA-02R001, Nuclear Group Administrative Procedure (NGAP), as directed by the ED.

1.2.3 Maintaining communication as directed by the NRC.

2.0 INITIAL ACTIONS

2.1 The ED Communicator(s) shall:

2.1.1 Receive completed Emergency Notification Form from Emergency Director.

2.1.2 IF Unusual Event OR Alert classification, SELECT and perform ERP-110 Appendix 1.

2.1.3 IF Site Emergency OR General Emergency classification, SELECT and perform ERP-110 Appendix 2.

2.1.4 IF initial call is not acknowledged, USE alternate telephone numbers.

2.1.5 WHEN initial 15 minute notifications are completed obtain completed Emergency Response Organization Form from ED, THEN initiate personnel call-outs per ERP-140.

2.1.6 WHEN personnel call-outs have been initiated, THEN complete "after 15 minutes" notifications.

2.2 The NRC Communicator shall:

2.2.1 Receive and make a station Public Address Announcement.

NOTE: CONTACT NRC AS SOON AS POSSIBLE AND NOT LATER THAN 1 HOUR AFTER DECLARATION OF AN EMERGENCY CLASSIFICATION.

2.2.2 Contact NRC via RED PHONE
OR alternate number.

a. Use the Event Notification Worksheet in the Reportability Manual (NGAP-NA-02R001).

b. NRC Operations Center Telephone Numbers

1st choice - RED PHONE
2nd choice - 301-951-0550
3rd choice - 301-427-4055
4th choice - 301-427-4259
5th choice - 301-492-8893

2.2.3 Remain on NRC telephone until NRC disconnects
OR approves securing line.

3.0 FOLLOW-UP ACTION

3.1 The ED Communicator shall:

3.1.1 WHEN notifications have been made,
submit completed ERP-110 Appendix 1
OR Appendix 2 to Emergency Director for signature.

3.1.2 WHEN ERP-140 call outs are completed,
notify Emergency Director.

3.1.3 IF Emergency Director provides a Protective Action Recommendation (PAR) and/or Protective Measure Recommendation
THEN:

a. Notify Pennsylvania Bureau of Radiation Protection (BRP) and Maryland Radiological Health Program (RHP) of the recommendation.

b. IF BRP and RHP cannot be contacted within 15 minutes,
THEN notify the affected counties directly.

c. Advise Emergency Director when notifications are completed.

3.1.4 IF Emergency Director requires additional call outs of emergency support personnel,
THEN make call outs using ERP-140 phone list.

3.2 The NRC Communicator shall:

3.2.1 Provide periodic updates on plant status or change in emergency classification as directed by Emergency Director OR as requested by NRC.

3.2.2 Remain on NRC telephone until NRC disconnects OR authorizes securing line.

4.0 FINAL CONDITIONS

4.1 Plant is in a stable condition
AND station conditions do not meet any emergency classification as delineated in ERP-101, Classification of Emergencies.

4.2 All notification
AND call-out records have been collected for filing in accordance with Administrative Procedure A-46, "Nuclear Records Management".

5.0 ATTACHMENTS AND APPENDICES

5.1 Attachment 1 - "Emergency Notifications Flow Chart"

5.2 Appendix 1 - "Emergency Classification Notification Telephone List for an Unusual Event OR Alert"

5.3 Appendix 2 - "Emergency Classification Notification Telephone List for Site Emergency OR General Emergency"

6.0 SUPPORTING INFORMATION

6.1 PURPOSE

Provide guidelines for Communicator(s) to perform notifications of emergency to off-site agencies
AND plant personnel for the four (4) emergency classifications described in the Peach Bottom Atomic Power Station Emergency Plan.

6.2 CRITERIA FOR USE

Implement whenever the ED declares an emergency in accordance with ERP-101, Classification of Emergencies.

6.3 REFERENCES

6.3.1 Code of Federal Regulations, Title 10, Energy, Part 50.72

6.3.2 ERP-101, "Classification of Emergencies"

6.3.3 ERP-110, "Emergency Notifications"

6.3.4 ERP-140, "Telephone Lists for Emergency Use"

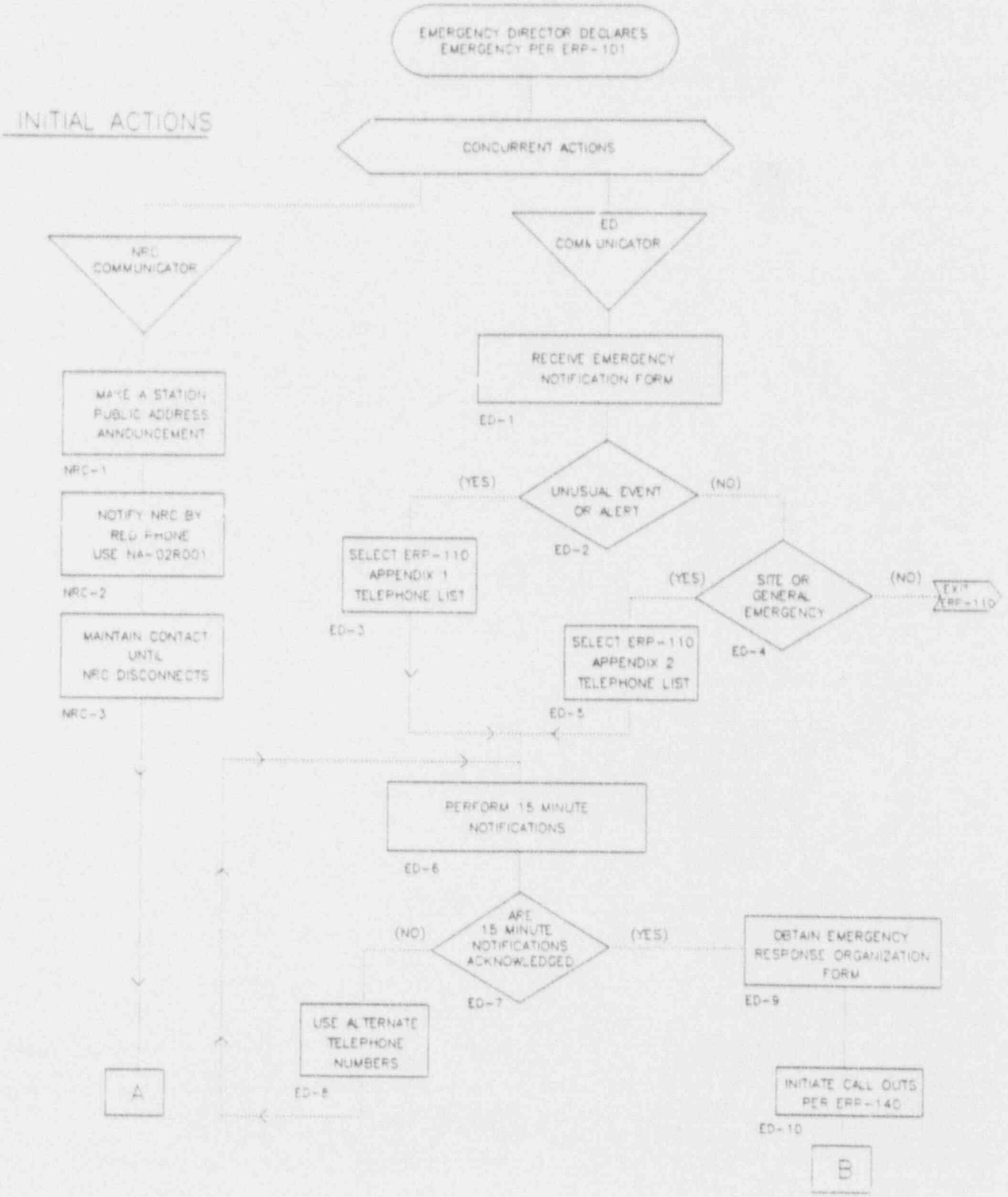
6.3.5 ERP-200, "Emergency Director"

6.3.6 Peach Bottom Atomic Power Station (PBAPS) Emergency Plan

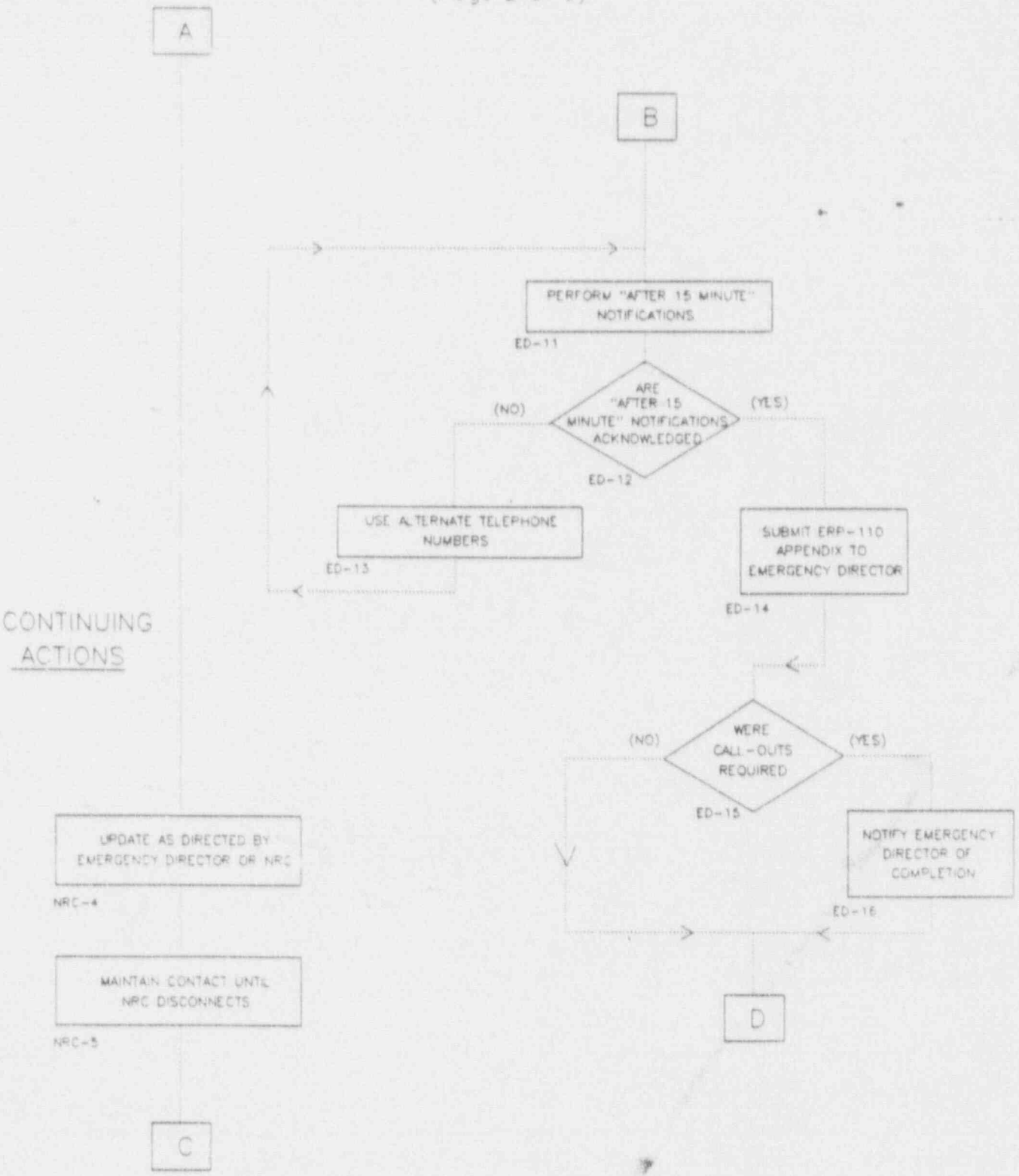
6.3.7 Nuclear Group Administrative procedure NA-02R001, "Identification and Evaluation of Potentially Reportable Items and Events of Public Interest"

6.3.6 PBAPS Administrative Procedure A-46, "Nuclear Records Management"

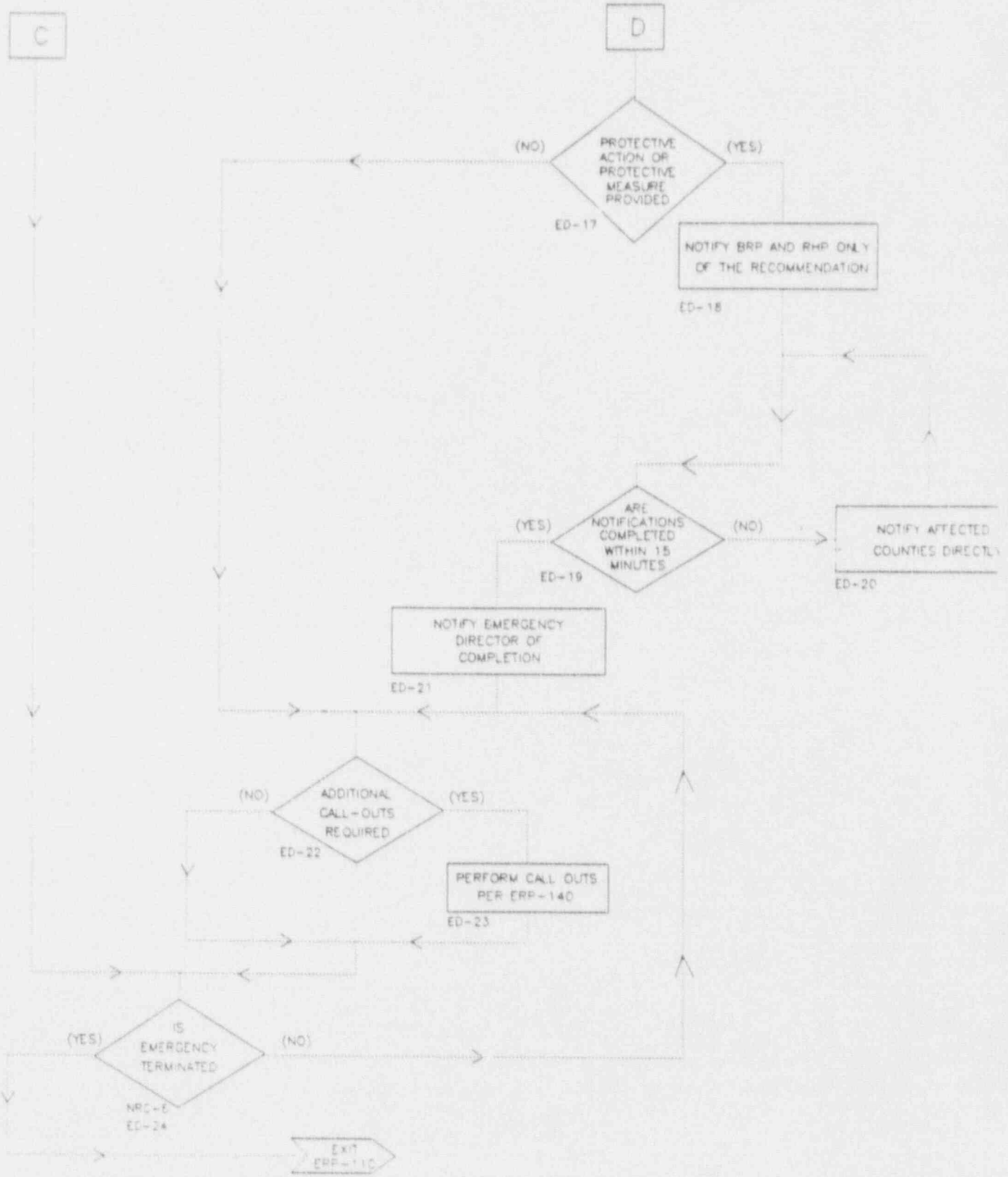
ATTACHMENT 1
EMERGENCY NOTIFICATIONS FLOW CHART
(Page 1 of 3)



ATTACHMENT 1
EMERGENCY NOTIFICATIONS FLOW CHART
(Page 2 of 3)



ATTACHMENT 1
EMERGENCY NOTIFICATIONS FLOW CHART
(Page 3 of 3)



12/3/41

APPENDIX 2
EMERGENCY CLASSIFICATION NOTIFICATION TELEPHONE LIST FOR A SITE EMERGENCY OR GENERAL EMERGENCY

USE THIS FORM IN CONJUNCTION WITH THE EMERGENCY NOTIFICATION FORM FOR EMERGENCY CLASSIFICATION NOTIFICATION (INITIAL OR CHANGE OR TERMINATION).

Time Notification Initiated: _____ Date: _____

DIRECTIONS: Dial Conference call Code 33 on OMNI phone 211, 212 or 268
As each agency answers, request they hold the line.
WHEN all agencies have answered
OR no other answers are received,
THEN transmit message. Roll call agencies which answered to ensure they received
AND understand message.
IF any agency failed to pickup,
THEN dial individual OMNI ext. or backup telephone number to complete notification.

PERSONNEL/AGENCIES TO BE NOTIFIED WITHIN 15 MINUTES	PHONE NUMBERS	TIME AM/PM	PERSON NOTIFIED
1. YORK COUNTY EMERGENCY MANAGEMENT AGENCY ROBERT STRAW, DIRECTOR	OMNI Phone Ext. 219 After 4:00 PM 9-854-5571 9-843-5111 HOME: 9-755-5575		
2. PENNSYLVANIA EMERGENCY MANAGEMENT AGENCY (PEMA)	OMNI Phone Ext. 216 or 9-783-8150		
3. HARFORD COUNTY DEPARTMENT OF EMERGENCY SERVICES	OMNI Phone Ext. 214 or 9-301-838-5800,3333		
4. CECIL COUNTY DEPARTMENT OF EMERGENCY SERVICES	OMNI Phone Ext. 215/234 or 9-301-398-2222, 3815, 1350		
5. MARYLAND EMERGENCY MANAGEMENT AGENCY	OMNI Phone Ext. 213 or 9-301-486-4422		
6. LANCASTER COUNTY EMERGENCY MANAGEMENT AGENCY Police Dispatcher	OMNI Phone Ext. 217 or 9-299-8373,8374 9-299-4321		
7. CHESTER COUNTY EMERGENCY SERVICES	OMNI Phone Ext. 218 or 9-215-344-6160		

NOT INCLUDED IN THE ABOVE CONFERENCE

8. MARYLAND RADIOLOGICAL HEALTH PROGRAM (RHP)	OMNI Phone Ext. 235 OMNI Phone Ext. 292 (8:00 AM to 4:00 PM ONLY) 9-301-631-3300 After 4:30 P.M. or Holidays 9-301-243-8700		
9. LOAD DISPATCHER	81-5141 or 9-215-841-5141 Request dispatcher to initiate emergency response organization call-out procedure		

APPENDIX 1

EMERGENCY CLASSIFICATION NOTIFICATION TELEPHONE LIST FOR AN UNUSUAL EVENT OR ALERT

PERSONNEL/AGENCIES TO BE NOTIFIED AFTER 15 MINUTE NOTIFICATIONS HAVE BEEN COMPLETED	PHONE NUMBERS	TIME AM/PM	PERSON NOTIFIED
1. PLANT MANAGEMENT (IF NOT ALREADY PRESENT)			
T.J. NIESSEN SUPERINTENDENT/OPERATIONS	HOME: [redacted] OFFICE: 4245 BEEPER: 9-800-331-7242 ACCESS NUMBER 502240		
OR			
K.P. POWERS PLANT MANAGER	HOME: [redacted] OFFICE: 4244 BEEPER: 9-800-331-7242 ACCESS NUMBER 502130		
OR			
D.B. MILLER V.P., PBAPS	HOME: [redacted] OFFICE: 4000 BEEPER: 9-800-331-7242 ACCESS NUMBER 502232		
2. MANAGER, PUBLIC INFORMATION PRIMARY: NEIL MCDERMOTT	HOME: [redacted] OFFICE: 81-4122 or 9-215-841-4122 BEEPER: 9-215-578-8883		
OR			
ALTERNATES: J. WILLIAM JONES	HOME: [redacted] OFFICE: 81-4129 BEEPER: 9-215-578-8885		
OR			
MICHAEL WOOD	HOME: [redacted] OFFICE: 81-4125 or 9-215-841-4125 BEEPER: 9-215-578-9803		
OR			
ASK FOR PUBLIC INFORMATION REPRESENTATIVE ON CALL	24 HRS: 81-5555 9-215-841-5555		
3. BUREAU OF RADIATION PROTECTION (BRP)	OMNI Phone Ext. 236 (8:00 AM to 4:00 PM ONLY) 9-787-2163 (8:00 AM to 4:30 PM) *After 4:00 PM call PEMA at 9-783-8150		
4. MARYLAND RADIOLOGICAL HEALTH PROGRAM (RHP)	OMNI Phone Ext. 235 OMNI Phone Ext. 292 (8:00 AM to 4:00 PM ONLY) 9-301-631-3300 After 4:30 P.M./Holidays 9-301-243-8700		

*If PEMA cannot be contacted, BRP can be accessed through DOE Radiological Assistance Program duty officer (24-hour) at 9-516-282-2200.

APPENDIX 2

EMERGENCY CLASSIFICATION NOTIFICATION TELEPHONE LIST FOR A SITE EMERGENCY OR GENERAL EMERGENCY

NOTE:

ERP-140 SHOULD BE INITIATED BEFORE PERFORMING REMAINDER OF NOTIFICATIONS.

PERSONNEL/AGENCIES TO BE NOTIFIED AFTER 15 MINUTE NOTIFICATIONS HAVE BEEN COMPLETED	PHONE NUMBERS	TIME AM/PM	PERSON NOTIFIED
1. PLANT MANAGEMENT (IF NOT ALREADY PRESENT)			
T.J. NIESSEN SUPERINTENDENT/OPERATIONS	HOME: [redacted] OFFICE: 4245 BEEPER: 9-800-331-7242 ACCESS NUMBER 502240		
OR			
K.P. POWERS PLANT MANAGER	HOME: [redacted] OFFICE: 4244 BEEPER: 9-800-331-7242 ACCESS NUMBER 502130		
OR			
D.B. MILLER V.P., PBAPS	HOME: [redacted] OFFICE: 4000 BEEPER: 9-800-331-7242 ACCESS NUMBER 502232		
2. MANAGER, PUBLIC INFORMATION PRIMARY: NEIL MCDERMOTT	HOME: [redacted] OFFICE: 81-4122 or 9-215-841-4122 BEEPER: 9-215-578-8883		
OR			
ALTERNATES: J. WILLIAM JONES	HOME: [redacted] OFFICE: 81-4129 BEEPER: 9-215-578-8885		
OR			
MICHAEL WOOD	HOME: [redacted] OFFICE: 81-4125 or 9-215-841-4125 BEEPER: 9-215-578-9803		
OR			
ASK FOR PUBLIC INFORMATION REPRESENTATIVE ON CALL	24 HRS: 81-5555 9-215-841-5555		
3. BUREAU OF RADIATION PROTECTION (BRP)	OMNI Phone Ext. 236 (8:00 AM to 4:00 PM ONLY) 9-787-2163 (8:00 AM to 4:30 PM) *After 4:00 PM call PEMA at 9-783-8150		

*If PEMA cannot be contacted, BRP can be accessed through DOE Radiological Assistance Program duty officer (24-hour) at 9-516 282-2200.

APPENDIX 1

EMERGENCY CLASSIFICATION NOTIFICATION TELEPHONE LIST FOR AN UNUSUAL EVENT OR ALERT

PERSONNEL/AGENCIES TO BE NOTIFIED AFTER 15 MINUTE NOTIFICATIONS HAVE BEEN COMPLETED	PHONE NUMBERS	TIME AM/PM	PERSON NOTIFIED
5. EMERGENCY PREPAREDNESS PRIMARY: R.R. GALLAGHER	HOME: [redacted] OFFICE: 4920 BEEPER: 9-800-331-7242 ACCESS NUMBER 502121		
OR			
ALTERNATE: D.E. MCCOMSEY	HOME: [redacted] OFFICE: 4052 BEEPER: 9-800-331-7242 ACCESS NUMBER 502222		
OR			
ALTERNATE: B.L. CLARK	HOME: [redacted] OFFICE: 81-4249 BEEPER: 9-800-331-7242 ACCESS NUMBER 502107		
6. PENNSYLVANIA STATE POLICE, YORK BARRACKS	OMNI Phone Ext. 284, or 9-848-6355		
7. NRC RESIDENT (NOTIFY ONE) J.J. LYASH LARRY MYERS MICHELE EVANS	OFFICE: 4213 HOME: [redacted] HOME: HOME:		
AGENCIES TO BE NOTIFIED AFTER ALL OTHER NOTIFICATIONS HAVE BEEN COMPLETED BUT WITHIN TWO HOURS FOR AN ALERT OR HIGHER CLASSIFICATION	PHONE NUMBERS	TIME AM/PM	PERSON NOTIFIED
1. ANI	9-203-677-7305		
2. INSTITUTE OF NUCLEAR POWER OPERATIONS (INPO) DUTY OFFICER (24-HR)	9-404-953-0904, 0922 OR SWITCHBOARD 9-404-953-3600		

Notification completed by: _____ Time/Date: _____
Communicator

Noted by: _____
Emergency Director

RRG:dlk
12/2/91

APPENDIX 1

EMERGENCY CLASSIFICATION NOTIFICATION TELEPHONE LIST FOR AN UNUSUAL EVENT OR ALERT

USE THIS FORM IN CONJUNCTION WITH THE EMERGENCY NOTIFICATION FORM FOR EMERGENCY CLASSIFICATION NOTIFICATION (INITIAL OR CHANGE OR TERMINATION).

Time Notification Initiated: _____ Date: _____

DIRECTIONS: Dial Conference call Code 33 on OMNI phone 211, 212 or 268.
As each agency answers, request they hold the line.
WHEN all agencies have answered
OR no other answers are received,
THEN transmit message. Roll call agencies which answered to ensure they received
AND understand message.
IF any agency failed to pickup,
THEN dial individual OMNI ext. or backup telephone number to complete notification.

PERSONNEL/AGENCIES TO BE NOTIFIED WITHIN 15 MINUTES	PHONE NUMBERS	TIME AM/PM	PERSON NOTIFIED
1. YORK COUNTY EMERGENCY MANAGEMENT AGENCY ROBERT STRAW, DIRECTOR	OMNI Phone Ext. 219 After 4:00 PM 9-843-5571 9-854-5111 HOME: 9-755-5575		
2. PENNSYLVANIA EMERGENCY MANAGEMENT AGENCY (PEMA)	OMNI Phone Ext. 216 or 9-783-8150		
3. HARFORD COUNTY DEPARTMENT OF EMERGENCY SERVICES	OMNI Phone Ext. 214 or 9-301-838-5800,3333		
4. CECIL COUNTY DEPARTMENT OF EMERGENCY SERVICES	OMNI Phone Ext. 215/234 or 9-301-398-3815, 1350		
5. MARYLAND EMERGENCY MANAGEMENT AGENCY	OMNI Phone Ext. 213 or 9-301-486-4422		
6. LANCASTER COUNTY EMERGENCY MANAGEMENT AGENCY Police Dispatcher	OMNI Phone Ext. 217 or 9-299-8373,8374 9-299-4321		
7. CHESTER COUNTY EMERGENCY SERVICES	OMNI Phone Ext. 218 or 9-215-344-6160		
NOT INCLUDED IN THE ABOVE CONFERENCE 8. LOAD DISPATCHER	81-5141 or 9-215-841-5141 Request dispatcher to initiate emergency response organization call-out procedure		

NOTE:

IF EMERGENCY RESPONSE FACILITIES ARE REQUIRED TO BE STAFFED, THEN ERP-140 SHOULD BE INITIATED BEFORE PERFORMING REMAINDER OF NOTIFICATIONS.

APPENDIX 2
EMERGENCY CLASSIFICATION NOTIFICATION TELEPHONE LIST FOR A SITE EMERGENCY OR GENERAL EMERGENCY

PERSONNEL/AGENCIES TO BE NOTIFIED AFTER 15 MINUTE NOTIFICATIONS HAVE BEEN COMPLETED	PHONE NUMBERS	TIME AM/PM	PERSON NOTIFIED
4. EMERGENCY PREPAREDNESS PRIMARY: R.R. GALLAGHER	HOME: [redacted] OFFICE: 4920 BEEPER: 9-800-331-7242 ACCESS NUMBER 502121		
OR			
ALTERNATE: D.E. MCCOMSEY	HOME: [redacted] OFFICE: 4052 BEEPER: 9-800-331-7242 ACCESS NUMBER 502222		
OR			
ALTERNATE: B.L. CLARK	HOME: [redacted] OFFICE: 81-4934 BEEPER: 9-800-331-7242 ACCESS NUMBER 502107		
5. PENNSYLVANIA STATE POLICE, YORK BARRACKS	OMNI Phone Ext. 284, or 9-848-6355		
6. NRC RESIDENT (NOTIFY ONE) J.J. LYASH LARRY MYERS MICHELE EVANS	OFFICE: 4213 HOME: [redacted] HOME: HOME:		
AGENCIES TO BE NOTIFIED AFTER ALL OTHER NOTIFICATIONS HAVE BEEN COMPLETED BUT WITHIN TWO HOURS FOR AN ALERT OR HIGHER CLASSIFICATION	PHONE NUMBERS	TIME AM/PM	PERSON NOTIFIED
1. ANI	9-203-677-7305		
2. INSTITUTE OF NUCLEAR POWER OPERATIONS (INPO) DUTY OFFICER (24-HR)	9-404-953-0904, 0922 OR SWITCHBOARD 9-404-953-3600		

Notification completed by: _____ Time/Date: _____
Communicator

Noted by: _____
Emergency Director

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY RESPONSE PROCEDURE

ERP-140 TELEPHONE LISTS FOR EMERGENCY USE

1.0 RESPONSIBILITIES

1.1 ED Communicator(s)

1.1.1 Perform call-outs of personnel designated by Emergency Director.

1.1.2 Perform "all-call" pager call-out for Alert or higher emergency classification.

1.1.3 Notify lead in-plant personnel.

1.2 Team Leaders

1.2.1 Determine the number of Group Leaders AND Group members required.

1.2.2 Call-out Group Leaders.

1.2.3 Respond to pager "all-call."

1.3 Group Leaders

1.3.1 Call-out Group members.

1.3.2 Respond to pager "all-call."

1.3.3 Report results of Group member call-out to Team Leader.

2.0 INITIAL ACTIONS

NOTE

ATTACHMENT TITLED, "TELEPHONE LISTS FOR EMERGENCY USE FLOW CHART", MAY BE USED AS A GUIDE FOR THE FOLLOWING ACTIONS.

2.1 ED Communicator(s) shall:

2.1.1 Request Emergency Director provide ERP-200 attachment titled, "Emergency Response Organization Form".

2.1.2 Notify lead in-plant personnel (Maintenance Shift Foreman, OPs HP, Shift Chemist, Shift Security Coordinator and Shift I&C Technician) of event classification AND emergency condition by paging them as follows:

2.1.2.1 Dial 81-6968 or 215-841-6968, at tone, dial 125.

2.1.2.2 When pager goes off, read the following message:

This (is/is not) a drill.
An Unusual Event/Alert/Site Emergency/General Emergency
(Pick One)
has been declared. Respond in accordance with procedure.
This (is/is not) a drill.

2.1.2.3 Hang up when message has been delivered.

2.1.3 IF only specific teams OR groups are required, THEN contact Team Leader(s).

2.1.3.1 Utilize numbers listed in applicable Team Appendices.

a. IF number called is busy, OR no answer, THEN select next candidate.

b. IF person contacted is unable to respond, THEN select next candidate.

c. IF pager must be used, THEN select correct pager number from pager list kept in Shift Clerks office.

1. WHEN tone is heard, THEN dial return phone number AND press # symbol.

2.1.3.2 WHEN call back is received, THEN inform Team Leader

a. This (is/is not) a drill

b. Event classification

c. Emergency condition from ERP-200, attachment titled "Emergency Notification Form".

d. Team OR group activation is required

e. Respond to assigned emergency location

2.1.3.3 Request Estimated Time of Arrival (ETA) from Team Leader.

2.1.3.4 Record call-out information on attachment titled, "All Call Pager Response List".

2.1.3.5 WHEN attachment titled, "All Call Pager Response List" is completed, THEN submit call-out results to Emergency Director.

2.1.4 IF "all call" pager call-out is required for Alert or higher emergency classification, THEN:

2.1.4.1 Select appropriate Emergency Message cassettes from storage rack. (Designated on ERP-200, attachment titled, "Emergency Response Organization Form".

2.1.4.2 Load cassettes into both answering machines.

a. Lift hinged panel for access to cassette compartment.

b. Insert Emergency message cassettes into Announce Message compartment on right.

1) Side 1 up and exposed tape to right.

c. Ensure blank cassette installed in Incoming Messages compartment on left.

d. Close hinged panel.

2.1.4.3 Press answering machine ON/OFF button.

a. IF green LED does not illuminated THEN check power supply connections.

2.1.4.4 WHEN tapes reset, THEN press counter Reset to reset counter to zero.

2.1.4.5 Adjust VOLUME control to a low setting. (Left)

NOTE:
This minimizes monitor volume when personnel call in.

2.1.4.6 Locate Emergency Director selected Emergency Message on attachment titled "Emergency Messages" (Selected message designated on ERP-200 attachment titled, "Emergency Response Organization Form".

a. Call voice mail using operating instructions (attachment titled, "Voice Mail Operating Instruction

AND record Emergency Messages from attachment titled, "Emergency Messages".

b. Exit voice mail system per operating instructions.

2.1.4.7 Obtain pager "all call" numbers from pager list kept in Shift Clerks office.

2.1.4.8 Dial "all call" numbers.

2.1.4.9 Insert appropriate code AND press # symbol.

PAGER CODES	RESPONSE
a. 7711 Official Test	Personnel will call in
b. 7722 Drill Activation	Personnel will call in AND respond
c. 7733 Actual Emergency	Personnel will call in AND respond

2.1.4.10 Hang up phone.

2.1.4.11 Wait approximately 10 minutes before reviewing call back responses.

2.1.4.12 Call voice mail to review responses using operating instructions (attachment titled, "Voice Mail Operating Instructions").

a. Record information on attachment titled, "All Call Pager Response List".

b. Exit voice mail using operating instructions (attachment titled, "Voice Mail Operating Instructions").

2.1.4.13 Review responses on answering machines:

NOTE:

Red Messages LED illuminates when recorded messages are on the tape.

a. Adjust volume control to higher setting. (Right)

b. Note number on LCD display.

c. Press REWIND AND wait until tape stops.

d. Press PLAY
AND record response information on attachment titled, "All Call Pager Response List".

NOTE:
Preceding each message, a voice will announce message number date and time.

e. WHEN last message is recorded,
THEN press STOP button.

f. Simultaneously press REWIND
AND ERASE buttons until tape stops.

g. Press STOP.

NOTE:
WHEN STOP LED extinguishes THEN unit is in automatic answer mode.

h. Adjust volume control to low setting.

2.1.4.14 Continue to review responses on answering machines AND voice mail until no other responses are received.

2.1.4.15 WHEN all call back information is recorded,
THEN verify all positions have responded.

2.1.4.16 IF a position(s) has not responded,
THEN contact using telephone number from appropriate Appendix of ERP-140
OR individual pager number.

2.1.4.17 Notify Emergency Director of call-out results AND submit completed attachment titled, "All Call Pager Response List".

2.2 Team Leaders shall:

2.2.1 IF contacted directly by telephone,
THEN obtain emergency information from Communicator.

2.2.1.1 Provide Communicator with estimated time of arrival.

2.2.1.2 IF only specific team
OR group(s) needs to be activated
THEN:

a. Contact Group Leader(s) using appropriate Appendix of ERP-140.

b. Determine number of group members required.

c. Direct Group Leader(s) to call-out group members
AND report to emergency facility.

d. Report to assigned emergency location
AND implement appropriate procedure(s).

2.2.2 IF contacted by "all call" pager,
THEN:

2.2.2.1 IF capable of voice mail access,
THEN:

a. Dial voice mail system
AND obtain emergency information.

b. Record response message on operator number 4414 by responding to Emergency Declaration message, including your:

1) Emergency Position

2) Name

3) Estimated Time of Arrival (ETA)

2.2.2.2 IF not on voice mail system, THEN:

a. Dial (717) 456-4066
OR (717) 456-4067

1) IF busy signal is received
THEN call back
using alternate number.

b. Obtain emergency information from recording

c. Provide answering machine with:

1) Emergency position

2) Name

3) Estimated Time of Arrival (ETA)

2.2.2.3 IF Group Leader(s) is not on the pager,
THEN contact Group Leader using the appropriate Appendix of ERP-140
AND direct call-outs of group members be made.

a. Direct Group Leader(s) report to emergency facility after call-outs completed.

2.2.2.4 Report to assigned emergency location AND implement appropriate procedure(s).

2.3 Group Leaders shall:

2.3.1 WHEN notified by Team Leader, THEN:

2.3.1.1 Call-out group members using the appropriate Appendix of ERP-140.

2.3.1.2 WHEN call-outs are completed, THEN report to assigned emergency location AND implement appropriate procedures.

2.3.1.3 Notify Team Leader of call out results.

2.3.2 IF contacted by "all call" pager, THEN:

2.3.2.1 IF capable of voice mail access, THEN:

a. Dial voice system AND obtain emergency information

b. Record response message on operator number 4414 by responding to Emergency Declaration message, including your:

1) Emergency Position

2) Name

3) Estimated Time of Arrival (ETA)

2.3.2.2 IF not on voice mail system, THEN:

a. Dial (717) 456-4066 OR (717) 456-4067

1) IF busy signal is received THEN call back using alternate number.

b. Obtain emergency information from recording.

c. Provide answering machine with:

1) Emergency position

2) Name

3) Estimated Time of Arrival (ETA)

2.3.2.3 Call-out group members using the appropriate Appendix of ERP-140.

a. Prioritize calls to meet 60 minute augment first.

b. Call out additional augment personnel to meet full emergency facility staffing.

2.3.2.4 WHEN call-outs are completed, THEN report to assigned emergency location AND implement appropriate procedures.

2.3.2.5 Report results of call-out to Team Leader.

3.0 CONTINUING ACTIONS

3.1 ED Communicator shall:

3.1.1 IF ED requires additional call-outs, THEN make call-outs as directed using the appropriate Appendix of ERP-140 OR pager list.

3.1.2 Notify ED of results.

3.2 Team Leaders shall:

3.2.1 IF additional augment personnel are required, THEN contact another Group Leader AND direct call-outs be made using the appropriate Appendix of ERP-140.

4.0 FINAL CONDITIONS

4.1 WHEN call-outs have been completed, THEN ED Communicator shall:

4.1.1 IF answering machine Emergency message was used, THEN:

4.1.1.1 Simultaneously press ERASE AND REWIND until tape stops.

4.1.1.2 Press OFF.

4.1.1.3 Lift hinged panel for access to cassette compartment.

4.1.1.4 Remove Emergency Message cassette from Announce Message Compartment on right.

4.1.1.5 Close hinged panel.

4.1.1.6 Return Emergency Message cassette to storage rack.

5.0 ATTACHMENTS AND APPENDICES

5.1 Attachment 1 - "Telephone Lists for Emergency Use Flow Chart"

5.2 Attachment 2 - "Emergency Messages"

5.3 Attachment 3 - "All Call Pager Response List"

5.4 Attachment 4 - "Voice Mail Operating Instructions"

5.5 Appendix 1 - "Emergency Directors"

5.6 Appendix 2 - "Technical Support Team"

5.7 Appendix 3 - "Dose Assessment Team"

5.8 Appendix 4 - "Chemistry Sampling and Analysis Team"

5.9 Appendix 5 - "Damage Repair Team"

5.10 Appendix 6 - "Security Team"

5.11 Appendix 7 - "Personnel Safety Team"

5.12 Appendix 8 - "Company Consultants and Contractors"

5.13 Appendix 9 - "Nearby Public and Industrial Users of Downstream Water"

6.0 SUPPORTING INFORMATION

6.1 PURPOSE

To provide guidelines for the call-out of emergency response organization personnel. Also provides phone numbers for off-site support organizations.

6.2 CRITERIA FOR USE

Implemented at the Alert or higher level of classification, or at the discretion of the Emergency Director.

6.3 REFERENCES

6.3.1 Peach Bottom Atomic Power Station (PBAPS) Emergency Plan, Section 5.0

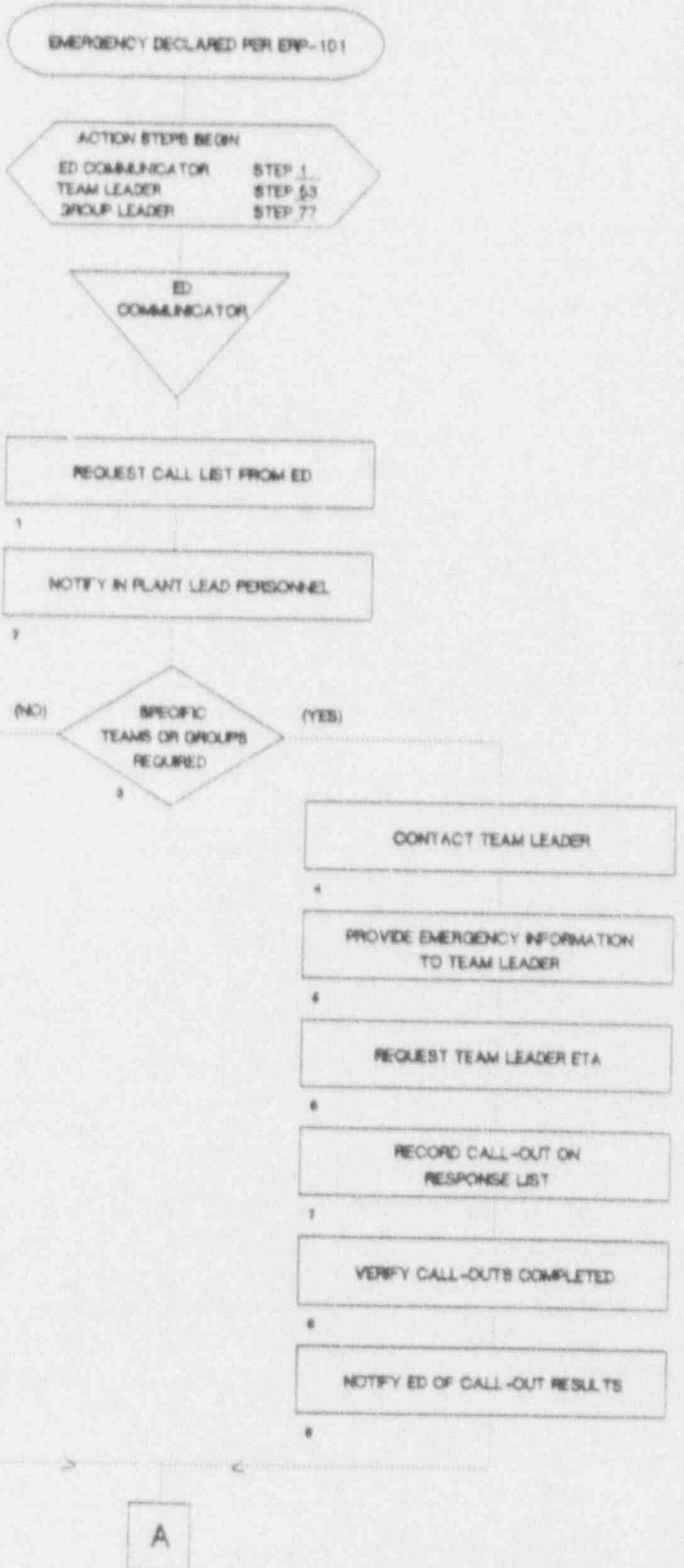
6.3.2 Plant Pager List

6.3.3 ERP-200, "Emergency Director"

ATTACHMENT 1
TELEPHONE LISTS FOR EMERGENCY USE FLOW CHART

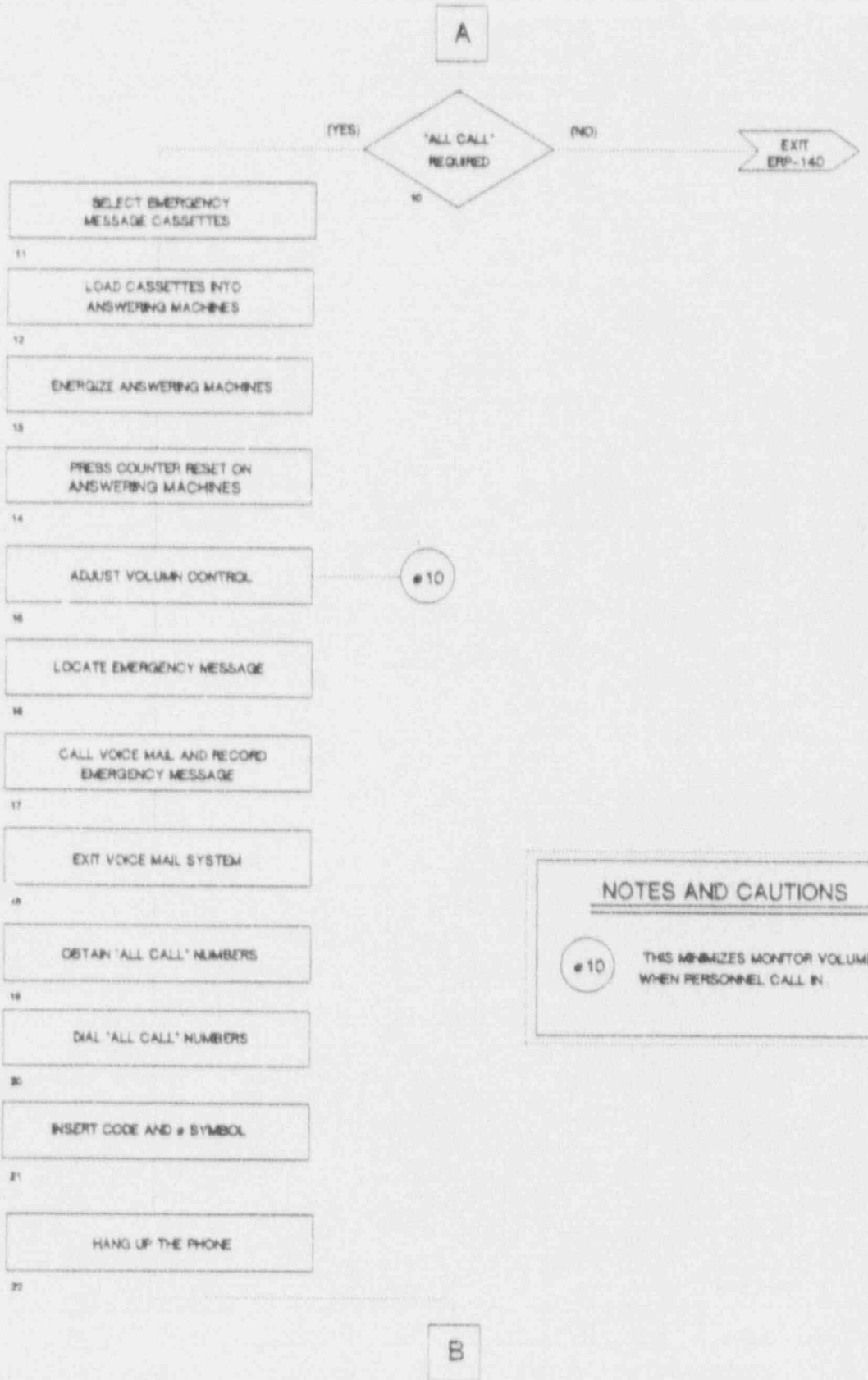
(Page 1 of 9)

INITIAL ACTIONS



ATTACHMENT 1
TELEPHONE LISTS FOR EMERGENCY USE FLOW CHART

(Page 2 of 9)

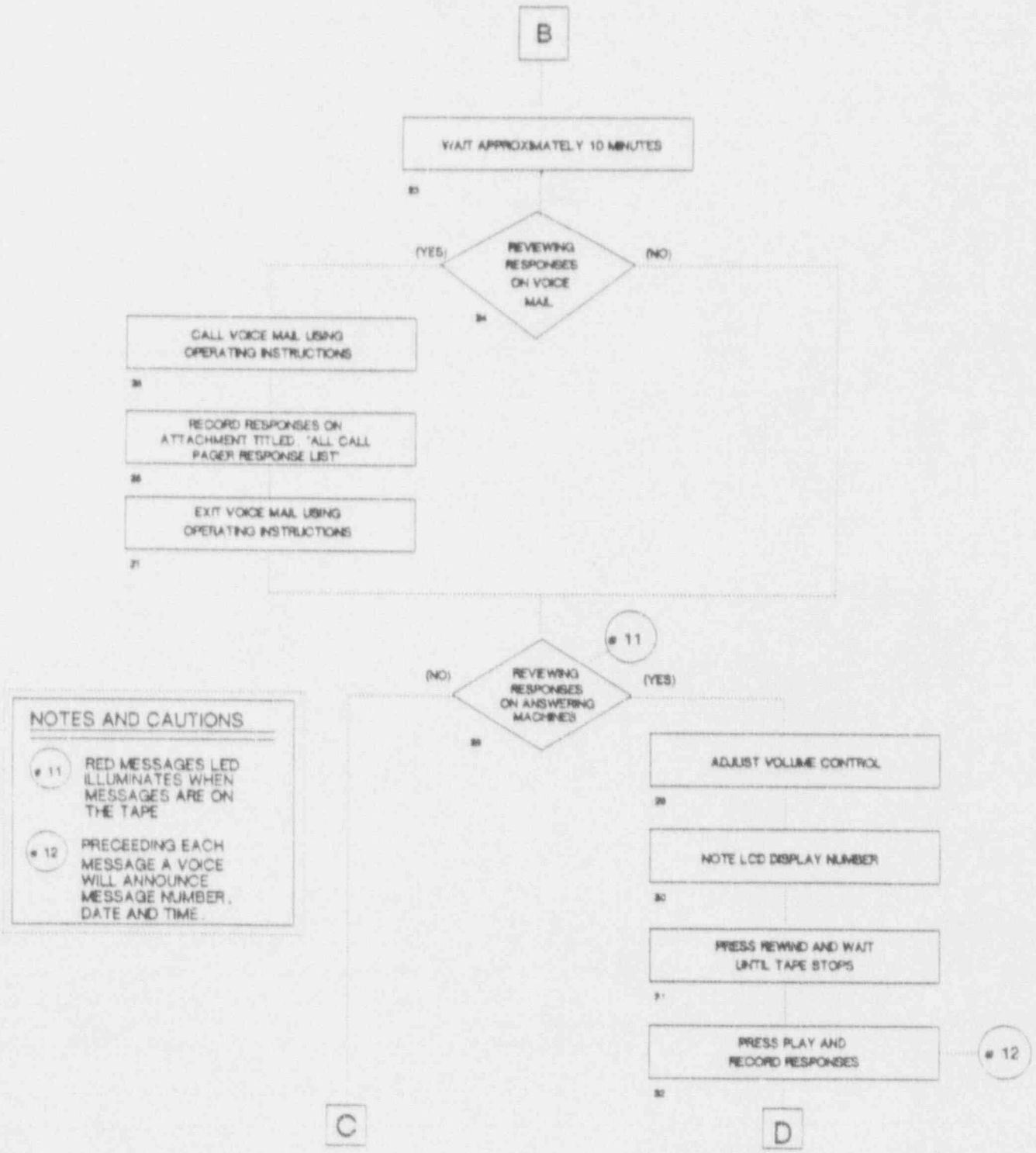


NOTES AND CAUTIONS

#10 THIS MINIMIZES MONITOR VOLUME WHEN PERSONNEL CALL IN.

ATTACHMENT 1
TELEPHONE LISTS FOR EMERGENCY USE FLOW CHART

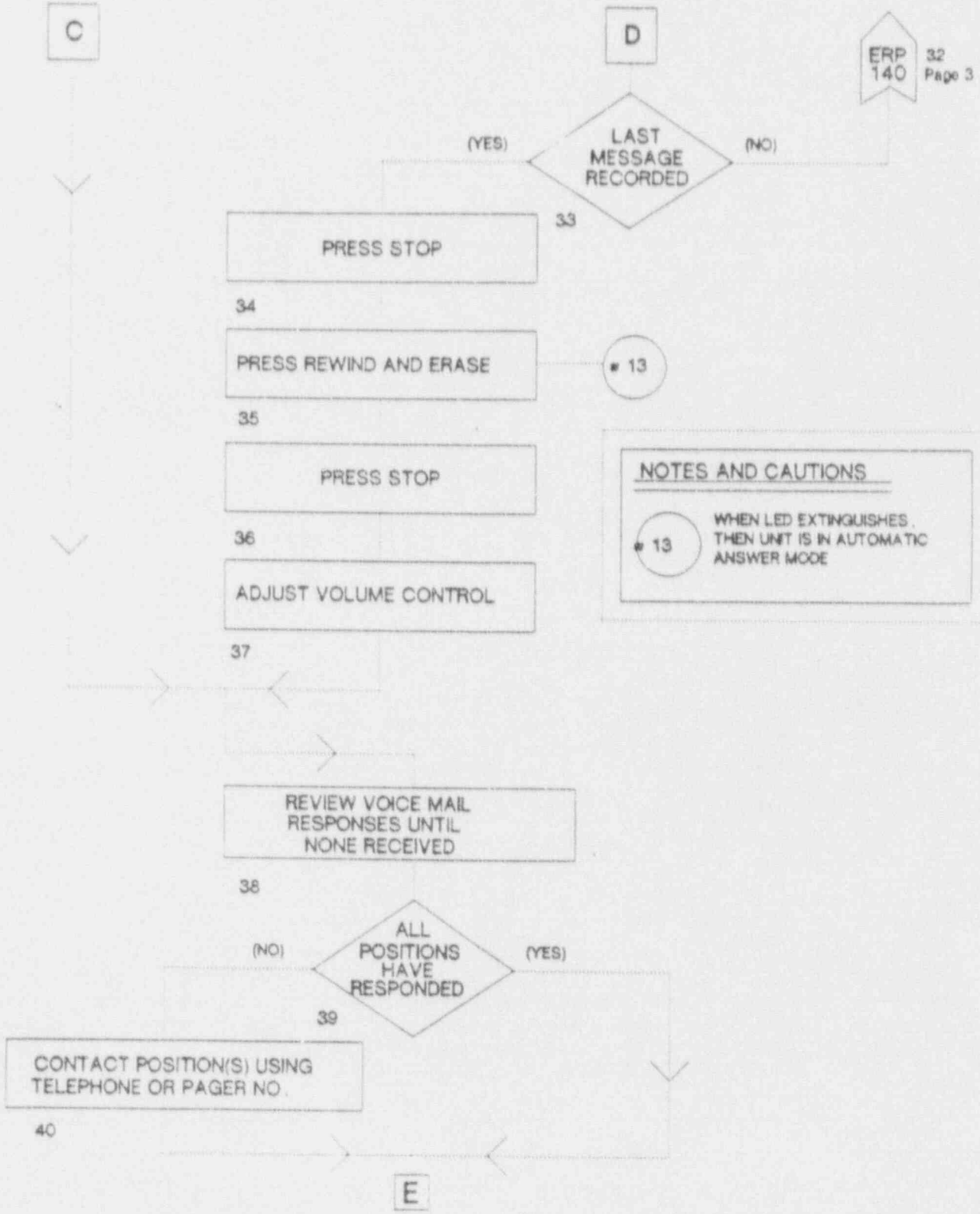
(Page 3 of 9)



ATTACHMENT 1

TELEPHONE LIST FOR EMERGENCY USE FLOW CHART

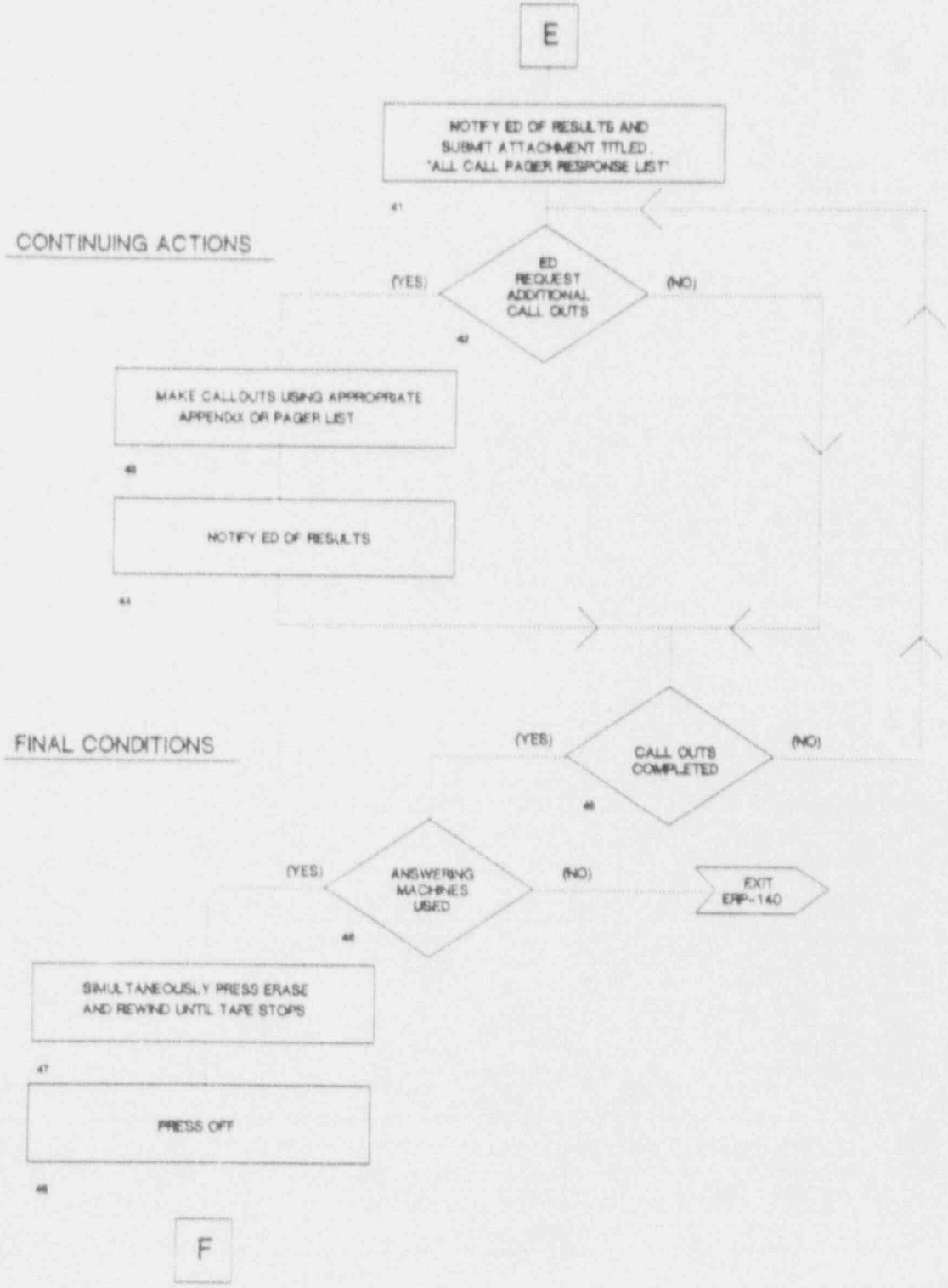
(Page 4 of 9)



ATTACHMENT 1

TELEPHONE LIST FOR EMERGENCY USE FLOW CHART

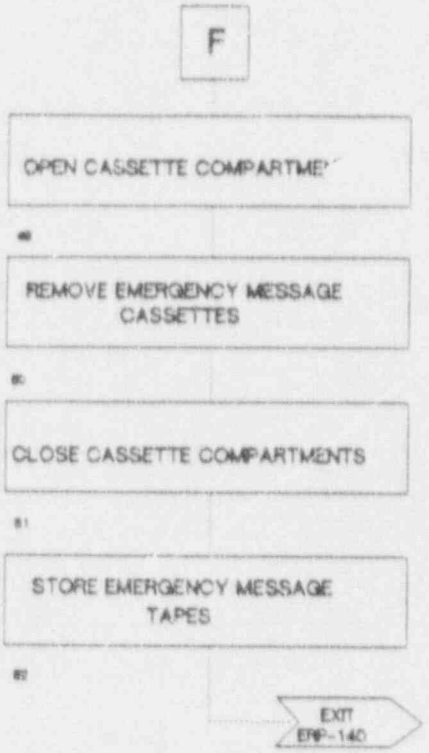
(Page 5 of 9)



ATTACHMENT 1

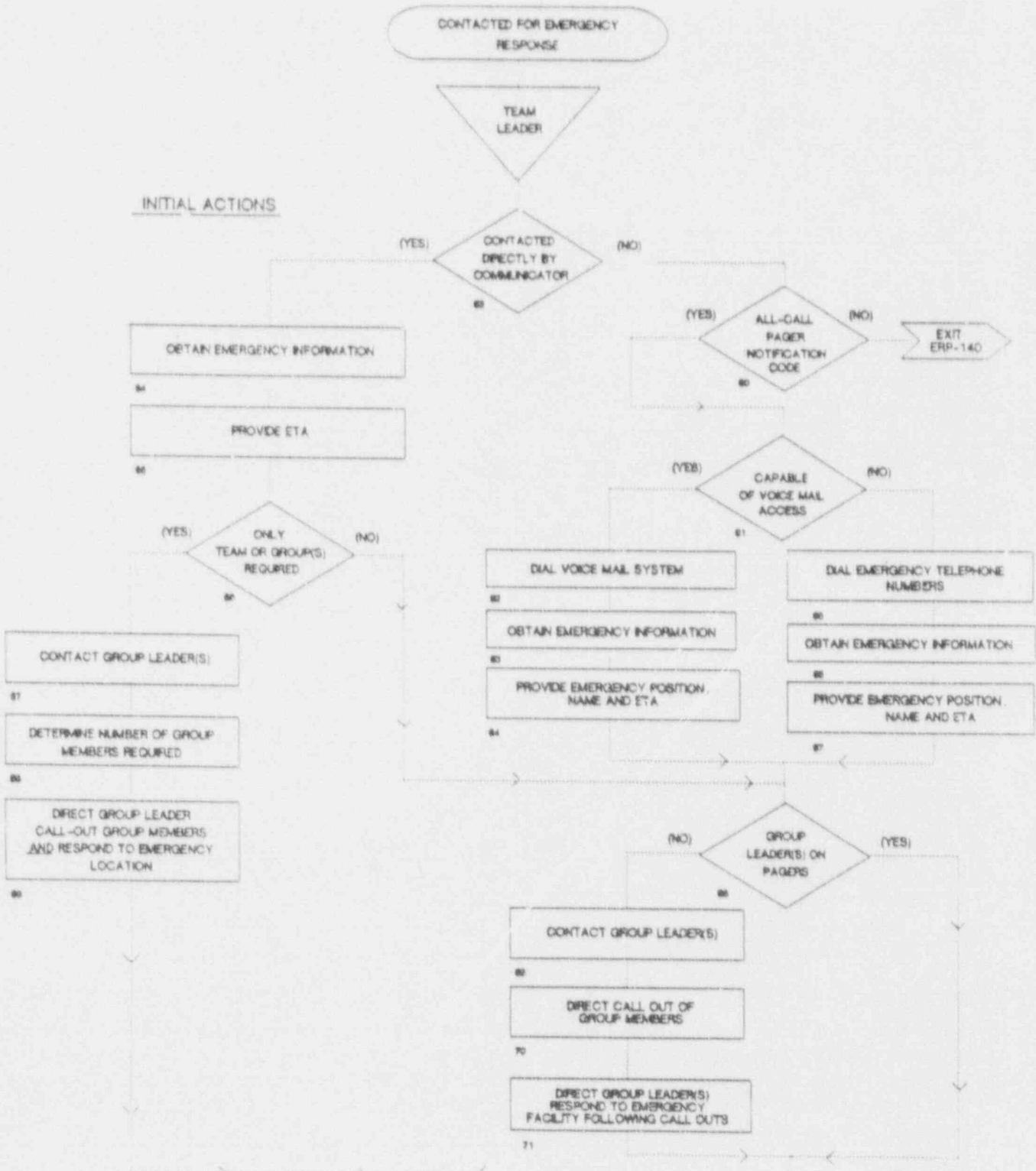
TELEPHONE LIST FOR EMERGENCY USE FLOW CHART

(Page 6 of 9)

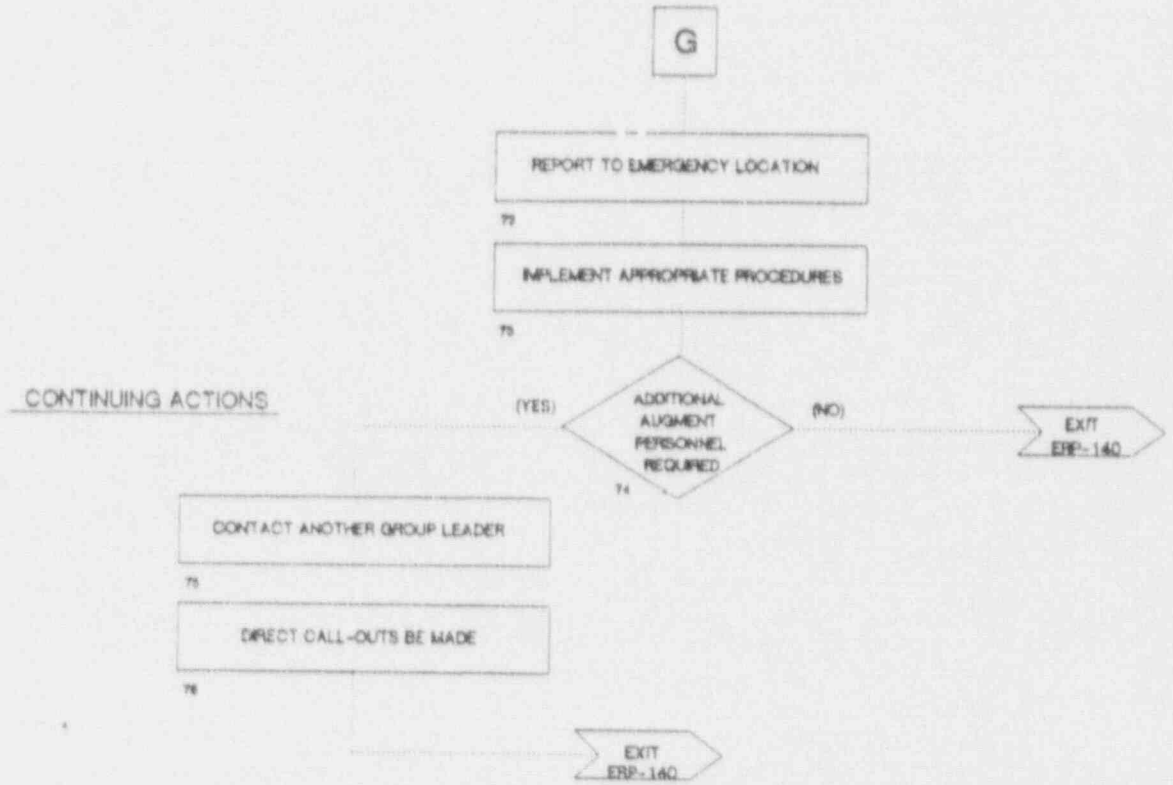


ATTACHMENT 1
TELEPHONE LISTS FOR EMERGENCY USE FLOW CHART

(Page 7 of 8)

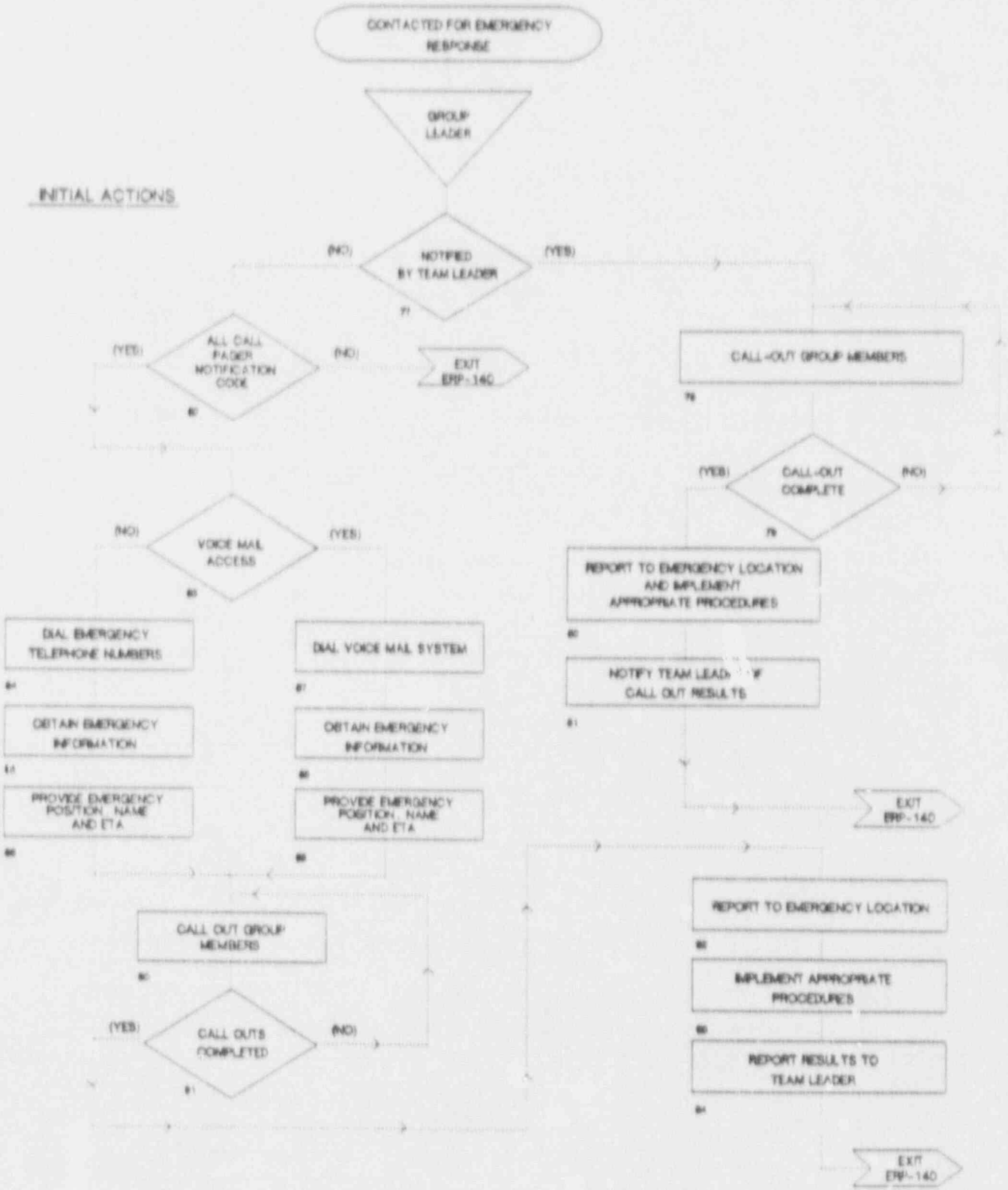


ATTACHMENT 1
TELEPHONE LISTS FOR EMERGENCY USE FLOW CHART
(Page 8 of 9)



ATTACHMENT 1
TELEPHONE LISTS FOR EMERGENCY USE FLOW CHART

(Page 9 of 9)



ATTACHMENT 2
EMERGENCY MESSAGES
(Page 1 of 1)

ALERT - ATOM ROAD

An Alert has been declared at Peach Bottom. Staffing of Emergency Response Facilities is required. Respond via Atom Road. Respond to this message leaving your emergency position, name and estimated time of arrival.

ALERT - LAY ROAD

An Alert has been declared at Peach Bottom. Staffing of Emergency Response Facilities is required. Respond via Lay Road. Respond to this message leaving your emergency position, name and estimated time of arrival.

SITE EMERGENCY - ATOM ROAD

A Site Emergency has been declared at Peach Bottom. Staffing of Emergency Response Facilities is required. Respond via Atom Road. Respond to this message leaving your emergency position, name and estimated time of arrival.

SITE EMERGENCY - LAY ROAD

A Site Emergency has been declared at Peach Bottom. Staffing of Emergency Response Facilities is required. Respond via Lay Road. Respond to this message leaving your emergency position, name and estimated time of arrival.

GENERAL EMERGENCY - ATOM ROAD

A General Emergency has been declared at Peach Bottom. Staffing of Emergency Response Facilities is required. Respond via Atom Road. Respond to this message leaving your emergency position, name and estimated time of arrival.

GENERAL EMERGENCY - LAY ROAD

A General Emergency has been declared at Peach Bottom. Staffing of Emergency Response Facilities is required. Respond via Lay Road. Respond to this message leaving your emergency position, name and estimated time of arrival.

ATTACHMENT 3
ALL CALL PAGER RESPONSE LIST
(Page 1 of 3)

Date _____

NOTE

One response per position is acceptable with the exception of the Emergency Director (ED). Two EDs are needed.

EMERGENCY POSITION	NAME	ETA
Emergency Director (ED)		
Technical Support Team Leader (TSTL)		
Technical Support Group Leader (TSGL)		
Services Support Group Leader (SSGL)		
		N/A
		N/A
Dose Assessment Team Leader (DATL)		

ATTACHMENT 3
ALL CALL PAGER RESPONSE LIST
(Page 2 of 3)

EMERGENCY POSITION	NAME	ETA
Dose Assessment Group Leader (DAGL)		
Field Survey Group Leader (FSGL)		
Chemistry Sampling and Analysis Team Leader (CSATL)		
Chemistry Sampling and Analysis Group Leader (CSAGL)		
Damage Repair Team Leader (DRTL)		
Security Team Leader (STL)		
Personnel Safety Team Leader (PSTL)		

ATTACHMENT 3
ALL CALL PAGER RESPONSE LIST
(Page 3 of 3)

EMERGENCY POSITION	NAME	ETA
Plant Survey Group Leader (PSGL)		

IF a response for a given position has not been received within 20 minutes of the "all call,"
THEN attempt call-out using numbers from appropriate Appendix of ERP-140 OR pager list.

Completed by _____ Time _____

Noted by _____ Time _____
Emergency Director

ATTACHMENT 4
VOICE MAIL OPERATING INSTRUCTIONS
(Page 1 of 2)

SENDING MESSAGES

1. Sign-on the system by calling extension 3605

****
*
*
* CAUTION:
*
* ENSURE PROMPT VOICE HAS STABILIZED PRIOR TO PERFORMING NEXT STEP
*
****

2. Press the "#" key
3. Enter mailbox number - 4414
4. Enter password 911911
5. Press "2"
6. Record message followed by "#" key when finished

NOTE:

1. Press "1" to replay message
2. Press "*" to re-record over what was previously recorded.
3. Press "#" when review or re-recording is completed.

7. Press "11"
8. Press "0"
9. Press "2"
10. Press "#" key
11. Press "12"
12. Press "#" key
13. Press "13"

ATTACHMENT 4
VOICE MAIL OPERATING INSTRUCTIONS
(Page 2 of 2)

14. Press "#" key
15. Press "14"
16. Press "#" ke
17. Press "15"
18. Press "#" key
19. Press "16"
20. Press "#" key
21. Press "17"
22. Press "#" key
23. Press "*" key
24. Press "*" key

REVIEWING RESPONSES

1. Sign-on the system by calling extension 3605.
2. Press the "#" key
3. Enter mailbox number - 4414
4. Enter Password - 911911
5. Press "1" to review messages.
6. Review and record information from responders following the system instructions.
7. When all messages have been reviewed, sign-off the system as follows:
   a. Press the "#" key to sign-off.
   b. Hang up.
8. This process should be repeated after reviewing the answering machine tapes to ensure that all responses have been recorded.

PHILADELPHIA ELECTRIC COMPANY
PEACH BOTTOM UNITS 2 AND 3
EMERGENCY RESPONSE PROCEDURE

ERP-200 EMERGENCY DIRECTOR (ED)

1.0 RESPONSIBILITIES

1.1 Verify the classification of the Emergency.

1.2 Direct the notification of the proper off-site agencies within 15 minutes of classification of the Emergency.

1.3 Issue a Protective Action Recommendation (PAR) to off-site agencies within 15 minutes following declaration of a General Emergency until the Emergency Response Manager (ERM) assumes control of the emergency event.

1.3.1 Perform Dose Assessment Team Leader (DATL) duties until the DATL assumes his emergency response role.

1.4 Direct the call out of the Emergency Response Organization (ERO) and the activation of the proper Emergency Response Facilities.

1.5 Direct local, partial plant, or site evacuation as appropriate.

1.6 Brief, as necessary, the Nuclear Regulatory Commission (NRC) and the Emergency Response Manager (ERM).

1.7 Review and authorize the following:

1.7.1 Emergency Radiation Exposure per ERP-670

1.7.2 Potassium Iodide Administration per ERP-680

1.7.3 Emergency Special Procedures

1.8 If event or conditions change such that re-classification is warranted, then escalate or de-escalate the Emergency Classification and re-enter this procedure.

NOTE: THE EMERGENCY DIRECTOR TITLE IS CREATED UPON CLASSIFICATION OF THE EMERGENCY AND IS FILLED BY SHIFT MANAGEMENT. THE PLANT MANAGER DESIGNEE ASSUMES THE DUTIES ON ARRIVAL AND WHEN KNOWLEDGEABLE OF PLANT CONDITIONS, AND SHIFT MANAGEMENT RETURNS TO CONTROL ROOM ASSIGNMENT.

NOTE: THE EMERGENCY DIRECTOR MAY ELECT TO ASSIGN A PERSON AS AN ASSISTANT. THE EMERGENCY DIRECTOR SHALL DESIGNATE THOSE FUNCTIONS FOR WHICH THE ASSISTANT IS RESPONSIBLE.

NOTE: ATTACHMENT TITLED, "EMERGENCY DIRECTOR FLOW CHART" MAY BE USED AS A GUIDE FOR THE FOLLOWING ACTIONS.

2.0 INITIAL ACTIONS

2.1 Select or appoint both an ED Communicator and a NRC Communicator.

2.2 Complete the Emergency Notification Form and the Emergency Response Organization Form and give the forms to the ED Communicator for implementation.

2.3 Complete the appropriate Station Public Address Announcement and give the form to the NRC Communicator to make the announcement and to contact the NRC.

2.4 Review plant status and emergency conditions with Shift Management and the Shift Technical Advisor (STA).

2.5 If an evacuation is deemed appropriate (local per GP-15, partial plant per ERP-120, or site evacuation per ERP-130) then:

2.5.1 designate an assembly area

2.5.2 notify the Personnel Safety Team Leader and the Security Team Leader

2.5.3 direct shift management to announce the evacuation and to sound the evacuation siren per procedure

2.5.4 direct the ED Communicator to notify PEMA and MEMA of the evacuation (only required for SITE EVACUATION).

2.6 Complete the Emergency Director Relief Summary, prior to being relieved by the TSC Emergency Director (only required at the Alert or higher Emergency Classification).

NOTE: TRANSFER OF RESPONSIBILITY (ED/CR to ED/TSC)

1. ED (SHIFT MANAGEMENT) CONTINUES COMMAND AND CONTROL OF THE EMERGENCY RESPONSE ORGANIZATION UNTIL RELIEVED BY THE ED (PLANT MANAGEMENT).

2. RESPONSIBILITY TRANSFER MAY OCCUR AT ANY POINT IN THIS PROCEDURE.

3. EMERGENCY DIRECTOR RELIEF SUMMARY IS USED FOR INITIAL RESPONSIBILITY TRANSFER AND FOR SHIFT CHANGES.

3.0 CONTINUING ACTIONS

3.1 Verify the TSC is adequately staffed and operational by conferring with the Technical Support Team Leader.

3.2 Brief the TSC staff on the Emergency situation.

3.3 Direct a station public address announcement be made that the TSC is activated and that responsibility for control of the emergency is with the ED in the TSC.

3.4 Following declaration of a General Emergency, complete the Protective Action Recommendation Form and inform BRP and RHP.

3.5 Provide a Protective Measure Recommendation regarding food supply whenever a PAR is issued or as determined by the Protective Measures Recommendation Form in ERP-300.

3.6 Confer with Shift Management to obtain

3.6.1 plant conditions

3.6.2 fission product barrier degradation

3.6.3 radioactive material release

3.6.4 mitigation actions

3.6.5 technical problems

3.7 Confer with the Dose Assessment Team Leader to determine

3.7.1 Protective Action Recommendation until the EOF is activated

3.7.2 Protective Measures Recommendation until the EOF is activated

3.8 Confer with the Chemistry Sampling and Analysis Team Leader to verify

3.8.1 appropriate sampling and analysis in progress

3.9 Confer with the Personnel Safety Team Leader and evaluate

3.9.1 emergency worker exposure and plant surveys

3.9.2 first aid or search and rescue efforts

3.9.3 authorization of emergency radiation exposure per ERP-670 if necessary

3.9.4 authorization of potassium iodide administration per ERP-680 if necessary

3.9.5 emergency facilities habitability

3.10 Confer with the Technical Support Team Leader and the Damage Repair Team Leader concerning efforts to mitigate the emergency.

3.11 At the Site Emergency Level or as appropriate, contact and brief the Emergency Response Manager (ERM) on the Emergency Status, including

3.11.1 plant conditions

3.11.2 fission product barrier degradation

3.11.3 radioactive material release

3.11.4 accident analysis and mitigation measures

3.11.5 Protective Action Recommendations

3.11.6 Protective Measure Recommendations

3.12 Periodically confer with Shift Management on the Emergency Status and actions taken to mitigate the event or trends which may impact the emergency classification. Include updates on evacuations, injuries, precautionary recommendations and any emergency worker dose extension.

3.13 Regularly brief the TSC staff, the ERM, and the OSC.

4.0 FINAL CONDITIONS

4.1 IF the event or the plant condition or the radiological condition changes such that re-classification of the emergency is appropriate THEN re-classify the emergency per ERP-101 and re-enter this procedure at the beginning.

4.2 IF the EOF is not activated,
THEN the ED, as appropriate to the emergency, shall escalate, de-escalate, or terminate the event.

4.3 IF the EOF is activated,
THEN the ED shall coordinate with the ERM on appropriate decession to escalate, de-escalate, terminate or enter the recovery phase.

4.4 WHEN, in the judgement of the ED,
the TSC no longer warrants activation
THEN the ED shall turn over control of the TSC
to the TSC Emergency Response Coordinator for
TSC closeout per ERP-205.

5.0 ATTACHMENTS AND APPENDICES

5.1 Attachment 1 - "Emergency Director Flow Chart"

5.2 Attachment 2 - "Emergency Notification Form"

5.3 Attachment 3 - "Emergency Response Organization Form"

5.4 Attachment 4 - "Unusual Event - Station Announcements"

5.5 Attachment 5 - "Alert - Station Announcements"

5.6 Attachment 6 - "Site Emergency - Station Announcements"

5.7 Attachment 7 - "General Emergency - Station Announcements"

5.8 Attachment 8 - "Emergency Director Relief Summary"

5.9 Attachment 9 - "Protective Action Recommendation"

6.0 SUPPORTING INFORMATION

6.1 PURPOSE

To describe the responsibilities of and provide guidance for the Emergency Director in the management of the emergency response organization.

6.2 CRITERIA FOR USE

This procedure is implemented upon the classification of an event according to ERP-101, and the declaration of an emergency.

6.3 REFERENCES

6.3.1 Code of Federal Regulations, Title 10, Energy, Part 50

6.3.2 NUREG-0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants

6.3.3 Peach Bottom Atomic Power Station (PBAPS) Emergency Plan

6.3.4 GP-15, "Local Evacuation"

6.3.5 ERP-101, "Emergency Classifications"

6.3.6 ERP-110, "Emergency Notifications"

6.3.7 ERP-120, "Partial Plant Evacuation"

6.3.8 ERP-130, "Site Evacuation"

6.3.9 ERP-205, "Emergency Response Coordinator"

6.3.10 ERP-250, "Technical Support Center (TSC) Activation"

6.3.11 ERP-300, "Dose Assessment Team Leader (DATL)"

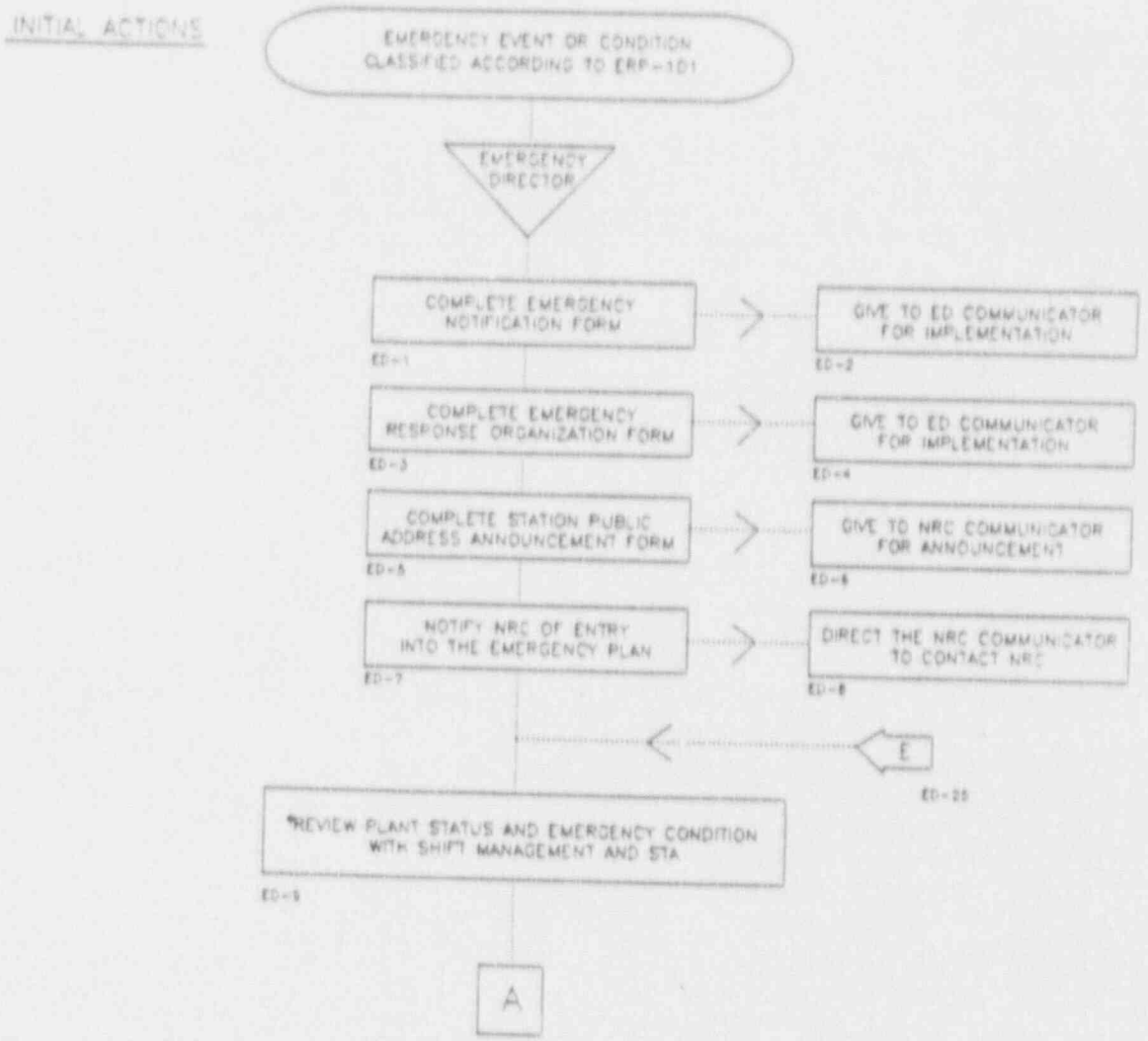
6.3.12 ERP-315, "Operation of the Peach Bottom Computer Dose Assessment System"

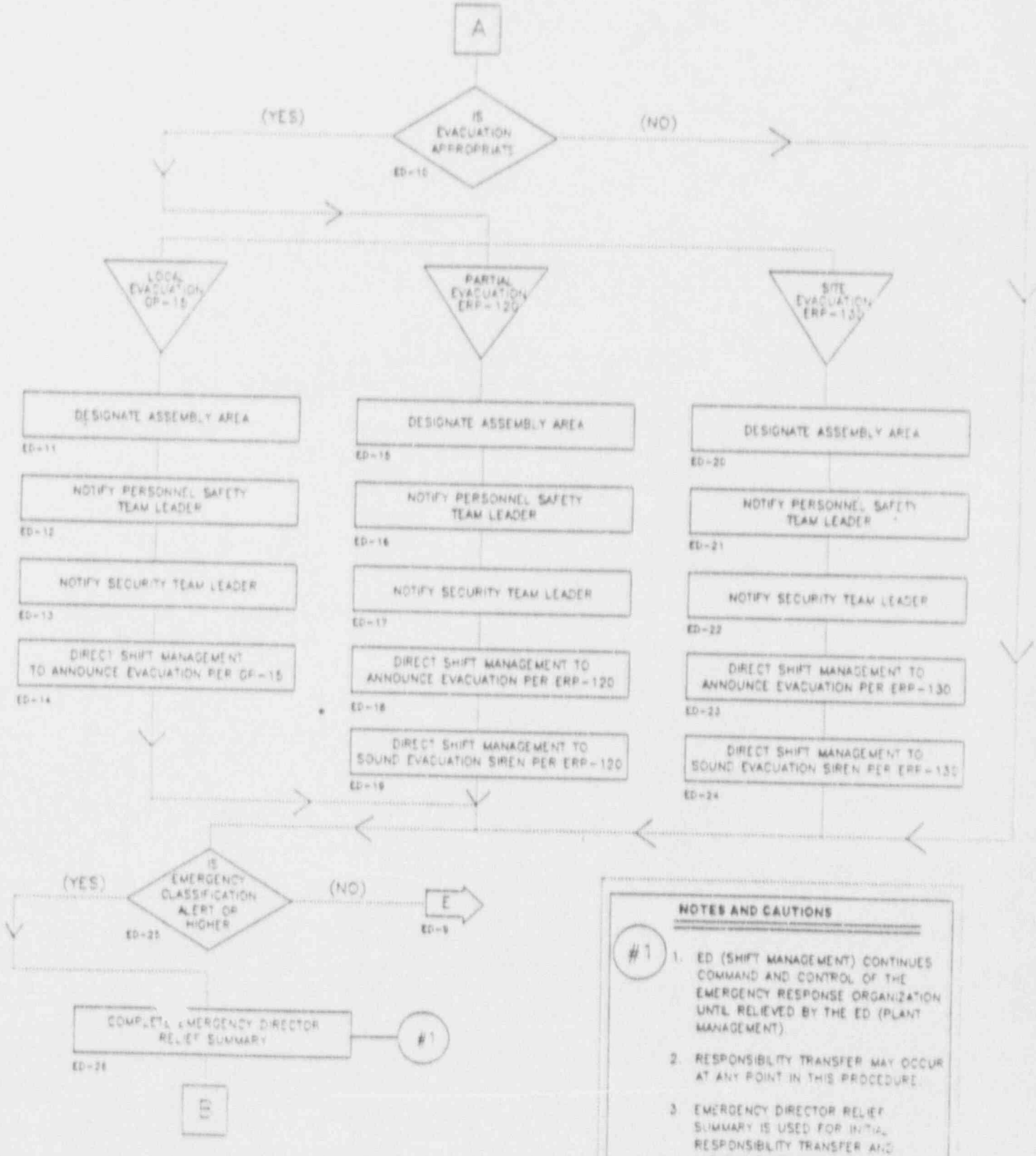
6.3.13 ERP-670, "Emergency Exposure Guidelines and Controls"

6.3.14 ERP-680, "Control of Thyroid Blocking Potassium Iodide (KI) Tablets"

ATTACHMENT 1
EMERGENCY DIRECTOR FLOW CHART

(Page 1 of 6)

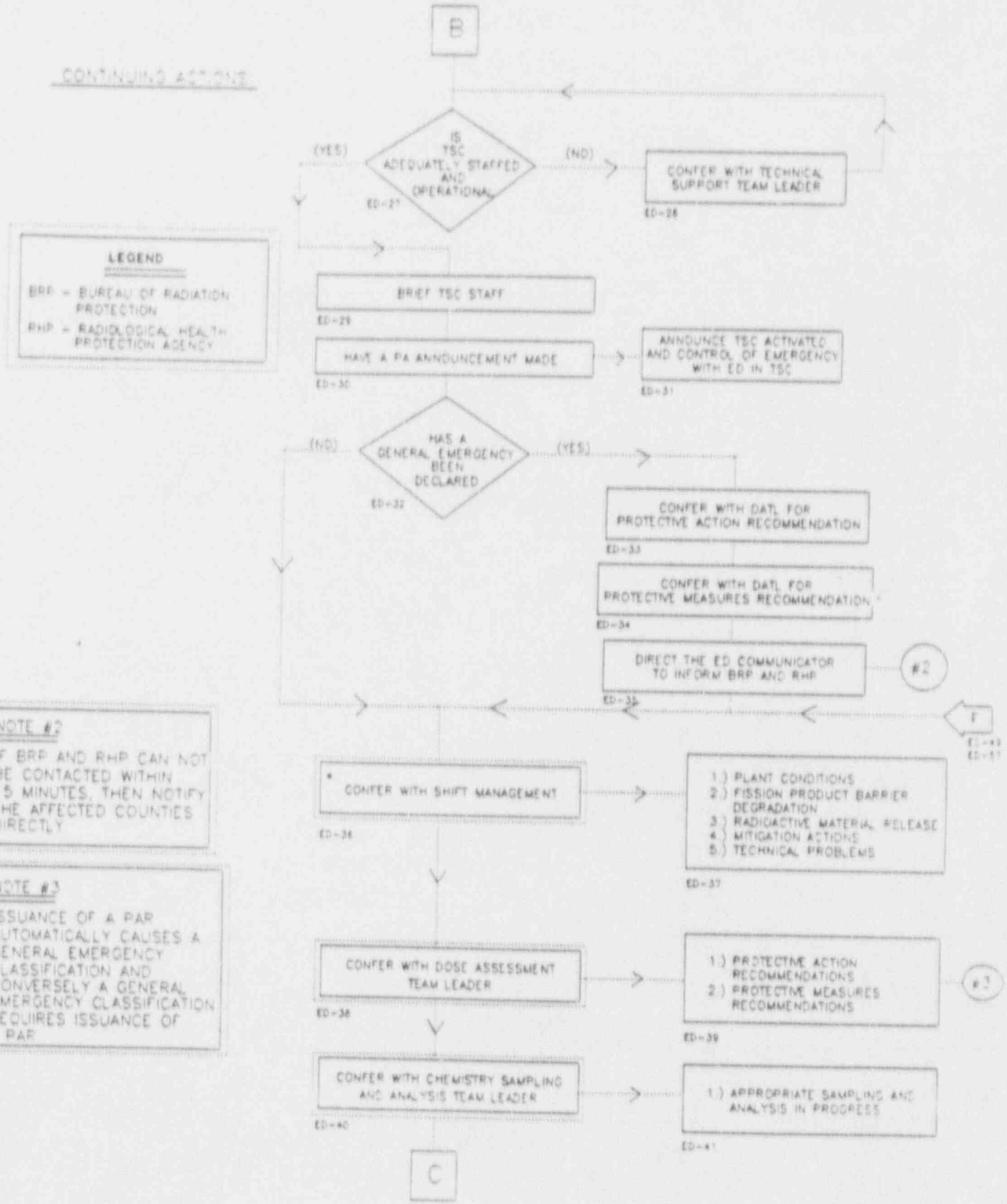




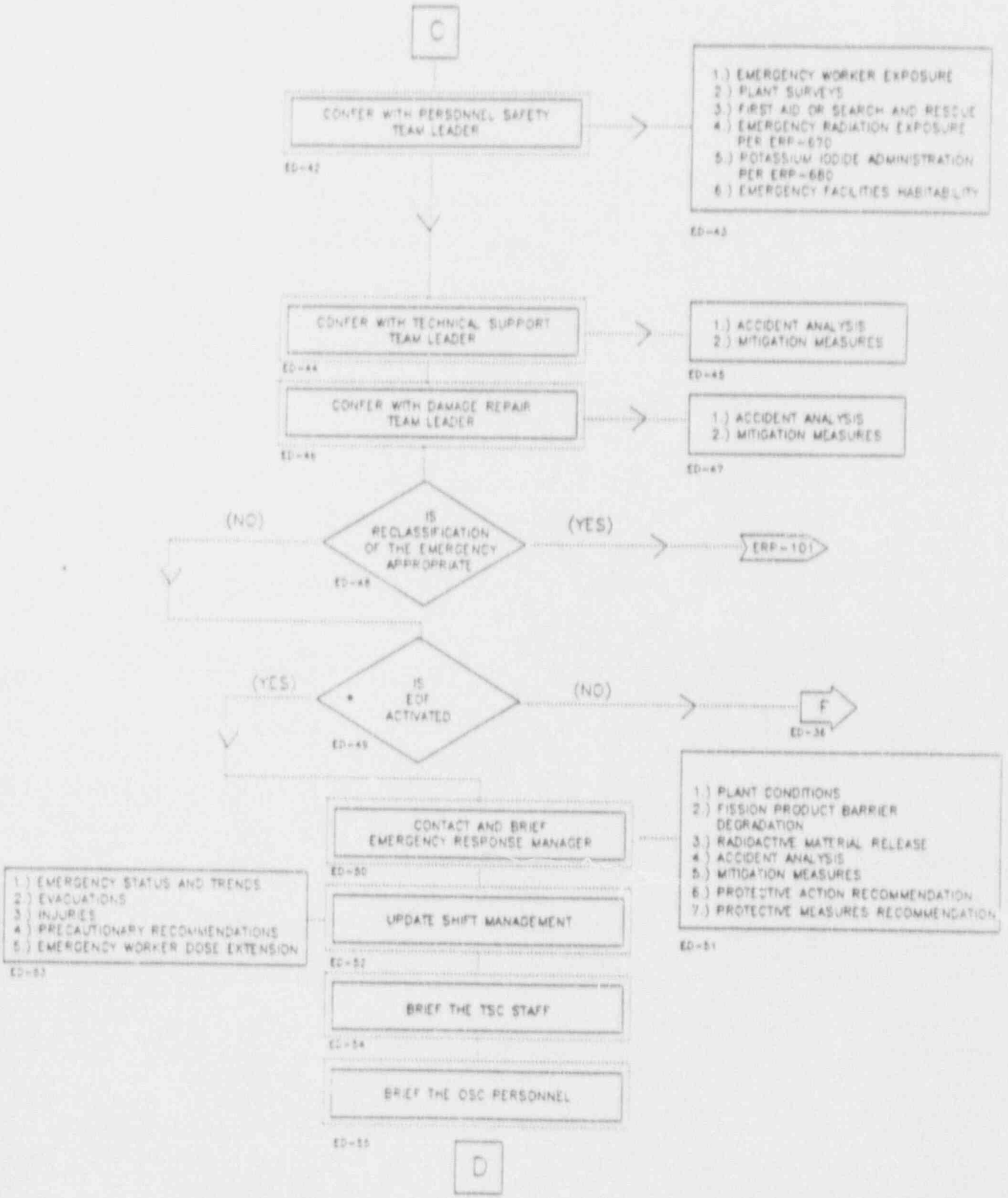
NOTES AND CAUTIONS

#1

1. ED (SHIFT MANAGEMENT) CONTINUES COMMAND AND CONTROL OF THE EMERGENCY RESPONSE ORGANIZATION UNTIL RELIEVED BY THE ED (PLANT MANAGEMENT).
2. RESPONSIBILITY TRANSFER MAY OCCUR AT ANY POINT IN THIS PROCEDURE.
3. EMERGENCY DIRECTOR RELIEF SUMMARY IS USED FOR INITIAL RESPONSIBILITY TRANSFER AND AND FOR SHIFT CHANGES.

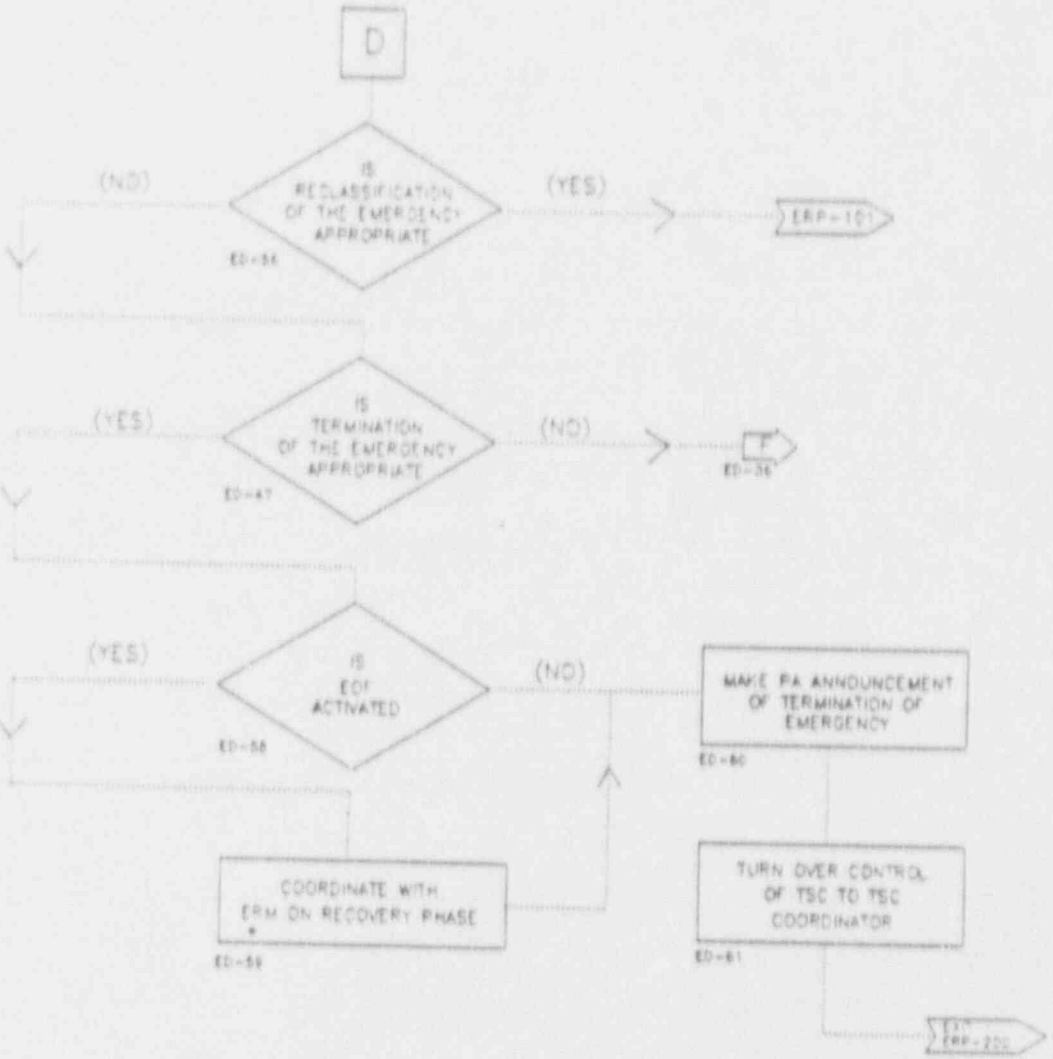

B
CONTINUING ACTIONS
IS TSC ADEQUATELY STAFFED AND OPERATIONAL
ED-27
(YES)
(NO)
CONFER WITH TECHNICAL SUPPORT TEAM LEADER
ED-28
LEGEND
BRP - BUREAU OF RADIATION PROTECTION
RHP - RADIOLOGICAL HEALTH PROTECTION AGENCY
BRIEF TSC STAFF
ED-29
HAVE A PA ANNOUNCEMENT MADE
ED-30
ANNOUNCE TSC ACTIVATED AND CONTROL OF EMERGENCY WITH ED IN TSC
ED-31
HAS A GENERAL EMERGENCY BEEN DECLARED
ED-32
(NO)
(YES)
CONFER WITH DATL FOR PROTECTIVE ACTION RECOMMENDATION
ED-33
CONFER WITH DATL FOR PROTECTIVE MEASURES RECOMMENDATION
ED-34
DIRECT THE ED COMMUNICATOR TO INFORM BRP AND RHP
ED-35
#2
F
ED-42
ED-57
NOTE #2
IF BRP AND RHP CAN NOT BE CONTACTED WITHIN 15 MINUTES, THEN NOTIFY THE AFFECTED COUNTIES DIRECTLY
NOTE #3
ISSUANCE OF A PAR AUTOMATICALLY CAUSES A GENERAL EMERGENCY CLASSIFICATION AND CONVERSELY A GENERAL EMERGENCY CLASSIFICATION REQUIRES ISSUANCE OF A PAR
CONFER WITH SHIFT MANAGEMENT
ED-36
1.) PLANT CONDITIONS
2.) FISSION PRODUCT BARRIER DEGRADATION
3.) RADIOACTIVE MATERIAL RELEASE
4.) MITIGATION ACTIONS
5.) TECHNICAL PROBLEMS
ED-37
CONFER WITH DOSE ASSESSMENT TEAM LEADER
ED-38
1.) PROTECTIVE ACTION RECOMMENDATIONS
2.) PROTECTIVE MEASURES RECOMMENDATIONS
#3
ED-39
CONFER WITH CHEMISTRY SAMPLING AND ANALYSIS TEAM LEADER
ED-40
1.) APPROPRIATE SAMPLING AND ANALYSIS IN PROGRESS
ED-41
C

ATTACHMENT 1
EMERGENCY DIRECTOR FLOW CHART
(Page 4 of 6)



ATTACHMENT 1
EMERGENCY DIRECTOR FLOW CHART

(Page 6 of 6)



ATTACHMENT 2
EMERGENCY NOTIFICATION FORM
(Page 1 of 1)

NOTE: THE ED COMMUNICATOR SHOULD OBTAIN AND IMPLEMENT ERP-110.

|___| This is a Drill |___| This is not a Drill

1. This is: _____ at Peach Bottom Atomic Power Station Unit ____.
Communicators Name

My phone number is: 717-456-7014 Ext. _____ or OMNI Number _____.

2. EMERGENCY CLASSIFICATION:

|___| Unusual Event
|___| Alert
|___| Site Emergency
|___| General Emergency
|___| The Event has been Terminated

AT: TIME: _____ DATE: _____

THIS REPRESENTS A/AN: |___| Escalation |___| Reduction |___| No Change IN CLASSIFICATION STATUS:

3. BRIEF NON-TECHNICAL DESCRIPTION OF THE EVENT:

_____

_____

_____

_____

4. THERE IS: |___| No Release |___| Airborne Release |___| Liquid Release

NOTE: INFORMATION BELOW TO BE RELAYED TO BRP AND RHP ONLY. IF NOT CONTACTED WITHIN 15 MINUTES, THEN NOTIFY THE AFFECTED COUNTIES DIRECTLY.

5. WHEN A GENERAL EMERGENCY IS THE EVENT CLASSIFICATION, PROVIDE A PAR DEVELOPED FROM THE PROTECTIVE ACTION RECOMMENDATION FORM.

_____

_____

_____

6. IF "AIRBORNE RELEASE" IS CHECKED ABOVE:

WIND DIRECTION IS FROM: _____ WIND SPEED: _____

|___| This is a Drill |___| This is not a Drill

APPROVED: _____ TIME: _____ DATE: _____
(Emergency Director)

ATTACHMENT 3
EMERGENCY RESPONSE ORGANIZATION FORM
(Page 1 of 1)

NOTE: THE ED COMMUNICATOR SHOULD OBTAIN AND IMPLEMENT ERP-140.

[ ] TSC to be activated, EOF to be staffed (Required for Alert)

[ ] TSC AND EOF to be activated (Required for Site Emergency or Higher)

_____ 1. NONE

_____ 2. All Call (Required for Alert, Site Emergency OR General Emergency.)

a. Prerecorded message cassette AND Voice Mail message to use.

_____ Alert - Atom Road
_____ Alert - Lay Road
_____ Site Emergency - Atom Road
_____ Site Emergency - Lay Road
_____ General Emergency - Atom Road
_____ General Emergency - Lay Road

_____ 3. Emergency Director ERP-140 Appendix 1

_____ 4. Technical Support Team ERP-140 Appendix 2

a. Technical Support Group
b. Services Support Group

_____ 5. Dose Assessment Team ERP-140 Appendix 3

a. Dose Assessment Group
b. Field Survey Group

_____ 6. Chemistry Sampling and Analysis Team ERP-140 Appendix 4

*_____ 7. Damage Repair Team ERP-140 Appendix 5

_____ 8. Security Team ERP-140 Appendix 6

_____ 9. Personnel Safety Team ERP-140 Appendix 7

a. Plant Survey Group
b. First Aid/Search and Rescue Group
c. Vehicle and Evacuee Control Group
d. Dosimetry, Bioassay and Respiratory Protection Group

_____ 10. Operations Personnel (only required when checked)

* Activate when a hurricane or tornado is forecasted to hit the station with sustained winds of 75 mph or greater.

ATTACHMENT 4

UNUSUAL EVENT - STATION ANNOUNCEMENT

NOTE: CIRCLE THE APPROPRIATE PHRASE(S) TO BE ANNOUNCED.

DECLARATION MESSAGE

THIS (IS) (IS NOT) A DRILL. REPEAT, THIS (IS) (IS NOT) A DRILL.

ATTENTION ALL PERSONNEL. ATTENTION ALL PERSONNEL.

THE EMERGENCY DIRECTOR HAS DECLARED AN UNUSUAL EVENT.

ALL PERSONNEL SHOULD CARRY ON WITH NORMAL DUTIES UNLESS FURTHER NOTIFIED ON THE PUBLIC ADDRESS SYSTEM.

THIS (IS) (IS NOT) A DRILL. REPEAT, THIS (IS) (IS NOT) A DRILL.

DE-ESCALATION MESSAGE

THIS (IS) (IS NOT) A DRILL. REPEAT, THIS (IS) (IS NOT) A DRILL.

ATTENTION ALL PERSONNEL. ATTENTION ALL PERSONNEL.

THE UNUSUAL EVENT CLASSIFICATION HAS BEEN TERMINATED.

THIS (IS) (IS NOT) A DRILL. REPEAT, THIS (IS) (IS NOT) A DRILL.

NOTE: UPON COMPLETION OF THIS ANNOUNCEMENT, THE NRC COMMUNICATOR SHOULD OBTAIN AND COMPLETE THE APPROPRIATE SECTIONS OF ERP-110.

ATTACHMENT 5

ALERT - STATION ANNOUNCEMENT

NOTE: CIRCLE THE APPROPRIATE PHRASE(S) TO BE ANNOUNCED.

DECLARATION MESSAGE

THIS (IS) (IS NOT) A DRILL. REPEAT, THIS (IS) (IS NOT) A DRILL.

ATTENTION ALL PERSONNEL. ATTENTION ALL PERSONNEL.

THE EMERGENCY DIRECTOR HAS DECLARED AN ALERT.

ALL SHIFT PERSONNEL REPORT TO THE OSC.

ALL MEMBERS OF THE EMERGENCY RESPONSE ORGANIZATION REPORT TO YOUR EMERGENCY FACILITY OR EMERGENCY ASSEMBLY AREA.

ALL NON-ESSENTIAL PERSONNEL AND VISITORS AWAIT FURTHER PUBLIC ADDRESS INSTRUCTIONS.

THIS (IS) (IS NOT) A DRILL. REPEAT, THIS (IS) (IS NOT) A DRILL.

DE-ESCALATION MESSAGE

THIS (IS) (IS NOT) A DRILL. REPEAT, THIS (IS) (IS NOT) A DRILL.

ATTENTION ALL PERSONNEL. ATTENTION ALL PERSONNEL.

THE ALERT CLASSIFICATION HAS BEEN (DE-ESCALATED TO AN UNUSUAL EVENT) (TERMINATED).

ALL PERSONNEL SHALL WAIT INSTRUCTIONS FROM THEIR TEAM LEADERS OR SUPERVISORS.

THIS (IS) (IS NOT) A DRILL. REPEAT, THIS (IS) (IS NOT) A DRILL.

NOTE: UPON COMPLETION OF THIS ANNOUNCEMENT, THE NRC COMMUNICATOR SHOULD OBTAIN AND COMPLETE THE APPROPRIATE SECTIONS OF ERP-110.

ATTACHMENT 6

SITE EMERGENCY - STATION ANNOUNCEMENTS

NOTE: CIRCLE THE APPROPRIATE PHRASE(S) TO BE ANNOUNCED.

DECLARATION MESSAGE

THIS (IS) (IS NOT) A DRILL. REPEAT, THIS (IS) (IS NOT) A DRILL.

ATTENTION ALL PERSONNEL. ATTENTION ALL PERSONNEL.

THE EMERGENCY DIRECTOR HAS DECLARED A SITE EMERGENCY.

ALL ON-SHIFT PERSONNEL REPORT TO THE OSC.

ALL MEMBERS OF THE EMERGENCY RESPONSE ORGANIZATION REPORT TO YOUR EMERGENCY FACILITY OR EMERGENCY ASSEMBLY AREA.

ALL NON-ESSENTIAL PERSONNEL AWAIT FURTHER PUBLIC ADDRESS INSTRUCTIONS

ALL VISITORS WILL REPORT WITH THEIR ESCORTS TO THE SECURITY ADMINISTRATION BUILDING AND AWAIT FURTHER INSTRUCTIONS.

THIS (IS) (IS NOT) A DRILL. REPEAT, THIS (IS) (IS NOT) A DRILL.

DE-ESCALATION MESSAGE

THIS (IS) (IS NOT) A DRILL. REPEAT, THIS (IS) (IS NOT) A DRILL.

ATTENTION ALL PERSONNEL. ATTENTION ALL PERSONNEL.

THE SITE EMERGENCY HAS BEEN (DE-ESCALATED TO AN UNUSUAL EVENT/ALERT) (TERMINATED).

ALL PERSONNEL SHALL WAIT INSTRUCTIONS FROM THEIR TEAM LEADERS OR SUPERVISORS.

THIS (IS) (IS NOT) A DRILL. REPEAT, THIS (IS) (IS NOT) A DRILL.

NOTE: UPON COMPLETION OF THIS ANNOUNCEMENT, THE NRC COMMUNICATOR SHOULD OBTAIN AND COMPLETE THE APPROPRIATE SECTIONS OF ERP-110.

ATTACHMENT 7

GENERAL EMERGENCY - STATION ANNOUNCEMENTS

NOTE: CIRCLE THE APPROPRIATE PHRASE(S) TO BE ANNOUNCED.

DECLARATION MESSAGE

THIS (IS) (IS NOT) A DRILL. REPEAT, THIS (IS) (IS NOT) A DRILL.

ATTENTION ALL PERSONNEL. ATTENTION ALL PERSONNEL.

THE EMERGENCY DIRECTOR HAS DECLARED A GENERAL EMERGENCY.

ALL ON-SHIFT PERSONNEL REPORT TO THE OSC.

ALL MEMBERS OF THE EMERGENCY RESPONSE ORGANIZATION REPORT TO YOUR EMERGENCY FACILITY OR EMERGENCY ASSEMBLY AREA.

ALL NON-ESSENTIAL PERSONNEL AWAIT FURTHER PUBLIC ADDRESS INSTRUCTIONS

ALL VISITORS WILL REPORT WITH THEIR ESCORTS TO THE SECURITY ADMINISTRATION BUILDING AND AWAIT FURTHER INSTRUCTIONS.

THIS (IS) (IS NOT) A DRILL. REPEAT, THIS (IS) (IS NOT) A DRILL.

DE-ESCALATION MESSAGE

THIS (IS) (IS NOT) A DRILL. REPEAT, THIS (IS) (IS NOT) A DRILL.

ATTENTION PERSONNEL. ATTENTION ALL PERSONNEL.

THE GENERAL EMERGENCY HAS BEEN (DE-ESCALATED TO AN UNUSUAL EVENT/ALERT/SITE EMERGENCY) (TERMINATED).

ALL PERSONNEL SHALL AWAIT INSTRUCTIONS FROM THEIR TEAM LEADERS OR SUPERVISORS.

THIS (IS) (IS NOT) A DRILL. REPEAT, THIS (IS) (IS NOT) A DRILL.

NOTE: UPON COMPLETION OF THIS ANNOUNCEMENT, THE NRC COMMUNICATOR SHOULD OBTAIN AND COMPLETE THE APPROPRIATE SECTIONS OF ERP-110.

ATTACHMENT B

EMERGENCY DIRECTOR RELIEF SUMMARY
(Page 1 of 3)

Date:_____ Time:_____ Name:_____

Unit No.:_____ SCRAM Time:_____ TRIP No.:_____

Event Classification:_____ Time Declared:_____ Category:_____

Description:_____

Notification performed:_____ NRC:_____

_____

PLANT CONDITIONS

Reactor:

Power	_____ Percent	Reactivity Control	_____
Level	_____ in.	Pressure Control	_____
Pressure	_____ psig	Level Control	_____

Containment:

Torus temp	_____ Deg. F	Sprays	_____
Torus level	_____ ft.	Cooling	_____
Torus pressure	_____ psig	Isolations	_____
Drywell temp	_____ Deg. F	Fans	_____
Drywell press	_____ psig	Other	_____

Critical System(s):

Conditions _____
Power supply _____

_____

RADIOLOGICAL

Release: YES |___| NO |___| Time start:_____ End:_____

Levels: Main stack _____
ARMs location _____ Value _____
_____ _____
_____ _____

Meteorological: _____ Wind from:_____ Speed:_____
_____

_____

ATTACHMENT B

EMERGENCY DIRECTOR RELIEF SUMMARY
(Page 2 of 3)

EMERGENCY RESPONSE

On-Site:

Group or Title	Key Actions and Events	Time
Access Control		
Personnel Safety		
Evacuation		
Accountability		
Injury		
Chemistry		
Damage Repair		
Plant Entry		
Fire		
Health Physics		

Facilities Status	Time
OSC	
Aux OSC	
EOF	
TSC	

Briefings _____

_____

Off-site:

Agencies/Status _____ _____

Protective Actions Recommendations _____ _____

_____ Time _____

Field Survey _____

Off-Site Dose Calculations _____

ATTACHMENT B

EMERGENCY DIRECTOR RELIEF SUMMARY
(Page 3 of 3)

EVENT SUMMARY

Key Problem(s): _____

_____

_____

Projected Trend(s): _____

_____

_____

ED Actions: _____

_____

_____

Resources Needed: _____

_____

_____

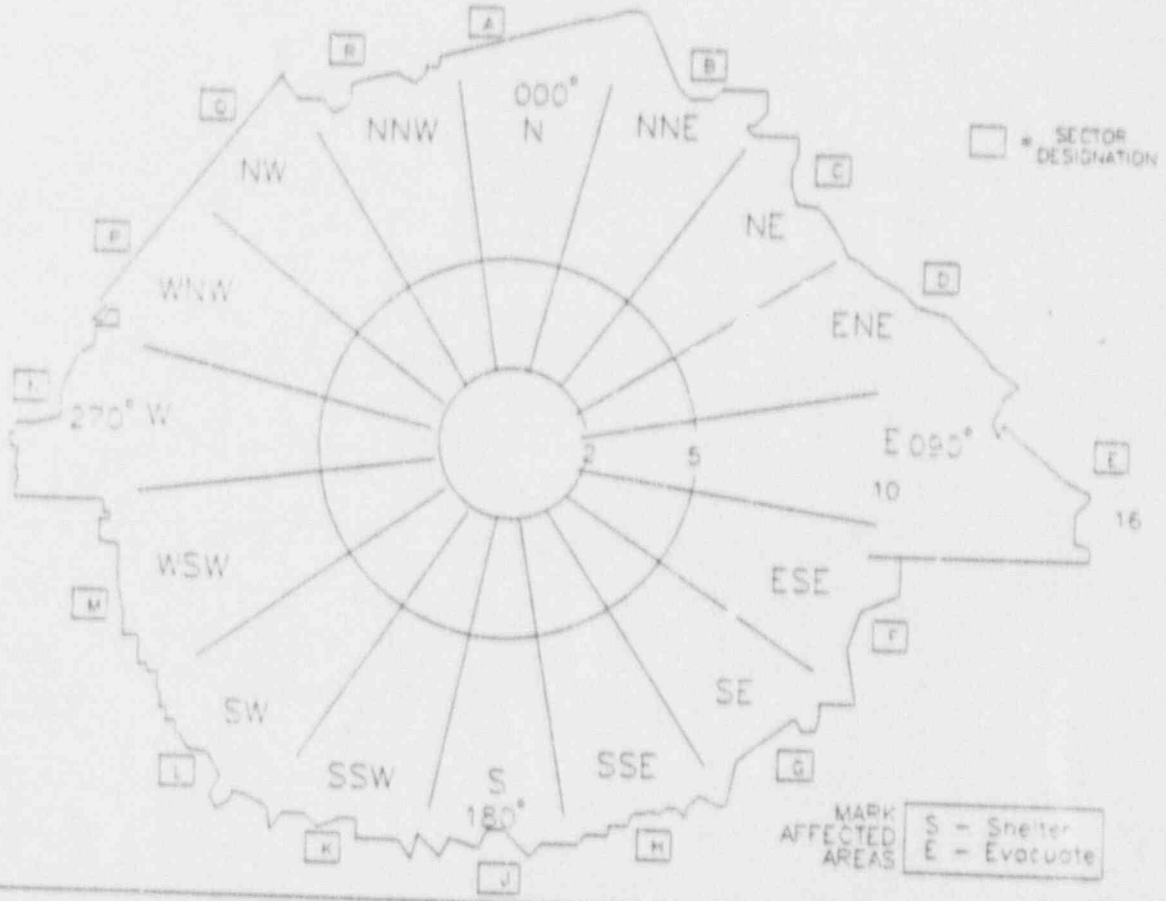
Remarks:

ATTACHMENT 9
PROTECTIVE ACTION RECOMMENDATION
(Page 1 of 1)

NOTE: INFO DEVELOPED FROM ERP-101 TABLES, ERP-315 COMPUTER PRINT-OUT, AND METEOROLOGICAL DATA AS AVAILABLE

Date/Time: _____ Windspeed: _____ mph Direction: _____ ° (From) _____ ° (To)

Area	Protective Actions	Sectors
0-2 miles	NONE SHELT EVAC	ALL
2-5 miles	NONE SHELT EVAC	
5-10 miles	NONE SHELT EVAC	
10-16 miles	NONE SHELT EVAC	



These protective actions are based on: ☐ plant status ☐ dose projections

Protective Measure Recommendations from DATL(if none, so state):

If duration of release is expected to be > 2 hours and projected doses exceed EPA PAG's, BRP philosophy is to order evacuation.

SUBMITTED: _____ (DATL)

APPROVED: _____ (ED) Date/Time: _____

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY RESPONSE PROCEDURE

ERP-230 OPERATIONS SUPPORT CENTER (OSC) ACTIVATION

1.0 RESPONSIBILITIES

1.1 Operations Support Center (OSC) Coordinator

1.1.1 Coordinates activation activities with Plant Survey Group Leader (PSGL) and Damage Repair Group Leader (DRGL).

1.1.2 Supervises operations personnel activation actions.

1.1.3 Direct initiation of Accountability.

1.2 Plant Survey Group Leader (PSGL)

1.2.1 Coordinates activation activities with OSC Coordinator and DRGL.

1.2.2 Supervises Health Physics personnel activation actions.

1.2.3 Directs initiation of radiological exposure tracking.

1.3 Damage Repair Group Leader (DRGL)

1.3.1 Coordinates activation activities with the OSC coordinator and the PSGL.

1.3.2 Supervises Damage Repair Group (DRG) activation activities.

1.3.3 Directs initiation of DRG activities.

1.4 Operations personnel

1.4.1 Perform actions directed by OSC Coordinator.

1.5 Plant Survey Group members (PSGM)

1.5.1 Perform actions directed by PSGL.

1.6 Damage Repair Group Members (DRGM)

1.6.1 Perform actions directed by DRGL.

2.0 INITIAL ACTIONS

NOTE: ATTACHMENT TITLED "OPERATIONS SUPPORT CENTER (OSC) ACTIVATION FLOW CHART" MAY BE USED AS A GUIDE FOR THE FOLLOWING ACTIONS.

2.1 OSC Coordinator shall:

2.1.1 Assign OSC Logbook/Operations Status Board Keeper (LB/SBK).

2.1.2 Ensure all OSC personnel have carded in at one of the OSC card readers or signed in on Personnel Accountability List if notified that security computer is out of service.

2.1.3 Ensure PSGL implements activation actions of Plant Survey Group.

2.1.4 Ensure DRGL implements activation actions of DRG.

2.1.5 Direct Operations Personnel:

2.1.5.1 Obtain, install and test OSC equipment as shown on ERP-230, Attachment titled "OSC Floor Plan".

2.1.5.2 Perform required OSC activation actions.

NOTE

Installation steps and equipment are described in ERP-230, section 2.4.

2.2 PSGL shall:

2.2.1 Assign RWP/Clerical Support to initiate retrieval of PRMS Data and/or ERP-230, Attachment titled "OSC Personnel Exposure Log".

2.2.2 Ensure incoming personnel

2.2.2.1 Log in with HP RWP/Clerical Support.

2.2.3 Assign PSGM

2.2.3.1 Obtain, install and test OSC equipment equipment as shown on ERP-230, Attachment titled "OSC Floor Plan.

2.2.3.2 Perform required OSC activation actions.

NOTE

Installation steps and equipment are described in ERP-230, section 2.5.

2.3 DRGL shall:

2.3.1 Assemble DRGM.

2.3.2 Assign DRGM to OSC activation tasks.

2.3.3 Assign DRGM to assist in OSC activation activities.

2.4 WHEN directed by OSC Coordinator, THEN Operations Personnel shall:

2.4.1 Log in with HP RWP/Clerical Support.

2.4.2 Obtain from equipment lockers AND install at locations shown on ERP-230, Attachment titled "OSC Floor Plan".

2.4.2.1 Telephones

2.4.2.2 Facsimile machine

2.4.2.3 Radio base station

2.4.2.4 Status boards

2.4.2.5 Arrange tables as required, to facilitate efficient operations.

2.4.3 Perform communication checks per ERP-230, Attachment titled "OSC Communications Check-Off List".

2.4.4 Report to OSCC when tests have been completed.

2.5 WHEN directed by Plant Survey Group Leader, THEN PSGM shall:

2.5.1 Log in with HP RWP/Clerical Support.

2.5.2 Obtain telephones from equipment lockers AND install at locations shown on ERP-230, Attachment titled, "OSC Floor Plan".

NOTE

Keys for equipment lockers are found in the DRGL office key locker.

2.5.4 Conduct communication checks per ERP-230, Attachment titled "OSC Communications Call Out List".

2.5.5 Inventory emergency kits using ST inventory list if kit seal is not intact..

2.5.6 Perform operational AND source check on survey instruments.

2.5.7 Place a frisker AND instruction sign at each entrance to the OSC.

2.5.8 Conduct initial habitability surveys and activate habitability monitoring equipment in accordance with ERP-620.

2.5.9 Assemble:

2.5.9.1 Radiation survey equipment

2.5.9.2 Protective clothing

2.5.9.3 Personnel dosimetry

2.5.10 Report to PSGL when assignments have been completed.

2.6 WHEN directed by DRGL, THEN DRGM shall:

2.6.1 Log in with HP RWP/Clerical Support.

2.6.2 Obtain and install facsimile machine as shown on ERP-230, Attachment titled, "OSC Floor Plan".

2.6.3 Assemble necessary tools and equipment

2.6.4 Assist in OSC activation activities as needed.

3.0 CONTINUING ACTIONS

3.1 OSC Coordinator shall:

3.1.1 Verify communication checks are completed:

3.1.1.1 Operations AND Plant Survey Group.

3.1.2 Verify facsimile machine operation.

3.1.3 Verify OSCC PA operations.

3.1.4 Verify that all OSC personnel have carded in.

3.1.5 Obtain PSG activation status from PSGL.

3.1.6 Obtain DRG activation status from DRGL.

3.1.7 Report activation status to ED/Shift Management.

3.1.8 Perform actions required by ERP-220.

3.1.9 IF OSC becomes uninhabitable,
THEN:

3.1.9.1 Notify Shift Management of situation
AND request PA announcement about move.

3.1.9.2 Coordinate
AND direct OSC transfer to the Backup OSC.
(Access Control Building).

3.1.9.3 Direct Operations personnel to transfer equipment.

a. Operations Status Board

b. Records
AND forms

c. Procedures

d. Facsimile machine

e. Radio base station

3.1.9.4 Re-establish OSC functions at the Backup OSC.

3.1.9.5 WHEN OSC is re-established,
THEN notify Shift Management.

3.2 PSGL shall:

3.2.1 Verify communication checks are completed.

3.2.2 Verify emergency kit inventories are completed as required.

3.2.3 Verify operational
AND source checks of survey instruments are satisfactory.

3.2.4 Verify initial habitability surveys are completed
OR being accomplished
AND habitability monitoring equipment is
activated or being activated.

3.2.5 Verify radiological response equipment is assembled.

3.2.6 Verify OSC personnel exposure records are up to date.

3.2.7 Notify OSC Coordinator
AND PSTL of status.

3.2.8 Perform actions required by ERP-620.

3.2.9 IF OSC becomes uninhabitable,
THEN:

3.2.9.1 Notify PSTL of situation.

3.2.9.2 Coordinate
AND direct PSG transfer to
Backup OSC (Access Control Building).

3.2.9.3 Direct PSGM transfer to

a. HP Status Boards

b. Survey instrumentation
AND HP supplies

c. Respiratory Protection equipment

d. Protective clothing

e. Dosimetry

f. Records
AND forms

g. Procedures

3.2.9.4 Re-establish PSG functions
in Backup OSC.

3.2.9.5 WHEN OSC is re-established,
THEN notify PSTL.

3.3 DRGL shall:

3.3.1 Verify DRGM are assembled.

3.3.2 Verify necessary equipment and materials have been obtained or currently being obtained.

3.3.3 Verify facsimile machine operational.

3.3.4 Notify OSC coordinator
AND DRTL of status.

3.3.5 IF OSC becomes uninhabitable
THEN

3.3.5.1 Notify DRTL of situation.

3.3.5.2 Coordinate
AND direct DRG
transfer to the Backup OSC
(Access Control Building).

3.3.5.3 Direct DRG member to transfer
supplies and equipment.

3.3.5.4 Direct DRG members to assist
PSG and Operations personnel
in relocation as necessary.

3.3.5.5 Re-establish DRG
functions in the Backup OSC.

3.3.5.6 WHEN OSC is re-established
THEN notify DRTL.

3.4 Operations Personnel shall:

3.4.1 Report completion of assigned activation tasks to OSC Coordinator.

3.4.2 Perform actions required by ERP-220.

3.5 PSGM shall:

3.5.1 Report completion of assigned activation task to PSGL.

3.5.2 Perform actions required by ERP-620.

3.6 DRGM shall:

3.6.1 Report completion of assigned activation tasks to DRGL.

3.6.2 Perform actions required by ERP-810.

4.0 FINAL CONDITIONS

4.1 WHEN directed to secure OSC by Shift Management,
THEN OSC Coordinator shall:

4.1.1 Coordinate
AND direct OSC deactivation.

4.1.1.1 Direct OSC operations personnel inventory
AND secure:

a. Telephones

b. Facsimile machine

c. Radio base station

d. Intercom system

e. Plant PA system

f. OSCC PA system

4.1.1.2 Assemble documents for review AND filing.

4.1.1.3 Direct operations personnel return to routine duties.

4.1.2 Notify Shift Management of completion.

4.1.3 Make close-out logbook entry.

4.2 WHEN notified to secure PSG by OSC Coordinator OR PSTL, THEN:

4.2.1 Coordinate AND direct PSG deactivation.

4.2.1.1 Direct PSGM

a. Inventory AND secure emergency kits.

b. Assemble all records AND forms.

c. Place telephones in equipment locker.

4.2.1.2 Verify all equipment secured.

4.2.1.3 Direct PSGM return to normal duties.

4.2.1.4 Direct OSC Logbook Keeper make close-out entry for PSG.

4.3 WHEN notified to secure DRG by the OSC coordinator or DRTL, THEN

4.3.1 Coordinate AND direct DRG de-activation.

4.3.1.1 Direct DRGM

a. Secure or return supplies and equipment.

b. Assist the PSG and Operation personnel as necessary.

4.3.1.2 Verify equipment and supplies are secured or returned.

4.3.1.3 Direct DRGM to return to normal duties.

5.0 ATTACHMENTS AND APPENDICES

5.1 Attachment 1 - Operations Support Center (OSC) Activation Flow Chart

5.2 Attachment 2 - OSC Floor Plan

5.3 Attachment 3 - OSC Communications Check-Off List

5.4 Attachment 4 - OSC Personnel Exposure Record Log

6.0 SUPPORTING INFORMATION

6.1 PURPOSE

To define actions required by OSC personnel for activating, AND staffing OSC as an Emergency Facility.

6.2 CRITERIA FOR USE

OSC is activated when an event has been classified as an Alert, Site Emergency, General Emergency, or at discretion of Emergency Director (ED).

6.3 REFERENCES

6.3.1 Code of Federal Regulations, Title 10, Energy, Part 20, Standards for Protection Against Radiation

6.3.2 NUREG 0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants

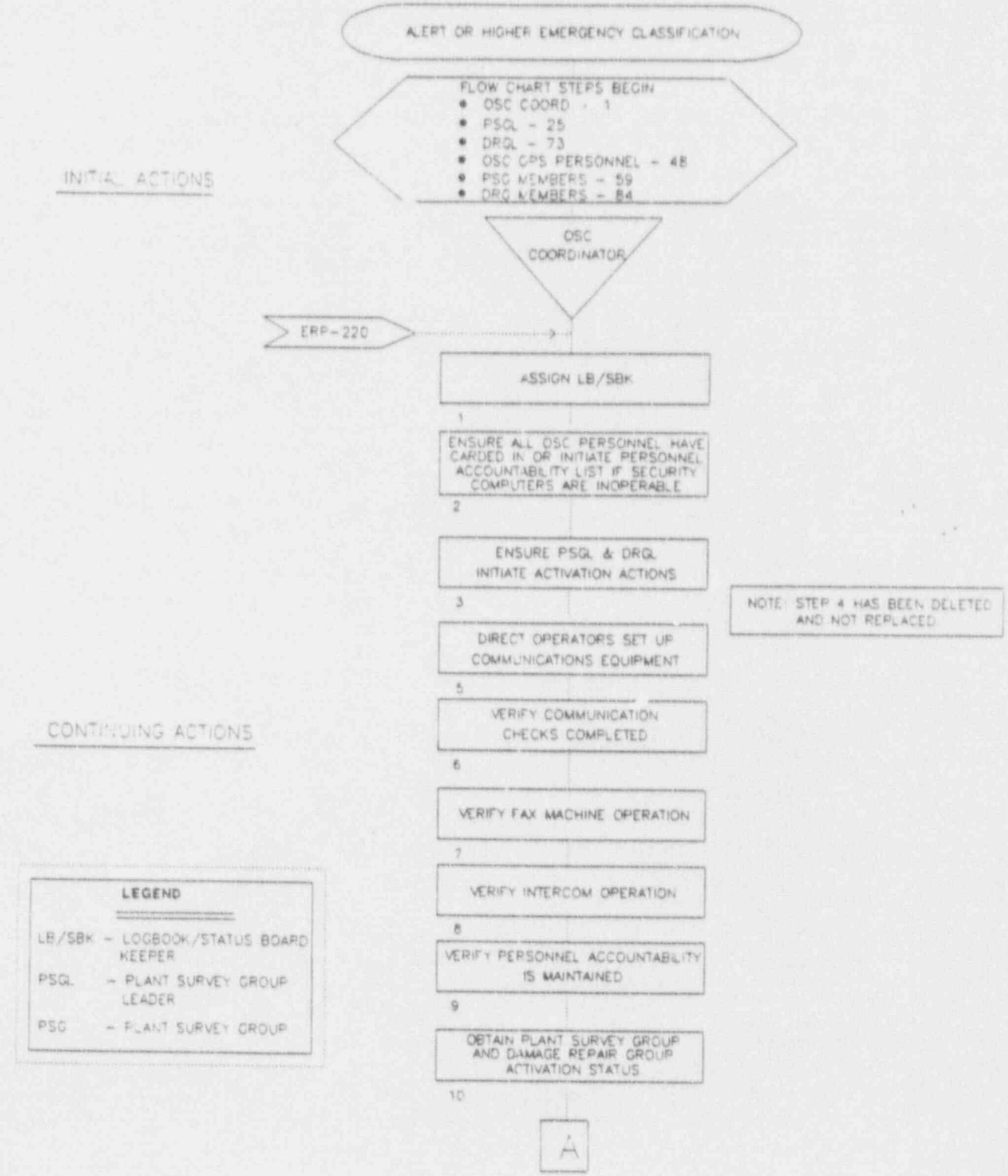
6.3.3 NUREG 0696, Functional Criteria for Emergency Response Facilities

6.3.4 Peach Bottom Atomic Power Station (PBAPS) Emergency Plan

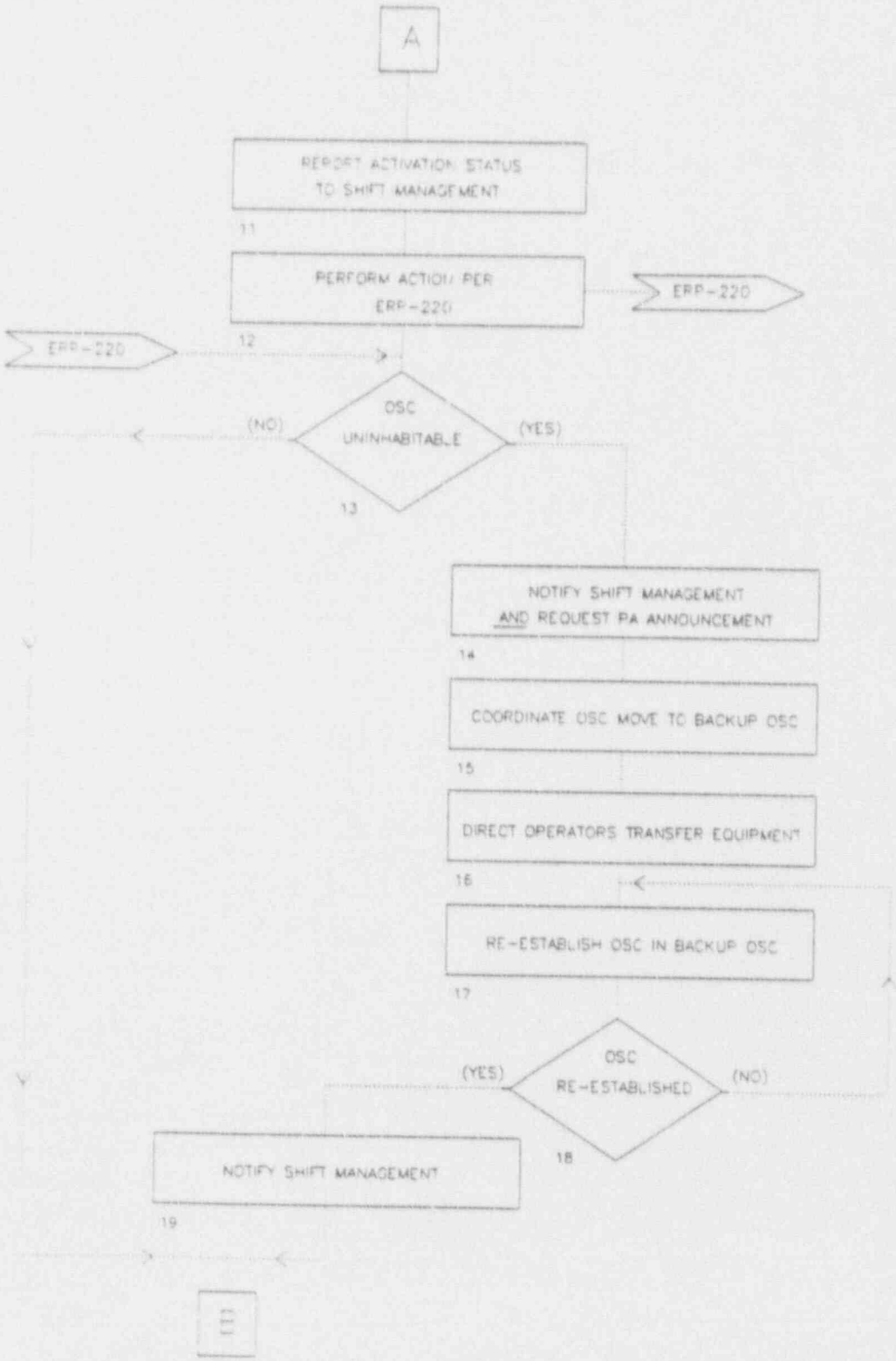
6.3.5 ERP-220, Operations Support Center (OSC) Personnel

6.3.6 ERP-620, Plant Survey Group

ATTACHMENT 1
OPERATIONS SUPPORT CENTER (OSC) ACTIVATION FLOW CHART
(Page 1 of 12)

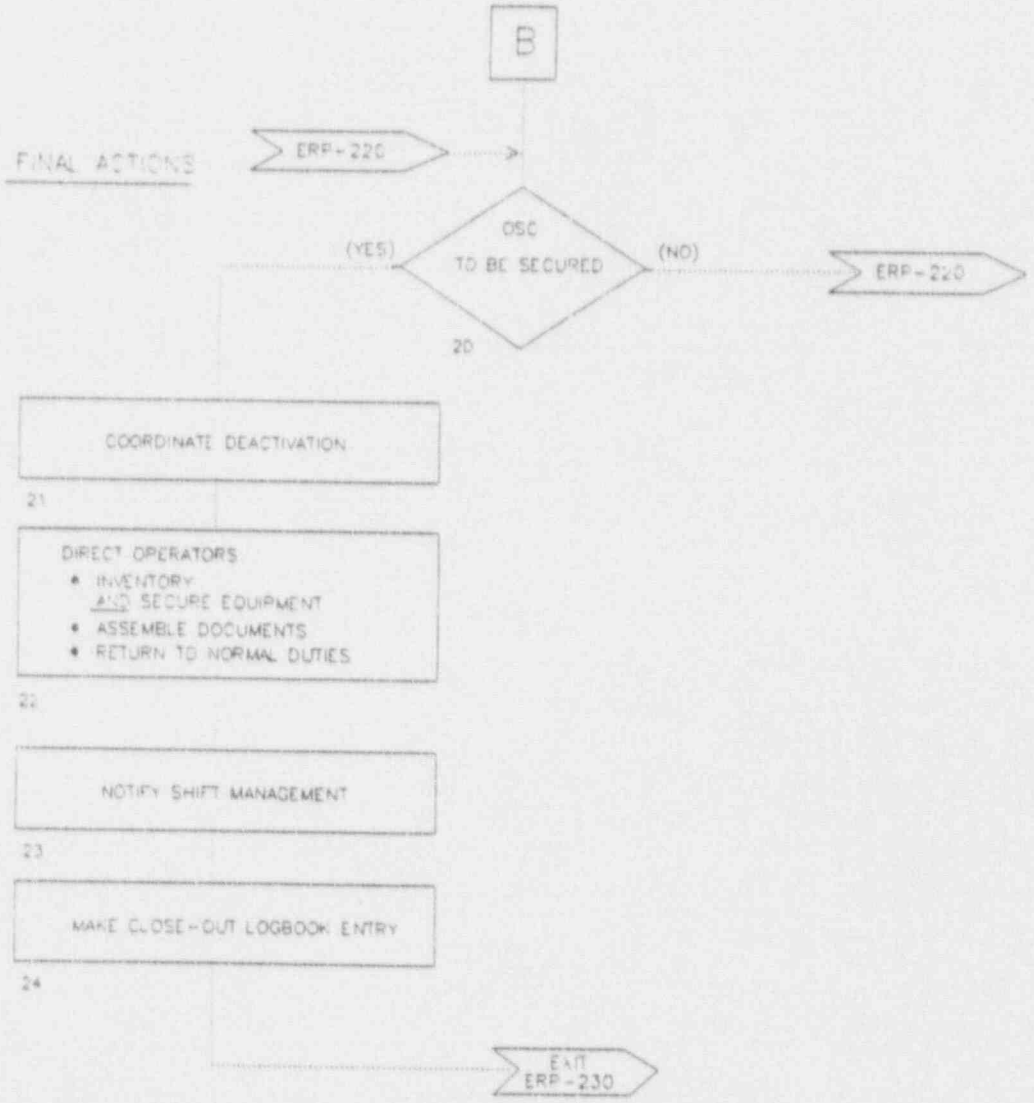


ATTACHMENT 1
OPERATIONS SUPPORT CENTER (OSC) ACTIVATION FLOW CHART
(Page 2 of 12)

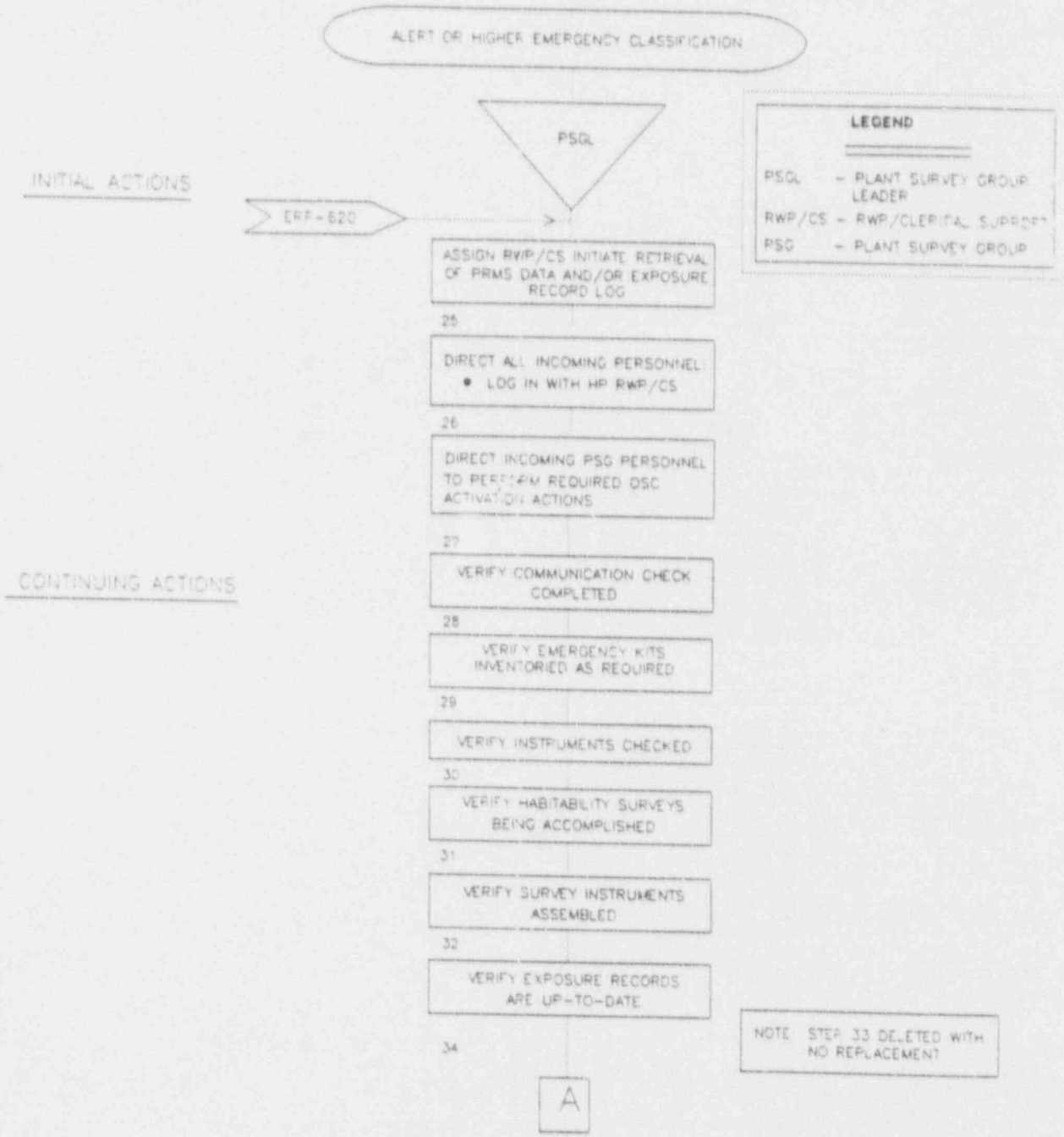


ATTACHMENT 1
OPERATIONS SUPPORT CENTER (OSC) ACTIVATION FLOW CHART

(Page 3 of 12)



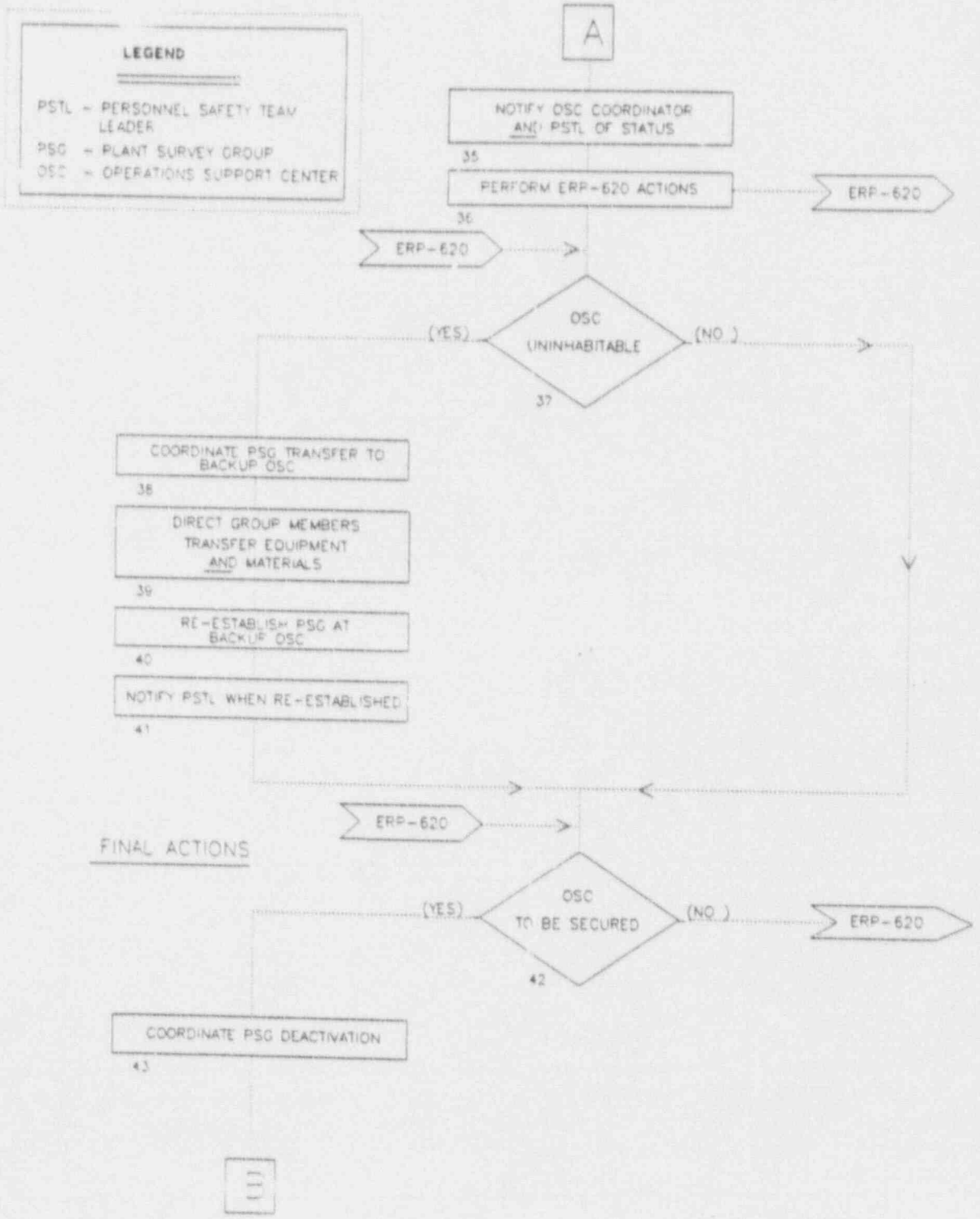
ATTACHMENT 1
OPERATIONS SUPPORT CENTER (OSC) ACTIVATION FLOW CHART
(Page 4 of 12)



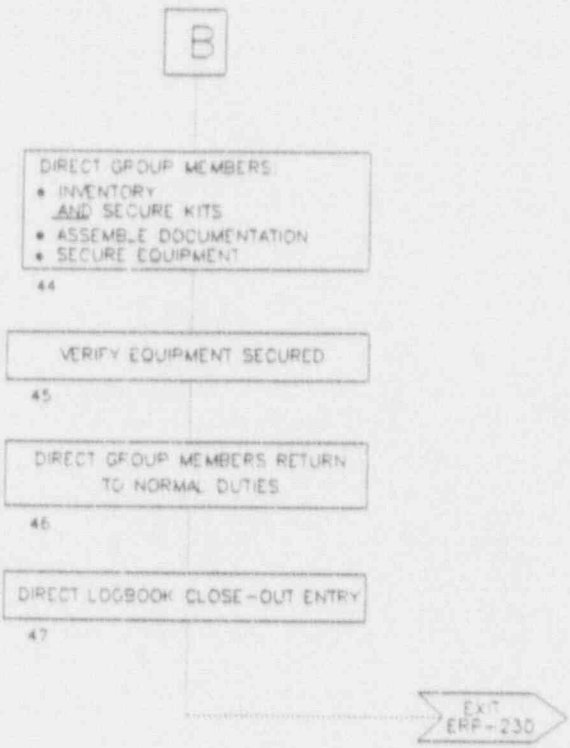
ATTACHMENT 1

OPERATIONS SUPPORT CENTER (OSC) ACTIVATION FLOW CHART

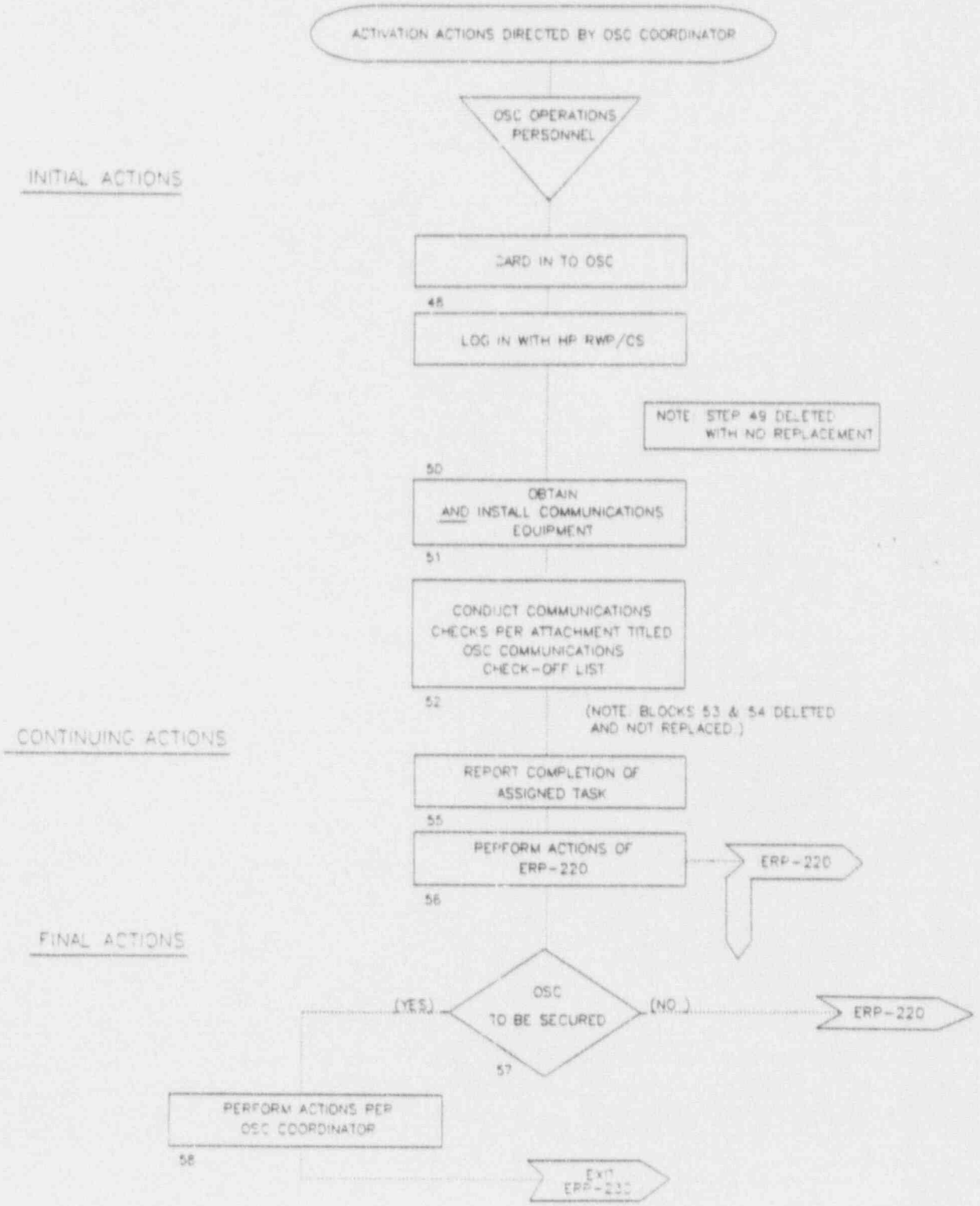
(Page 5 of 12)



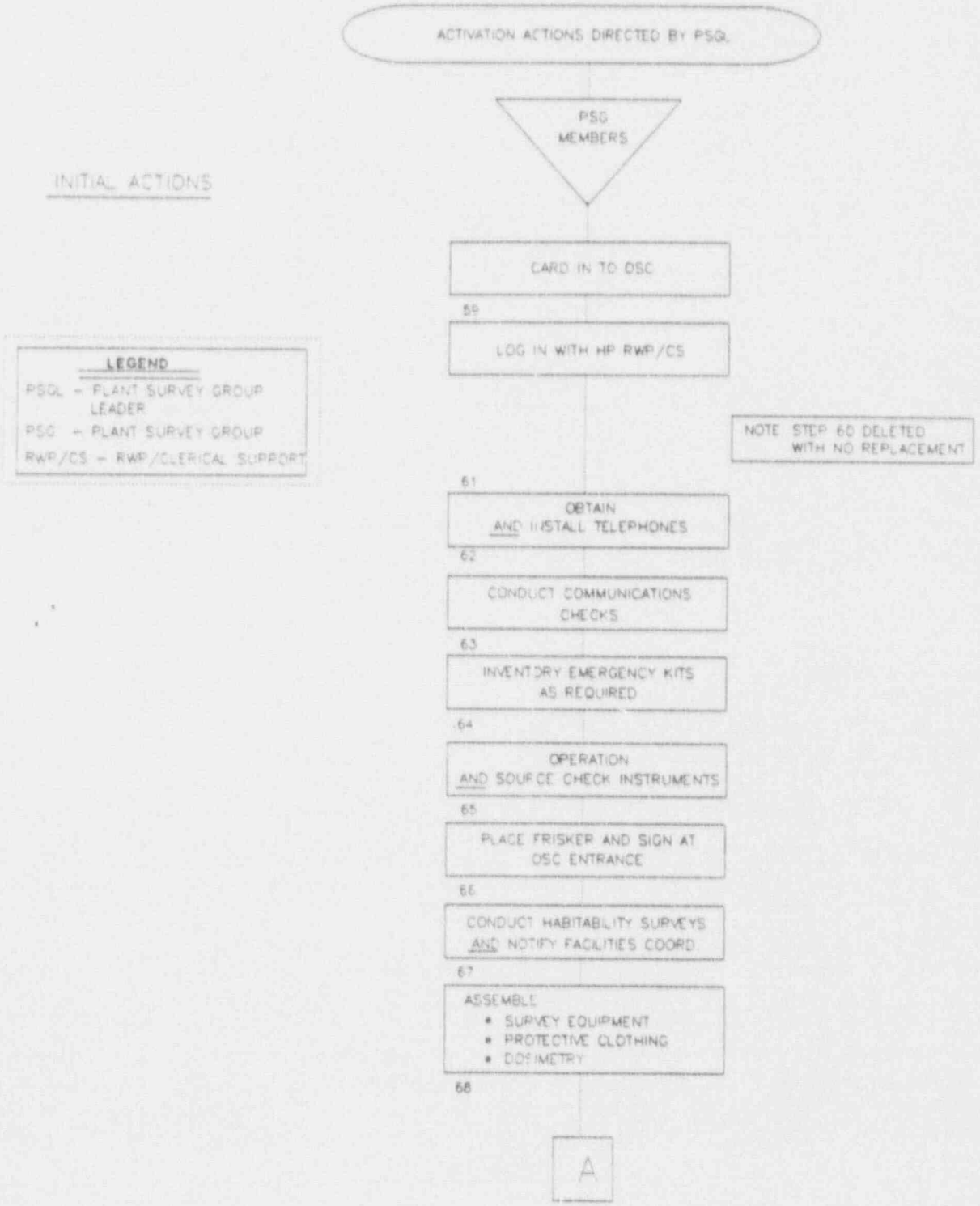
ATTACHMENT 1
OPERATIONS SUPPORT CENTER (OSC) ACTIVATION FLOW CHART
(Page 6 of 12)



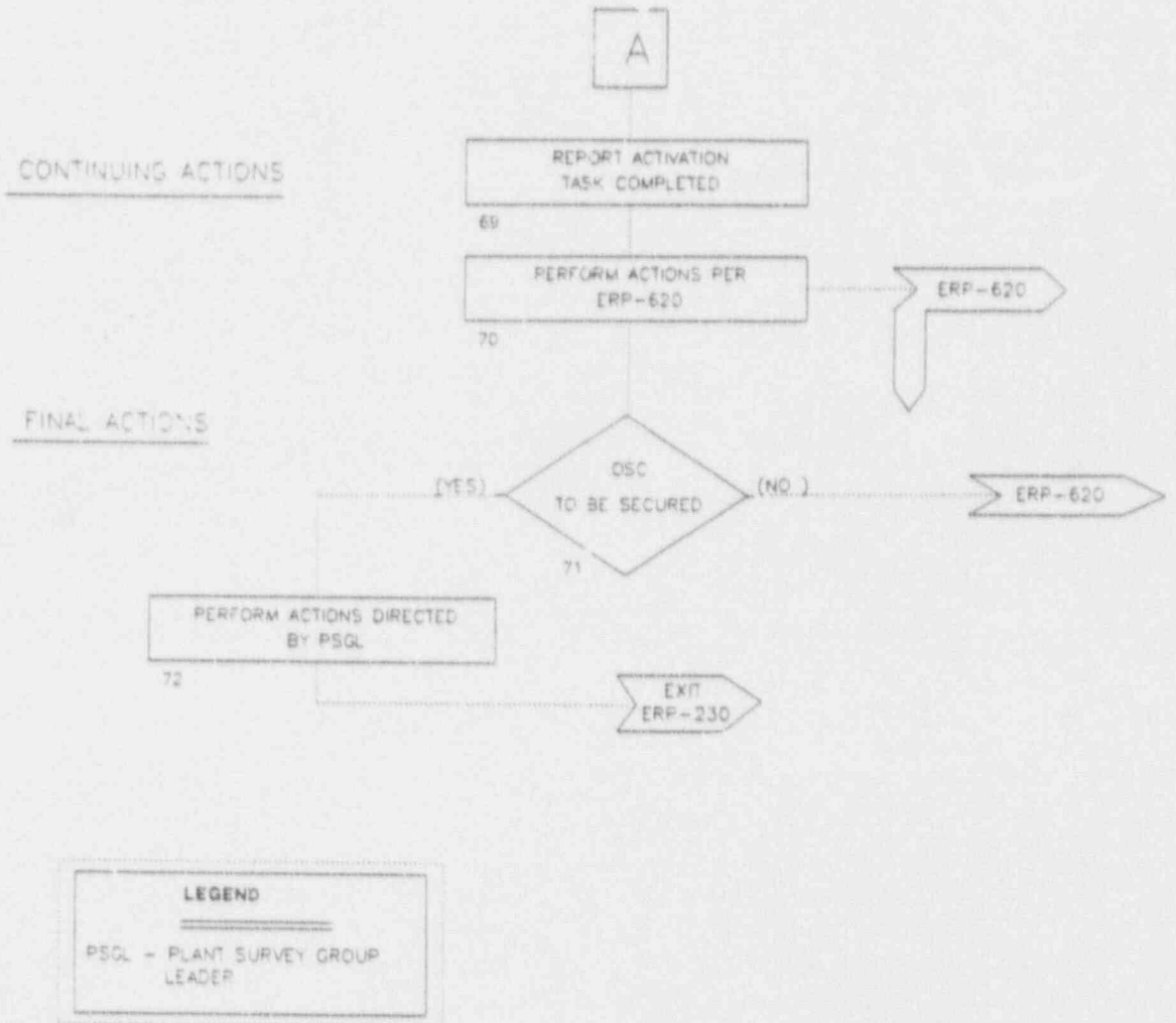
ATTACHMENT 1
OPERATIONS SUPPORT CENTER (OSC) ACTIVATION FLOW CHART
(Page 7 of 12)



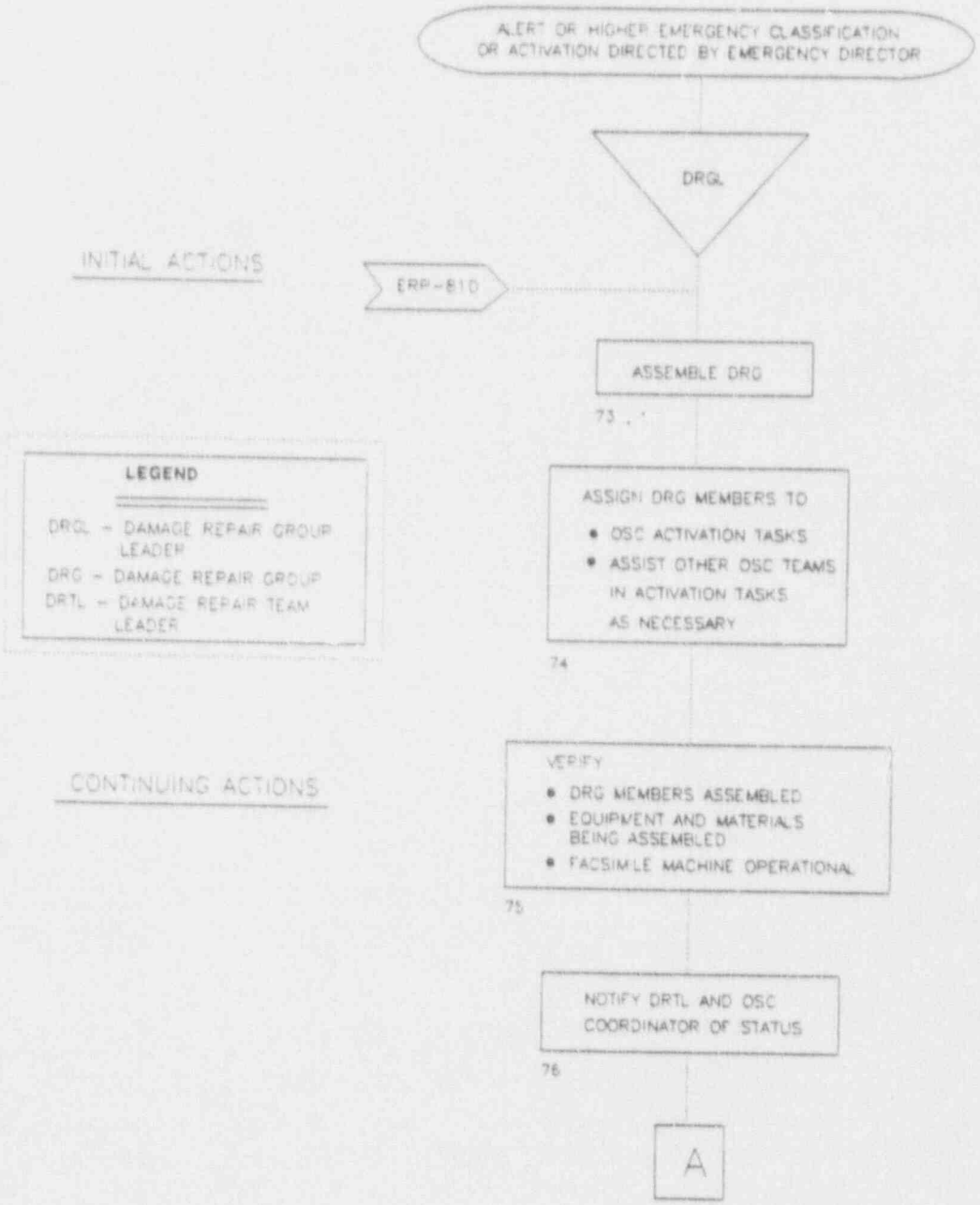
ATTACHMENT 1
OPERATIONS SUPPORT CENTER (OSC) ACTIVATION FLOW CHART
(Page 8 of 12)



ATTACHMENT 1
OPERATIONS SUPPORT CENTER (OSC) ACTIVATION FLOW CHART
(Page 9 of 12)



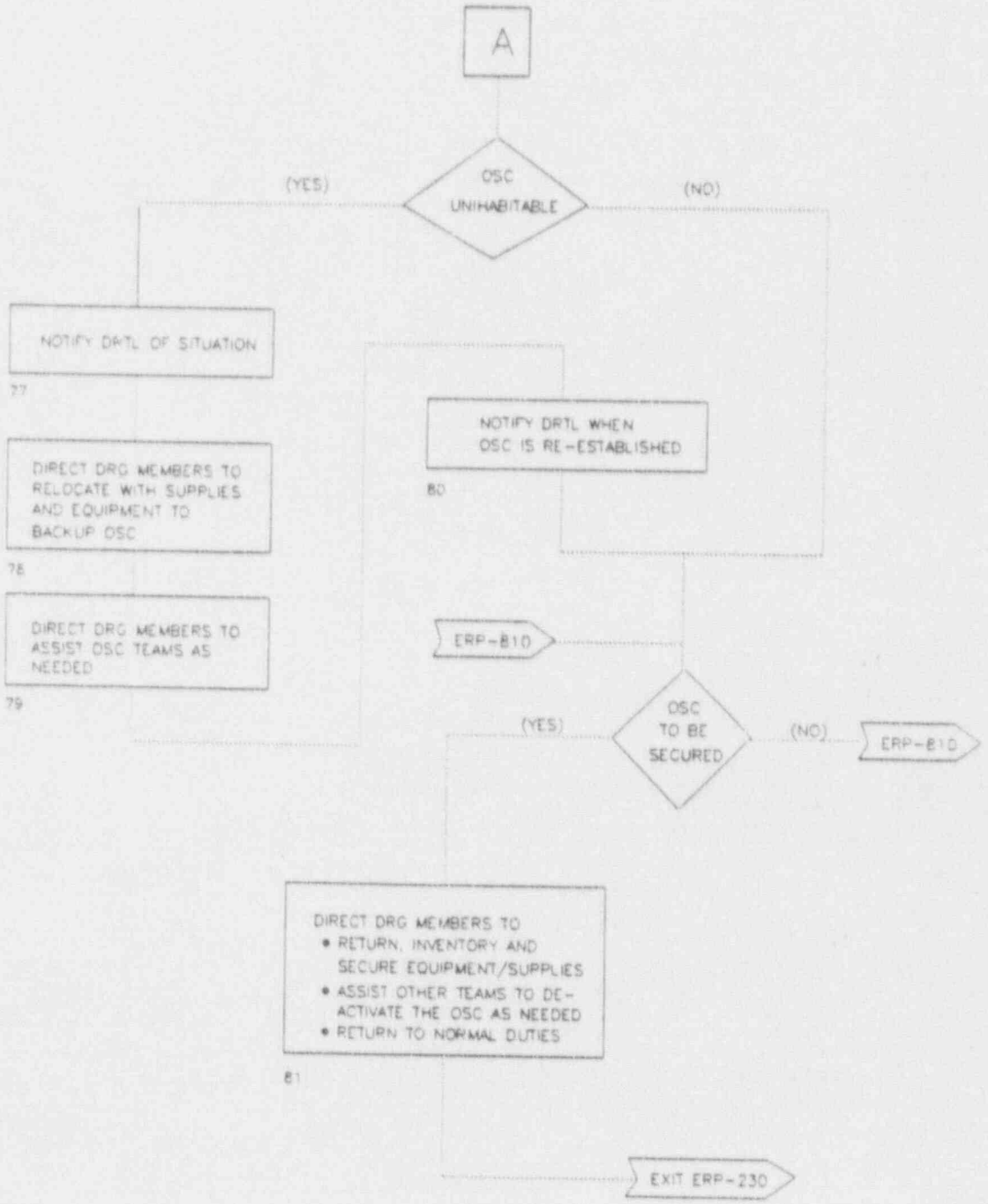
ATTACHMENT 1
OPERATIONS SUPPORT CENTER (OSC) ACTIVATION FLOW CHART
(Page 10 of 12)



ATTACHMENT 1

OPERATIONS SUPPORT CENTER (OSC) ACTIVATION FLOW CHART

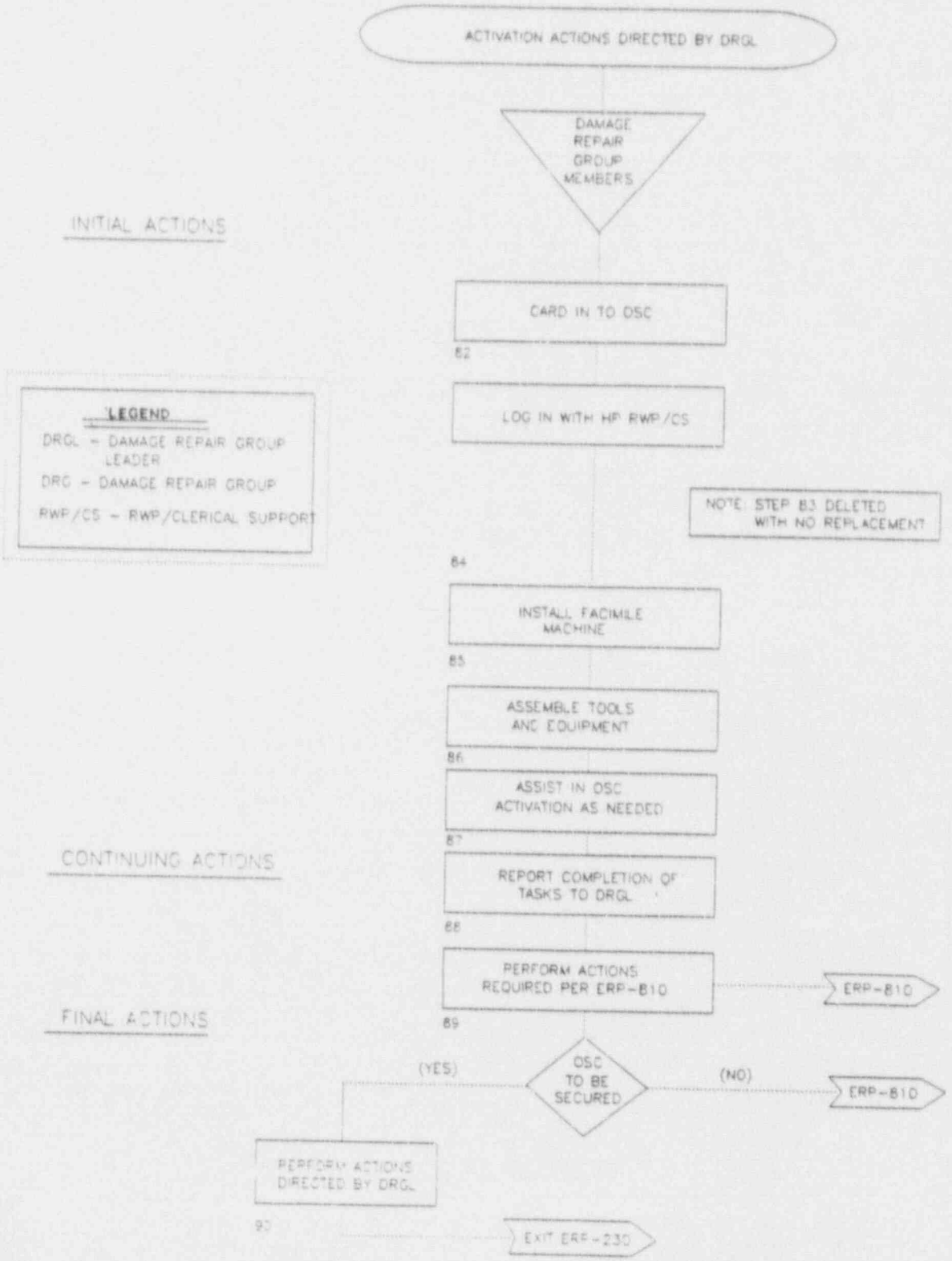
(Page 11 of 12)



ATTACHMENT 1

OPERATIONS SUPPORT CENTER (OSC) ACTIVATION FLOW CHART

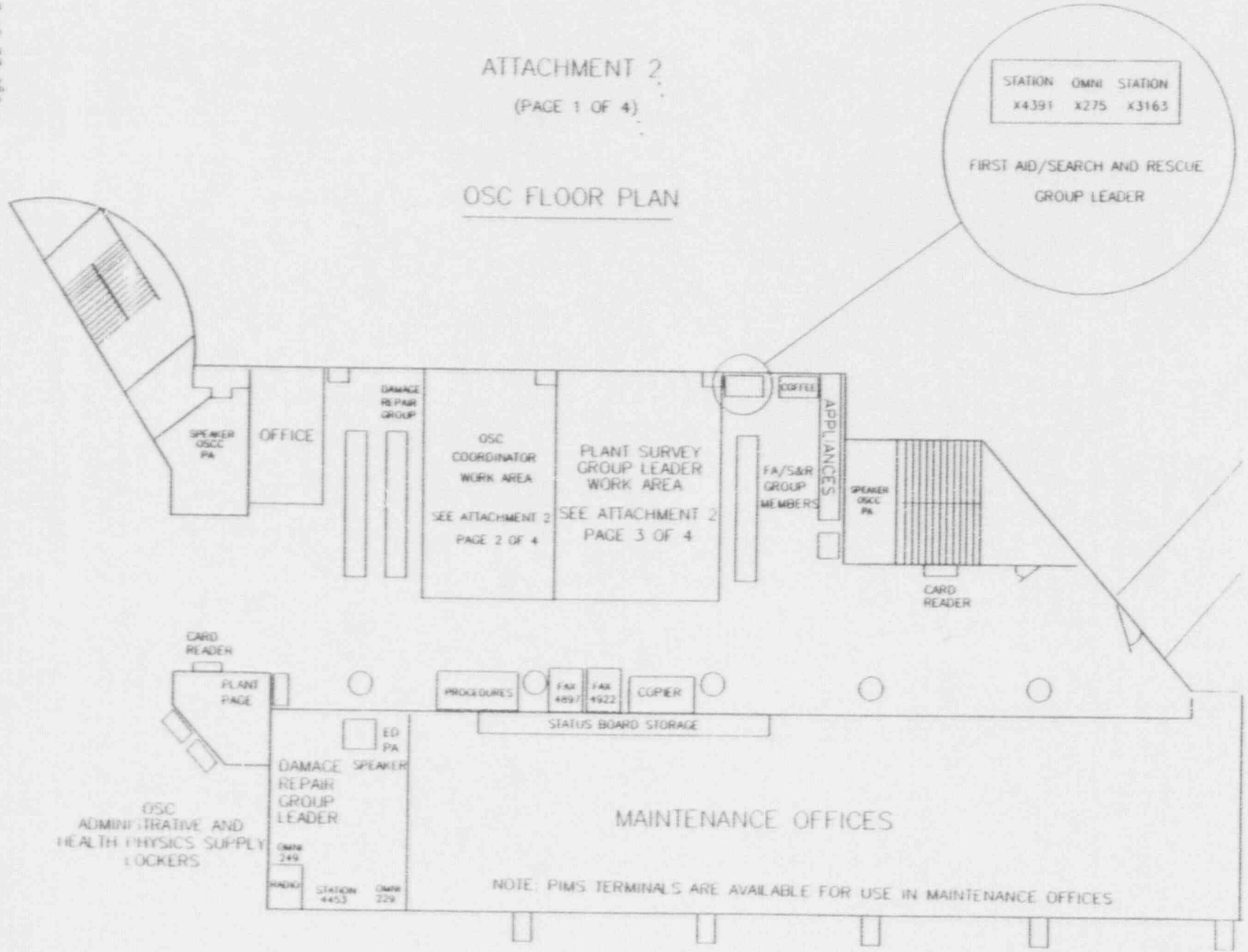
(Page 12 of 12)



ATTACHMENT 2

(PAGE 1 OF 4)

OSC FLOOR PLAN

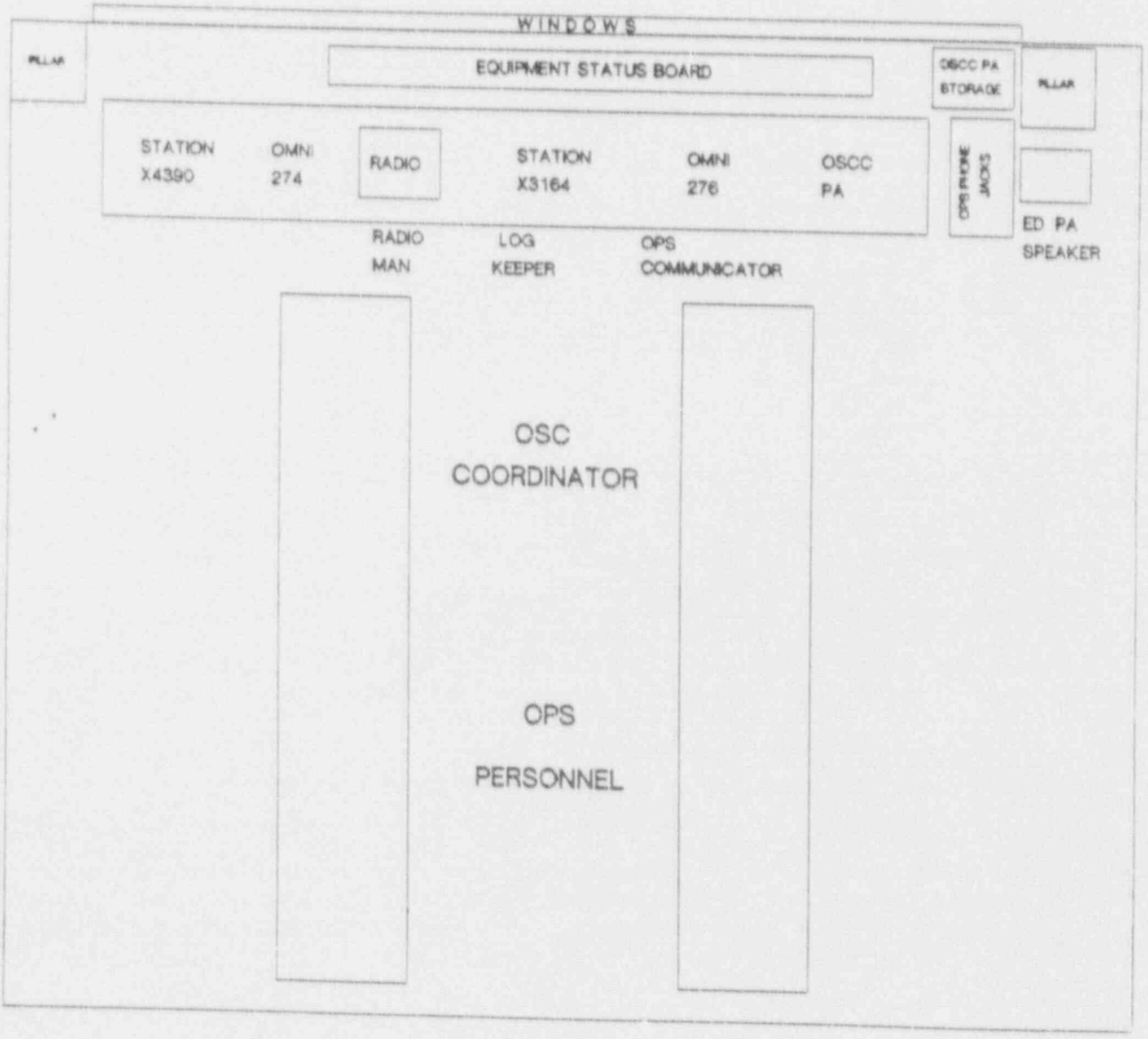


ATTACHMENT 2
(PAGE 2 OF 4)

OSC FLOOR PLAN

OSC COORDINATOR

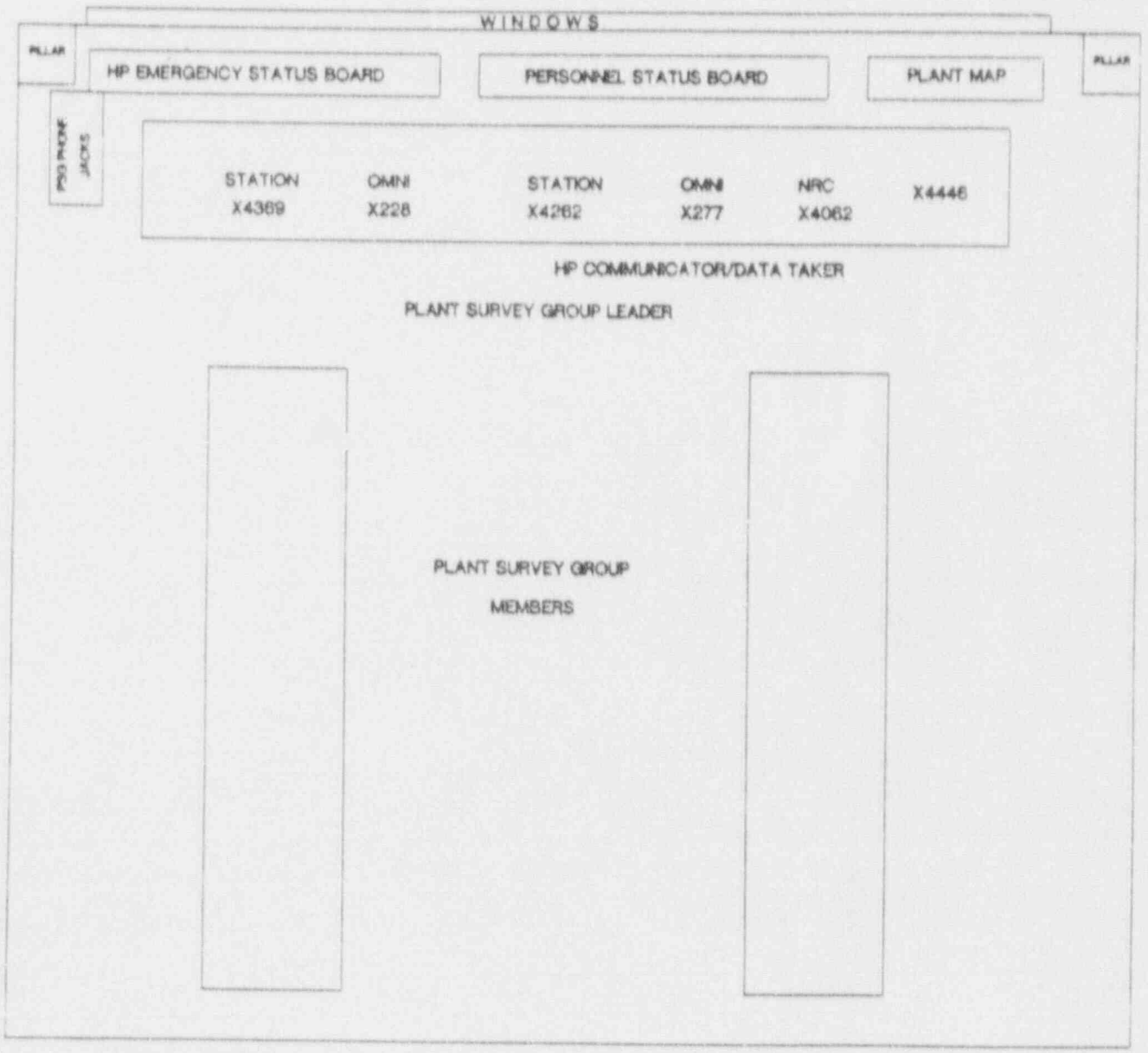
WORK AREA



ATTACHMENT 2
(PAGE 3 OF 4)

OSC FLOOR PLAN

PLANT SURVEY GROUP LEADER WORK AREA



ATTACHMENT 2
(PAGE 4 OF 4)

OSC FLOOR PLAN

(First Floor Administration Building)

ATTACHMENT 3

OSC COMMUNICATIONS CHECK-OFF-LIST
(Page 1 of 2)

Date _____

Test OMNI Phones for Dial Tone		Initials
1. Operations		
OSC Coordination Circuit (OSCC)	274 (Beige)	_____
TSC/OSC Circuit (OSC Communicator)	276 (Lt. Blue)	_____
2. Plant Survey Group		
Personnel Safety Team Circuit(PSGL)	228 (Beige)	_____
TSC/OSC Circuit(HP Communicator)	277 (Lt. Blue)	_____
OSC Coordination Circuit(FA/S&R GL)	275 (Beige)	_____
3. Damage Repair Group		
Damage Repair Group Leader	249 (Brown)	_____
4. First Aid Search and Rescue Group		
First Aid Search and Rescue Group Leader	275 (Beige)	_____

Test Station Phones for Dial Tone		Initials
1. Operations		
Ops. Communicator	3164	_____
OSC Coordinator	4390	_____
Fax machine phone	4922	_____
2. Plant Survey Group		
Group Leader	4262	_____
Data Taker	4369	_____
General Use Line	4446	_____
3. Damage Repair Group		
Damage Repair Group Leader	4453	_____
4. First Aid Search And Rescue Group		
First Aid Search and Rescue Group Leader	4391	_____
General Use Line	3163	_____

ATTACHMENT 3

OSC COMMUNICATIONS CHECK-OFF-LIST
(Page 2 of 2)

Test Radio Base Station — Initials

1. Operations

   Select operations channel
   Set volume control
   Transmit to Operator
   Receive from Operator _____

Test OSC Coordinator PA

1. Operations

Plant Paging System

1. Operations

   Obtain keys and unlock _____

Test Facsimile Machines — Initials

1. Operations

   Transmit copy
   Receive copy _____

2. DRGL

   Transmit copy
   Receive copy _____

Discrepancies

_____

_____

_____

Notify Emergency Director of discrepancies _____ Initials _____ Date

NOTE
Submit to OSC Coordinator when completed.

ATTACHMENT 4
PERSONNEL EXPOSURE LOG
OPERATIONS SUPPORT CENTER (OSC)

DATE ___ - ___ - ___ TIME _________ COMPLETED BY ___________________

NAME		S.S.N _____ - _____ - _____		NRC-4 ON FILE Y OR N		RESPIRATOR QUALIFICATION U.V. - 4.5	
CURRENT QUARTER BALANCE		EXPOSURE RECEIVED	BAL.	EXPOSURE RECEIVED	BAL.	EXPOSURE RECEIVED	BAL.
EXPOSURE RECEIVED	BAL.	EXPOSURE RECEIVED	BAL.	EXPOSURE RECEIVED	BAL.	TOTAL EXPOSURE	BAL.
NAME		S.S.N _____ - _____ - _____		NRC-4 ON FILE Y OR N		RESPIRATOR QUALIFICATION U.V. - 4.5	
CURRENT QUARTER BALANCE		EXPOSURE RECEIVED	BAL.	EXPOSURE RECEIVED	BAL.	EXPOSURE RECEIVED	BAL.
EXPOSURE RECEIVED	BAL.	EXPOSURE RECEIVED	BAL.	EXPOSURE RECEIVED	BAL.	TOTAL EXPOSURE	BAL.
NAME		S.S.N _____ - _____ - _____		NRC-4 ON FILE Y OR N		RESPIRATOR QUALIFICATION U.V. - 4.5	
CURRENT QUARTER BALANCE		EXPOSURE RECEIVED	BAL.	EXPOSURE RECEIVED	BAL.	EXPOSURE RECEIVED	BAL.
EXPOSURE RECEIVED	BAL.	EXPOSURE RECEIVED	BAL.	EXPOSURE RECEIVED	BAL.	TOTAL EXPOSURE	BAL.
NAME		S.S.N _____ - _____ - _____		NRC-4 ON FILE Y OR N		RESPIRATOR QUALIFICATION U.V. - 4.5	
CURRENT QUARTER BALANCE		EXPOSURE RECEIVED	BAL.	EXPOSURE RECEIVED	BAL.	EXPOSURE RECEIVED	BAL.
EXPOSURE RECEIVED	BAL.	EXPOSURE RECEIVED	BAL.	EXPOSURE RECEIVED	BAL.	TOTAL EXPOSURE	BAL.

REMARKS:

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY RESPONSE PROCEDURE

ERP-250 TECHNICAL SUPPORT CENTER (TSC) ACTIVATION

1.0 RESPONSIBILITIES

1.1 On-Shift I&C Technician is responsible for opening the Technical Support Center (TSC) and activating designated equipment.

1.2 Emergency Director's (ED) Communicator is responsible for implementing notifications procedures and providing telephone communications support.

1.3 Health Physics (HP) Technician is responsible for operating portable radiological instruments to monitor facility habitability and activating designated equipment.

1.4 Security Team member is responsible for providing access control and dosimetry.

1.5 Status Board Keepers are responsible for obtaining/entering data on display boards and maintaining boards in current status.

1.6 Message Router is responsible for ensuring the flow of documents/messages both internally and transmitted.

1.7 Corporate Computer Operator is responsible for entering technical data into the Corporate Computer System (TSOE) for transmission to dedicated locations.

1.8 Communications Console Operators are responsible for staffing the Telephone Consoles.

1.9 Communicator(s) is responsible for staffing designated telephones or performing specific communications functions.

2.0 INITIAL ACTIONS

NOTE: ATTACHMENT TITLED "TECHNICAL SUPPORT CENTER (TSC) ACTIVATION FLOW CHART" MAY BE USED AS A GUIDE FOR THE FOLLOWING ACTIONS.

2.1 On-Shift I&C Technician shall:

2.1.1 Obtain Unit 1 emergency keys from the Guardhouse (yellow tag non-vital key box).

2.1.2 Activate Emergency Facilities Equipment at Unit 1. (Implement Attachment titled "TSC Equipment Initial Activation", Attachment titled "Operability of the TSC Plant Monitoring System Equipment (PMS)" and Attachment titled "Recovery Procedures for TSC Plant Monitoring System Equipment")

2.1.3 Inform the ED when activation is complete.

2.1.4 Assume Plant Monitoring System Operator assignment at Position 21 (see Attachment titled "TSC Equipment Locations and Personnel Assignments") until relieved by Plant Monitoring System operator.

2.1.5 Return to OSC for assignment as a Damage Repair Group Member. Report to Group Leader.

2.2 ED Communicator shall:

2.2.1 Verify telephone communications by implementing Attachment titled "TSC Telephone Checkoff List", with reference to Attachment titled " TSC Equipment Locations and Personnel Assignments". Inform the ED of completion and deficiencies, if any.

2.2.2 Provide communications at Position 3 as shown on the Attachment titled "TSC Equipment Locations and Personnel Assignments" as directed by the ED.

2.2.3 Initiate a log of incoming/outgoing messages:

a. Date/Time (24 hr clock)

b. Subject Matter

c. Name/Title/Agency of caller

d. Initialed by communicator

2.2.4 Advise the ED of significant information received.

2.2.5 Initiate the Emergency Support Personnel Information Status Board.

2.3 HP Technician (first to arrive at the TSC) shall:

2.3.1 Implement Attachment titled "Actions of First HP to Arrive at the TSC.".

2.3.2 Evaluate Habitability of the TSC using continuous air monitoring devices and Eberline units. Compare readings with Appendix titled, "Habitability Guidelines - Essential Facilities" values and report status to the Personnel Safety Team Leader (PSTL).

2.4 Security Team member shall:

2.4.1 Ensure non-emergency response personnel leave the Unit 1/Training Complex.

2.4.2 Obtain dosimetry from the Radiation Equipment Room adjacent to the lobby.

a. Distribute dosimetry to emergency response personnel who do not have dosimetry using ERP-520 Security Team, Attachment titled "TSC Personnel Log".

b. Log dosimetry serial numbers, personnel names and Social Security numbers.

2.4.3 Obtain Eberline RM-14 Monitor from the Emergency Equipment Storage Room, if necessary, and set it up at the front door.

2.4.4 Establish Access Control - Admit only authorized personnel (PECo personnel listed in the phone directory with PECo I.D.).

2.4.5 Initiate a log of personnel entering and leaving the TSC facility (ERP-520, Attachment titled "TSC Personnel Log".

2.5 Status Board Keepers shall:

2.5.1 Report to the ED/Technical Support Team Leader (TSTL) for board assignments.

2.5.2 Clean boards.

2.5.3 Establish communications in accordance with ERP-710, Technical Support Team, Attachment titled "TSC Status Board Matrix".

2.6 Message R[illegible] shall:

2.6.1 [illegible]nt Message Center function at Position 40 (see A[illegible]chment titled, "TSC Equipment Locations and Personnel Assignments") in accordance with ERP-710.

2.6.2 Activate equipment:

a. Copy machine at Position 32 (see Attachment titled, "TSC Equipment Locations and Personnel Assignments").

b. Facsimile machine at Position 54 (see Attachment titled, "TSC Equipment Locations and Personnel Assignments").

2.7 Corporate Computer Operator shall:

2.7.1 Activate the Corporate Computer terminal at Position 38 (see Attachment titled, "TSC Equipment Locations and Personnel Assignments") and sign-on to the system.

2.7.2 Initiate Transmission of technical data taken from Plant Parameters, Plant Parameters Trends, and Event Chronology Status Boards.

2.8 Communications Console Operators shall activate and staff the telephone consoles:

456-7014 and OMNI System

2.9 Communicator(s) shall:

2.9.1 Staff dedicated lines, i.e., Control Room (CR), Operations Support Center (OSC) as directed by the ED.

(2.9.2 Initiate Communications Log(s):

a. Date/Time (24 hour clock)
b. Subject Matter
c. Name/Title/Agency of caller
d. Communicator initials

3.0 FOLLOW-UP ACTIONS

3.1 On-Shift I&C Technicians shall:

3.1.1 Function as Plant Monitoring System Operators until relieved by designated operator.

3.2 ED Communicator shall:

3.2.1 Maintain communications and contacts, as required.

3.2.2 Perform notifications in accordance with ERP-110, Emergency Notifications and ERP-140, Telephone Lists for Emergency Use, as directed by the ED.

3.2.3 Advise the ED of significant events/information received by telephone.

3.2.4 Monitor the Emergency Support Personnel Status Board for updated entries. 3.2.5 Initiate ED conference calls. Record and deliver verbal messages.

3.2.6 Perform other tasks, as requested.

3.3 HP Technician shall:

3.3.1 Ensure facility habitability by performing surveys in accordance with ERP-340.

3.3.2 Evaluate and report resultant data.

3.3.3 Maintain radiological instrumentation.

3.4 Status Board Keepers shall:

3.4.1 Maintain boards in current condition by updating every 15 minutes.

3.4.2 Verify data to ensure accurate entries.

3.5 Message Router shall:

3.5.1 Route internal and external messages.

3.5.2 Duplicate and distribute documents, notices, bulletins, etc.

3.5.3 Transmit documents via the telecopier.

3.5.4 Perform assigned tasks as requested by the ED.

4.0 FINAL CONDITIONS

4.1 OPERATIONAL STATUS

The TSC is declared operational by the ED when judged that sufficient functions are implemented.

4.2 REDUCTION OF EMERGENCY CLASSIFICATION/TERMINATION OF THE EMERGENCY

4.2.1 In the judgement of the ED and as conditions warrant:

4.2.1.1 Services provided by the facility are phased out.

4.2.1.2 Functions/staffs are reduced and/or closed-out. Personnel return to normal assignments.

4.2.1.3 The ED shall assign personnel to implement TSC close-out activities.

4.2.2 TSC Close-Out

4.2.2.1 Personnel assigned to close-out tasks shall implement Attachment titled, "TSC Close-Out Checklist", and submit the completed form to the ED.

4.2.2.2 Team/Group Leaders shall:

a. Obtain all reports, records, and logs, organize and evaluate the information, and send the documents to consolidated storage.

b. As directed by the ED write summary reports of the event and submit such reports to the ED.

5.0 ATTACHMENTS AND APPENDICES

5.1 Attachment 1 - "Technical Support Center (TSC) Activation Flow Chart"

5.2 Attachment 2 - "TSC Equipment Locations and Personnel Assignments"

5.3 Attachment 3 - "TSC Telephone Check-Off List"

5.4 Attachment 4 - "TSC Equipment Location without Phones"

| 5.5 Attachment 5 - "TSC Equipment Initial Activation"

| 5.6 Attachment 6 - "Actions of First HP to Arrive at the TSC"

5.7 Attachment 7 - "Activation of Habitability Monitoring Device(s)"

| 5.8 Attachment 8 - "Operability of the TSC Plant Monitoring System Equipment"

| 5.9 Attachment 9 - "Recovery Procedures for the TSC Plant Monitoring System Equipment"

5.10 Attachment 10 - "TSC Close-Out Checklist"

5.11 Appendix 1 - "Habitability Guidelines - Essential Facilities"

6.0 SUPPORTING INFORMATION

6.1 PURPOSE

To describe the activation, staffing and deactivation of the TSC.

6.2 CRITERIA FOR USE

The TSC is activated when an Alert (or higher) emergency classification has been declared, or at the discretion of the ED.

6.3 REFERENCES

6.3.1 ERP-110, "Emergency Notifications"

6.3.2 ERP-140, "Telephone Lists for Emergency Use"

6.3.3 ERP-520, "Security Team"

6.3.4 ERP-710, "Technical Support Team"

6.3.5 HP-211, "Contamination Survey Techniques"

6.3.6 HP-214, "Air Sample Analysis & Evaluation"

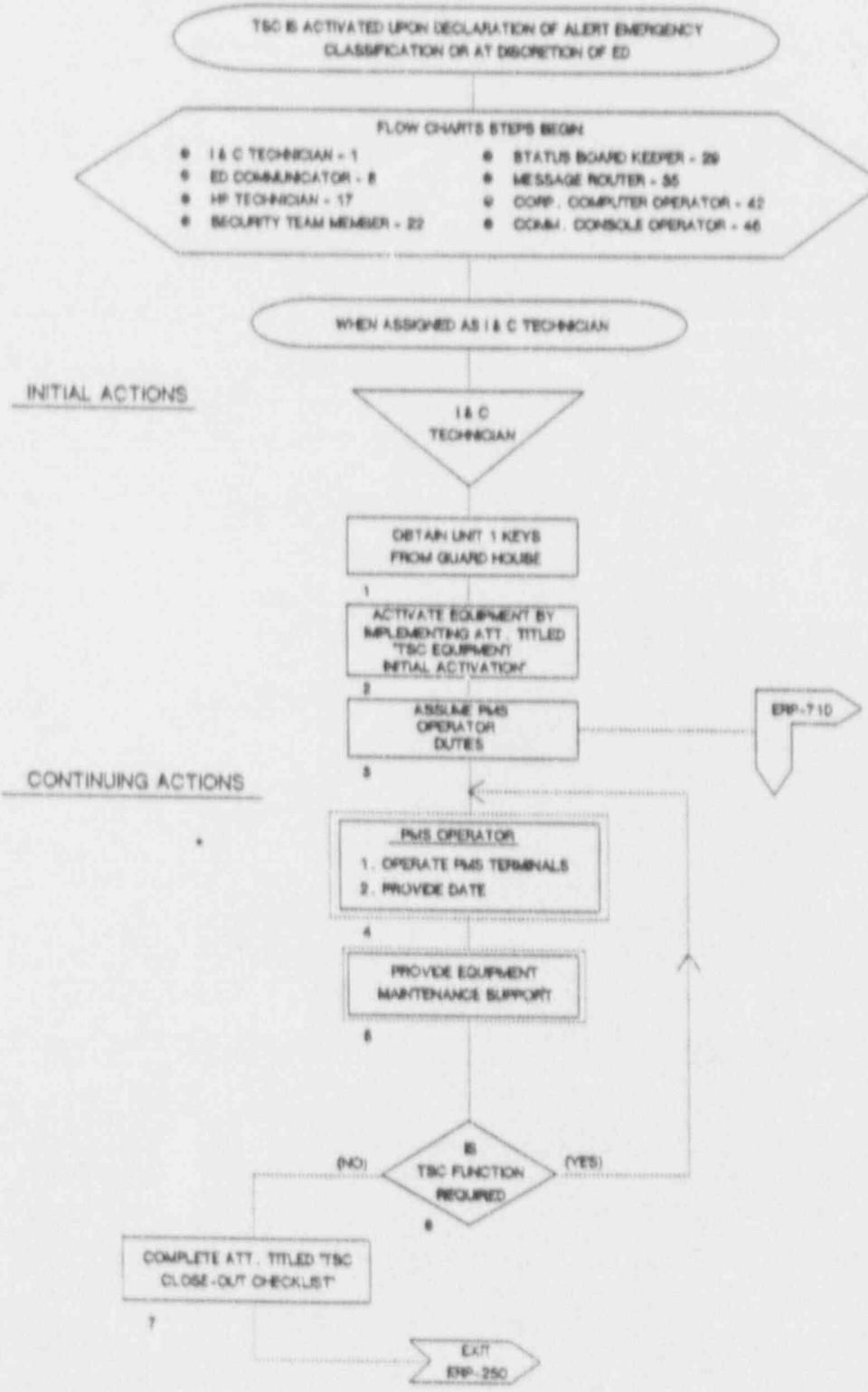
6.3.7 Peach Bottom Atomic Power Station (PBAPS) Emergency Plan

6.3.8 SO 40P, "TSC and EOF Vent System"

6.3.9 ERP-340, "Field Survey Group"

ATTACHMENT 1
TECHNICAL SUPPORT CENTER (TSC) ACTIVATION FLOWCHART

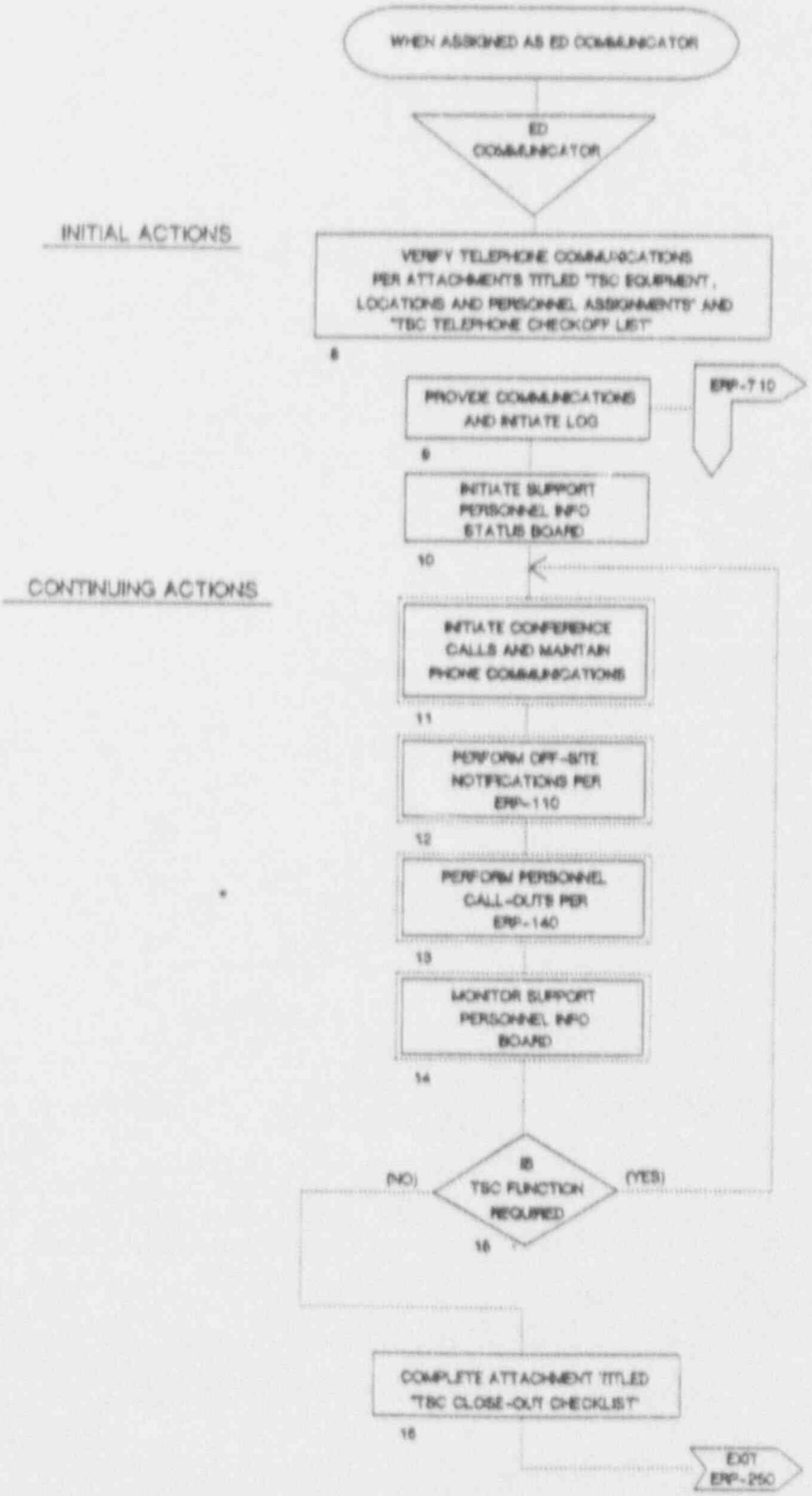
(Page 1 of 8)



ATTACHMENT 1

TECHNICAL SUPPORT CENTER (TSC) ACTIVATION FLOWCHART

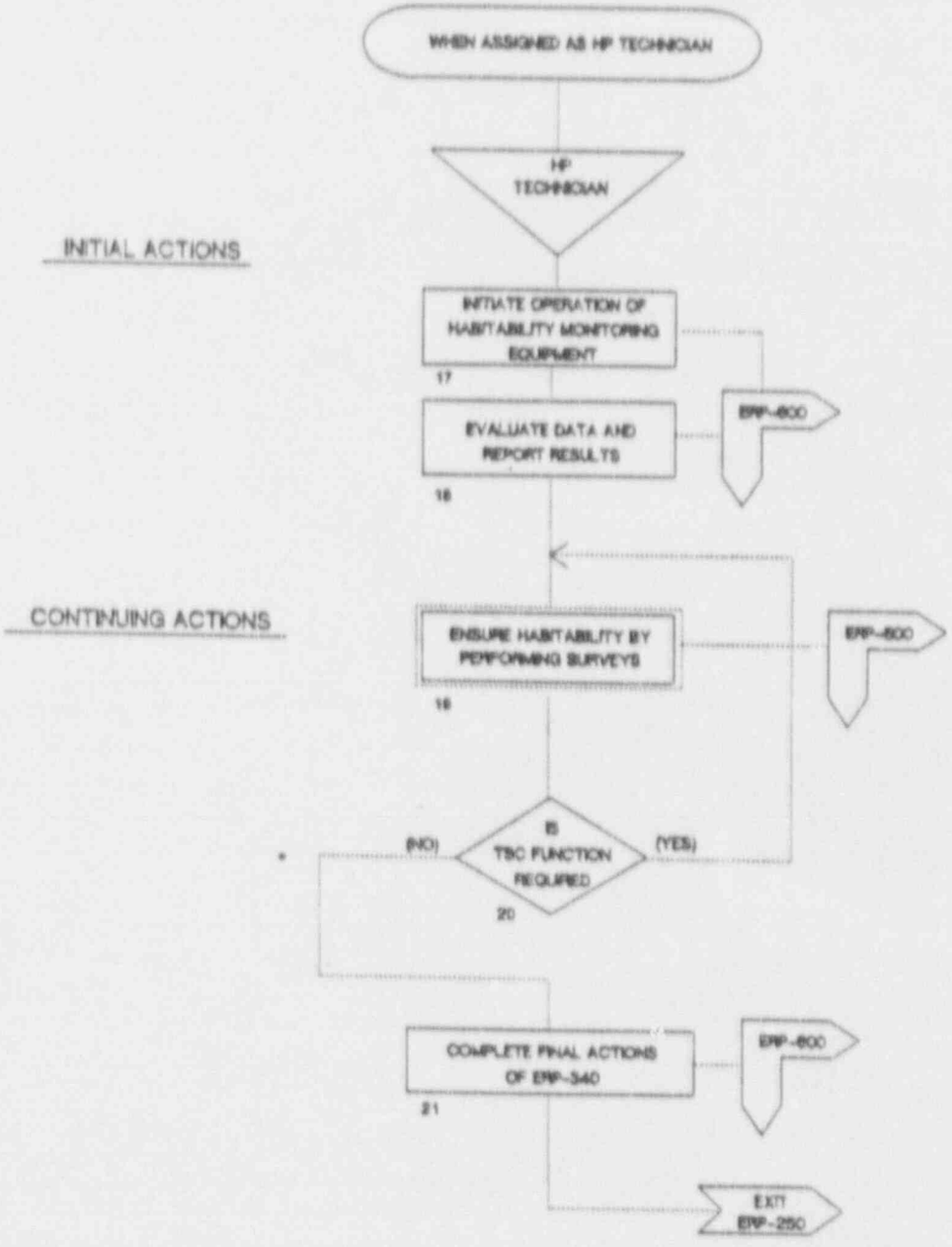
(Page 2 of 8)



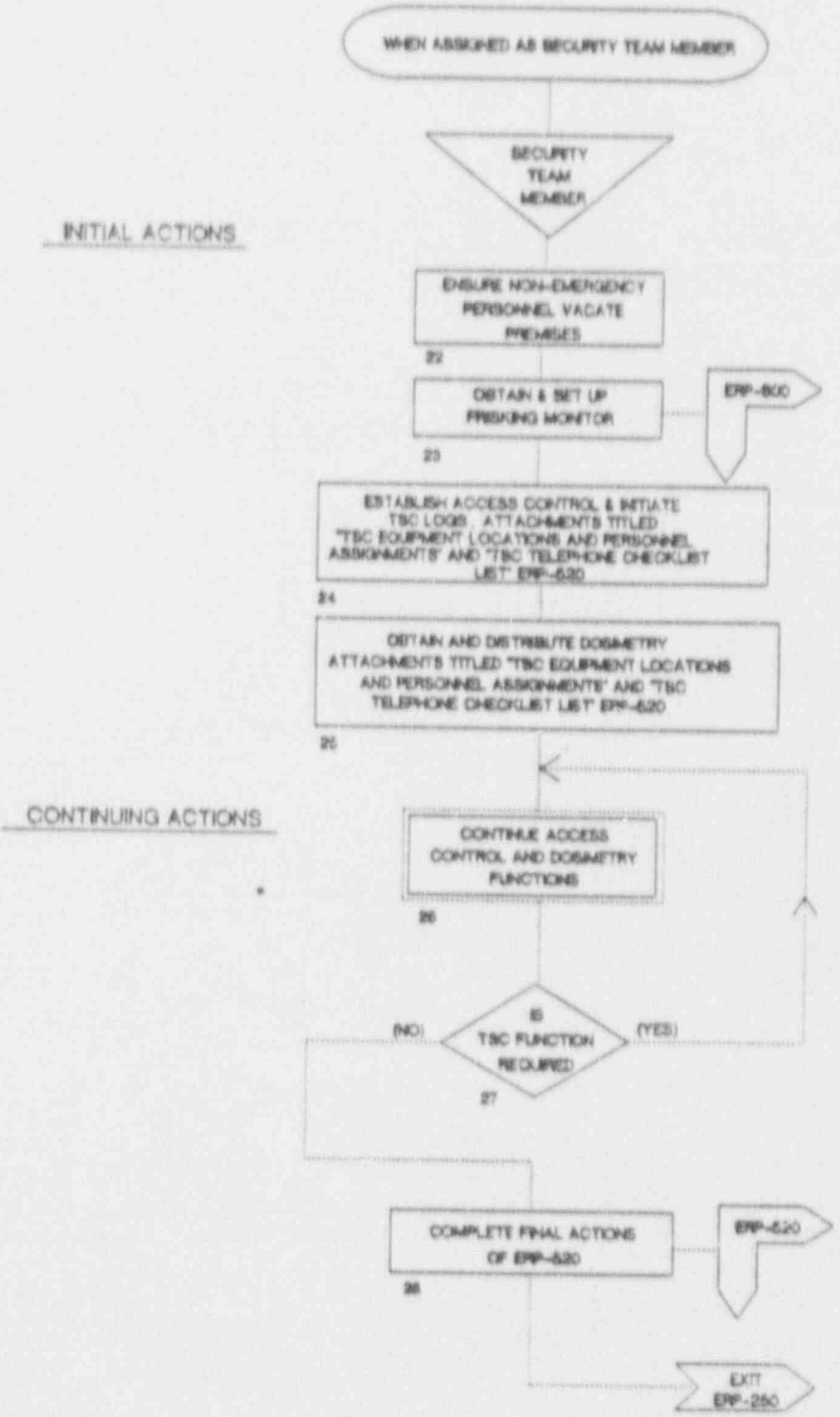
ATTACHMENT 1

TECHNICAL SUPPORT CENTER (TSC) ACTIVATION FLOWCHART

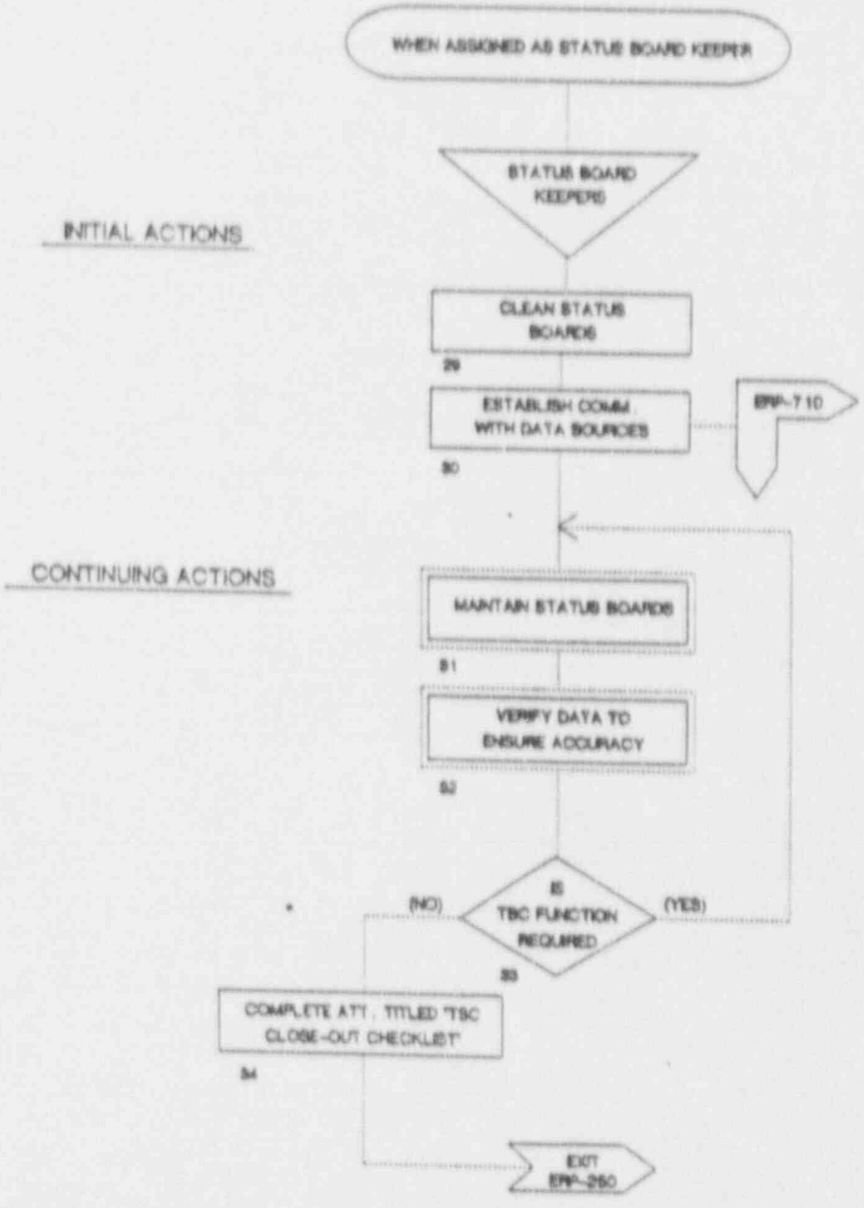
(Page 3 of 8)



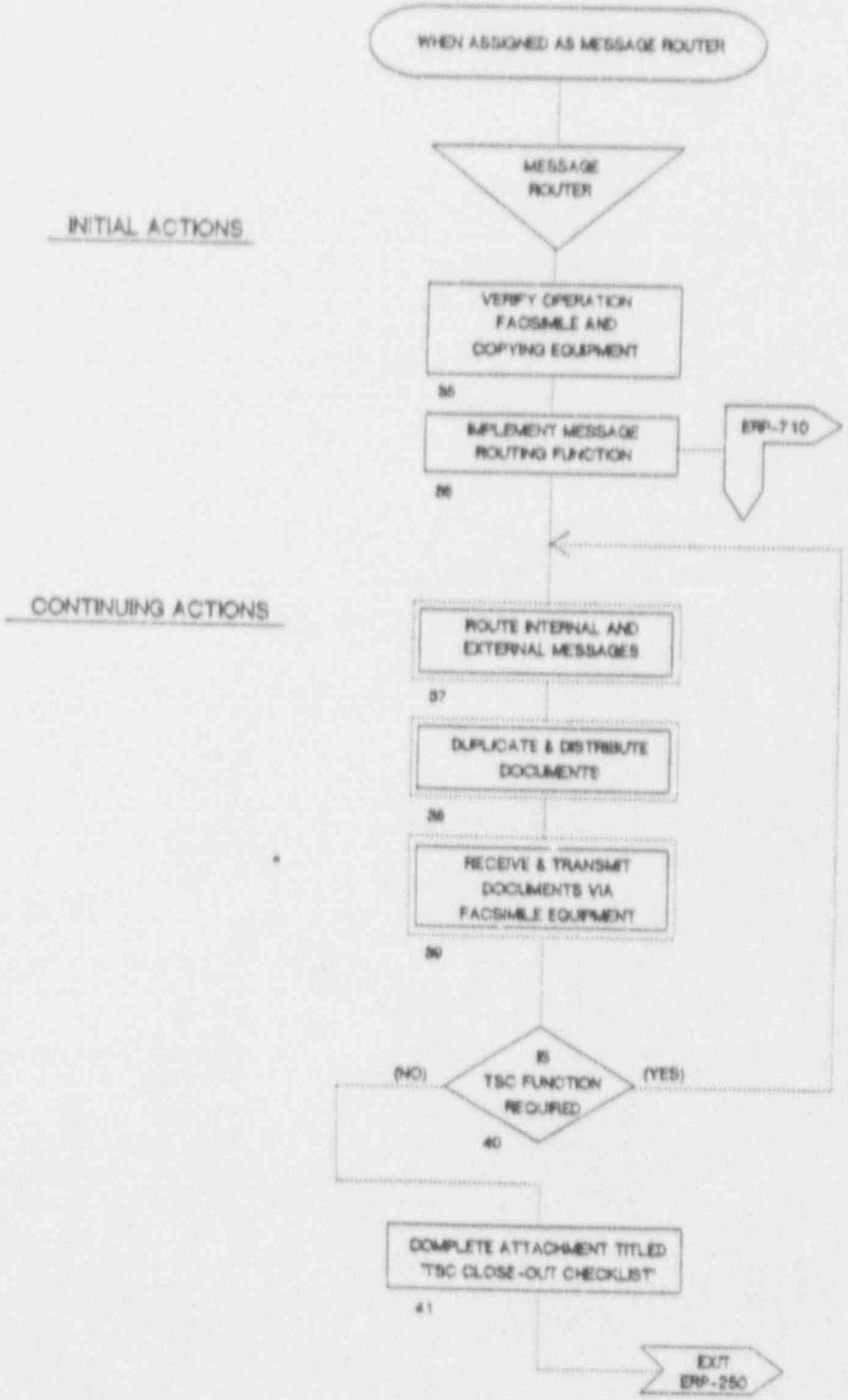
ATTACHMENT 1
TECHNICAL SUPPORT CENTER (TSC) ACTIVATION FLOWCHART
(Page 4 of 8)



ATTACHMENT 1
TECHNICAL SUPPORT CENTER (TSC) ACTIVATION FLOWCHART
(Page 5 of 8)

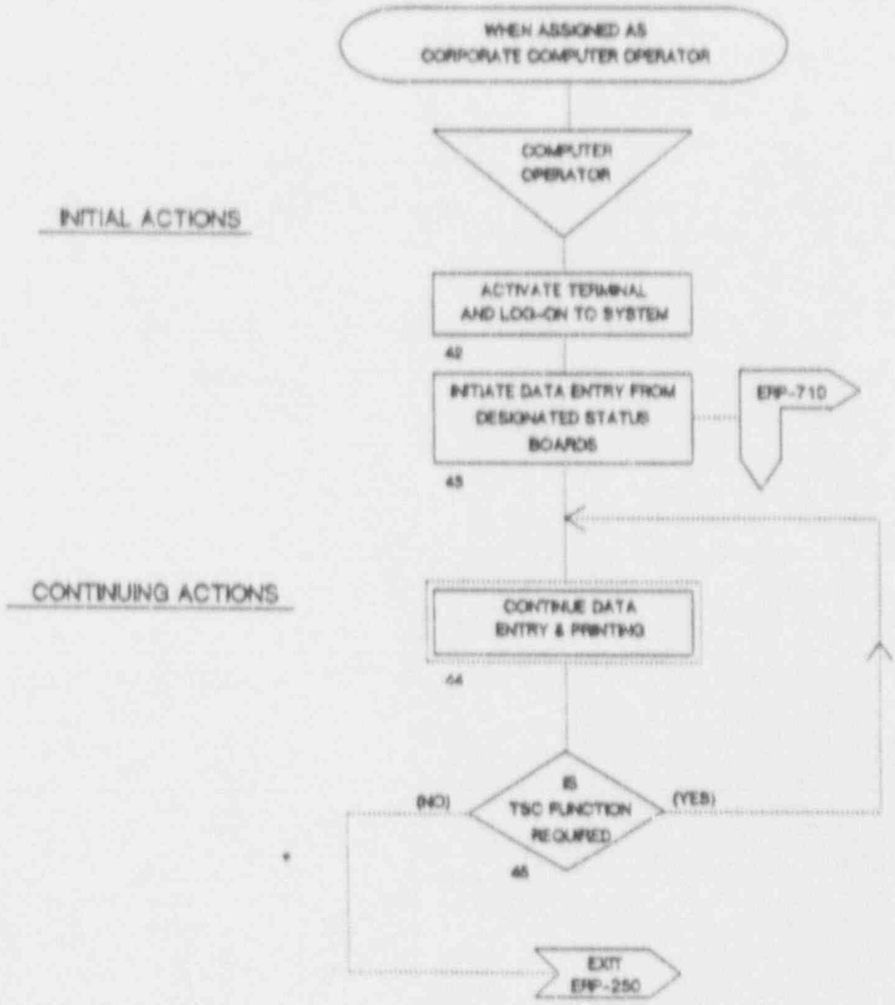


ATTACHMENT 1
TECHNICAL SUPPORT CENTER (TSC) ACTIVATION FLOWCHART
(Page 6 of 8)

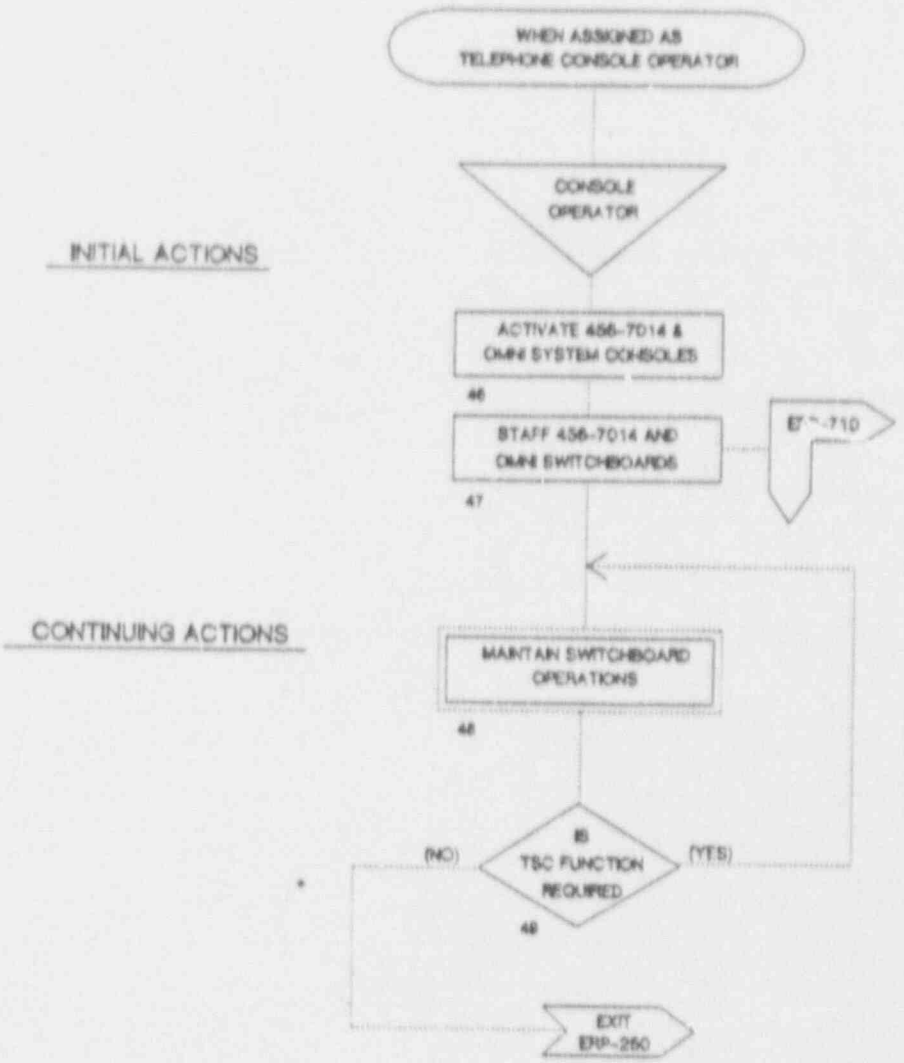


ATTACHMENT 1
TECHNICAL SUPPORT CENTER (TSC) ACTIVATION FLOWCHART

(Page 7 of 8)



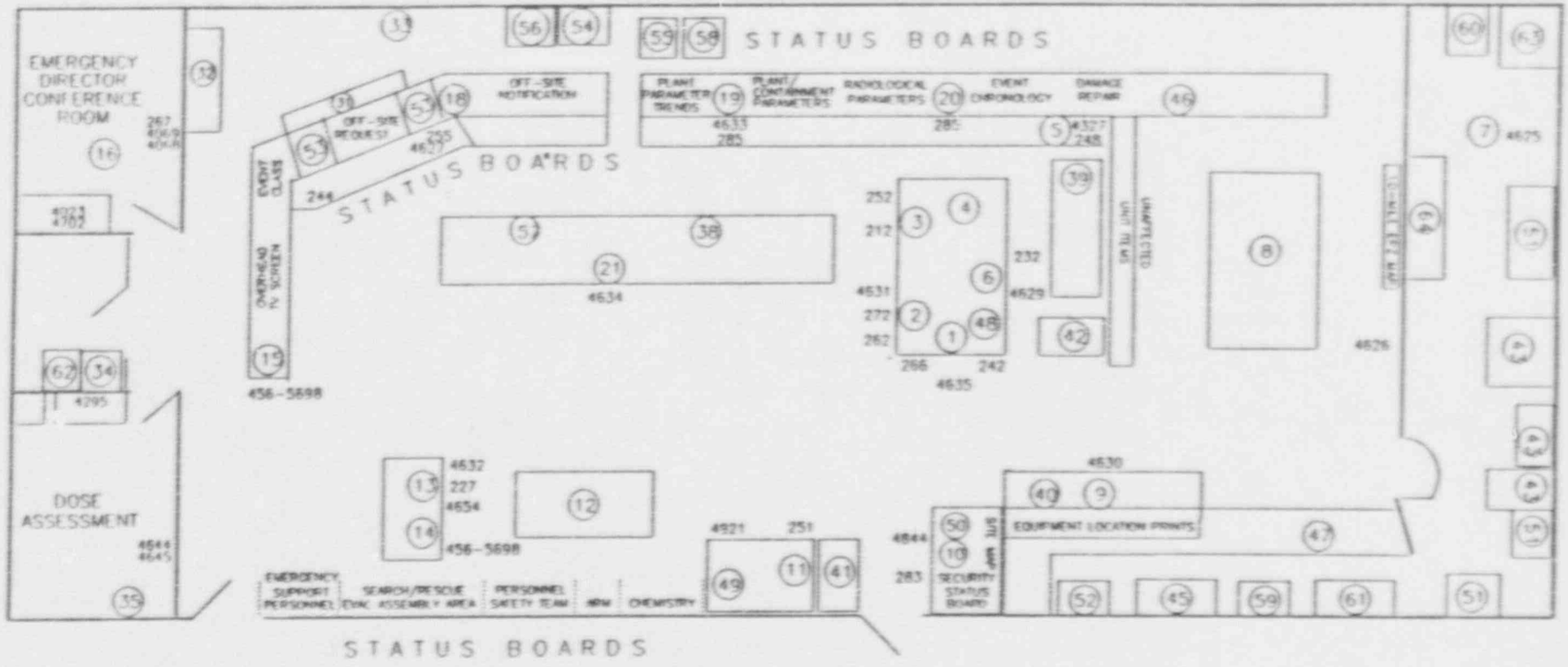
ATTACHMENT 1
TECHNICAL SUPPORT CENTER (TSC) ACTIVATION FLOWCHART
(Page 8 of 8)



. ATTACHMENT 2

TSC EQUIPMENT LOCATIONS AND PERSONNEL ASSIGNMENTS

(PAGE 1 OF 1)



ATTACHMENT 3
TSC TELEPHONE CHECK-OFF LIST
(Page 1 of 1)

Position	Personnel Assignments/ Equipment Locations	Phone Numbers		Check-Off Sat	Check-Off Unsat
1	Emergency Director (ED).....	4635			
	Supportive Area Conference Ckt.....	266			
	Management Ckt.....	242)			
2	Assistant ED.....	4631			
	CR/TSC/EOF Ckt.....	262			
	TSC/OSC Ckt.....	272			
	Load Dispatcher.....	Auto			
3	ED Communicator.....	None			
	State/County Emerg. Notification Ckt.....	212			
	Emerg. Communications Communicators Ckt...	252			
4	NRC Hot Line.....	Auto			
5	Damage Maintenance Coordination Ckt.....	248	(Wall)		
	Damage Repair Team Leader (DRTL).....	4327	(Wall)		
6	Technical Support Team Leader (TSTL).....	4629			
	BRP Technical Ckt.....	232)			
7	Nuclear Records Management.....	4625	(Wall)		
8	Technical Support Group.....	4626	(Wall)		
9	Technical Support Group Leader.....	4630	(Counter)		
10	Security Team Leader (STL).....	4844			
	Municipal Support Ckt.....	283			
11	Chemistry Sampling and Analysis Team Leader (CSATL).....	4921			
	Chemistry Sampling and Analysis Ckt.....	251			
12	Personnel Safety Team.....	None			
13	Personnel Safety Team Leader (PSTL).....	4632			
		4654			
	Personnel Safety Team Ckt.....	227			
14	NRC-HPN Line.....	456-5698			
15	NRC-HPN Line.....	456-5698			
16	Emergency Director Conference Room.....	4636			
	Supportive Area Conference Communications Ckt.....	267			
		4702			
		4023			
		4068			
		4069			
18	Status Board Keeper (SBK).....	4627			
	SBK Ckt.....	244			
	Emergency Communication Communicator Ckt..	255			
19	Status Board Keeper (SBK).....	4633			
	SBK Ckt.....	285			
20	Status Board Keeper.....	None			
	SBK Ckt.....	285			
21	Plant Monitoring System Operators.....	4634			
35	Dose Assessment Area.....	4295			
		4644			
		4645			

Notify (ED) of discrepancies

ATTACHMENT 4

TSC EQUIPMENT LOCATIONS WITHOUT PHONES
(Page 1 of 1)

Position	Functional Areas/Equipment
31	Corporate Computer Printer - XY1H (2) Facsimile Machine
32	Copy Machine
33	Lighting Panel P-47
34	Plant Pager Volume Control
35	Plant Page (Dose Assessment Area/Field Survey Area)
38	Corporate Computer Terminal
39	TRIP Procedures Diagrams
40	Message Center
41	File, phone storage
42	Emergency Response Plans and Procedures
43	Plant Procedures, Circuit Schedules, P&IDs, Tech. Specs. Inst. Indexes, Equipment Lists, Vendor Print Control Registers and TRIP Procedures
45	Continuous air monitoring device
46	TSC/EOF VAC Control Panel
47	Diesel Generator Control Panel
48	ED Public Address System
49	Radio, short wave - Operations frequency
50	Radio, short wave - Security frequency
51	Microfiche, aperture files and readers
52	Microfiche supplies and equipment
53	Administration and HP supplies (2 locations)
54	Plant Monitoring System, Unit 2 printer and stand
55	Plant Monitoring System, Unit 3 printer and stand
56	Plant Monitoring System color copier, Unit 2
57	Plant Monitoring System displays (4 units)
58	Plant Monitoring System color copier, Unit 3
59	TST Tool Box
60	16mm Film Storage
61	SAR, UFSAR
62	Key Box
63	16mm File Viewer
64	Station Prints

ATTACHMENT 5

TSC EQUIPMENT INITIAL ACTIVATION
(Page 1 of 1)

The Shift I&C Technician shall implement the following steps:

NOTE:

IF STEPS HAVE BEEN PERFORMED BY OTHER RESPONDERS, PROCEED TO NEXT STEP.

1. On the third floor (TSC facility), turn on the Master Light Switch Contactor P44-C1R14 on the left, across the hall from the stairtower door (If all the lights are not on, check the breakers in Panel P-47 near the TSC copy machine).

2. Unlock Telephone Console room (Records) door using Key B7196 (Room 312).

3. Open the TSC door (Room 317) using Key B4823. Unlock from the inside and keep closed during emergency conditions. Place radio on PSTL desk.

4. Proceed to the Ventilation System Panel (Position 46 on Attachment titled, "TSC Equipment Locations and Personnel Assignments", and activate using Procedure SO 40P.7.A. Operate in the emergency mode.

NOTE

THIS STEP MAY BE PERFORMED BY THE TECHNICAL ENGINEERING GROUP IF I & C IS UNAVAILABLE.

5. Activate Plant Monitoring System in TSC. See Attachment titled, "Operability of the TSC Plant Monitoring System Equipment (PMS)".

6. Staff one of the PMS Operator assignments in the TSC.

7. Report completion of this Attachment to the ED.

ATTACHMENT 6

ACTIONS OF FIRST HP TO ARRIVE AT THE TSC
(Page 1 of 1)

A. Operate the following TSC radiological monitoring equipment (or equivalent) immediately and inspect periodically as required.

1. Continuous air monitoring device or Low Volume Air Sampler (See Attachment titled, "Activation of Habitability Monitoring Device(s)".

2. RM-14

3. AM-2 or equivalent

If facility habitability is in question, notify the PSTL immediately.

B. Conduct habitability surveys in accordance with ERP-340 and as directed by the FSGL using HP-211 and 214 and complete ERP-340, Attachment titled, "Habitability Check-Off List".

C. Report TSC habitability and surveys to the PSTL.

ATTACHMENT 7

ACTIVATION OF HABITABILITY MONITORING DEVICE(S)
(Page 1 of 1)

Air Sampling Equipment (AMS-3 or equivalent)

Locations:

1. First floor entrance lobby - Unit 1 Administration Building

2. Third floor - TSC

Conditions:

1. The equipment is in standby condition at all times.

Activation:

1. Activate the unit in accordance with established procedures (AMS-3's have copies of the current procedure attached). This is to include a new filter and iodine cartridge, which are stored in the Radiological Equipment Storage Room, first floor, Unit 1.

Radiation Monitoring Equipment

Locations:

1. TSC (third floor)

Conditions:

1. The equipment is in standby at all times.

Activation:

1. Ensure the unit is operational.

2. Set the unit to the desired alarm setting in accordance with ERP-250, Appendix titled, "Habitability Guidelines - Essential Facilities", or as directed by the Field Survey Group Leader.

ATTACHMENT 8

OPERABILITY OF THE TSC PLANT MONITORING SYSTEM (PMS)
(Page 1 of 3)

1. IF the terminal has a totally blank screen THEN

   a. Press the return key
      A message followed by a prompt will appear (Local >)

   b. After the prompt, dependent upon which unit and CPU you wish to monitor, type

      C PECO2A, or
      C PECO2B, or
      C PECO3A, or
      C PECO3B

NOTE
C PECO2A = Unit 2 C PECO2B = Unit 2 C PECO3A = Unit 3 C PECO3B = Unit 3

   c. Press the return key twice

      A message and prompt (user name:) will appear

   d. After the prompt, type SAIPMS

   e. Press the return key

      A message will appear followed by the prompt (Local >)

   f. Type in LO

   g. Press the return key

NOTE
Wait for screen to appear requesting "Select Function Key or Turn on Code" in the top left of the screen, with a cursor and a yellow rectangle at the top right of the screen.

   h. Type in PSUM

ATTACHMENT 8

OPERABILITY OF THE TSC PLANT MONITORING SYSTEM (PMS)
(Page 2 of 3)

1. Press the return key

   You should now be on the TSC Plant Summary Screen. Select the plant parameters you wish to monitor by touching the screen in the area you wish to view OR by typing the key letters of each section (usually the first letter or several letters shown in a contrasting color) and press enter.

2. IF the terminal is not displaying the Plant Summary Screen, but the top left of the screen requests "Select Function Key or Turn on Code", or "Enter TOC or Select Touch Area"
   THEN
   a. Type PSUM
   b. Press enter
      The terminal should now be on the TSC plant summary screen

   IF the terminal is requesting "Enter GRP/Plot name or Touch Area", or "Enter Group Name",
   THEN depress the "PREV" Key or the "CANC" Key (located on the left side of keyboard), or touch the screen in the previous block (if displayed).

   a. Type PSUM
   b. Press enter

   The terminal should now be on the TSC Plant Summary Screen.

3. IF the wrong unit or CPU is displayed at the bottom of the screen
   THEN
   a. Type "Exit"
   b. Press "Enter"
   c. Proceed with step 1 and select the desired unit and CPU during the LOGON process.

4A. To request automatic printouts of plant numerical data every 15 minutes

   1. Touch the screen in the "LOG" box OR type "LOG" and press "ENTER".

   2. Touch the screen in the "Free Format" Box. OR type "FF" and press "ENTER"

   3. Type the number in the left hand column that identifies "TSC 10 Page Log".

   4. Press the "F1" Key (left corner of key pad)

   5. Touch the "PREVIOUS" box on the screen or press "PREV"

ATTACHMENT 8

OPERABILITY OF THE TSC PLANT MONITORING SYSTEM (PMS)
(Page 3 of 3)

6. Type "PSUM" and press "ENTER"

   OR

   Touch the "GRAPHICS" box or type "GRA" and press "ENTER"
   THEN touch the screen in the Plant Summary box
   OR
   type "PSUM" and press "ENTER"

4B. To disable 15 minute automatic printers

1. Follow the same progression detailed in section 4A, but depress the "F3" key instead of the "F1" key as stated in step 4A.4.

NOTE
The color copier should be used only as needed or as requested to "capture" transient information. "Routine" printouts should be requested following section 4A.

5. To request a copy of the screen to be printed on the color copier,

   a. Depress the button adjacent to the keyboard marked "copy"

   b. The printout will be available on the copier behind the status boards.

      IF the terminal still will not display the plant summary section, refer to Attachment 10, Recovery Procedures for the TSC PMS Equipment

ATTACHMENT 9

RECOVERY PROCEDURES FOR THE TSC
PLANT MONITORING SYSTEM EQUIPMENT
(Page 1 of 2)

A. IDT TERMINALS

SYMPTOM: No status line information or extraneous characters or lines on the screen.

ACTION: Press the RETURN or CANCEL keys to get a "SELECT FUNC. KEY OR TURN-ON CODE" prompt in the Operator Communication Area (OCA), which is located in the upper left corner of the screen. Type "RIDT" then press the RETURN key. The status line should return after a short time delay.

SYMPTOM: Terminal does not respond from either the touch screen or the keyboard.

ACTION: Press and hold the CTRL key, press the RESET key then release both. Look for the XON and XOFF keys in the upper right hand part of the keyboard to flash. When the terminal has completed resetting you may have system time displayed on the screen. Attempt to get a prompt in the OCA by pressing the RETURN or the CANCEL key. At the prompt, type "RIDT" to restore the terminal. Notify Lab if this method doesn't work.

SYMPTOM: Terminal responds to either the touch screen or keyboard, but not both.

ACTION: Continue to use the operator interface available. You will need to call Lab to correct this problem.

SYMPTOM: Terminal screen is blank and a short beep sounds when the RETURN key is pressed.

ACTION: The terminal is probably logged off the system. Type the letter "P", then press the RETURN key. At the "USERNAME" prompt, type "SAIPMS" then press the RETURN key. After a short time delay, the PMS screen will appear.

B. LA210 PRINTER

SYMPTOM: Periodic beep and/or the POWER/FAULT light flashes.

ACTION: This indicates a circuit fault, an out of paper condition or the printer has been off-line for an extended period of time. Load paper or put the printer back on line, then press the "LOCAL FORM FEED (RESET)" pushbutton. If the POWER/FAULT light continues to flash or no obvious problem exists and the POWER/FAULT light continues to flash, notify Lab.

ATTACHMENT 9

RECOVERY PROCEDURES FOR THE TSC
PLANT MONITORING SYSTEM EQUIPMENT
(Page 2 of 2)

C. SEIKO COLOR COPIER

SYMPTOM: The red PAPER status light is on with an "A.1" displayed in the COUNT display.

ACTION: This is a paper jam. Lift the top cover and clear the paper path. Close the top cover, the paper LED should clear. Issue a paper feed to initialize the paper handler by entering 00 onto the COUNT display then pressing the START/ENTER key. After the paper ejects, enter 01 onto the COUNT display, then press the ON LINE key.

SYMPTOM: The red PAPER status light is on with an "A1." displayed on the COUNT display.

ACTION: The copier is out of paper, install a new roll per the operations manual.

SYMPTOM: The red INK SHEET status light is on with an "A.1." displayed in the COUNT display.

ACTION: The ink sheet roll is either jammed or exhausted. Lift the front cover to determine which is the case, then correct or replace as needed per the operations manual.

SYMPTOM: The red MACHINE status light is on with an "A2" displayed on the COUNT display.

ACTION: The top cover is not fully down or the position switch did not pick up the last time the top cover was closed. Open the top cover, then reclose it. If this doesn't correct problem, call Lab. Press the ON LINE key to put the copier back in service.

Any other error codes on the COUNT display should be referred to Lab for resolution.

ATTACHMENT 10

TSC CLOSEOUT CHECKLIST
(Page 1 of 2)

Personnel assigned to closeout shall perform or ensure completion of the following tasks. Open items and observations shall be recorded in the REMARKS section.

		Initial
1.	Ensure correct shutdown of this equipment (to be performed by qualified personnel only):	
	a. Corporate Computer Terminal (Operator _____)	_____
	b. Nuclear Records Management (NMR Operator _____)	_____
	c. Continuous Air Monitoring Device (HP Technician _____)	_____
	d. Emergency Diesel Generator, if activated (Operator _____)	_____
	e. Emergency Director P.A. System (I&C Technician _____)	_____
2.	Shutdown emergency ventilation system. Return to normal from emergency recirculation/HEPA mode. (Technical Support Team)	_____
3.	Inventory office and consumable supplies, including forms, and attach the list to this report.	_____
4.	Inventory telephone equipment (use Attachment titled "TSC Telephone Check-off List"). Record deficiencies in the REMARKS section. Attach Check-off List to this report.	_____
5.	Clean status boards.	_____
6.	Retrieve all loose documents, maps, worksheets, etc., consolidate and give the material to the TSC Emergency Preparedness Coordinator (EPC) for proper storage.	_____
7.	Perform special or additional tasks as directed by the ED.	_____

ATTACHMENT 10

TSC CLOSEOUT CHECKLIST
(Page 2 of 2)

		Initial
8.	Record equipment and operations deficiencies in the REMARKS section or on an attached page.	_____

10. REMARKS: _____

_____

_____

_____

_____

_____

_____ / _____
Signature Date

APPENDIX 1

HABITABILITY GUIDELINES - ESSENTIAL FACILITIES

Values are approximate

RADIATION	ALERT*	ACTION**
Gamma Radiation (Whole body)	35 mR/hour	350 mR/hour
Noble Gas	6 MPCs	50 MPCs
(Xe-133)	6 x 10-5 uCi/cc	5 x 10-4 uCi/cc
Particulate Beta-Gamma	6 MPCs	50 MPCs
(unidentified count)	2 x 10-9 uCi/cc	1.5 x 10-8 uCi/cc
(isotopic analysis)	2 x 10-8 uCi/cc	1.5 x 10-7 uCi/cc
Iodine	6 MPCs	50 MPCs
(I-131)	5 x 10-8 uCi/cc	4 x 10-7 uCi/cc

* Notify PSTL that area has reached the alert habitability guideline (7 12 hour shift occupancy to reach quarterly limit).

** Notify PSTL that area has reached the action habitability guideline (8 hour shift to reach quarterly limit).

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY RESPONSE PROCEDURE

ERP-315 OPERATION OF THE PEACH BOTTOM COMPUTER DOSE ASSESSMENT SYSTEM

1.0 RESPONSIBILITIES

1.1 The Shift Dose Assessment Personnel (SDAP) is responsible for Dose Assessment Team duties until the Dose Assessment Group is assembled and turn-over is completed in accordance with ERP-310, Dose Assessment Group.

1.2 The Dose Assessment Group Leader (DAGL) is responsible for relieving the SDAP of Dose Assessment duties and directing the use of the Dose Assessment System (DAS).

1.3 The Emergency Director is responsible for Dose Assessment Team Leader (DATL) duties until the DATL assumes his emergency role in the TSC.

1.4 The Dose Assessment Group members are responsible for collecting input data and operation of the Dose Assessment System (DAS) in accordance with Plant Monitoring System (PMS) and MESOREM, Jr. Atmospheric Dispersion and Dose Assessment System User's Manual.

2.0 INITIAL ACTIONS

NOTE: ATTACHMENT TITLED, "OPERATION OF PEACH BOTTOM COMPUTER DOSE ASSESSMENT SYSTEM FLOW CHART" WILL BE USED AS A GUIDE FOR THE FOLLOWING ACTIONS.

2.1 Activate computers used for dose assessment.

2.1.1 Turn on computer power.

2..2 IF computer and printer do not activate THEN ensure individual switches are turned on.

2.1.3 Verify paper is loaded in adequate supply.

2.1.4 Obtain current 15 minute meteorological summary data from the PMS.

2.1.5 Log onto the Computer Dose Assessment System.

NOTE:

THE PASSWORD AND USER ID FOR THE SHIFT DOSE ASSESSMENT PERSONNEL WILL ALLOW ACCESS TO FAST MODE A AND ESTIMATION OF SOURCE TERM ONLY.

TO PERFORM DOSE PROJECTIONS DURING ACCIDENT CONDITIONS, FAST MODE A OR MODE A SHALL BE EXECUTED. TO PERFORM TOTAL INTEGRATION OF DOSE PROJECTIONS, FAST MODE B OR MODE B SHOULD BE EXECUTED AS PART OF THE RECOVERY PHASE ONLY!

2.2 Complete attachment titled, "Input Parameters for Operation of PB Dose Assessment System".

2.3 IF a release is not yet in progress
THEN estimate the release source term using source term estimate option.

2.4 Execute the Dose Assessment System per Section 3.

3.0 CONTINUING ACTIONS

3.1 For Mode A operations:

3.1.1 At Mode A menu, select F1, Fast Mode A.

3.1.2 At Accident menu, select F1, Loss of Coolant Accident
IF isotopic breakdown unknown
OR F10, MCA data for known isotopic.

3.1.3 Enter data recorded on attachment titled, "Input Parameters for Operation of Peach Bottom Dose Assessment System", in response to prompt for DAS
OR use default values shown at the prompt.

3.1.4 Select release point from Release Point Menu.

3.1.5 Enter meteorological data in response to prompts utilizing the meteorological data hierarchy provided on Attachment titled,. "Meteorological Parameters Resources".
(The computer prompt contains the proper primary meteorological sensor.)

3.1.6 Enter effluent monitor data in response to prompts.

3.1.7 Enter isotopic breakdown data in response to prompts if data is available.

NOTE: THE ISOTOPIC ABUNDANCE MAY BE ENTERED AS PERCENTAGES, CONCENTRATION OR RELEASE RATE.

3.1.8 IF an unmonitored release, unknown isotopic breakdown, was selected
THEN enter field survey data in response to prompts.

3.1.9 Make appropriate printout selection.

3.1.10 IF a release is in progress from more than one release point, THEN enter Y after the prompt, "Will this be a simultaneous release?"

3.1.11 When the answer to any simultaneous release prompt is yes, the system displays the Release Point Menu and takes you through the data input for the new release point. After all meteorology and effluent data has been input and the calculations completed the user will be prompted for another release point:

Do you want to consider other release points?
(Y or N, <RETURN> = N):

When the operator chooses to answer "NO" to any simultaneous release prompt, results are printed for a summation when the wind direction values are the same for each release point.

3.1.12 At this point, you may perform another dose projection OR return to the main menu.

3.1.13 After the initial dose projection is complete select additional reports desired from the menu. Follow the prompts generated by CDM.

3.2 Mode B Execution

NOTE: FAST MODE B OR MODE B SHOULD ONLY BE COMPLETED AS DIRECTED BY THE DATL.

3.2.1 The procedure for entering meteorological and effluent data is similar to Mode A except data may be entered for up to 96 15 minute periods.

3.2.2 The user will be given the option to review the input data as part of the output. The system will list all input parameters for all increments.

3.2.3 Ingestion Reports Fast Mode B and Mode B create ingestion reports based on methodologies prescribed in Regulatory Guide 1.109. Ingestion doses will be calculated for all pathways, age groups and critical organs outlined in Regulatory Guide 1.109.

NOTE: TO OBTAIN THESE INGESTION REPORTS, FAST MODE B OR MODE B MUST BE FIRST EXECUTED.

3.2.4 Default Values for Mode A and Mode B

The following list the default parameters to be used in the event that the actual values are unavailable. Flow rate default is >.25 E5 - No normal value.

3.2.4.1 Release duration: 2.0 hours

3.2.4.2 Pressure correction factor: 1.1

3.2.4.3 SGTS efficiency: 99.97%

3.2.5 Select Mode B operation from Command Menu by pressing F3.

NOTE: FOR EACH RELEASE POINT, DIFFERENT METEOROLOGICAL TOWERS MAY BE CHOSEN TO BE UTILIZED AS INPUT.

NOTES: FORECASTS CAN ONLY BE PERFORMED FOR FULL 1 HOUR INCREMENTS. FORECASTS MAY BE PERFORMED FOR BETWEEN 1 AND 24 HOURS.

THE PROGRAM CANNOT UTILIZE THE SAME TOWER AT TWO DIFFERENT ALTITUDES FOR TWO DIFFERENT SETS OF METEOROLOGY DATA. EACH TOWER CAN ONLY BE ACTIVE FOR ONE TOWER METEOROLOGY STATION AT A TIME.

IN A SIMULTANEOUS RELEASE, WHEN THE METEOROLOGY AS COMMON - EVERYTHING BUT WIND SPEED AND WIND DIRECTION - ARE CHANGED FROM ONE RELEASE POINT TO ANOTHER THE FOLLOWING MESSAGE APPEARS:

WARNING: EDITS TO THE REMAINING METEOROLOGICAL PARAMETERS WILL AFFECT ALL ACTIVE STATIONS ON THE METEOROLOGICAL GRID.

3.2.6 For Fast Mode B operations:

3.2.6.1 At Command Menu, select F2, Execute Dispersion Model.

3.2.6.2 At Mode B Menu, select F1, Fast Mode B.

3.2.6.3 At Accident Menu, select F1, Loss of Coolant Accident for UNKNOWN isotopic breaksdown
OR F10, MCA Data, for KNOWN isotopic breakdown.

3.2.6.4 Enter data in response to prompts.

3.2.7 For Mode B operation:

3.2.7.1 At Command Menu, select F1, Update Data.

3.2.7.2 At File Menu, select files to be updated AND update.

3.2.7.3 Select "Q", return to Command Menu.

3.2.7.4 At Command Menu, select F2, Execute Dispersion Model.

3.2.7.5 At Mode B Menu, select F2, Mode B.

3.2.8 After execution, the maximum DCHI/Q, whole body, skin, and thyroid will be displayed for the 2, 5, 10, and 16 mile plant radiuses.

3.2.9 Ingestion Dose Rate Calculations to 50 miles are compiled AND are accessed thru receptor files.

3.3 Use Back-calculate option on main menu to evaluate a source term based on field data.

3.4 The Shift Dose Assessment Personnel shall perform the following:

3.4.1 Obtain and input corrected data as new information becomes available.

3.4.2 Verify the accuracy of all input data prior to executing the Dose Assessment System program.

3.4.3 Submit dose projection hard copies to the DAGL or Emergency Director.

4.0 FINAL CONDITIONS:

4.1 The potential for and/or actual airborne release has been alleviated.

4.2 The DATL has determined that dose projection information is no longer necessary.

4.3 All records are compiled for final review and filing.

5.0 ATTACHMENTS AND APPENDICES

5.1 Attachment 1 - "Operation of Peach Bottom Computer Dose Assessment System Flow Chart"

5.2 Attachment 2 - "Input Parameters for Operation of PB Dose Assessment System"

5.3 Attachment 3 - "Backup Meteorological Data from National Weather Service"

5.4 Attachment 4 - "Classification of Atmospheric Stability by Delta Temperature or Sigma Theta"

5.5 Attachment 5 - "Meteorological Parameter Resources"

6.0 SUPPORTING INFORMATION

6.1 PURPOSE

To provide directions for using the Peach Bottom Computer Dose Assessment System.

6.2 CRITERIA FOR USE

This procedure shall be implemented when an Alert or higher level emergency has been declared in accordance with ERP-101, Classification of Emergencies.

6.3 REFERENCES

6.3.1 Peach Bottom Atomic Power Station Emergency Plan

6.3.2 10CFR20, Appendix B

6.3.3 10CFR50, Appendix I

6.3.4 ERP-101, "Classification of Emergencies"

6.3.5 ERP-300, "Dose Assessment Team Leader"

6.3.6 ERP-305, "Dose Assessment Group Leader"

6.3.7 ERP-320, "Use of Containment Radiation Monitor to Estimate Release Source Term and Noble Gas Monitor Readings"

6.3.8 Regulatory Guide 1.109, "Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10CFR50", Rev. 1, October 1977

6.3.9 LFE Corporation, "Process Control Division, Ventilation Radiation Monitoring System, MQ-216"

6.3.10 NUREG/CR-3344, MESOI Version 2.0: "An Interactive Mesoscale Lagrangian Puff Dispersion Model with Deposition and Decay"

6.3.11 NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"

6.3.12 SAND 77-1725, "Public Protection Strategies for Potential Nuclear Reactor Accidents: Sheltering Concepts with Existing Public and Private Structures"

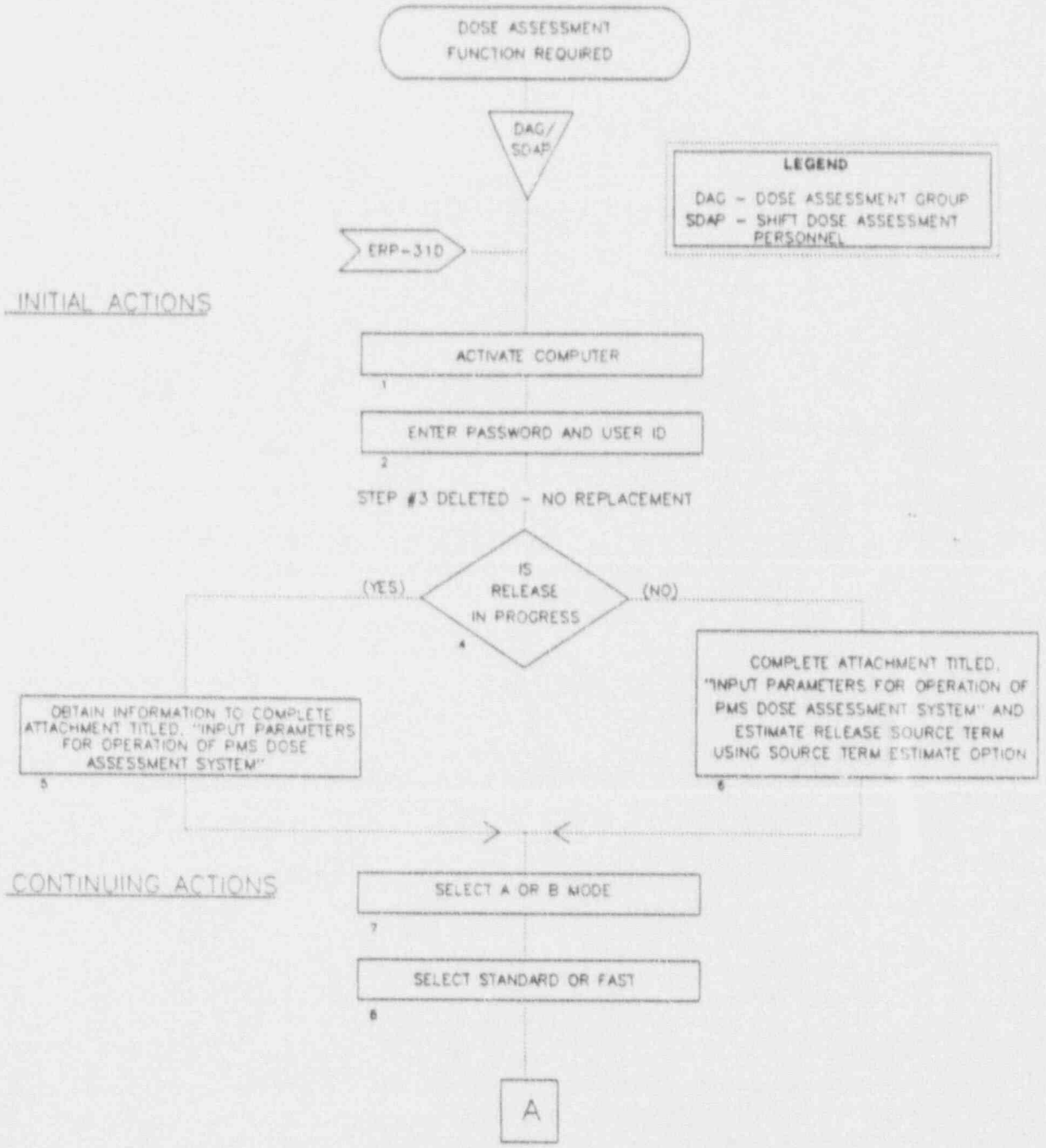
6.3.13 MESOREM, Jr. Atmospheric Dispersion and Dose Assessment System, User's Manual

ATTACHMENT 1

OPERATION OF PEACH BOTTOM COMPUTER DOSE MODEL

FLOW CHART

(Page 1 of 3)

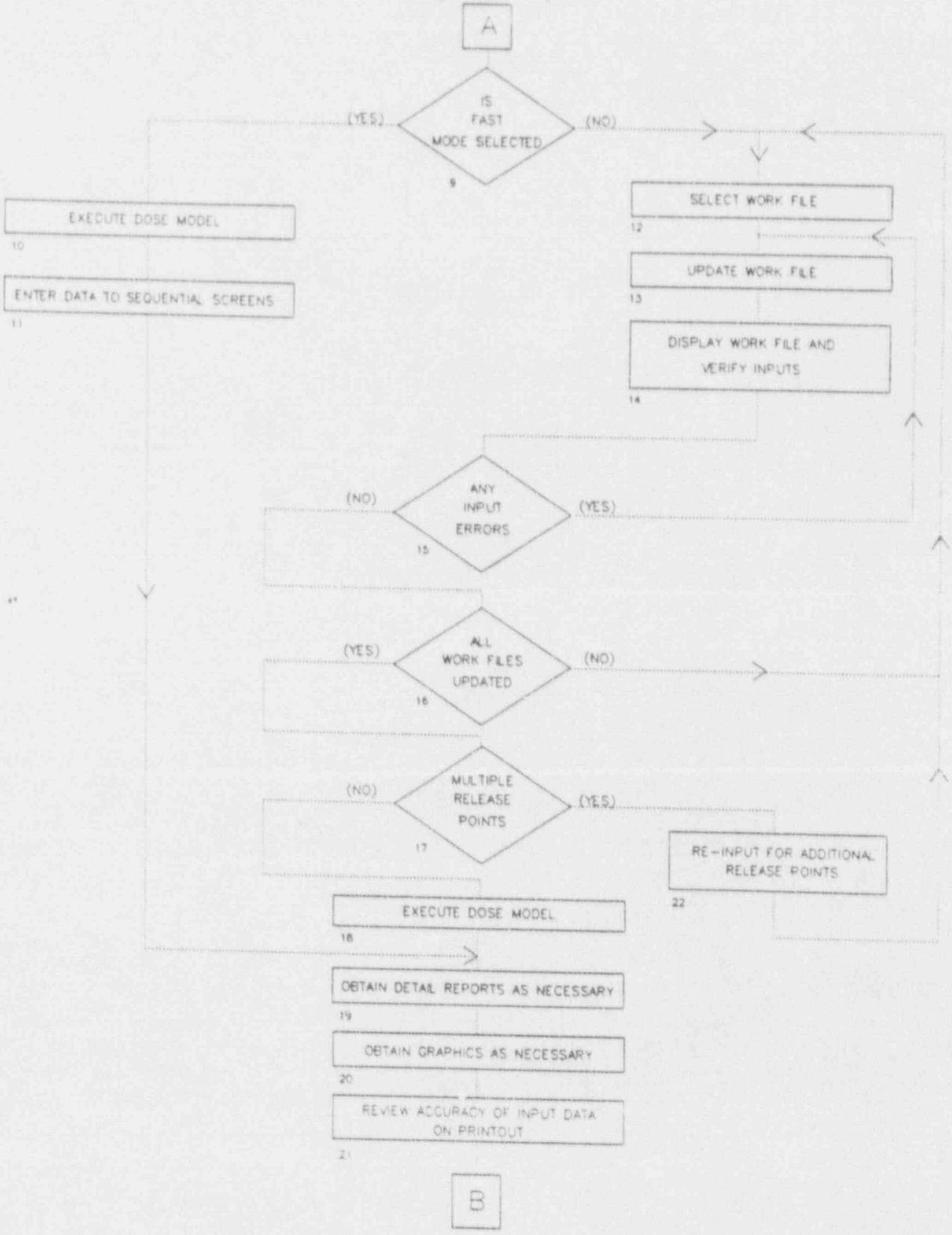


ATTACHMENT 1

OPERATION OF PEACH BOTTOM COMPUTER DOSE MODEL

FLOW CHART

(Page 2 of 3)

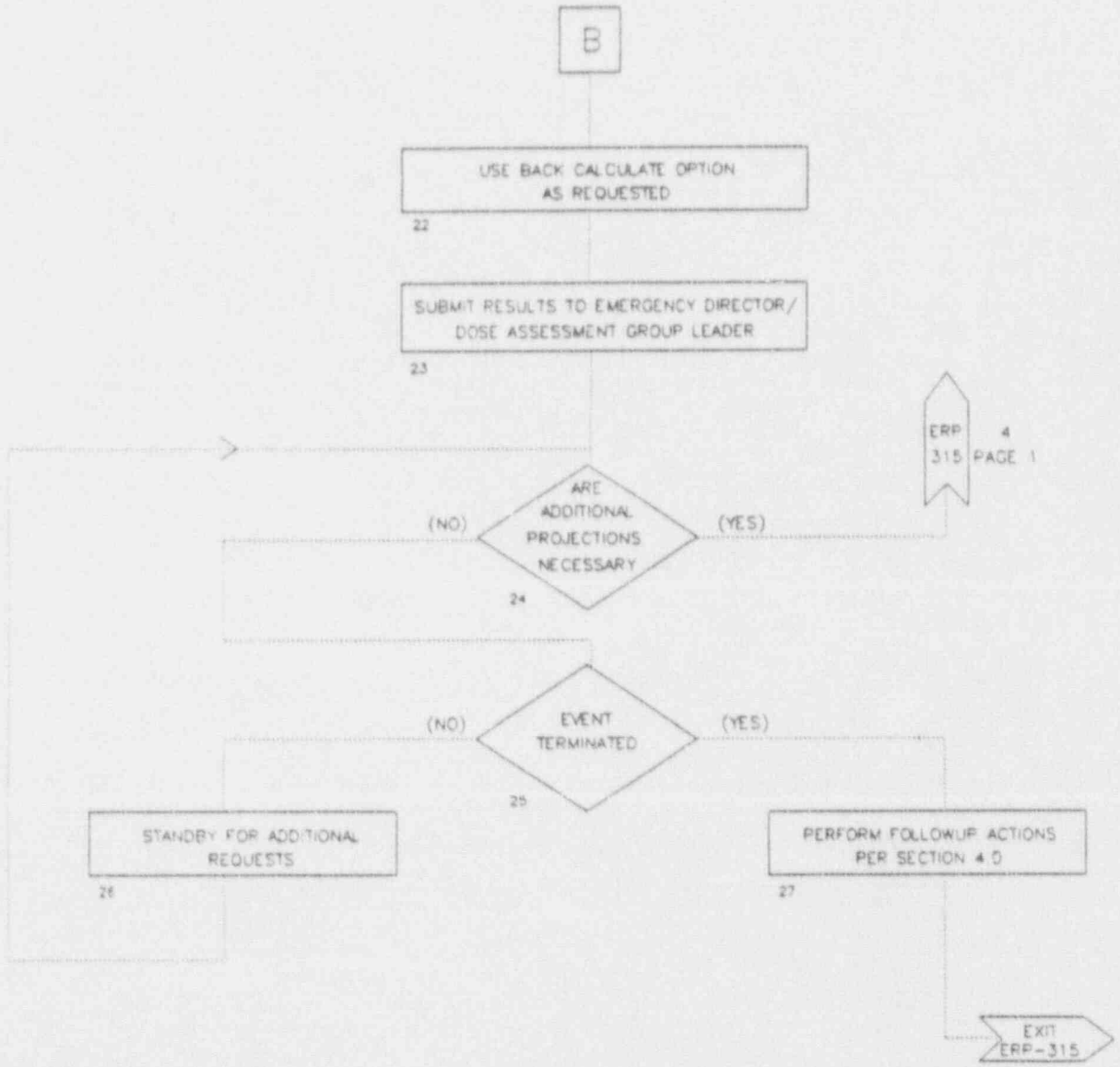


ATTACHMENT 1

OPERATION OF PEACH BOTTOM COMPUTER DOSE MODEL

FLOW CHART

(Page 3 of 3)



ATTACHMENT 2

INPUT PARAMETERS FOR OPERATION OF PB DOSE ASSESSMENT SYSTEM
(Page 1 of 4)

Affected Unit _____

Time of event (release): (HH:MM:SS) _____:_____:_____ (Military time)

Date of event (release): (MM/DD/YY) _____/_____/_____

Daytime or Nighttime (Circle one)

Adverse or Normal Weather (Circle one)

Expected release duration: (HH) _____
(If unknown use default or request information from Technical Support Team Leader)

Has the release been in progress? Yes or No (Circle one)

- If Yes: Start Time of Release (HH:MM) _____:_____

  How long has the release been in progress? (HH:MM) _____:_____

- If No:

  How long until the release is to begin? (HH:MM) _____:_____

Time since reactor scram: (HH:MM) _____:_____

Drywell Radiation Monitor: RI-8/9103 A/C____ R/HR____ RI-8/9103 B/D____ R/HR

Account for wet deposition? Yes or No (Circle one)

Release Point(s): Main Stack Roof Vent Ground (Circle one)

Simultaneous release? Yes or No (Circle one)

Meteorological Parameters (refer to Section 1.2.2.10.2 for back-up met. towers if primary are unavailable)

For Main Stack Release

Wind speed Twr 2-320' _____ mph

Wind direction Twr 2-320' _____ degs

Delta temperature Twr 2 330'-33' _____ degs F
(Sigma theta Twr 2-75' _____ degs)

Ambient temperature Twr 2-33' _____ degs F

Precipitation Twr 2 _____ in/hr

ATTACHMENT 2

INPUT PARAMETERS FOR OPERATION OF PB DOSE ASSESSMENT SYSTEM
(Page 2 of 4)

For Roof Vent Release

Wind speed Twr 2-75' _____ mph

Wind direction Twr 2-75' _____ degs

Delta temperature Twr 2 330'-33' _____ degs F

(Sigma theta Twr 2-75' _____ degs)

Ambient temperature Twr 2-33' _____ degs F

Precipitation Twr 2 _____ in/hr

For Ground Release

Wind speed River Twr 33' _____ mph

Wind direction River Twr 33' _____ degs

Delta temperature Twr 2 330'-33' _____ degs F

(Sigma theta Twr 2 75' _____ degs)

Ambient temperature Twr 2 33' _____ degs F

Precipitation Twr 2 _____ in/hr

Effluent Parameters for Main Stack Release

Normal Range (RR-0-17-051) or High Range (RR-7127) (Circle one)

Count Rate _____ cps

Flow Rate _____ cfm

Pressure Correction Factor _____

SGTS efficiency _____ %, Flow Rate _____

ATTACHMENT 2

INPUT PARAMETERS FOR OPERATION OF PB DOSE ASSESSMENT SYSTEM
(Page 3 of 4)

For Roof Vent Release

Normal Range (RR-2/3979) or High Range (RR-7127) (Circle one)

Count Rate _____ cpm

Flow Rate _____ cfm

Pressure Correction Factor _____

Isotopic Breakdown: Known or Unknown (Circle one)

If known, enter sample results as percents.

Kr 83m _____ %

Kr 85m _____ %

Kr 85 _____ %

Kr 87 _____ %

Kr 88 _____ %

Kr 89 _____ %

Xe 131m _____ %

Xe 133m _____ %

Xe-135m _____ %

Xe-135 _____ %

Xe-137 _____ %

Xe-138 _____ % Total _____ %

Total must equal 100% ± 1%

Total Noble Gas Concentration _____ uCi/cc

ATTACHMENT 2

INPUT PARAMETERS FOR OPERATION OF PB DOSE ASSESSMENT SYSTEM
(Page 4 of 4)

I-131 _____ %

I-132 _____ %

I-133 _____ %

I-134 _____ %

I-135 _____ %

Total Iodine Concentration _____ uCi/cc

Total must equal 100 ± 1%

How long has it been since the sample was analyzed? (HH:MM) _____:_____

Ground Level Release - Unknown Isotopic Breakdown

Field Survey whole body dose rate _____ mr/hr

Field Survey thyroid dose rate _____ mr/hr

Distance where readings were obtained _____ miles

Wind direction (TOWARDS) where readings were obtained _____ degs

ATTACHMENT 3

BACKUP METEOROLOGICAL DATA FROM NATIONAL WEATHER STATION (NWS)

1 - Wilmington NWS: 1-302-573-6143

2 - Philadelphia NWS: 1-215-597-0846

3 - Baltimore NWS: 1-301-962-2177

Date: _____ Time: _____

PE Contact: _____ _____
(Name) (Telephone)

This is Peach Bottom Atomic Power Station. I am calling you for the following meteorological parameters:

Wind Direction (WD30) _____ deg. az.

Wind Speed (WD30) _____ knots

Cloud Cover (CLCVR) _____ tenths

Cloud Ceiling (CLCEG) _____ ft

Forecast:

May I have your name.

NWS Contact: _____

Initial _____

ATTACHMENT 4

CLASSIFICATION OF ATMOSPHERIC STABILITY BY
DELTA TEMPERATURE OR SIGMA THETA

Delta T (Deg F)		Sigma Theta (Deg)		
Primary 330-33 ft.	Backup 150-33 ft.	Stack - 320' Dev Vent - 75' Dev Ground-River Dev	Stability Description	Pasquill-Stability Class
< - 3.0	< - 1.3	> 22.5	Extremely Unstable	A
-2.0 to -2.7	-1.2 to -1.1	17.5 to 22.4	Moderately Unstable	B
-2.6 to -2.4	-1.0	12.5 to 17.4	Slightly Unstable	C
-2.3 to -0.8	-0.9 to -0.4	7.5 to 12.4	Neutral	D
-0.7 to 2.3	-0.3 to 0.9	3.8 to 7.4	Slightly Stable	E
2.4 to 6.2	1.0 to 2.5	2.1 to 3.7	Moderately Stable	F
> 6.3	> 2.6	< 2.1	Extremely Stable	G

ATTACHMENT 5

METEOROLOGICAL PARAMETER RESOURCES

| Primary: Plant Monitoring System (PMS)

| Backup: MCR strip charts (Control Room Only)

Secondary Backup: National Weather Service

Select appropriate tower/sensor data from this table

Release Point	Primary PMS Screen		Backup PMS Screen	
MAIN STACK				
Wind Speed (mph)	Twr 2-320'	MET	Twr 2-75'	MET
Wind Direction (Deg Azm)	Twr 2-320'	MET	Twr 2-75'	MET
Delta Temperature (Deg F)	Twr 2-330'-33'	MET	Twr 2-150'-33'	MET
Sigma Theta (Deg. Azm)	Twr 2-75'	MET	None	MET
Ambient Temperature (Deg F)	Twr 2-33'	MET	None	MET
Precipitation (in/hr)	Twr 2	MET	Twr A	MET
ROOF VENT				
Wind Speed (mph)	Twr 2-75'	MET	Twr 2-320'	MET
Wind Direction (Deg Azm)	Twr 2-75'	MET	Twr 2-320'	MET
Delta Temperature (Deg F)	Twr 2-330'-33'	MET	Twr 2-150'-33'	MET
Sigma Theta (Deg. Azm)	Twr 2-75'	MET	None	MET
Ambient Temperature (Deg F)	Twr 2-33'	MET	None	MET
Precipitation (in/hr)	Twr 2	MET	Twr A	MET
GROUND LEVEL				
Wind Speed (mph)	River Twr 33'	MET	Twr 2-75'	MET
Wind Direction (Deg Azm)	River Twr 33'	MET	Twr 2-75'	MET
Delta Temperature (Deg F)	Twr 2-330'-33'	MET	Twr 2-150'-33'	MET
Sigma Theta (Deg. Azm)	Twr 2-75'	MET	None	MET
Ambient Temperature (Deg F)	Twr 2-33'	MET	None	MET
Precipitation (in/hr)	Twr 2	MET	Twr A	MET

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY RESPONSE PROCEDURE

MAR 2 7 1990

ERP-316 CUMULATIVE POPULATION DOSE CALCULATIONS FOR AIRBORNE RELEASES - MANUAL METHOD

1.0 RESPONSIBILITIES

1.1 The Shift Dose Assessment Personnel shall perform the necessary calculations outlined in this procedure until the Dose Assessment Group is assembled and turn-over of dose assessment responsibilities is completed in accordance with ERP-305, Dose Assessment Group Leader.

1.2 The Dose Assessment Group shall perform the necessary calculations outlined in this procedure as directed by the DAGL.

2.0 INITIAL ACTIONS

NOTE: ATTACHMENT 1, CUMULATIVE POPULATION DOSE CALCULATIONS FOR AIRBORNE RELEASE - MANUAL METHOD FLOW CHART, MAY BE USED AS A GUIDE FOR THE FOLLOWING ACTIONS.

2.1 The Shift Dose Assessment Personnel shall perform the following steps until Dose Assessment Group personnel are assembled and the turn-over of dose assessment responsibilities is completed.

2.1.1 Determine airborne release flow path(s).

2.1.2 Contact the Chemistry Sampling and Analysis Team Leader (CSATL) and direct him to collect and analyze appropriate gas, iodine and particulate samples from the main stack and/or roof vents in accordance with CH-916, Obtaining Iodine and Particulate Samples from Main Stack and Roof Vent Following Accident Conditions.

2.1.3 Request the Chemistry Sampling and Analysis Team to provide the sample analysis results as soon as they are available. The sample results will be utilized in performing off-site dose calculations when the computer Dose Assessment System becomes available.

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY RESPONSE PROCEDURE

JUN 1 2 1990

ERP-317 DETERMINATION OF PROTECTIVE ACTION RECOMMENDATIONS

1.0 RESPONSIBILITIES

1.1 The Dose Assessment Team Leader (DATL) is responsible for:

1.1.1 Determining Protective Action Recommendations (PARs).

1.1.2 Determining protective measures recommendations.

1.1.3 Providing recommendations to the Emergency Director (ED) or Emergency Response Manager (ERM) (if the EOF is activated) for authorization.

1.2 The ED is responsible for:

1.2.1 Performing DATL duties until the DATL assumes his emergency response role in the EOF/TSC.

1.2.2 Reviewing and authorizing issuance of recommendations to the state and local agencies until the ERM is in control.

1.2.3 Providing recommendations directly to the affected counties if the BRP and/or MDPH can not be contacted.

1.3 The ERM is responsible for:

1.3.1 Relieving the ED of the responsibility for PAR authorization.

1.3.2 Reviewing and authorizing issuance of recommendations.

1.3.3 Ensuring recommendations are provided to the state and local agencies.

2.0 INITIAL ACTIONS

NOTE: ATTACHMENT 1, PROTECTIVE ACTION RECOMMENDATION (PAR) FLOW CHART, MAY BE USED AS A GUIDE FOR THE FOLLOWING ACTIONS.

1-14-91

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY RESPONSE PROCEDURE

ERP-320 USE OF THE CONTAINMENT RADIATION MONITOR TO ESTIMATE RELEASE SOURCE TERM AND NOBLE GAS MONITOR READINGS

1.0 RESPONSIBILITIES

A member of the Dose Assessment Group shall perform these calculations.

2.0 INITIAL ACTIONS

NOTE: ATTACHMENT 1, USE OF THE CONTAINMENT RADIATION MONITOR TO ESTIMATE RELEASE SOURCE TERM AND NOBLE GAS MONITOR READINGS FLOW CHART, MAY BE USED AS A GUIDE FOR THE FOLLOWING ACTIONS.

2.1 The Dose Assessment Group member shall determine the percent of fuel inventory released to the containment by:

2.1.1 Obtaining the time of reactor shutdown (i.e., SCRAM) from the status board or TSC.

2.1.2 Determining time since shutdown (T) and recording it on Attachment 2.

2.1.3 Obtaining the Drywell radiation monitor dose rate reading (D) and recording it on Attachment 2.

2.1.4 Using Attachment 2 as a worksheet and Attachments 3 and 4 as references, record percent fuel inventory released and an approximate source and damage estimate.

2.2 The Dose Assessment Group member shall determine the source term as follows:

a. Pathway A. Primary containment purged through Standby Gas Treatment System (SGTS)

b. Pathway A-1. Primary containment leakage to secondary containment

c. Pathway A-2. Release from secondary containment

d. Pathway B. Secondary containment purge through SGTS

e. Pathway C. Secondary containment activity released through roof vents

RRG:dmk/dlk

12/3/91

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY RESPONSE PROCEDURE

ERP-600 PERSONNEL SAFETY TEAM LEADER (PSTL)

1.0 RESPONSIBILITIES

1.1 Managing and Coordinating the Personnel Safety Teams.

1.2 Establishing radiation exposure control and personnel safety measures for emergency workers.

1.3 Reporting to the Emergency Director (ED).

1.4 Assigning a team member to man the Health Physics Network and assigning a communicator to obtain dose assessment information from the control room.

1.5 Ensuring that habitability surveys are conducted for the TSC and associated facilities.

2.0 INITIAL ACTIONS

NOTE: ATTACHMENT TITLED, "PSTL FLOW CHART" MAY BE USED AS A GUIDE FOR THE FOLLOWING ACTIONS.

2.1 The Personnel Safety Team Leader (PSTL) shall:

2.1.1 Report to the Technical Support Center (TSC).

2.1.2 Obtain a briefing from the Health Physics Shift Supervisor.

2.1.3 Obtain a briefing from the ED.

NOTE: THE PSTL DIRECTS ACTIVITIES OF THE PERSONNEL SAFETY TEAM GROUPS:

a. FIRST AID/SEARCH AND RESCUE GROUP (ERP-610)
b. PLANT SURVEY GROUP (ERP-620)
c. DOSIMETRY, BIOASSAY AND RESPIRATORY PROTECTION GROUP (ERP-630)
d. VEHICLE AND EVACUEE CONTROL GROUP (ERP-640)

2.1.4 The PSTL shall contact each Group Leader and:

2.1.4.1 Obtain the status of the group.

2.1.4.2 Direct each group to activate and perform initial actions.

2.1.4.3 Provide each Group Leader information on:

a. Planned emergency activities

b. Plant conditions

c. Emergency classification

d. Protective action recommendations

e. Anticipated group activities and priorities

2.1.5 The PSTL shall request each Group Leader provide a status update when initial actions are complete and team is ready.

2.1.6 The PSTL shall:

2.1.6.1 Allocate and assign available HP personnel to the various group functions as necessary.

2.1.6.2 Assign individual(s), as necessary, to:

a. Assign an individual to perform habitability duties.

b. Man the TSC radiological status board.

c. Serve as Personnel Safety Team Communicators.

d. Act as a PSTL assistant.

2.1.7 The PSTL shall direct the Status Board Keeper to obtain and post ARM readings and plant survey data as it becomes available.

2.1.8 When all Personnel Safety Team Group Leaders have reported back, brief the ED on staffing, readiness, initial actions and plant radiological conditions.

2.1.9 The PSTL shall confer with other Team Leaders and:

2.1.9.1 Provide them with facility radiological conditions.

2.1.9.2 Advise them of conditions which may affect their operations.

2.1.9.3 Advise them if their operations may impact adversely on personnel radiological safety.

2.1.9.4 Remain cognizant of planned activities of other teams.

2.2 The PSTL shall assign:

2.2.1 A team member to man the Health Physics Network upon request.

2.2.2 A communicator to obtain dose assessment information from the Control Room until relieved by the Dose Assessment Team.

2.3 The person assigned habitability duties shall:

2.3.1 Perform at TSC:

2.3.1.1 Initial habitability check including radiation and contamination surveys as necessary.

2.3.1.2 Initiate operation of habitability monitoring equipment.

NOTE: INITIATING OPERATION REQUIRES PHYSICAL INSPECTIONS, RESPONSE CHECKS AND CALIBRATION VERIFICATION.

2.3.1.3 Set radiation and airborne contamination equipment alarms to the desired set points.

2.3.1.4 Complete attachment titled, "Habitability Check-Off List".

2.3.1.5 Record survey results on attachment titled, "Habitability Status Log Sheet".

2.3.1.6 Notify Team Leader of habitability survey results.

2.3.2 Upon notification of alarms:

2.3.2.1 Proceed to the affected area.

2.3.2.2 Take action to mitigate the effects of any condition impacting on the immediate health and safety of personnel occupying the effected area.

2.3.2.3 Perform radiation, contamination and air sampling, as required.

2.3.2.4 Report results and any actions taken to the PSTL.

2.3.2.5 Complete plant survey forms.

2.3.2.6 Enter results on attachment titled, "Habitability Status Log Sheet".

2.3.2.7 Continue habitability surveys in the area at intervals specified by the Team Leader.

3.0 CONTINUING ACTIONS

3.1 If an evacuation is ordered, the PSTL shall:

3.1.1 Advise the Vehicle and Evacuee Control Group Leader.

3.1.2 Direct the Vehicle and Evacuee Control Group Leader to implement ERP-640.

3.1.3 Coordinate this activity with the Security Team Leader (STL).

3.1.4 Maintain communication with the Vehicle and Evacuee Control Group Leader.

3.1.5 Advise the ED of the status of any evacuation.

3.2 If individuals are identified by the STL as not accounted for, the PSTL shall:

3.2.1 Direct First Aid/Search and Rescue Group Leader to request the Control Room make repeated announcements using the plant page in an attempt to locate these personnel.

3.2.2 If time permits, estimate probable exposure of Search and Rescue Team members and establish exposure limits for each Search and Rescue Group. If exposure may approach or exceed NRC limits, implement ERP-670, Emergency Radiation Exposure Guidelines and Controls.

3.2.3 Recommend to the ED that Search and Rescue Teams enter the facility if no response from the missing persons is received.

3.2.4 Inform STL and Plant Survey Group Leader (PSGL) that utilization of emergency exits is permissible to decrease response time.

3.2.5 Coordinate entries with the STL and Technical Support Team Leader (TSTL).

3.2.6 Direct the First Aid/Search and Rescue Team to enter the facility and begin search in accordance with ERP-610.

3.3 If an injury or contaminated injury is found and off-site medical assistance is required, the PSTL shall:

3.3.1 Request the Control Room contact the ambulance service.

3.3.2 Request STL to expedite off-site medical personnel entrance to Restricted Area.

3.3.3 Contact the appropriate off-site medical facility using ERP-610 attachment titled, "Medical Event Information".

3.3.3.1 Provide the off-site medical facility the following information, as applicable.

a. Number of injured persons

b. Estimated time of arrival (Hospitals only)

c. Type and extent of injury and contamination.

3.3.4 Notify FA/S&R Group Leader that an ambulance has been called.

3.3.5 Notify ED of off-site agency contact and the identity and condition of the injured.

3.3.6 Verify that any injured arrive at the medical facility.

3.3.7 Notify ED of injured arrival at medical facility.

3.4 If services are determined to be required of the Dosimetry, Bioassay and Respiratory Protection Group, the PSTL shall:

3.4.1 Determine what services will be required from this group.

3.4.2 Direct Group Leader to provide required services in accordance with ERP-630.

3.4.3 Evaluate status reports from the Group Leader.

3.4.4 Report significant results and exposures in excess of guides and regulatory limits whether planned or unplanned to the ED.

NOTE: SIGNIFICANT RESULTS INCLUDE EXPOSURE EXCEEDING 2 REM WHOLE BODY, 5 RADS SKIN, 10 REM EXTREMITY OR UPTAKE EXCEEDING 5 PERCENT MPBB.

3.5 When requested to establish exposure limits and personnel protective measures for entries into affected areas, the PSTL shall:

NOTES:

1. ALL EMERGENCY CONDITION ENTRIES TO POTENTIAL OR ACTUAL AFFECTED AREAS ARE TO BE PERFORMED WITH HP SUPPORT. THIS INCLUDES TRANSIT ON THE SITE, DISPATCH OF SECURITY PERSONNEL, AND OTHER PERSONNEL MOVEMENTS.

2. EXPOSURE IN EXCESS OF PBAPS ADMINISTRATIVE EXPOSURE LIMITS REQUIRE AUTHORIZATION IN ACCORDANCE WITH ERP-670, "EMERGENCY RADIATION EXPOSURE GUIDELINES AND CONTROLS".

3.5.1 Obtain and evaluate radiological conditions.

3.5.2 Inform the ED when radiological conditions may interfere with a planned entry.

3.5.3 Establish exposure limits and corresponding stay times for work.

3.5.4 Inform the Plant Survey Group Leader (PSGL) of:

a. Planned activities

b. Plant status

c. Priority of activities

3.5.5 Authorize entry without HP escort and inform PSGL when:

a. Entry is of short duration and well defined in terms of radiological hazard, location and work to be performed

b. Exposure rates are less than 100 mR/hr

c. Alarming dosimeters are utilized

3.5.6 Consider radiological conditions and how changes in plant status will effect those conditions.

3.5.7 Determine, or assist the PSGL, the dosimetry, protective measures and special considerations for each significant entry, using Attachment 4 of ERP-660, "Health Physics Considerations for Facility Access During Emergencies".

3.5.8 Consider the need for thyroid blocking.

3.5.9 Coordinate entry with the STL, Damage Repair Team Leader (DRTL), and OSC Coordinator as necessary.

3.5.10 Inform the ED of significant exposures, uptakes, or skin contamination problems which have occurred during entries.

3.6 If services are required of the Plant Survey Group, the PSTL shall:

3.6.1 Provide the PSGL with the areas to be surveyed or HP coverage requirements.

3.6.2 Direct the PSGL to have surveys performed or HP coverage assigned.

3.6.3 Direct the PSGL to have status and results of the surveys reported to the TSC on a periodic basis.

3.6.4 Maintain periodic communication with the PSGL.

3.7 If notified of a fire, the PSTL shall:

****
*
*CAUTION: A FIRE IN A RADIOLOGICALLY CONTROLLED AREA MAY CREATE AN *
* UNMONITORED RELEASE OF AIRBORNE RADIOACTIVITY. *
****

3.7.1 Ensure HP coverage at the fire site.

3.7.2 Advise the Dose Assessment Group Leader (DAGL) in the EOF that a fire situation exists.

3.7.3 Advise First Aid/Search & Rescue Group Leader to prepare for possible actions.

3.8 When requested to perform an exposure authorization evaluation, the PSTL shall:

NOTE: ALTHOUGH IT IS PREFERABLE TO PERFORM AND DOCUMENT THESE STEPS PRIOR TO THE EXPOSURE, THE ED MAY VERBALLY AUTHORIZE THE EXPOSURE AND COMPLETE THE DOCUMENTATION AT A LATER TIME.

3.8.1 Review all requests for emergency exposure in excess of PBAPS Administrative limits and prepare documentation for approval of the ED in accordance with ERP-670.

3.8.2 Forward the documentation, together with recommendations, to the ED.

3.8.3 Notify the PSGL of approval.

3.8.4 Ensure that each exposure in excess of guides or regulatory limits is promptly brought to the attention of the ED.

3.9 When elevated levels of radioiodine in air samples are identified, or if fuel damage has occurred, the PSTL shall evaluate use of Potassium Iodide (KI) for thyroid blocking by:

NOTE: THE TAKING OF KI TABLETS IS VOLUNTARY FOR EACH INDIVIDUAL INVOLVED.

3.9.1 Determining the need for administration of KI by completing Attachment 2, Potassium Iodide Worksheet of ERP-680, Control of Thyroid Blocking (KI) Tablets, for each individual entering an affected area.

3.9.2 Making recommendations to the ED when KI is needed and obtaining authorization in accordance with ERP-680 prior to administration.

3.9.3 Directing the Dosimetry, Bioassay and Respiratory Group Leader to complete Attachments of ERP-680 and to administer the tablets.

```
**********************************************************************
*CAUTION:  WHEN AIR PURIFYING RESPIRATORS ARE NECESSARY FOR ENTRIES,   *
*         REPLACE THE STANDARD FILTER CARTRIDGES WITH GMR-I PARTICULATE-*
*         CHARCOAL-FILTER CANISTERS.  SOME PROTECTION IS PROVIDED,     *
*         HOWEVER NO ADDITIONAL PROTECTION FACTOR SHALL BE CREDITED.   *
**********************************************************************
```

3.9.4 Ensuring that the KI is administered in the proper dosage and for the proper number of doses.

3.10 The PSTL shall, on a continuing basis:

3.10.1 Brief the ED on:

a. Personnel Safety Team actions

b. Radiological problems

c. Personnel injuries

d. Medical [illegible] orts

e. Site evacuation status

3.10.2 Evaluate need for additional support personnel for shift coverage.

3.10.3 Remain cognizant of all plant and on-site radiological conditions.

3.10.4 Consult with Corporate Safety Department Site Representative in assessing any non-radiological hazards.

3.10.5 Review habitability status and trends for all site emergency facility locations and compare survey results with ERP-250, Appendix 1.

3.10.6 Consider the effect of plant conditions on continued habitability.

3.10.7 Evaluate the need for implementation of additional protective measures.

3.10.8 Coordinate on-site resource support.

3.10.9 IF offsite medical assistance has been requested THEN notify the Control Room AND hospital as additional information becomes known or changes develop in the medical and/or radiological condition of the injured.

3.11 Upon relief, provide turnover briefing covering:

a. Radiological data

b. Personnel injury and contamination information

c. Task assignments

d. Number of HP personnel available and their assignments

e. Site Evacuation status

f. Problem areas

g. Requirements for manpower, equipment

3.12 Personnel Safety Team Member conducting habitability surveys shall:

3.12.1 Conduct surveys at frequency specified by Team Leader and in accordance with attachment titled, "Habitability Check-Off List".

3.12.2 Report results to the Team Leader.

3.12.3 Record results on attachment titled, "Habitability Status Log Sheet".

3.12.4 Continue periodic checks in accordance with attachment titled, "Habitability Check-Off List".

4.0 FINAL CONDITIONS

4.1 If ordered to deactivate the Personnel Safety Team, the PSTL shall:

4.1.1 Instruct group leaders to:

4.1.1.1 Enforce housekeeping measures.

4.1.1.2 Inventory supplies for replacement.

4.1.1.3 Collect and identify records for review and filing.

4.1.1.4 Return areas to non-emergency status or implement radiological control of areas as necessary.

4.1.2 Provide a list of required supplies to the Site Emergency Planning Coordinator.

4.1.3 Direct the First Aid/Search and Rescue Group Leader to:

4.1.3.1 Prepare a status report on the First Aid/Search and Rescue Activities.

4.1.3.2 Deactivate First Aid/Search and Rescue Group.

4.1.4 Direct the Plant Survey Group Leader to:

4.1.4.1 Establish and define radiologically controlled areas in the facility.

4.1.4.2 Deactivate the Plant Survey Group.

4.1.5 Direct the Dosimetry, Bioassay and Respiratory Group Leader to:

4.1.5.1 Direct collection of dosimetric devices and arrange for evaluations.

4.1.5.2 Direct collection of bioassay samples and arrange for analysis.

4.1.5.3 Ensure that continuing bioassay requirements are documented.

4.1.5.4 Deactivate Dosimetry, Bioassay and Respiratory Group.

4.1.6 Direct the Vehicle and Evacuee Control Group Leader to:

4.1.6.1 Complete decontamination of personnel, vehicles and equipment to procedural limits.

4.1.6.2 Terminate Site Evacuation preparations.

4.1.6.3 Deactivate the Vehicle and Evacuee Control Group function.

4.2 If any entries for emergency repair or operation were made, the PSTL shall ensure that:

4.2.1 Emergency repair and operation teams have completed duties and are accounted for.

4.2.2 Dosimetry devices are collected and are being evaluated.

4.2.3 Individuals involved in entries are being debriefed by HP personnel for evaluation and identification of follow-up actions.

4.3 If Emergency Radiation Exposure Guidelines and Controls were implemented, the PSTL shall:

4.3.1 Forward to the MD information about all exposures, external or internal, in excess of company guides or NRC quarterly limits.

4.3.2 Ensure that each exposure evaluation and report on the exposures in excess of NRC quarterly limits emergency exposure includes all sections of ERP-670, "Emergency Exposure Authorization Form". These reports shall be completed in accordance with 10CFR20.403 and forwarded to the Engineer-In-Charge, Licensing, for submittal to the NRC.

4.3.3 Ensure that all emergency exposure data are forwarded for incorporation into the radiation exposure records.

4.3.4 Ensure that all personnel are notified about their exposure.

4.3.5 Ensure that appropriate supervisory personnel are notified about any exposure restrictions for these individuals, for the current and subsequent calendar quarters.

4.4 In the event that KI tablets were administered, the PSTL shall:

4.4.1 Forward KI Administration Record Forms to the MD.

4.4.2 Retain KI Worksheets for records management.

4.4.3 Ensure that KI Consent Forms and Instructions and Record Sheets for persons receiving KI are retained for records management.

4.4.4 Ensure the ED has been notified of all persons who received KI.

4.5 Retain and is properly document all plant radiation information.

5.0 ATTACHMENTS AND APPENDICES

5.1 Attachment 1 - "Personnel Safety Team Leader (PSTL) Flow Chart"

5.2 Attachment 2 - "Habitability Check-Off List"

5.3 Attachment 3 - "Habitability Status Log Sheet"

6.0 SUPPORTING INFORMATION

6.1 PURPOSE

This procedure defines the duties, responsibilities and interfaces of the PSTL.

6.2 CRITERIA FOR USE

Portions of this procedure may be activated at the Unusual Event, Alert, Site Emergency or General Emergency event classifications, or at the discretion of the ED.

6.3 REFERENCES

6.3.1 Code of Federal Regulations, Title 10, Energy, Part 20 Standards for Protection Against Radiation

6.3.2 ERP-230, "Operations Support Center (OSC) Activation"

6.3.3 ERP-610, "First Aid/Search and Rescue Group"

6.3.4 ERP-620, "Plant Survey Group"

6.3.5 ERP-630, "Dosimetry, Bioassay and Respiratory Group"

6.3.6 ERP-640, "Vehicle and Evacuee Control Group"

6.3.7 ERP-650, "Transport of Contaminated Injury Off-Site"

6.3.8 ERP-660, "Personnel Safety Team Leader"

6.3.9 ERP-670, "Emergency Radiation Exposure Guidelines and Controls"

6.3.10 ERP-680, "Control of Thyroid Blocking Potassium Iodine (KI) Tablets"

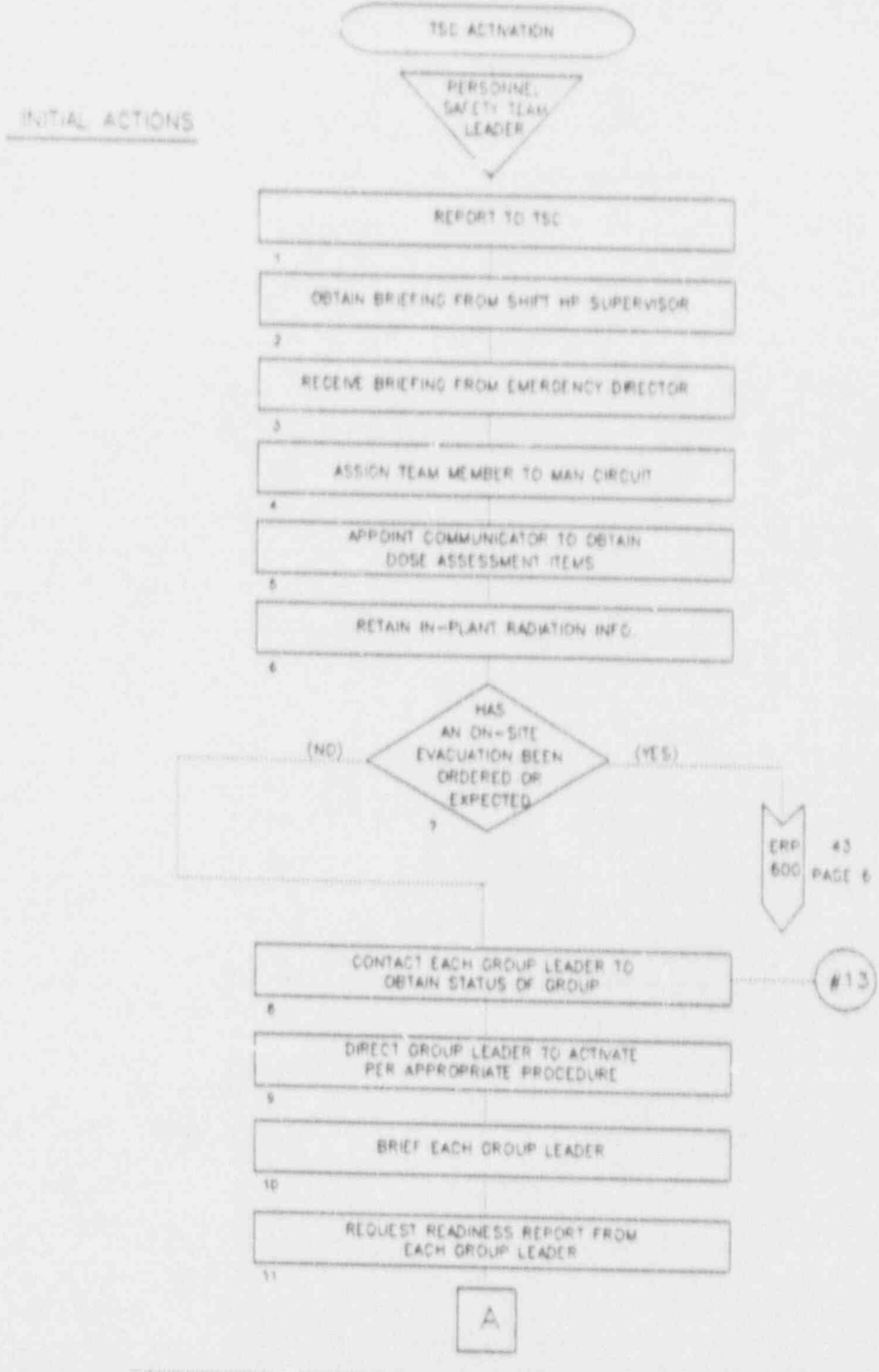
6.3.11 NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"

6.3.12 NUREG-0696, "Functional Criteria for Emergency Response Facilities"

6.3.13 Peach Bottom Atomic Power Station (PBAPS) Emergency Plan

6.3.14 US Environmental Protection Agency, EPA 520/2-75-001 Table 2.1

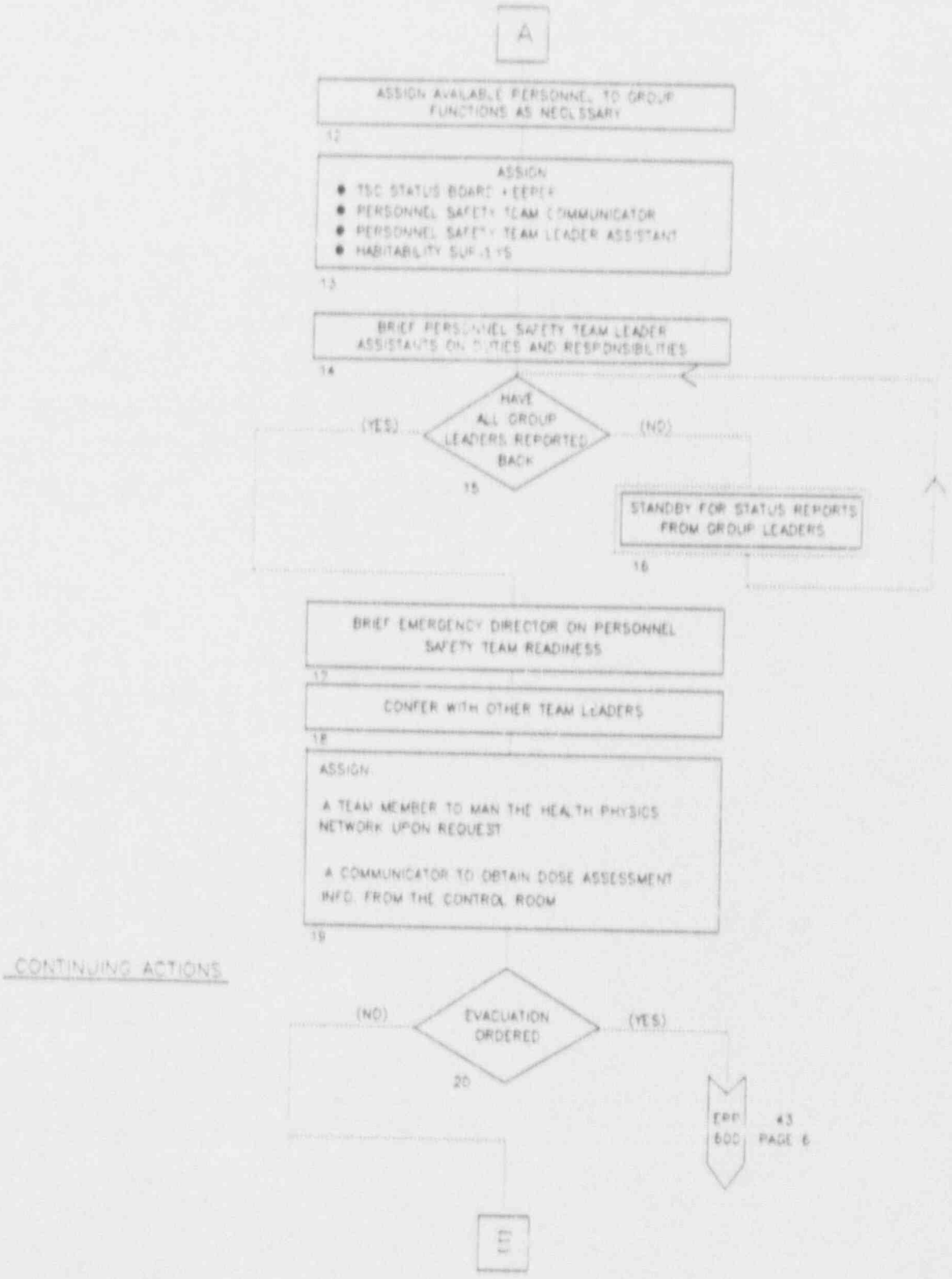
ATTACHMENT 1
PERSONNEL SAFETY TEAM LEADER (PSTL) FLOW CHART
(Page 1 of 14)



NOTES AND CAUTIONS

#13 THE PSTL IS RESPONSIBLE FOR ACTIVITIES OF THE PERSONNEL SAFETY GROUPS

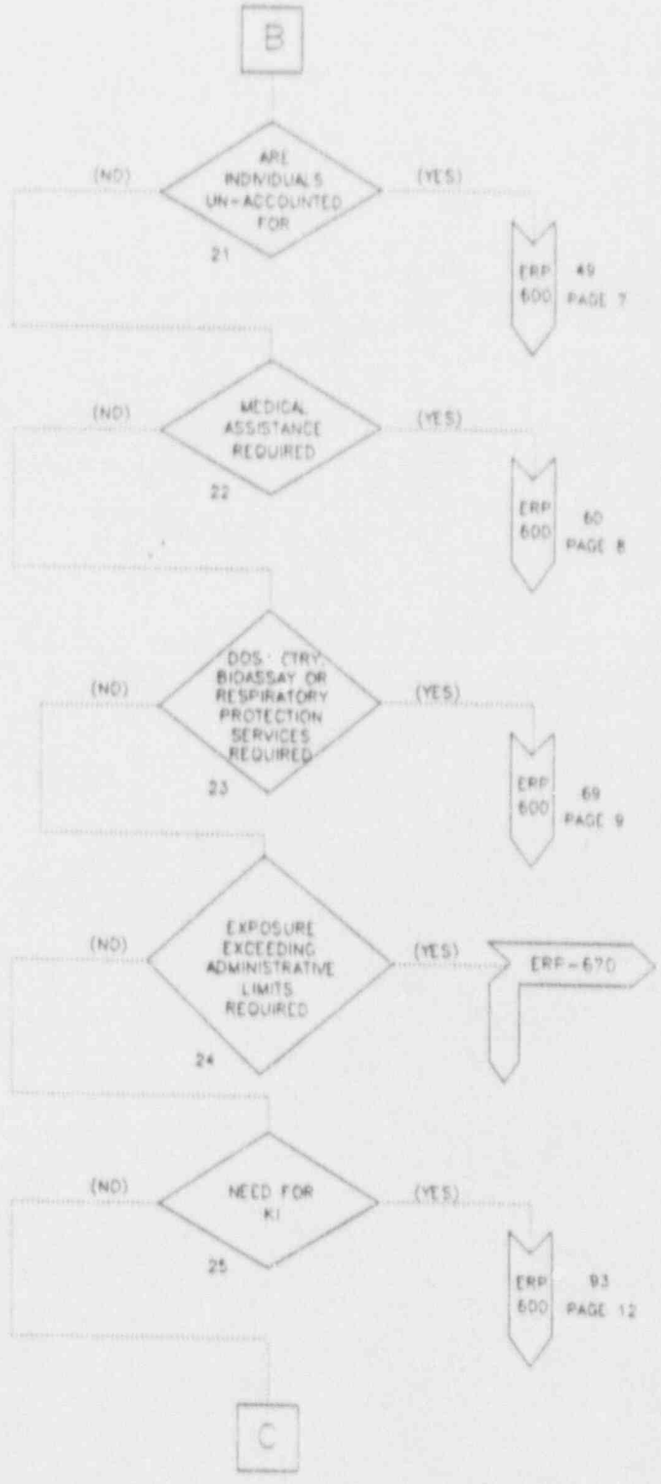
- FIRST AID/SEARCH AND RESCUE GROUP (ERP-610)
- PLANT SURVEY GROUP (ERP-620)
- DOSIMETRY, BIOASSAY & RESPIRATORY PROTECTION GROUP (ERP-630)
- EVACUATION ASSEMBLEY GROUP (ERP-640)


A
ASSIGN AVALABLE PERSONNEL TO GROUP FUNCTIONS AS NECESSARY
12
ASSIGN
• TSC STATUS BOARD KEEPER
• PERSONNEL SAFETY TEAM COMMUNICATOR
• PERSONNEL SAFETY TEAM LEADER ASSISTANT
• HABITABILITY SURVEYS
13
BRIEF PERSONNEL SAFETY TEAM LEADER ASSISTANTS ON DUTIES AND RESPONSIBILITIES
14
HAVE ALL GROUP LEADERS REPORTED BACK
15
(YES)
(NO)
STANDBY FOR STATUS REPORTS FROM GROUP LEADERS
16
BRIEF EMERGENCY DIRECTOR ON PERSONNEL SAFETY TEAM READINESS
17
CONFER WITH OTHER TEAM LEADERS
18
ASSIGN
A TEAM MEMBER TO MAN THE HEALTH PHYSICS NETWORK UPON REQUEST
A COMMUNICATOR TO OBTAIN DOSE ASSESSMENT INFO. FROM THE CONTROL ROOM
19
CONTINUING ACTIONS
EVACUATION ORDERED
20
(NO)
(YES)
ERP 600 43 PAGE 6
E

ATTACHMENT 1

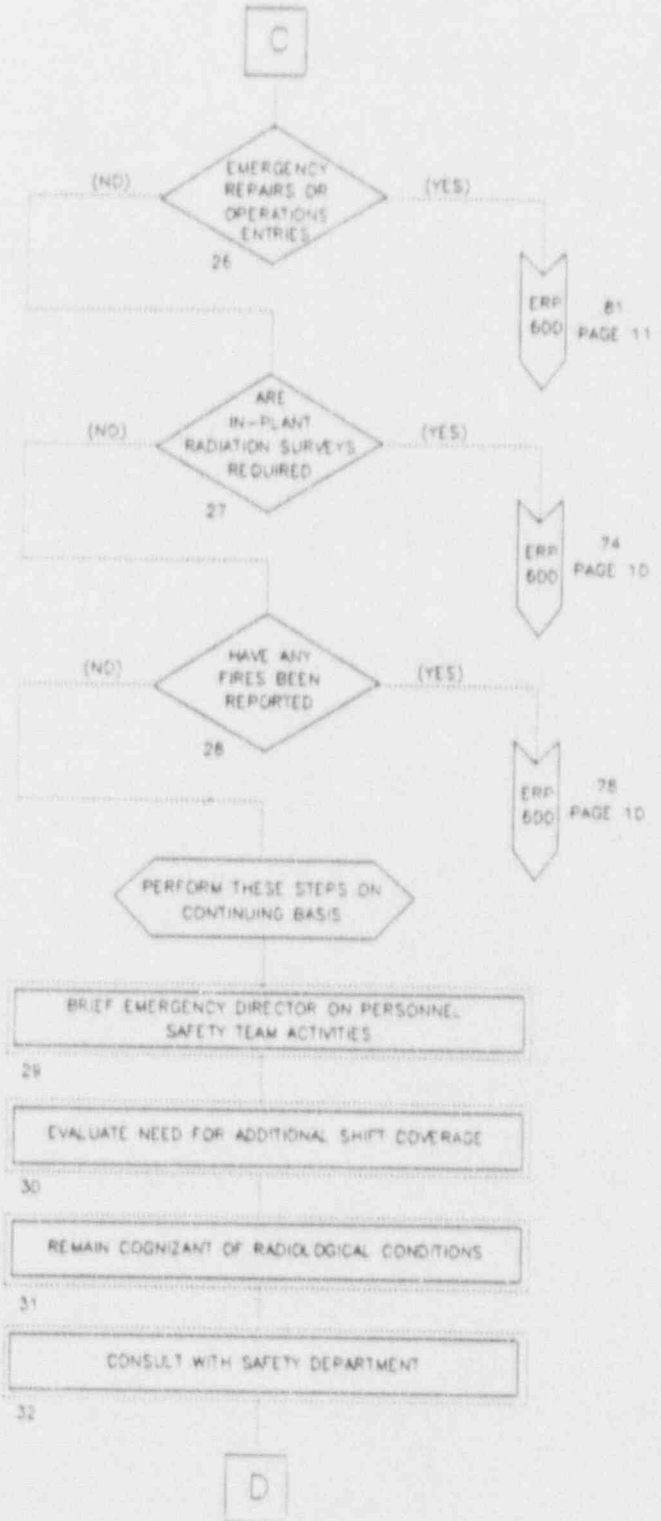
PERSONNEL SAFETY TEAM LEADER (PSTL) FLOW CHART

(Page 3 of 14)

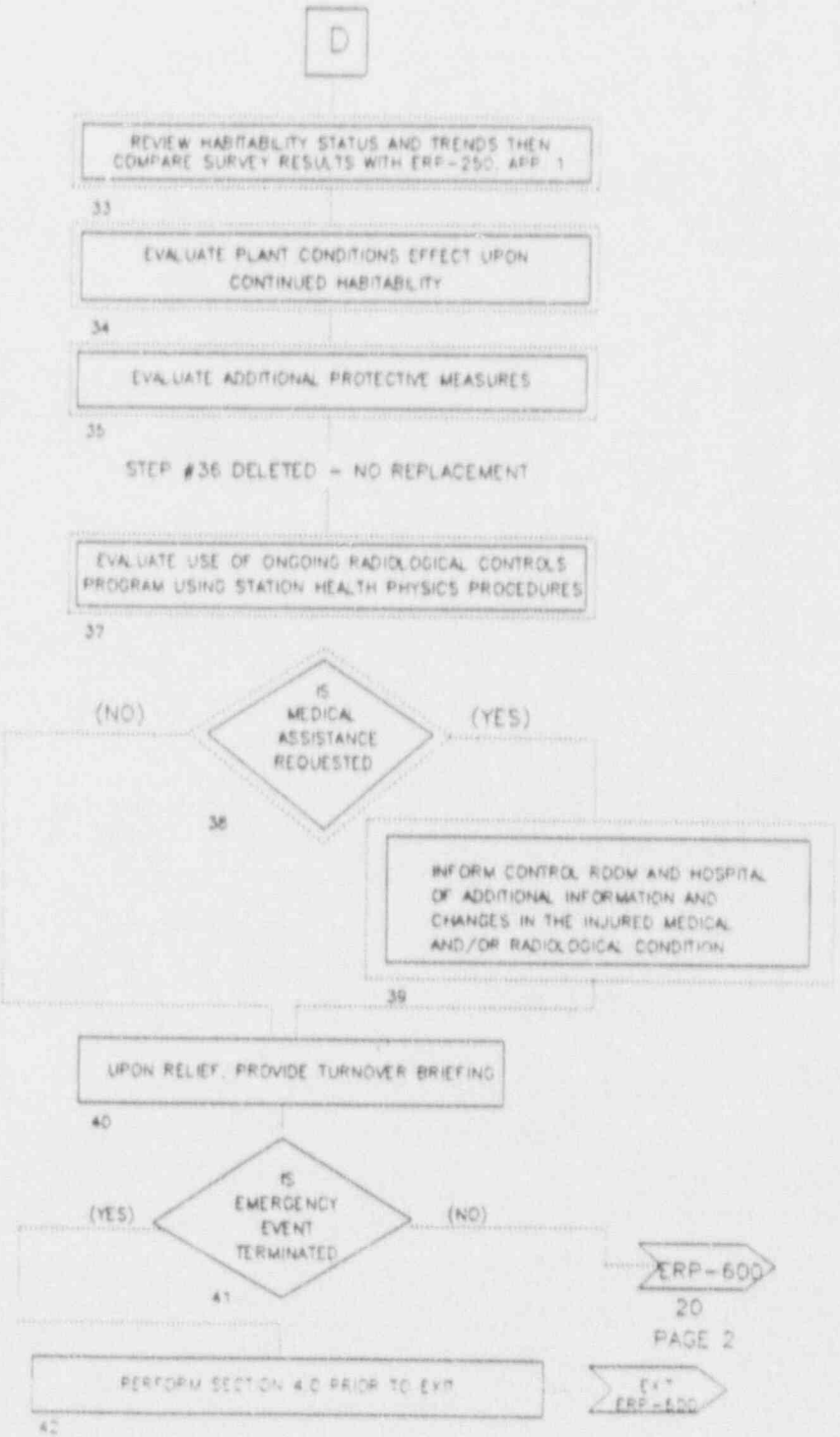


ATTACHMENT 1
PERSONNEL SAFETY TEAM LEADER (PSTL) FLOW CHART

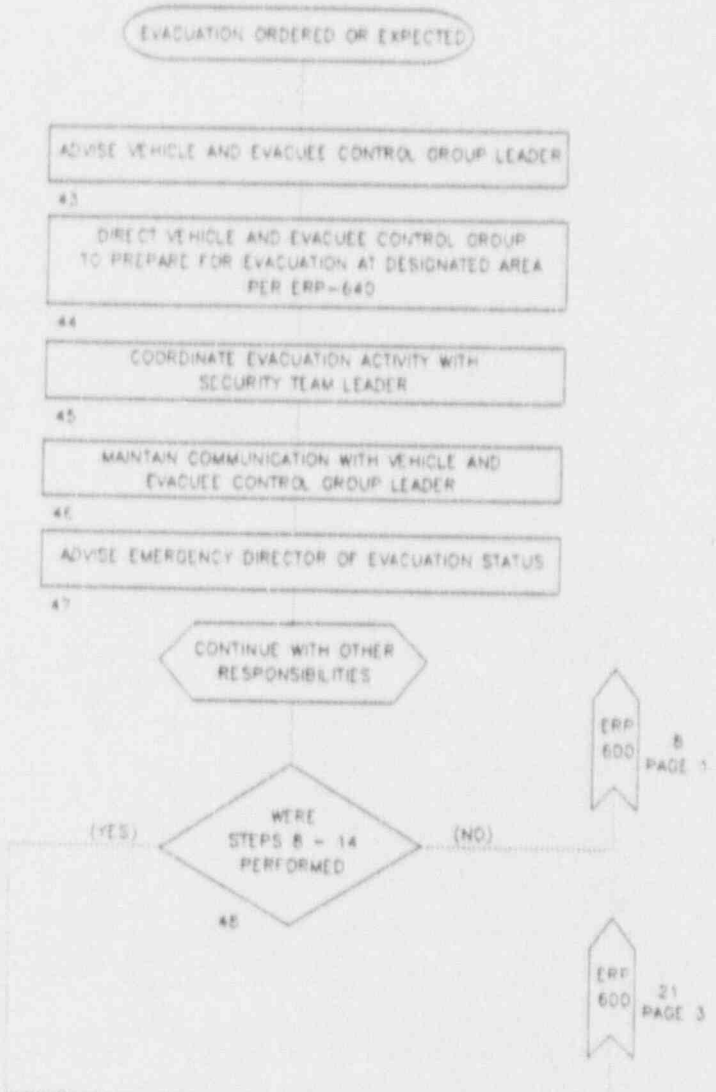
(Page 4 of 14)



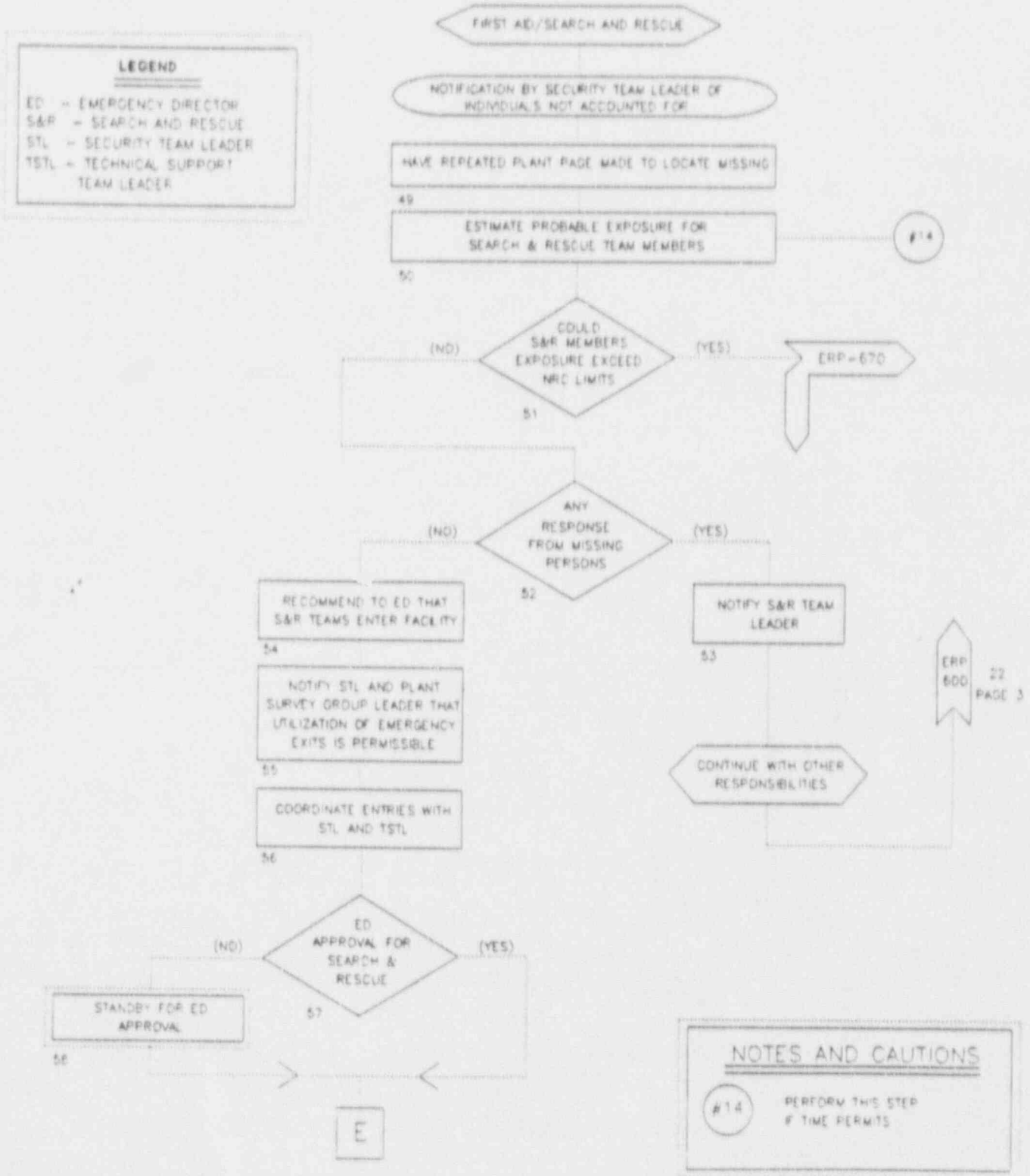
ATTACHMENT 1
PERSONNEL SAFETY TEAM LEADER (PSTL) FLOW CHART
(Page 5 of 14)



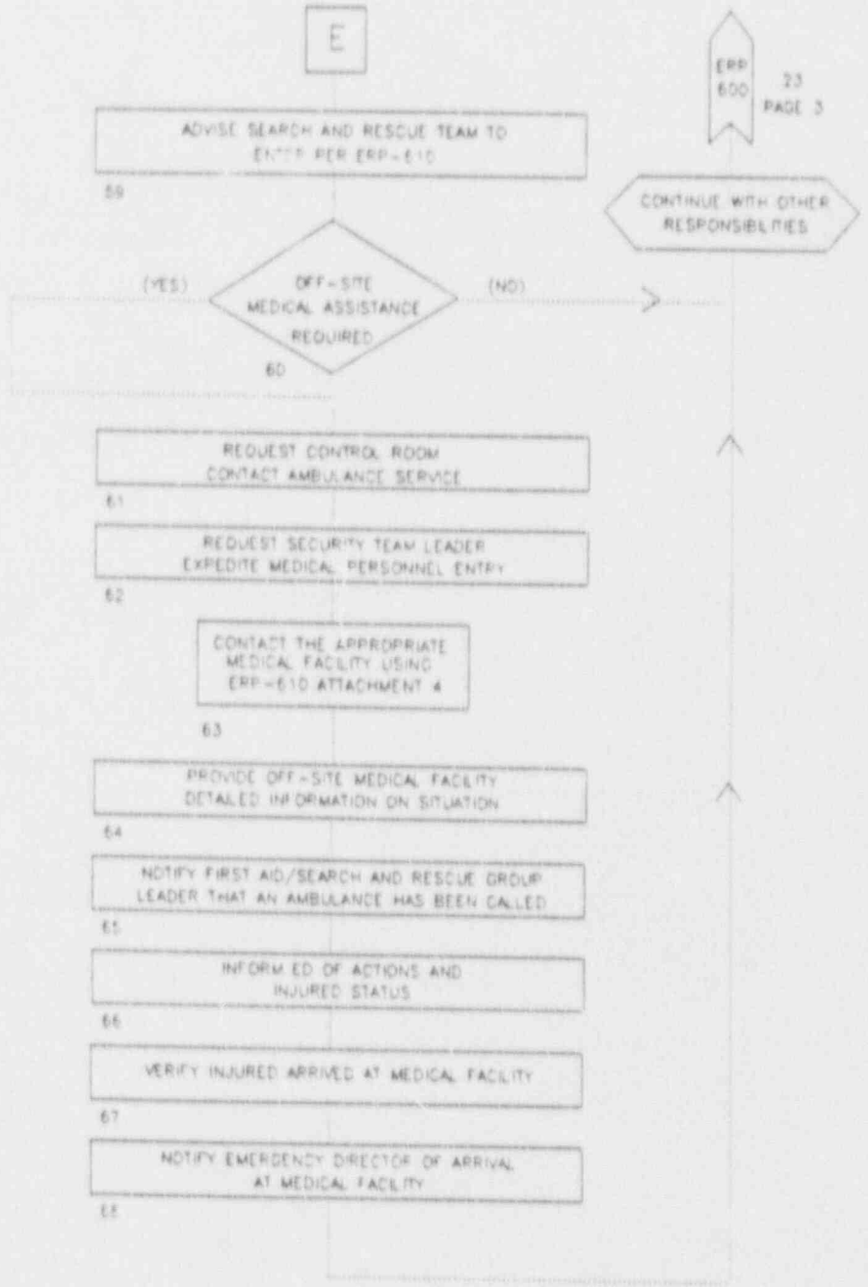
ATTACHMENT 1
PERSONNEL SAFETY TEAM LEADER (PSTL) FLOW CHART
(Page 6 of 14)



ATTACHMENT 1
PERSONNEL SAFETY TEAM LEADER (PSTL) FLOW CHART
(Page 7 of 14)



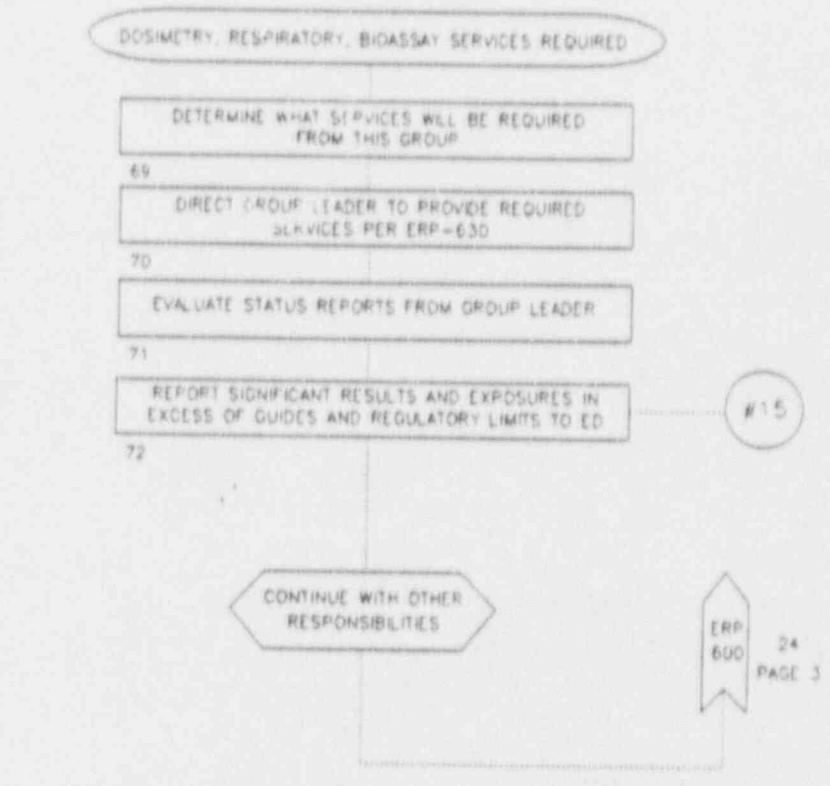
ATTACHMENT 1
PERSONNEL SAFETY TEAM LEADER (PSTL) FLOW CHART
(Page 8 of 14)



ATTACHMENT 1

PERSONNEL SAFETY TEAM LEADER (PSTL) FLOW CHART

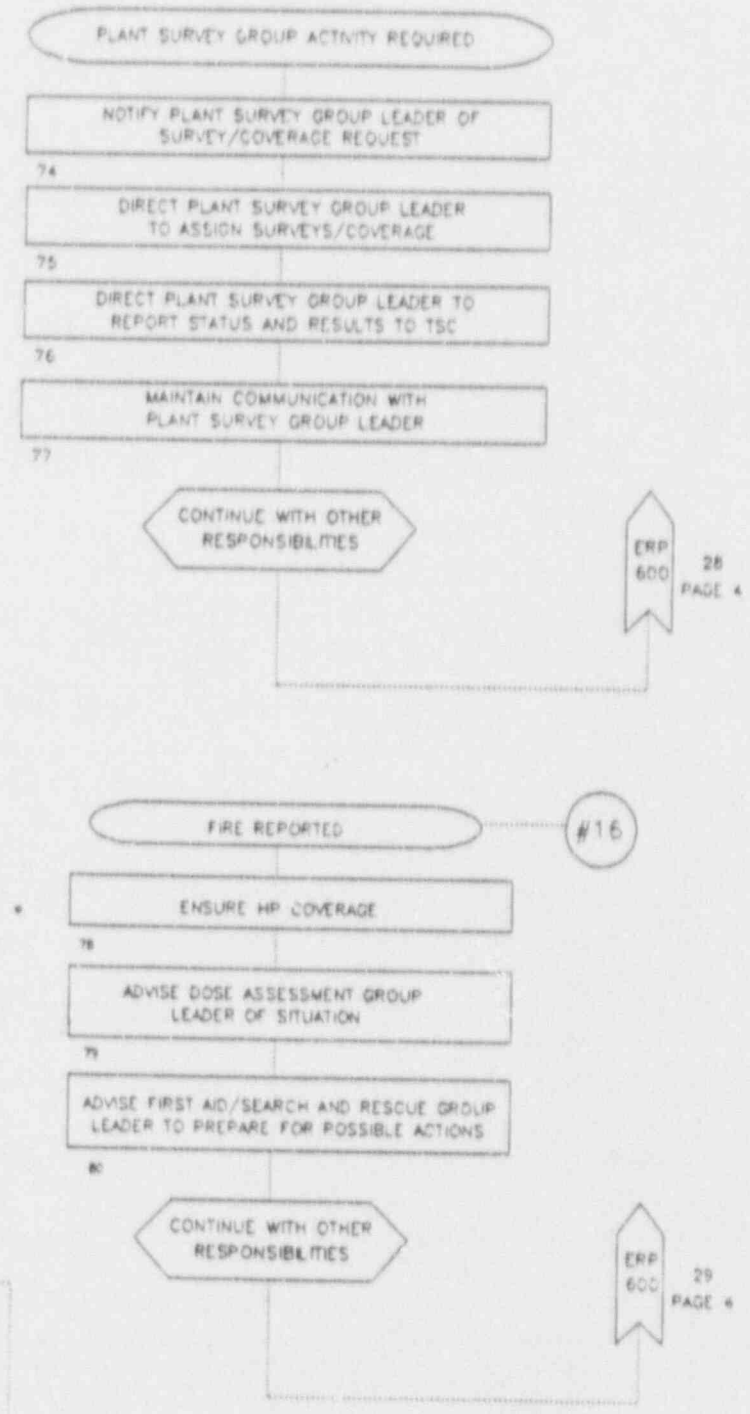
(Page 9 of 14)



NOTES AND CAUTIONS

#15 SIGNIFICANT RESULTS INCLUDE EXPOSURE EXCEEDING 2 REM WHOLE BODY, 5 RADS SKIN, 10 REM EXTREMELY OR UPTAKE EXCEEDING 5% MPBB.

ATTACHMENT 1
PERSONNEL SAFETY TEAM LEADER (PSTL) FLOW CHART
(Page 10 of 14)



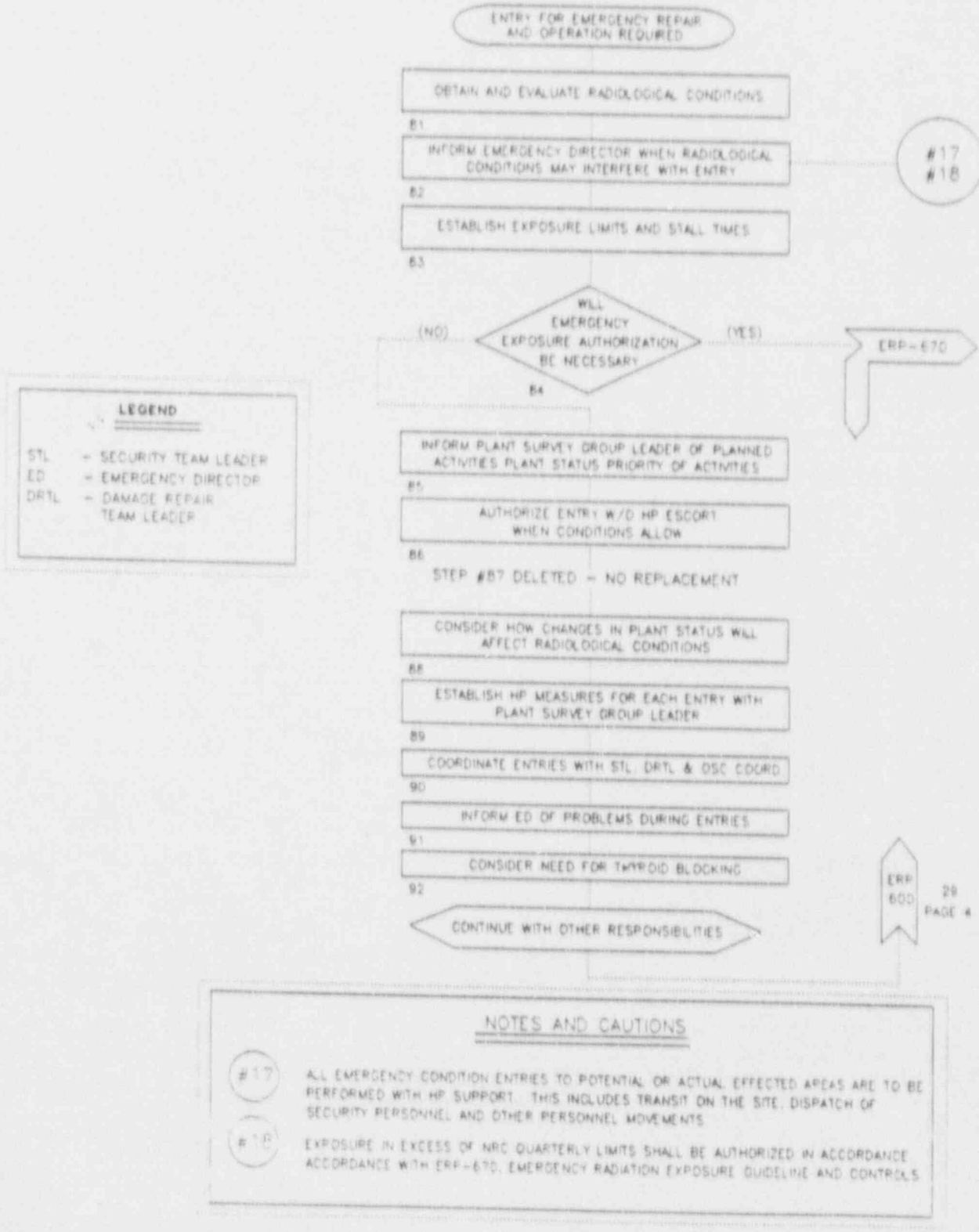
NOTES AND CAUTIONS

#16 A FIRE IN RADIOLOGICAL CONTROLLED AREA MAY CREATE AN UNMONITORED RELEASE OF AIRBORNE RADIOACTIVITY.

ATTACHMENT 1

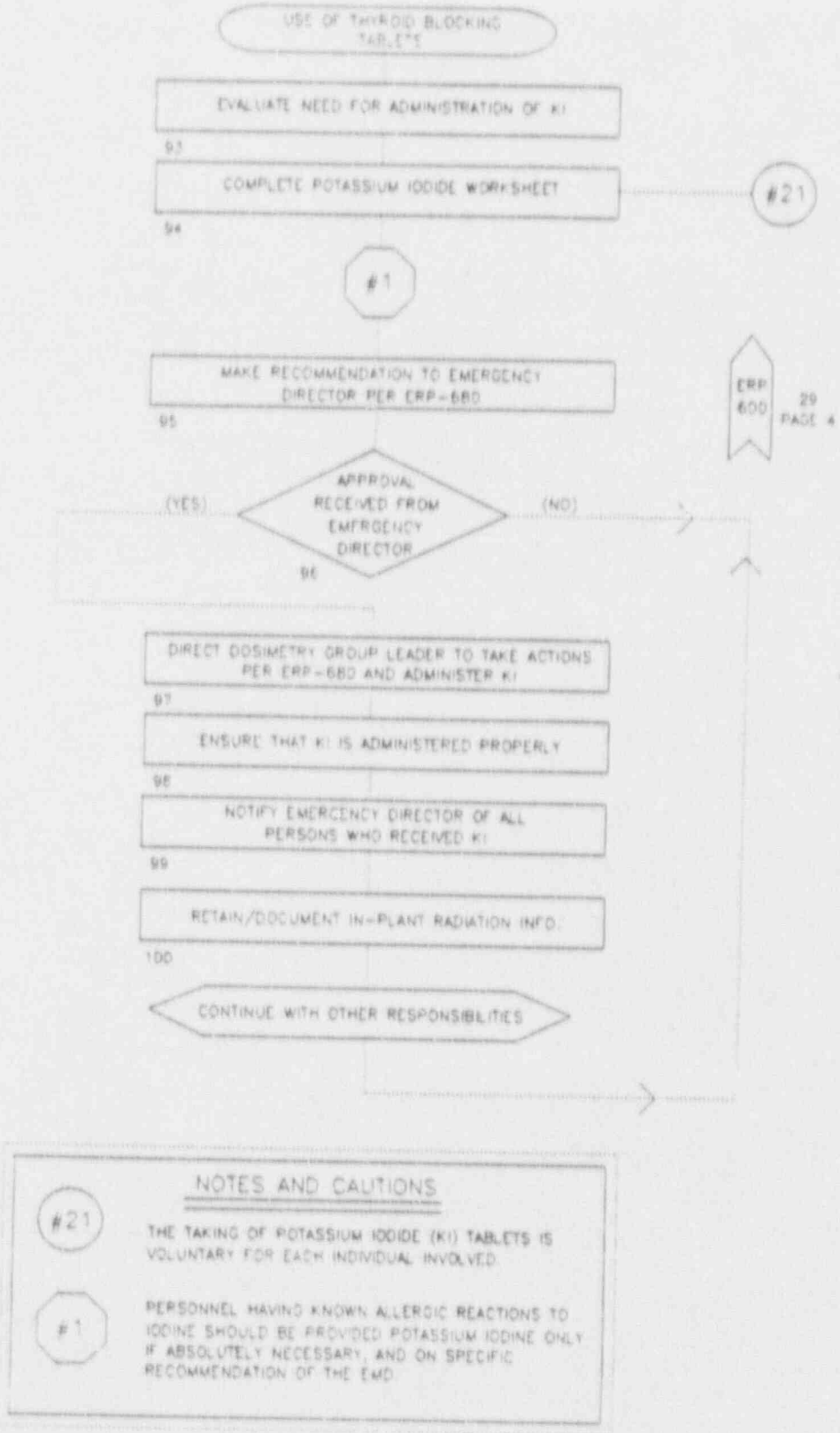
PERSONNEL SAFETY TEAM LEADER (PSTL) FLOW CHART

(Page 11 of 14)



ATTACHMENT 1
PERSONNEL SAFETY TEAM LEADER (PSTL) FLOW CHART

(Page 12 Of 14)



NOTES AND CAUTIONS

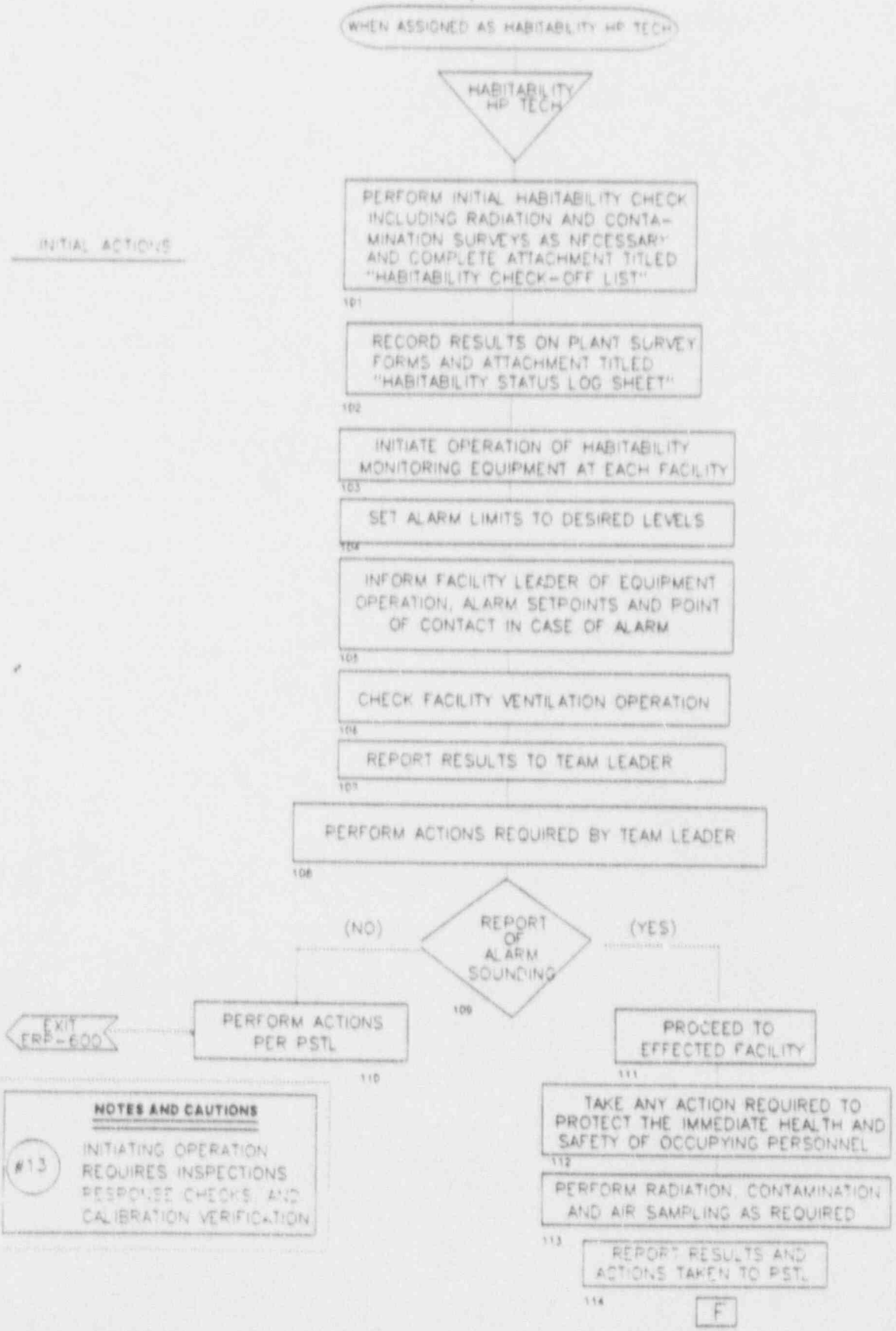
#21 THE TAKING OF POTASSIUM IODIDE (KI) TABLETS IS VOLUNTARY FOR EACH INDIVIDUAL INVOLVED.

#1 PERSONNEL HAVING KNOWN ALLERGIC REACTIONS TO IODINE SHOULD BE PROVIDED POTASSIUM IODINE ONLY IF ABSOLUTELY NECESSARY, AND ON SPECIFIC RECOMMENDATION OF THE EMD.

ATTACHMENT 1

PERSONNEL SAFETY TEAM LEADER (PSTL) FLOW CHART

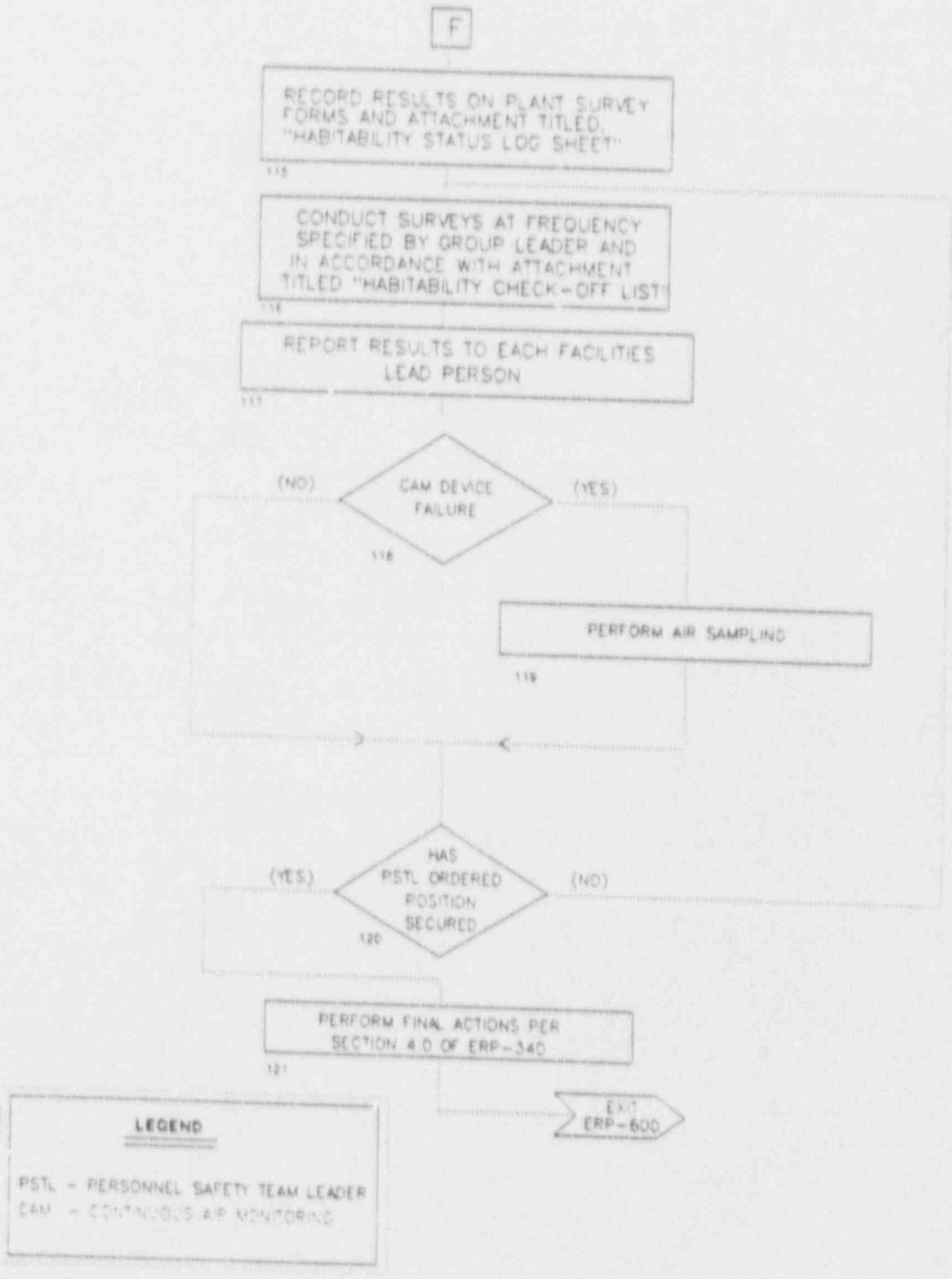
(Page 13 of 14)



ATTACHMENT 1

PERSONNEL SAFETY TEAM LEADER (PSTL) FLOW CHART

(Page 14 of 14)



ATTACHMENT 2

HABITABILITY CHECK-OFF LIST

HP Technician:_____ Date:_____

Instructions: Perform initial steps and note time completed. Perform periodic steps and log on attachment titled, "Habitability Status Log Sheet".

	TIME
1. Perform initial radiation contamination surveys in TSC as necessary	_____
2. Activate/verify continuous air monitoring device operability (1st Floor)	_____
3. Activate/verify continuous air monitoring device operability (3rd Floor)	_____
4. Verify ventilation in recirculation mode	_____
5. Periodically check air-handler filters for loading and break-through	
6. Periodically perform contamination surveys at entrance to building and at the TSC entrance.	
7. Perform air samples if continuous air monitoring device is inoperable	

ATTACHMENT 3

HABITABILITY STATUS LOG SHEET

INSTRUCTIONS:

Provide updated logsheets to PSTL and indicate type as General Area (GA) or Specific (S). Identify Specific areas in remarks if different from General Area.

			SURVEY RESULTS		AIRBORNE ACTIVITY (uCi/cc)				
TYPE	TIME	LOCATION	RADIATION EXPOSURE (mR/hr)	CONTAMINATION (dpm/100 cm^2)	PARTICULATE	IODINE	NOBLE GAS	MPC FRACTION PARTICULATE AND IODINE	REMARKS

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY RESPONSE PROCEDURE

ERP-670 EMERGENCY RADIATION EXPOSURE GUIDELINES AND CONTROLS

1.0 RESPONSIBILITIES

1.1 The Emergency Director (ED) is responsible for authorizing exposure exceeding PBAPS administrative dose control levels. This is a non-delegable responsibility of the ED.

1.2 The Personnel Safety Team Leader (PSTL) is responsible for evaluating the proposed exposures in excess of PBAPS administrative dose control limits and providing a recommendation to the ED.

1.3 The individual authorized for emergency radiation exposure is responsible for completing Section B of Attachment titled, "Emergency Exposure Authorization Form".

2.0 INITIAL ACTIONS

NOTE: THIS PROCEDURE APPLIES IN CASES WHERE EXPOSURE IS INTENDED TO EXCEED ADMINISTRATIVE DOSE CONTROL LEVELS DURING DECLARED EMERGENCIES.

NOTE: EMERGENCY WORKERS MAY RECEIVE EMERGENCY EXPOSURE IN PERFORMING THE FOLLOWING TASKS:

A. REMOVAL OF INJURED PERSONS/REDUCTION OF INJURY
B. UNDERTAKING CORRECTIVE ACTIONS TO MITIGATE AN EMERGENCY
C. PERFORMING ASSESSMENT ACTIONS
D. PROVIDING FIRST AID/LIFESAVING ACTIONS
E. PERFORMING PERSONNEL DECONTAMINATION
F. PROVIDING AMBULANCE SERVICE
G. PROVIDING MEDICAL TREATMENT SERVICES

NOTE: ALTHOUGH IT IS PREFERABLE TO PERFORM AND DOCUMENT THESE STEPS PRIOR TO THE EXPOSURE, THE ED MAY VERBALLY AUTHORIZE THE EXPOSURE AND COMPLETE THE DOCUMENTATION AT A LATER TIME.

2.1 The PSTL shall:

2.1.1 Consider/examine alternatives to the proposed tasks in order to minimize radiation exposures.

2.1.2 Evaluate the consequences of not performing the proposed tasks against the health risks associated with the proposed exposure, and advise the ED accordingly.

2.1.3 IF estimated exposures exceed Administrative Dose Control Levels and do not exceed NRC Quarterly Limits, THEN consider completion of Attachment titled, "Emergency Dose Extension Form" and request ED approval.

2.1.4 IF probable radiation exposures are estimated to exceed the NRC Quarterly Limits
THEN A. Verify that estimated exposures shall not exceed the limits specified in Appendix 1.
B. Complete section F of Attachment titled, "Emergency Exposure Authorization Form".

2.1.5 Verify, utilizing appropriate resources, that the personnel assigned to perform the task:

A. Are aware of the potential biological effects associated with the requested emergency exposure, as shown on Attachment titled, "Potential Biological Effects Associated With Emergency Exposure Guidelines"

B. Are not (a) fertile female(s).

C. Have not previously received an emergency exposure.

D. Consider themselves in good general health.

E. Are technically qualified to perform the assigned task.

F. Are volunteers.

2.1.6 Complete Section A of Attachment titled, "Emergency Exposure Authorization Form".

2.1.7 Provide Attachment titled, "Emergency Exposure Authorization Form" together with any recommendation to the ED.

2.1.8 Ensure that all reasonable precautions for minimizing the radiological consequences of the emergency action are taken, (i.e., protective clothing, respiratory protection, thyroid blocking agents, etc.).

2.1.9 Provide briefing or delegate responsibility for briefing individuals to receive emergency exposure which shall include:

a. The situation and reasons why the emergency exposure is necessary.

b. Informing individuals that the exposure is voluntary.

c. The biological consequences of the exposure.

d. Actions or steps to minimize the exposure.

e. Instructing personnel not to enter any area where dose rates are unknown or unmeasurable with dose rate instruments.

f. Instructing personnel to sign Section C of Attachment titled, "Emergency Exposure Authorization Form".

2.2 The individual, to receive the emergency exposure authorization, shall complete Section C of Attachment titled, "Emergency Exposure Authorization Form".

3.0 FOLLOW-UP ACTIONS

3.1 The PSTL shall:

3.1.1 Ensure that each exposure incident resulting in a dose greater than NRC quarterly limits, is brought to the attention of the Medical Director using the guidance of Attachment titled, "Criteria for Medical Evaluation in Case of Emergency Exposure".

3.1.2 Implement the direction of the Medical Director regarding subsequent radiological evaluations.

3.1.3 Ensure that emergency exposure data is provided for incorporation into the individual's exposure record in accordance with plant procedures.

3.1.4 Evaluate or obtain technical assistance from the DATL on the need for follow-up activities such as bioassay dosimetry studies.

3.1.5 Ensure that appropriate supervisory personnel are aware of the exposure restrictions placed on these individuals, for current and subsequent quarters.

3.1.6 Ensure that all sections of Attachment titled, "Emergency Exposure Authorization Form" have been completed.

3.1.7 Ensure all reports required by 10CFR20.403 and 20.405 have been completed and forwarded to Nuclear Generation Division, Nuclear Services, Engineer-In-Charge, Licensing, for submittal to the NRC.

3.1.8 Ensure exposure data is reported to the individual.

4.0 FINAL CONDITIONS

Not applicable.

5.0 ATTACHMENTS AND APPENDICES

5.1 Attachment 1 - Emergency Radiation Exposure Guidelines and Controls

5.2 Attachment 2 - Emergency Exposure Authorization Form

5.3 Attachment 3 - Criteria for Medical Evaluation in Case of Emergency Exposure

5.4 Attachment 4 - Potential Biological Effects Associated With Emergency Exposure Guidelines

5.5 Attachment 5 - Emergency Dose Extension Form

5.6 Appendix 1 - Emergency Exposure Guidelines

6.0 SUPPORTING INFORMATION

6.1 PURPOSE

The purpose of this procedure is to provide guidelines and administrative controls for radiation exposures in excess of PBAPS administrative dose control levels during activities involving: removal of injured persons/reduction of injury, undertaking corrective actions to mitigate an emergency, performing assessment actions, providing first aid/life saving actions, performing personnel decontamination, providing ambulance service, or providing medical treatment services.

6.2 CRITERIA FOR USE

This procedure may be activated at the Unusual Event, Alert, Site Emergency or General Emergency event classification, or at the discretion of the ED. This procedure applies when emergency response actions undertaken in accordance with Step 6.1 are expected to result in radiation exposure in excess of PBAPS administrative dose control levels (A-106, "Dosimetry Program". Emergency exposures in excess of 10CFR20 limits (refer to Appendix 1) are not dependent on whether a NRC Form 4 has been executed.

6.3 REFERENCES

6.3.1 Biological Effects of Ionizing Radiation III, National Academy of Science, National Research Council

6.3.2 Code of Federal Regulations, Title 10, Energy, Part 20.403, Notification of Incidents

6.3.3 NUREG-0654, Criteria for Preparation and Evaluation of Emergency Response Plans and Preparedness in Support of Nuclear Power Plants

6.3.4 Peach Bottom Atomic Power Station (PBAPS) Emergency Plan

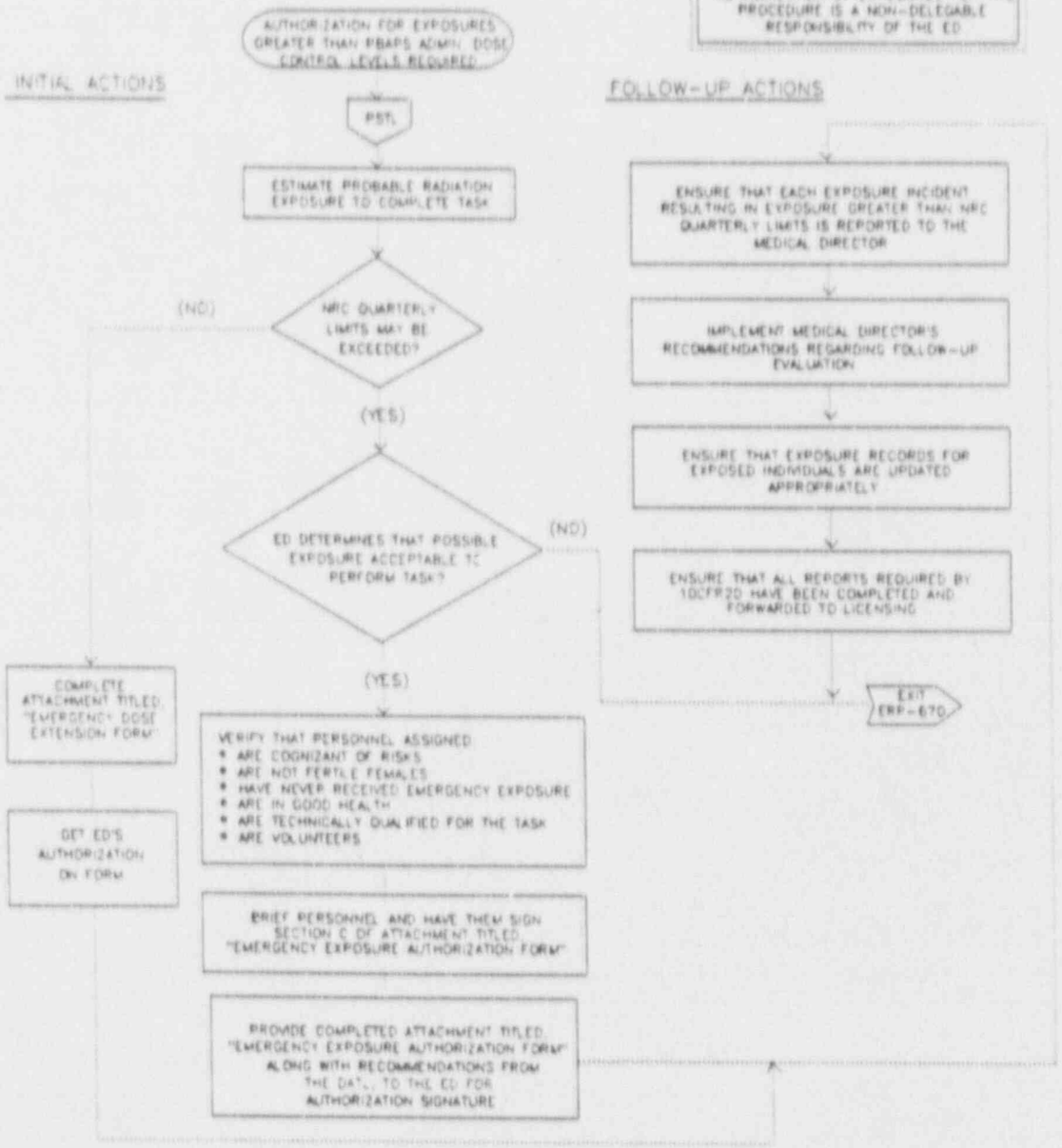
6.3.5 A-106, "Dosimetry Program"

6.3.6 USA Environmental Protection Agency, 520/2-75-001 Table 2.1

ATTACHMENT 1
EMERGENCY RADIATION EXPOSURE GUIDELINES AND CONTROLS
FLOW CHART
(Page 1 of 1)

NOTES AND CAUTIONS

AUTHORIZATION OF EXPOSURES PER THIS PROCEDURE IS A NON-DELEGABLE RESPONSIBILITY OF THE ED



ATTACHMENT 2
EMERGENCY EXPOSURE AUTHORIZATION FORM
(Page 1 of 3)

Section A

1. Name (to receive exposure):_____

2. Soc. Sec. No:_____ 3. Sex:_____ 4. Age:_____

5. Individual TLD No.:_____

Employer/Work Group:_____/_____

6. Task(s) to be performed:_____

Location:_____

Estimated exposure:_____

_____

7. Date of authorization:_____ Authorized limit:_____ Rem

Authorized working time_____minutes

8. Conditions

	INITIAL VERIFICATION
Individual is a volunteer and technically qualified for assigned task(s).	_____
Individual is familiar with radiological consequences of exposure.	_____
Fertile females should not take part.	_____
Individual has not received an emergency exposure before	_____
Individual considers themselves in good general health.	_____

Section B

Basis for Authorization:

Life Saving Action_____

Mitigating Action_____

9. ED:_____(Signature)

Section C (not applicable for exposures not exceeding NRC quarterly limits)

I have been briefed in the radiological consequences of the proposed emergency exposure, and I have volunteered to perform the emergency measures during which I will receive the emergency exposure.

Signature:_____Date:_____

ATTACHMENT 2

EMERGENCY EXPOSURE AUTHORIZATION FORM
(Page 2 of 3)

Section D - Exposure Evaluation

1. Dose equivalent assigned for entry:_____

2. TLD/DRD results:_____

3. Bioassay results:_____

4. Medical evaluation/action:_____

Doctor:_____ Date/Time contacted:_____

5. PSTL:_____ Date:_____

Section E

1. Disposition (allow additional exposure, restricted access, etc.):

2. Individual assigned to follow up report(s):_____

3. PSTL:_____ Date:_____

ATTACHMENT 2

EMERGENCY EXPOSURE AUTHORIZATION FORM
(Page 3 of 3)

Section F - Emergency Exposure Evaluation Worksheet

Determine the following factors:

Access time:_____ Dose rate in access area:_____

Work time:_____ Dose rate while working: _____
(whole body)

Extremity dose rate:_____

Return time:_____ Dose rate to return:_ _____

Will high levels of external contamination be present?_____

Airborne radioactive materials present:_____

Type of respiratory protection:_____Protection factor:_____

What ALARA steps to be taken?_____

_____

Estimate - Dose to access and return:_____

External - Dose to work:_____Extremity dose:_____

Total external:_____

Internal:

$$\frac{\text{MPCs present}}{\text{Protection factor}} \times \text{work time (hours)} = \frac{\qquad}{\text{(MPC hours exposure)}}$$

I recommend the exposure be authorized

_____ Date:_____
(PSTL)

ATTACHMENT 3

CRITERIA FOR MEDICAL EVALUATION IN CASE OF EMERGENCY EXPOSURE

The following criteria should be applied as a minimum to any individual potentially exposed to excessive radiation levels:

1. 10 Rem whole body

2. 30 Rem thyroid

3. 60 Rem skin

4. 150 Rem extremity

| 5. Internal deposition equivalent to one organ burden

| The details of the exposure incident shall be brought to the attention of the | PECo MD. The MD shall determine the need, extent, and nature of any clinical, biological, or biochemical examinations, or the need for expert consultation.

ATTACHMENT 4

POTENTIAL BIOLOGICAL EFFECTS ASSOCIATED WITH EMERGENCY EXPOSURE GUIDELINES

Projected Whole Body Dose	Biological Effects Summary	Somatic Long-Term Risks
5.0 Rem	No detectable ill effects.	An additional 0.135 percent (or 13.5 additional cases in 10,000) chance of contacting cancer. (See Note 1)
25 Rem	Slight transient reduction in white blood cells. (See Note 2)	An additional 0.75 percent (or 75 additional cases in (10,000 chance of contacting cancer. (See Note 1)
75 Rem	May experience one or more of the following: nausea, anorexia, vomiting, fatigue.	An additional 2.25 percent (or 225 additional cases in (10,000 chance of contacting cancer. (See Note 1)

Note 1: The normal incidence of cancer is approximately 2500 in 10,000 (or 25%). The long term risks indicate potential increases above the normal incidence, if 10,000 people received the projected whole body dose.

Note 2: The acute effects are similar over the range from 25 Rem to 75 Rem, but are more likely to be experienced as exposures increase.

ATTACHMENT 5

EMERGENCY DOSE EXTENSION FORM

Due to the emergency condition, approval is being given to waive the normal administrative dose control limits and dose extension process of A-106, "Dosimetry Program".

This dose extension approval allows emergency response personnel to receive up to the Federal limits of 10CFR20 for emergency response on the affected unit.

APPROVALS

Personnel Safety Team Leader	Date/Time
Emergency Director	Date/Time

APPENDIX 1

EMERGENCY EXPOSURE GUIDELINES

Function	Projected Whole Body Dose	Thyroid Dose	Authorized by
1. Life Saving and Reduction of Injury	75 Rem*	375 Rem	Emergency** Director
2. Operation of Equipment to Mitigate an Emergency	25 Rem*	125 Rem	Emergency** Director
3. Protection of Health and Safety of the Public	5 Rem	25 Rem	Emergency Director
4. Other Emergency Activities	10CFR20 Limits	10CFR20 Limits	Emergency Director
5. Re-Entry/Recovery Activities	Administrative Guidelines	Administrative Guidelines	N/A

NRC QUARTERLY LIMITS (10CFR20)

	REM
Whole body, head and trunk, blood forming organs, lens of eyes, gonads	1 1/4****
Skin of whole body	7 1/2***
Hands and forearms, feet and ankles	18 3/4***
Inhalation (thyroid)	520 MPC-hours integrated exposure

* References: EPA-520/1-75-001, Table 2.1
** Such exposure shall be on a voluntary basis
*** There are no separate emergency exposure guidelines, use whole body limits
**** 3 Rem with NRC - 4 form completed

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY RESPONSE PROCEDURE

ERP-680 CONTROL OF THYROID BLOCKING POTASSIUM IODIDE (KI) TABLETS

1.0 RESPONSIBILITIES

1.1 The Personnel Safety Team Leader (PSTL) is responsible for recommending when potassium iodide (KI) administration is warranted, advises the Emergency Director (ED), and directs the administration of the tablets.

1.2 The Personnel Dosimetry, Bioassay and Respiratory Protection Group Leader is responsible for administration of the KI tablets.

1.3 The ED is responsible for authorizing the use of KI.

****
* CAUTION: *
* *
* 1. THE TAKING OF KI TABLETS IS STRICTLY VOLUNTARY FOR EACH *
* INDIVIDUAL. HOWEVER, ONCE ADMINISTERED, DOSAGE SHOULD CONTINUE *
* FOR A MINIMUM OF THREE DAYS BUT, PREFERABLY FOR 10 CONSECU- *
* TIVE DAYS, TO PROVIDE THE FULL PROTECTIVE EFFECT. *
* *
* 2. PERSONNEL HAVING KNOWN ALLERGY REACTIONS TO IODINE SHALL NOT *
* BE ADMINISTERED KI UNLESS ABSOLUTELY NECESSARY AND ONLY WITH *
* SPECIFIC MEDICAL DIRECTION. *
* *
* 3. KI IS MOST EFFECTIVE IF ADMINISTERED WITHIN 1 HOUR OF EXPECTED *
* EXPOSURE OR SHORTLY AFTER EXPOSURE BEGINS. USE SEVERAL HOURS BEFORE *
* EXPECTED EXPOSURE WILL SIGNIFICANTLY REDUCE EFFECTIVENESS OF *
* PROTECTIVE EFFECT. *
****

2.0 INITIAL ACTIONS

NOTE: ATTACHMENT TITLED, "CONTROL OF THYROID BLOCKING POTASSIUM IODIDE (KI) TABLETS FLOW CHART", MAY BE USED AS A GUIDE FOR THE FOLLOWING ACTIONS.

2.1 The ED shall:

2.1.1 Review the recommendation of the PSTL that KI administration will be beneficial in reducing radiation dose commitment to the thyroid gland.

2.1.2 Authorize KI administration based on PSTL and MD recommendations by signing attachment titled, "KI Authorization".

2.2 The PSTL shall:

2.2.1 Determine the need for administering KI by completing attachment titled, "Potassium Iodide Worksheet", for each individual to be evaluated.

2.2.2 Determine if KI administration will be beneficial based upon a projected thyroid radiation dose commitment exceeding the range of 10 to 30 rem (700-2000 MPC-hours).

2.2.3 Recommend to the ED that KI administration will be beneficial in reducing projected thyroid radiation dose commitment.

2.2.4 Request, from the ED, a decision to authorize administration of KI.

2.2.5 Upon notification that the ED has approved administration of KI, provide the names of each individual approved for KI administration to the Dosimetry, Bioassay, and Respiratory Group Leader.

2.2.6 Direct the Dosimetry, Bioassay and Respiratory Group Leader to administer the KI tablets using attachment titled, "KI Authorization" and log this information on attachment titled, "Potassium Iodide Administration Record Form".

2.2.7 Provide the names of each individual approved for KI administration to the appropriate group leaders and direct them to send personnel to the Dosimetry, Bioassay and Respiratory Protection Group Leader.

NOTE: NO CREDIT IS GIVEN OR ALLOWED FOR KI USE IN EVALUATION FOR COMPLIANCE WITH THE NRC LIMIT.

2.2.8 Consider whether planned exposure to airborne radioiodines may exceed the NRC quarterly limit of 520 MPC hours.

2.2.9 If radioiodine exposure may exceed the NRC quarterly limit, advise the ED that approval will be necessary in accordance with ERP-670, "Emergency Radiation Exposure Guidelines and Controls".

2.3 When directed by the PSTL and when attachment titled "KI Authorization" is received, the Personnel Dosimetry, Bioassay and Respiratory Protection Group Leader shall:

NOTE:

ADMINISTRATION OF KI MAY BE DELEGATED BY THE DOSIMETRY, BIOASSAY AND RESPIRATORY GROUP LEADER TO INDIVIDUALS AT OTHER LOCATIONS IF ACCESS OR TIME CONSIDERATIONS DICTATE BY USE OF ATTACHMENT TITLED, "KI AUTHORIZATION".

2.3.1 Assemble the personnel to be treated.

2.3.2 Obtain an adequate supply of tablets from:

a. Medical Room (Radwaste Building 135' El.)
b. Dispensary
c. Unit #1 Equipment Room

2.3.3 Check the expiration date on each bottle.

2.3.4 If tablets have expired, obtain a supply from alternate locations.

2.3.5 Determine if any individuals are aware of an allergy to iodine.

2.3.6 Discuss cases of individuals with known allergy to iodine with the PSTL. If possible, these individuals should not be assigned to duties where radioiodine exposure is likely.

2.3.7 Brief personnel taking KI concerning the following and obtain their signature on attachment titled, "Potassium Iodide Consent Form".

2.3.7.1 Possible side effects:

a. skin rashes
b. swelling of parotid glands ("like mumps")
c. metallic taste in mouth
d. burning mouth and throat
e. sore teeth and gums
f. symptoms of a head cold
g. stomach upset
h. diarrhea

2.3.7.2 That taking KI is strictly voluntary for each individual.

2.3.7.3 That an allergic reaction may be experienced by a few people. Symptoms could be:

a. fever and joint pain
b. swelling of parts of the face and body
c. at times, severe shortness of breath which requires immediate medical attention.

2.3.7.4 That side effects noticed shall be reported to the Dosimetry, Bioassay and Respiratory Protection Group Leader immediately.

2.3.8 Have each individual sign a copy of attachment titled, "Potassium Iodide Consent Form", unless one is already on file.

2.3.9 Administer tablets to personnel who already have been exposed to radioiodine first or, preceding exposure, preferably no more than 1 hour before expected exposure.

2.3.10 Provide each individual receiving KI with a copy of attachment titled, "Instruction and Record Sheet for Persons Receiving KI", and instruct them to report back each day for follow-up dosages.

2.3.11 Complete the information required for each person on attachment titled, "Potassium Iodide Administration Form". Use this information to administer follow-up dosages.

2.3.12 Inform the PSTL when completed.

3.0 CONTINUING ACTIONS

3.1 The PSTL shall:

3.1.1 Notify the ED in writing of all persons who received KI.

3.1.2 Ensure that the KI is administered in the proper dosage and for the proper number of doses as described on the attachment titled, "Instruction and Record Sheet for Persons Receiving KI", or as directed by the PECo Medical Director.

4.0 FINAL CONDITIONS

4.1 Thyroid uptake of iodine is evaluated and resultant radiation doses estimated and entered into personnel monitoring records.

4.2 Reports and evaluations are completed and any exposure in excess of the applicable limits in 10CFR20.101 et. seq. are reported to the NRC pursuant to 10CFR20.405.

4.3 Exposure data is reported to the individual pursuant to 10CFR19.13.

5.0 ATTACHMENTS

5.1 Attachment 1 - "Control of Thyroid Blocking Potassium Iodide (KI) Tablets Flow Chart"

5.2 Attachment 2 - "Potassium Iodide Worksheet"

5.3 Attachment 3 - "Potassium Iodide Administration Record Form"

5.4 Attachment 4 - "Potassium Iodide Consent Form"

5.5 Attachment 5 - "Instruction and Record Sheet for Persons Receiving KI"

5.6 Attachment 6 - "KI Authorization"

6.0 SUPPORTING INFORMATION

6.1 PURPOSE

This procedure provides guidelines for administration of potassium iodide (KI) as a radio-protective drug to emergency workers for protection against airborne radioiodine.

6.2 CRITERIA FOR USE

This procedure may be utilized at the Unusual Event, Alert, Site Emergency or General Emergency event classification or at the discretion of the ED whenever anticipated thyroid doses to emergency workers from radioiodines may exceed approximately 10-30 rem.

6.3 REFERENCES

6.3.1 Code of Federal Regulations, Title 10, Energy, Parts 19 and 20

6.3.2 NRCP, Report No. 55, Protection of the Thyroid Gland in the Event of Exposure

6.3.3 NUREG 0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants

6.3.4 Peach Bottom Atomic Power Station (PBAPS) Emergency Plan, Section 6.7.2.3, Use of Radioprotective Drugs

ATTACHMENT 1

CONTROL OF THYROID BLOCKING POTASSIUM IODIDE (KI) TABLETS

FLOW CHART

(Page 1 of 4)

WHEN ASSIGNED AS HABITABILITY HP TECH

FLOW CHART STEPS BEGIN
- PSTL - 1
- ED - 28
- DBRGL - 15
- MD - 31

#1

#2

#3

PSTL

INITIAL ACTIONS

COMPLETE ATTACHMENT TITLED, "POTASSIUM IODIDE WORKSHEET"

1

DETERMINE IF KI ADMINISTRATION WILL BE BENEFICIAL

2

A

LEGEND

DBRGL - DOSIMETRY BIOASSAY & RESPIRATORY PROTECTION GROUP LEADER

PSTL - PERSONNEL SAFETY TEAM LEADER

ED - EMERGENCY DIRECTOR

NOTES AND CAUTIONS

#1 THE TAKING OF KI TABLETS IS STRICTLY VOLUNTARY FOR EACH INDIVIDUAL INVOLVED. HOWEVER, ONCE ADMINISTERED, DOSAGE SHOULD CONTINUE FOR A MINIMUM OF THREE DAYS BUT PERFERABLY FOR 10 CONSECUTIVE DAYS TO PROVIDE THE FULL PROTECTIVE EFFECT.

#2 PERSONNEL HAVING KNOWN ALLERGY REACTIONS TO IODINE SHALL NOT BE ADMINISTERED POTASSIUM IODIDE UNLESS ABSOLUTELY NECESSARY AND ONLY WITH SPECIFIC MEDICAL DIRECTION.

#3 KI IS MOST EFFECTIVE IF ADMINISTERED WITHIN 1 HOUR OF EXPECTED EXPOSURE OR SHORTLY AFTER EXPOSURE BEGINS. USE SEVERAL HOURS BEFORE EXPECTED EXPOSURE WILL SIGNIFICANTLY REDUCE EFFECTIVENESS OF PROTECTIVE EFFECT

ATTACHMENT 1
CONTROL OF THYROID BLOCKING POTASSIUM IODIDE (KI) TABLETS
FLOW CHART
(Page 2 of 4)

A

LEGEND

DBRGL - DOSIMETRY BIOASSAY & RESPIRATORY PROTECTION GROUP LEADER

ED - EMERGENCY DIRECTOR

RECOMMEND KI USE TO THE ED
3

REQUEST AUTHORIZATION TO ADMINISTER KI FROM ED
4

WHEN AUTHORIZATION IS RECEIVED FROM ED, PROVIDE NAMES TO DBRGL
5

DIRECT DBRGL TO ADMINISTER KI TABLETS AND AND COMPLETE ATTACHMENT TITLED, "POTASSIUM IODIDE ADMINISTRATION RECORD FORM"
6

NOTIFY APPROPRIATE GROUP LEADERS AND DIRECT PERSONNEL TO THE DBRGL
7

CONSIDER WHETHER PLANNED EXPOSURE TO AIRBORNE RADIOIODINESS MAY EXCEED THE NRC QUARTERLY LIMIT
8 ..... #9

EXPOSURE MAY EXCEED 520 MPC HOURS
9

ADVISED ED THAT APPROVAL PER ERP-670 NECESSARY
10

FOLLOW-UP ACTIONS

PROVIDE THE MD AND ED A LIST OF PERSONNEL WHO RECEIVED KI
11

ENSURE THAT THE KI IS ADMINISTERED PROPERLY
12

PERFORM FINAL ACTIONS PER SECTION 4.0
13

EXIT ERP-680

NOTES AND CAUTIONS

#9 NO CREDIT IS GIVEN OR ALLOWED FOR KI USE IN EVALUATION FOR COMPLIANCE WITH THE NRC LIMIT.

ATTACHMENT 1
CONTROL OF THYROID BLOCKING POTASSIUM IODIDE (KI) TABLETS
FLOW CHART
(Page 3 of 4)

DBRGL DIRECTED TO ADMINISTER KI

DBRGL

INITIAL ACTIONS

LEGEND

DBRGL – DOSIMETRY BIOASSAY & RESPIRATORY PROTECTION GROUP LEADER

PSTL – PERSONNEL SAFETY TEAM LEADER

NOTES & CAUTIONS

(#10) ADMINISTRATION OF KI MAY BE DELEGATED BY THE DBRGL TO INDIVIDUALS AT OTHER LOCATIONS IS ACCESS OR TIME CONSIDERATIONS DICTATE

ASSEMBLE THE PERSONNEL TO BE TREATED ..... (#10)

14

OBTAIN AN ADEQUATE SUPPLY OF TABLETS

15

CHECK THE EXPIRATION DATE

16

IF EXPIRED, OBTAIN FROM ALTERNATE LOCATIONS

17

DETERMINE IF INDIVIDUALS KNOW OF AN ALLERGY TO IODINE

18

DISCUSS CASES OF KNOWN ALLERGY WITH THE PSTL

19

BRIEF INDIVIDUALS TAKING KI ON:
- SIDE EFFECTS
- KI USE IS VOLUNTARY
- ALLERGIC REACTION SYMPTOMS
- REPORT SIDE EFFECTS TO DBRGL

20

HAVE EACH INDIVIDUAL SIGN A COPY OF ATTACHMENT TITLED, "POTASSIUM IODIDE CONSENT FORM"

21

FIRST ADMINISTER TABLETS TO PERSONNEL WHO HAVE BEEN EXPOSED

22

PROVIDE EACH INDIVIDUAL WITH ATTACHMENT TITLED, "POTASSIUM IODIDE ADMINISTRATION RECORD FORM"

23

INSTRUCT INDIVIDUAL TO REPORT BACK EACH DAY

24

COMPLETE THE INFORMATION ON ATTACHMENT TITLED, "POTASSIUM IODIDE ADMINISTRATION RECORD FORM"

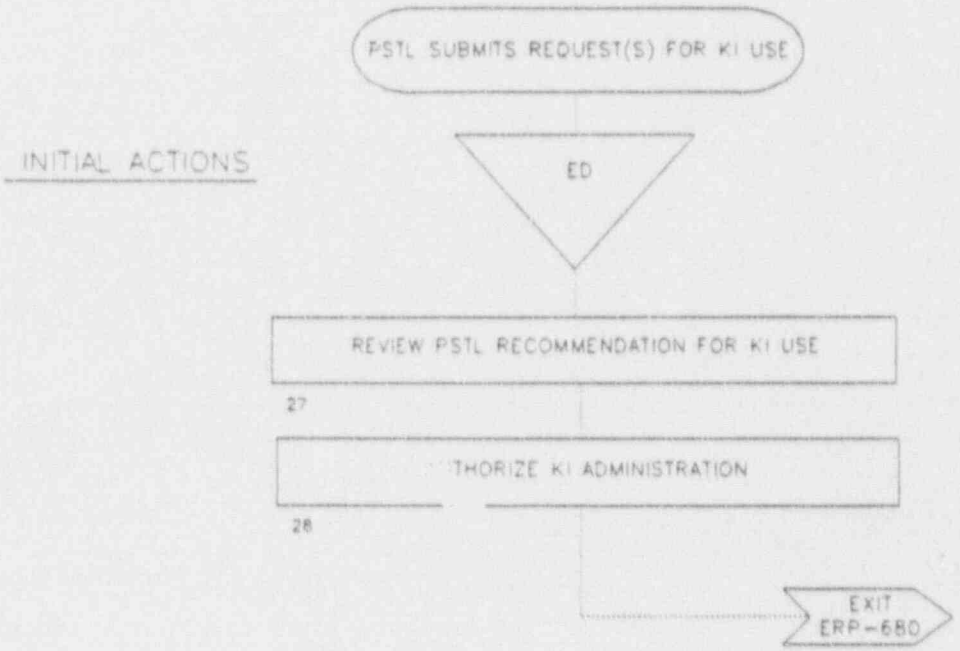
25

INFORM PSTL WHEN TASK COMPLETED

26

EXIT ERP-680

ATTACHMENT 1
CONTROL OF THYROID BLOCKING POTASSIUM IODIDE (KI) TABLETS
FLOW CHART
(Page 4 of 4)



ATTACHMENT 2

POTASSIUM IODIDE WORKSHEET

Date:_____ Time:_____ Plant Phone:_____
Home Phone:_____
Name:_____ Emergency Contact (Name):_____
Phone:_____

Payroll Number:_____ or S.S. Number:_____

Area to be entered:_____
I-131 Concentration (uCi/cc) in affected area:_____
Respiratory equipment to be used:

Type	Protection Factor	
Air purifying*	1	_____
Atmosphere supplying	2,000	_____
SCBA	10,000	_____
NONE	1	_____

Previous iodine exposure during this emergency:_____MPC-hrs(D)

Perform evaluation:

Estimated iodine concentration:_____MPC (A)
Task time:_____Hours (B)
Protection factor:_____ (C)

Total thyroid:

$$\text{Exposure} = \frac{A\_\_\_\_ \times B\_\_\_\_}{C\_\_\_\_} + D\_\_\_\_$$

Exposure = _____ MPC-Hrs

If exposure exceeds 700 MPC hours:

a. Consider recommendation to administer KI
b. Notify ED that task will require emergency exposure authorization.

*Use combination charcoal-filter type canister (GMR-I) when iodine may be present and use of air-supply type devices is not feasible.

Calculation completed by:_____
(Signature)

NOTE: EXPOSURE AT THE MPC FOR AIRBORNE IODINES WILL RESULT IN ACCUMULATION OF THYROID DOSE COMMITMENT AT ABOUT 15 MILLIREM PER HOUR. THE NRC LIMIT IS REACHED AT 520 MPC-HOURS OF INTEGRATED EXPOSURE. EXPOSURES ABOVE THIS VALUE AFTER A PROTECTION FACTOR IS APPLIED REQUIRE ED APPROVAL.

ATTACI 3
POTASSIUM IODIDE ADMI. ,TRATION RECORD FORM
(Page ___ of ___)

NAME	PAYROLL OR SS NUMBER	EMPLOYER	DATE ADMINISTERED/INITIAL									

INSTRUCTION: Enter Name, Payroll Number, Employer; for each date that a tablet is administered, enter the date and initial.

ATTACHMENT 4

POTASSIUM IODIDE CONSENT FORM

I _____ volunteer to receive 130 milligrams of the thyroid blocking agent potassium iodide (KI) per day for the next 10 days. I have been informed by a representative of PECo that this drug will block the absorption of radioiodine by my thyroid and thereby reduce the exposure to radiation of the thyroid; that potassium iodide does not reduce the uptake of other radioactive materials by the body; nor, does it provide protection against exposure from external radiation. I also understand that there may be some side effects upon taking this drug.

Skin rashes
Swelling of parotid glands ("like mumps")
Metallic taste in mouth
Burning mouth and throat
Sore teeth and gums
Symptoms of a head cold
Gastric upset
Diarrhea

An allergic reaction may be experienced by a few people. Symptoms could be fever and joint pain, or swelling of parts of the face and body and, at times, severe shortness of breath requiring immediate medical attention.

By signing below, I acknowledge that I am not aware of any allergy to iodine.

Signature _____

Date _____

ATTACHMENT 5

INSTRUCTION AND RECORD SHEET FOR PERSONS RECEIVING KI

Instructions:

Dosimetry Group Leader shall complete Part A.
Individual administering KI shall complete applicable section of Part B.
Whole body Counter Tech shall complete applicable section of Part B.

PART A:

Name: _____

Payroll/
SS Number: _____

****
* CAUTION: *
* *
* IF YOU FEEL SICK, REPORT IMMEDIATELY TO THE PERSONNEL DOSIMETRY, *
* BIOASSAY AND RESPIRATORY PROTECTION GROUP LEADER. *
****

You have just received 130 mgs. of the thyroid blocking agent KI. In order to be most effective you should receive an additional nine (9) doses over the next 9 days. Each day for the next 9 days, take this form and report to the _____ for a thyroid count and another KI pill.

PART B

	Date	130 mg KI Tablets Issued (Date, Time, Initials)	Thyroid Count Performed (Date, Time, Initials)
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Individual administering KI complete:

I acknowledge that I have been directed by PSTL with concurrence of ED and MD to administer KI to person listed above.

_____ _____ _____
Signature Date Time

ATTACHMENT 6

KI AUTHORIZATION
(Page 1 of 1)

To be used when administration of KI is necessary. When time or access considerations dictate this form may be transmitted by facsimile (telecopier).

TO: _____

POSITION: _____

DATE: _____ TIME: _____

You are authorized to administer KI in accordance with ERP-680 to the individuals named below.

Name	PECo ID# or SSN	Contractor Name (If available)

Approved PSTL _____ _____ _____
Signature Date Time

Approved ED _____ _____ _____
Signature Date Time

Person administering KI to complete:

I acknowledge that I have been directed by PSTL with approval of the ED to administer KI to persons listed above.

_____ _____ _____
Signature Date Time

EMERGENCY RESPONSE PROCEDURES
INDEX
PEACH BOTTOM ATOMIC POWER STATION

Number	Title	Sponsor Number	Review Date	Rev. No.	Revision Date
ERP-101	CLASSIFICATION OF EMERGENCIES	(000000)	05/16/90	8	12/31/91
ERP-110	EMERGENCY NOTIFIC ONS	(000000)	03/27/90	5	12/31/91
ERP-110 APPENDIX 1	EMERGENCY CLASSIFICATION NOTIFICATION TELEPHONE LIST FOR AN UNUSUAL EVENT OR ALERT	(000000)	06/22/90	20	12/31/91
ERP-110 APPENDIX 2	EMERGENCY CLASSIFICATION NOTIFICATION TELEPHONE LIST FOR A SITE EMERGENCY OR GENERAL EMERGENCY	(000000)	06/20/90	17	12/31/91
ERP-120	PARTIAL PLANT EVACUATION	(000000)	03/27/90	2	07/22/91
ERP-130	SITE EVACUATION	(000000)	03/27/90	4	07/22/91
ERP-140	TELEPHONE LISTS FOR EMERGENCY USE	(000000)	04/30/90	7	12/31/91
ERP-140 APPENDIX 1	EMERGENCY DIRECTOR (ED) (CALL IN 2)	(900000)	06/20/90	16	10/16/91
ERP-140 APPENDIX 2	TECHNICAL SUPPORT TEAM LEADER (TSTL)	(900000)	03/27/90	19	10/16/91
ERP-140 APPENDIX 3	DOSE ASSESSMENT TEAM LEADER (DATL)	(000000)	07/11/90	21	10/16/91
ERP-140 APPENDIX 4	CHEMISTRY SAMPLING & ANALYSIS TEAM LEADER (CSATL)	(000000)	03/16/90	14	10/16/91
ERP-140 APPENDIX 5	DAMAGE REPAIR TEAM LEADER (DRTL)	(000000)	03/16/90	13	10/16/91
ERP-140 APPENDIX 6	SECURITY TEAM LEADER (STL)	(000000)	03/16/90	12	10/16/91
ERP-140 APPENDIX 7	PERSONNEL SAFETY TEAM LEADER (PSTL)	(000000)	03/16/90	16	10/25/91
ERP-140 APPENDIX 8	COMPANY CONSULTANTS AND CONTRACTORS	(000000)	03/21/91	8	06/14/91

Number	Title	Sponsor Number	Review Date	Rev. No.	Revision Date
ERP-140 APPENDIX 9	NEARBY PUBLIC AND INDUSTRIAL USERS OF DOWNSTREAM WAT	(000000)	03/16/90	10	10/16/91
ERP-200	EMERGENCY DIRECTOR (ED)	(000000)	10/17/90	8	12/31/91
ERP-205	EMERGENCY RESPONSE COORDINATOR/TSC	(000000)	07/22/91	0	07/22/91
ERP-210	EMERGENCY RESPONSE MANAGER (ERM)	(000000)	10/17/90	3	10/17/90
ERP-215	PLANNING & SCHEDULING COORDINATOR (P&SC)	(000000)	03/27/90	0	06/02/88
ERP-220	OPERATIONS SUPPORT CENTER (OSC) OPERATIONS PERSONNEL	(000000)	03/27/90	4	08/14/91
ERP-230	OPERATIONS SUPPORT CENTER (OSC) ACTIVATION	(000000)	07/02/90	8	12/31/91
ERP-240	AUXILIARY OPERATIONS SUPPORT CENTER (AUX OSC) ACTIVATION -CANCELLED- NO REPLACEMENT	(000000)	08/01/88		
ERP-250	TECHNICAL SUPPORT CENTER (TSC) ACTIVATION	(000000)	09/12/90	9	12/31/91
ERP-260	EMERGENCY OPERATIONS FACILITY (EOF) ACTIVATION	(000000)	02/02/90	9	07/22/91
ERP-270	ALTERNATE EMERGENCY OPERATIONS FACILITY (ALT EOF) ACTIVATION	(000000)	09/12/90	2	09/12/90
ERP-300	DOSE ASSESSMENT TEAM LEADER (DATL)	(000000)	05/02/90	2	03/20/89
ERP-305	DOSE ASSESSMENT GOUP LEADER (DAGL)	(000000)	07/02/90	3	07/02/90
ERP-310	DOSE ASSESSMENT GROUP	(000000)	06/12/90	4	04/30/??
ERP-315	OPERATION OF THE PEACH BOTTOM COMPUTER DOSE ASSESSMENT SYSTEM	(000000)	05/11/90	5	12/31/..

Number	Title	Sponsor Number	Review Date	Rev. No.	Revision Date
ERP-316	CUMULATIVE POPULATION DOSE CALCULATIONS FOR AIRBORNE RELEASES - MANUAL METHOD CANCELLED - REPLACED BY ERP-315	( )	/ /	3	12/31/91
ERP-317	DETERMINATION OF PROTECTIVE ACTION RECOMMENDATIONS CANCELLED - REPLACED BY ERP-200 & ERP-101	( )	/ /	3	12/31/91
ERP-318	LIQUID RELEASE DOSE CALCULATIONS AT DOWNSTREAM WATER INTAKE FACILITIES	(000000)	09/11/90	1	08/29/88
ERP-319	LIQUID RELEASE DOSE CALCULATIONS FOR FISH INGESTION	(000000)	05/03/90	1	08/29/88
ERP-320	USE OF THE CONTAINMENT RADIATION MONITOR TO ESTIMATE RELEASE SOURCE TERM AND NOBLE GAS MONITOR READINGS CANCELLED - REPLACED BY ERP-315	( )	/ /	2	12/31/91
ERP-330	FIELD SURVEY GROUP LEADER (FSGL)	(000000)	09/06/90	5	09/06/90
ERP-340	FIELD SURVEY GROUP	(000000)	05/01/90	2	01/14/91
ERP-350	THYROID DOSE COMMITMENT USING TCS AIR SAMPLING SYSTEM	(000000)	04/18/90	0	04/18/90
ERP-400	CHEMISTRY SAMPLING AND ANALYSIS TEAM LEADER (CSATL)	(000000)	03/27/90	1	08/29/88
ERP-410	CHEMISTRY SAMPLING AND ANALYSIS TEAM	(000000)	03/27/90	1	08/29/88
ERP-500	SECURITY TEAM LEADER (STL)	(000000)	10/17/90	5	01/31/91

Number	Title	Sponsor Number	Review Date	Rev. No.	Revision Date
ERP-510	PERSONNEL ACCOUNTABILITY	(000000)	10/17/90	7	08/14/91
ERP-520	SECURITY TEAM ACTIVATION	(000000)	02/02/90	2	01/10/91
ERP-600	PERSONNEL SAFETY TEAM LEADER (PSTL)	(000000)	04/05/90	5	12/31/91
ERP-610	FIRST AID/SEARCH AND RESCUE GROUP	(000000)	10/12/90	4	12/31/91*
ERP-620	PLANT SURVEY GROUP	(000000)	04/05/90	5	08/20/91
ERP-630	DOSIMETRY, BIOASSAY, AND RESPIRATORY PROTECTION GROUP	(000000)	06/22/90	3	01/10/91
ERP-640	VEHICLE AND EVACUEE CONTROL GROUP	(000000)	04/05/90	2	01/14/91
ERP-650	TRANSPORT OF CONTAMINATED INJURY OFF-SITE	(000000)	09/06/90	3	09/06/90
ERP-660	ENTRY FOR EMERGENCY REPAIR AND OPERATIONS	(000000)	07/02/90	5	08/20/91
ERP-670	EMERGENCY RADIATION EXPOSURE GUIDELINES AND CONTROLS	(000000)	04/05/90	1	12/31/91
ERP-680	CONTROL OF THYROID BLOCKING POTASSIUM IODIDE (KI) TABLETS	(000000)	04/05/90	2	12/31/91
ERP-700	TECHNICAL SUPPORT TEAM LEADER (TSTL)	(000000)	03/30/90	3	07/22/91
ERP-710	TECHNICAL SUPPORT TEAM	(000000)	03/30/90	4	07/22/91
ERP-800	DAMAGE REPAIR TEAM LEADER (DRTL)	(000000)	03/30/90	1	01/13/89
ERP-810	DAMAGE REPAIR GROUP	(000000)	04/11/90	4	08/14/91
ERP-900	RECOVERY PHASE IMPLEMENTATION	(000000)	04/11/90	1	07/22/91
ERP-910	RECEPTION AND ORIENTATION OF SUPPORT PERSONNEL	(000000)	04/11/90	1	01/10/91

Number	Title	Sponsor Number	Review Date	Rev. No.	Revision Date

END OF REPORT FOR ERP INDEX

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY RESPONSE PROCEDURE

ERP-610 FIRST AID/SEARCH AND RESCUE GROUP

1.0 RESPONSIBILITIES

1.1 The First Aid/Search and Rescue Group Leader is responsible for:

1.1.1 Directing and coordinating group activities.

1.1.2 Maintaining telephone communications with the Personnel Safety Team Leader (PSTL) or Control Room (CR) if the Technical Support Center (TSC) is not activated.

1.1.3 Evaluating the need for offsite assistance, choosing either York Hospital or Harford Memorial Hospital.

1.2 Shift Management is responsible for:

1.2.1 Ensuring that Public Address announcements are made directing the First Aid/Search and Rescue Group members' response prior to official team activations.

1.2.2 Performing the notifications required of the Personnel Safety Team Leader until the TSC is activated and staffed.

1.3 First Aid/Search and Rescue Group Members are responsible for:

1.3.1 The first or most qualified First Aid/Search and Rescue Group member responding shall assume the responsibilities of the First Aid/Search and Rescue Group Leader until relieved by a designated group leader.

1.3.2 Performing activities assigned by the First Aid/Search and Rescue Group Leader.

NOTES:

1. PERSONNEL PARTICIPATION IN FIRST AID/SEARCH AND RESCUE OPERATIONS SHALL BE VOLUNTARY.

2. THIS ACTIVITY IS EXEMPT FROM RADIOLOGICAL WORK PERMIT (RWP) REQUIREMENTS, BUT PROPER RADIOLOGICAL CONTROLS SHALL BE ADHERED TO AS MUCH AS PRACTICABLE.

3. PERSONNEL EXPOSURE SHOULD BE LIMITED TO LEVELS IN APPENDIX 1, EMERGENCY EXPOSURE GUIDELINES.

4. GROUP MEMBERS SHALL CONTROL THEIR OWN EXPOSURE IN ACCORDANCE WITH ALARA CONCEPTS.

5. IF WAITING FOR EMERGENCY DIRECTOR (ED) APPROVAL COULD ENDANGER PERSONNEL, THE FIRST AID/SEARCH AND RESCUE GROUP LEADER MAY DIRECT THE REMOVAL OF THE INJURED PERSON(S) TO A NON-AFFECTED AREA.

6. MINIMUM FIRST AID/SEARCH AND RESCUE TEAM COMPOSITION SHALL CONSIST OF A PROTECTION TECHNICIAN, TWO FIRST AID RESPONDERS AND ONE QUALIFIED HEALTH PHYSICS TECHNICIAN.

2.0 INITIAL ACTIONS

NOTE: ATTACHMENT TITLED, "FIRST AID/SEARCH AND RESCUE GROUP FLOW CHART" MAY BE USED AS A GUIDE FOR THE FOLLOWING ACTIONS.

2.1 Shift Management shall:

2.1.1 Upon notification of an injured person:

2.1.1.1 Direct the Chief Operator or designee to make public address and radio announcements directing the response of the First Aid/Search and Rescue group members to the desired location and repeat said announcement several times.

2.1.1.2 Contact the ambulance, if offsite medical assistance is determined to be necessary, and complete attachment titled, "Medical Emergency Contact Form".

2.1.1.3 IF TSC is NOT activated, perform the following:

a. Complete the "Medical Emergency Contact Form".

b. Contact appropriate hospital if offsite assistance is required, and relay information included in completed "Medical Emergency Contact Form".

2.1.1.4 IF TSC is NOT activated, perform the following:

a. Contact medical department if assistance beyond the First Aid/Search and Rescue Group Members is required.

b. Contact Security and inform them that an ambulance is responding to site, the ambulance pick-up point, and plant doors to be opened.

c. Ensure that ambulance escorts are available.

2.1.1.5 IF TSC is activated, perform the following:

a. Convey all information to PSTL when the position has been manned.

2.2 The First Aid/Search and Rescue Group Leader shall:

2.2.1 Direct group members to obtain necessary radiation and contamination protection equipment. (This equipment can be obtained in the plant or from Operations Support Center (OSC).) Equipment may include, but is not limited to:

a. Respiratory protection equipment

b. Radiation survey equipment

c. Anti-contamination clothing

d. Personal dosimetry

2.2.2 Ensure that the group is equipped with Emergency Medical Equipment/First Aid Kit, stretcher and blanket. First Aid Kit locations in the protected area are listed in the attachment titled, "First Aid-Related Equipment in Power Block".

2.2.3 Ensure the Plant Survey Group Leader (PSGL) has assigned an HP technician to the group.

2.2.4 For missing persons only:

2.2.4.1 Obtain the following information from the CR or PSTL.

a. Name of missing person

b. Person's last known location

c. Job person was performing when last seen

d. Any significant plant conditions or special instructions (e.g., equipment failures, radiation levels, etc.)

2.2.4.2 Request that Security or the Control Room attempt to contact missing persons using the plant paging system for approximately 5 minutes.

2.2.4.3 Direct Search and Rescue Team to missing person's last known location, using most expeditious route. Expand search to adjacent areas if required.

2.2.4.4 Coordinate activities to minimize duplication of effort, amount of time, and radiation exposure of group members.

2.2.4.5 Report to PSTL or CR when missing person is found.

2.2.5 For injured person:

2.2.5.1 Obtain the following information from PSTL or Control Room:

a. Name of injured person

b. Location of injured person

c. Type of injury

d. Significant plant conditions or special instructions (e.g., equipment, radiation hazards, etc.)

2.2.5.2 Direct FA/S&R Group members to the injury location.

2.2.5.3 Communicate with group members to determine extent of any injury, contamination problems and supervise the administration of first aid.

2.2.5.4 Notify the PSTL or CR of:

a. The extent of the injury

b. First aid rendered

c. Additional actions required

d. Recommendations for off-site assistance (ambulance and hospital)

e. Contamination levels

2.2.5.5 Direct, depending on prevailing conditions, the First Aid/Search and Rescue Group members to prepare for and do the following as necessary:

a. Transport the injured person to Decontamination Area and Site Medical Dispensary.

b. Direct off-site ambulance personnel to the injured person.

c. Transport the injured person to an entrance accessible to an ambulance.

2.2.5.6 Review, sign and send completed attachment titled, "Notification Medical Emergency" to the transport site.

2.2.5.7 If the contaminated injury is being sent to the hospital for treatment, request the PSGL provide an additional HP for contamination control at the hospital.

NOTE: THE HP TECHNICIAN ASSIGNED TO A FIRST AID/SEARCH AND RESCUE GROUP WILL NORMALLY BE THE AMBULANCE ESCORT UNLESS CONTAMINATED.

2.3 First Aid/Search and Rescue Group members:

NOTE: IF THE OSC IS NOT ACTIVATED, THE GROUP MEMBERS SHALL REPORT TO DESIGNATED RESPONSE AREA AS DETERMINED BY PUBLIC ADDRESS RADIO ANNOUNCEMENTS.

2.3.1 Report to the First Aid/Search and Rescue Group Leader for initial assignments.

2.3.2 Obtain Emergency Medical Equipment/First Aid Kit, stretcher and blanket, or ensure they can be obtained enroute (locations of first aid equipment in the protected area are listed in attachment titled, "First Aid Kit Locations".

2.3.3 Obtain necessary radiation protection equipment as directed by the Group Leader.

2.3.4 Obtain a briefing from the Group Leader on assigned task.

2.3.5 For missing persons:

2.3.5.1 Report to last known location and commence search.

2.3.5.2 Expand search to adjacent areas until person is found.

2.3.5.3 Report to First Aid/Search and Rescue Group Leader when person is found.

2.3.6 For injured person:

2.3.6.1 Report to injured persons location.

2.3.6.2 Administer first aid. (If the injury is severe, immediate medical treatment is the highest priority, and radiological concerns are secondary.)

2.3.6.3 Remove injured person to a low radiation area immediately (if possible).

2.3.6.4 If contamination is suspected have HP verify by survey and be careful to limit spread of contamination and personnel exposure.

2.3.6.5 Prepare the injured person for transport and if contaminated, take steps to minimize spread of contamination.

2.3.6.6 Fill out attachment titled, "Notification of Medical Emergency" and submit it to the First Aid/Search and Rescue Group Leader.

2.3.6.7 Transport the injured person to a location dictated by the First Aid/Search and Rescue Group Leader.

3.0 CONTINUING ACTIONS

3.1 Shift Management shall:

3.1.1 Keep the hospital informed (as appropriate contingent upon TSC activation), of the medical and/or radiological conditions of the injured.

3.2 The First Aid/Search and Rescue Group Leader shall:

3.2.1 Provide a status report on group activities to the PSTL.

3.2.2 Ensure that the white copy of the completed "Notification of Medical Emergency" form is provided to the party receiving the injured person.

NOTE: WHEN INFORMATION NECESSARY TO COMPLETE THE NOTIFICATION OF MEDICAL EMERGENCY FORM IS OBTAINED, PROVIDE TO PSTL.

3.2.3 Notify the PSTL when the injured person is:

3.2.3.1 Received by the ambulance crew or

3.2.3.1 Decontaminated by H.P. and sent to the Medical Dispensary or

3.2.3.3 Sent to the Medical Dispensary.

3.2.4 Direct Group Members to:

3.2.4.1 Recover any contaminated articles from the injured person for isotopic analysis.

3.2.4.2 Follow normal decontamination and disposal practices for first aid equipment and supplies used on the injured person.

3.2.4.3 Return to the designated assembly area when assigned tasks are completed.

3.2.5 Account for all group members and report to the PSTL.

3.2.6 Provide completed records to Plant Survey Group Leader.

3.2.7 Direct group members to stand by for additional assignments until released.

3.3 First Aid/Search and Rescue Group members shall:

3.3.1 Deliver the injured person to the group directed by the First Aid/Search and Rescue Group Leader.

3.3.1.1 Ambulance crew

3.3.1.2 Decon HPs

3.3.1.3 Medical Dispensary personnel

3.3.2 Provide a completed "Notification of Medical Emergency" form.

3.3.3 Forward remaining 3 copies of "Notification of Medical Emergency" form to the PSTL.

3.3.4 Provide Health Physics escort with a contaminated injured person.

3.3.5 Follow normal decontamination and disposal practices for first aid equipment and supplies when tasks are completed.

3.3.6 Return to designated assembly area and report to the Group Leader for debriefing.

3.3.7 Standby for additional assignments until released by the group leader.

3.4 PSTL shall:

3.4.1 Retain one copy of completed "Notification of Medical Emergency" form for documentation.

3.4.2 Forward remaining copies of the form to the Industrial Safety and Health Section.

4.0 FINAL CONDITIONS

4.1 Missing person(s) have been accounted for.

4.2 Injured person(s) have received appropriate first-aid or been transported off-site for treatment.

4.3 Briefings to the PSTL have been accomplished.

4.4 Generated records have been compiled and submitted to the PSGL.

4.5 First Aid/Search and Rescue Group has been released by the PSTL.

5.0 ATTACHMENT AND APPENDICES

5.1 Attachment 1 - First Aid/Search and Rescue Group Flow Chart

5.2 Attachment 2 - "First Aid Kit Locations"

5.3 Attachment 3 - "Notification of Medical Emergency"

5.4 Attachment 4 - "Medical Emergency Contact Form"

5.5 Appendix 1 - "Emergency Exposure Guidelines"

6.0 SUPPORTING INFORMATION

6.1 PURPOSE

To define the requirements for and provide guidance in conducting first aid/search and rescue operations.

6.2 CRITERIA FOR USE

6.2.1 This procedure shall be implemented during an Alert or higher emergency when personnel are known to be missing or injured, or as required by the ED.

6.3 REFERENCES

6.3.1 ERP-140, "Telephone Lists for Emergency Use"

6.3.2 ERP-600, "Personnel Safety Team Leader (PSTL)"

6.3.3 ERP-650 "Transport of Contaminated Injury Off-site"

6.3 NUREG 0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"

6.3.5 Peach Bottom Atomic Power Station (PBAPS) Emergency Plan, Sections 5.2, 6.7, 6.9

6.3.6 Philadelphia Electric Company (PECo) Official Bulletin, Serial No. 437-R3

6.3.7 NSS/SOP-11 "Security EMT's"

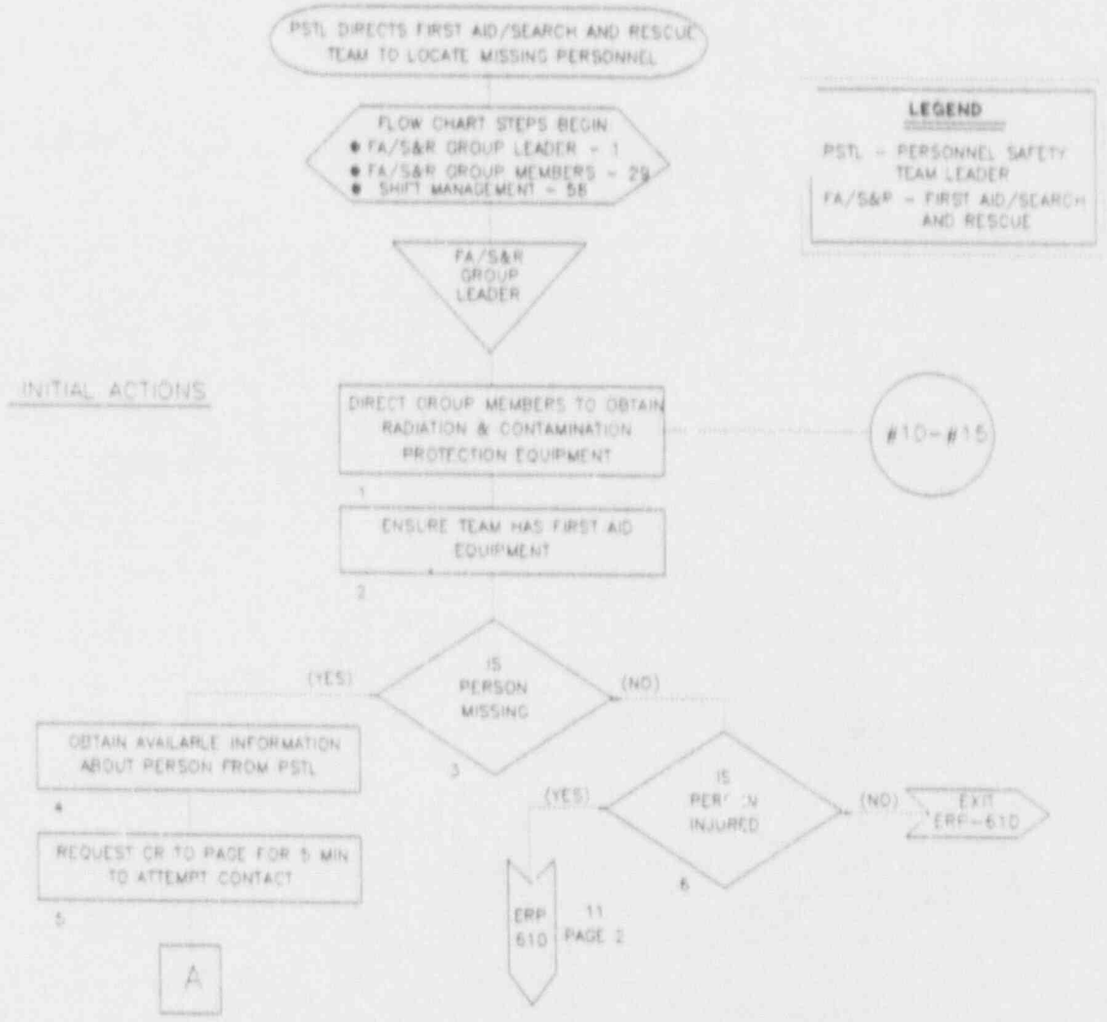
6.3.8 10CFR Part 20, "Standards for Protection Against Radiation"

6.3.9 EPA-520/1-75-001, Table 2.1

ATTACHMENT 1

FIRST AID/SEARCH AND RESCUE GROUP FLOW CHART

(Page 1 of 7)



NOTES AND CAUTIONS

(#10) PERSONNEL PARTICIPATION IN FIRST AID/SEARCH AND RESCUE OPERATIONS SHALL BE VOLUNTARY.

(#11) THIS ACTIVITY IS EXEMPT FROM RADIOLOGICAL WORK PERMIT (RWP) REQUIREMENTS, BUT PROPER RADIOLOGICAL CONTROLS SHALL BE ADHERED TO AS MUCH AS PRACTICABLE.

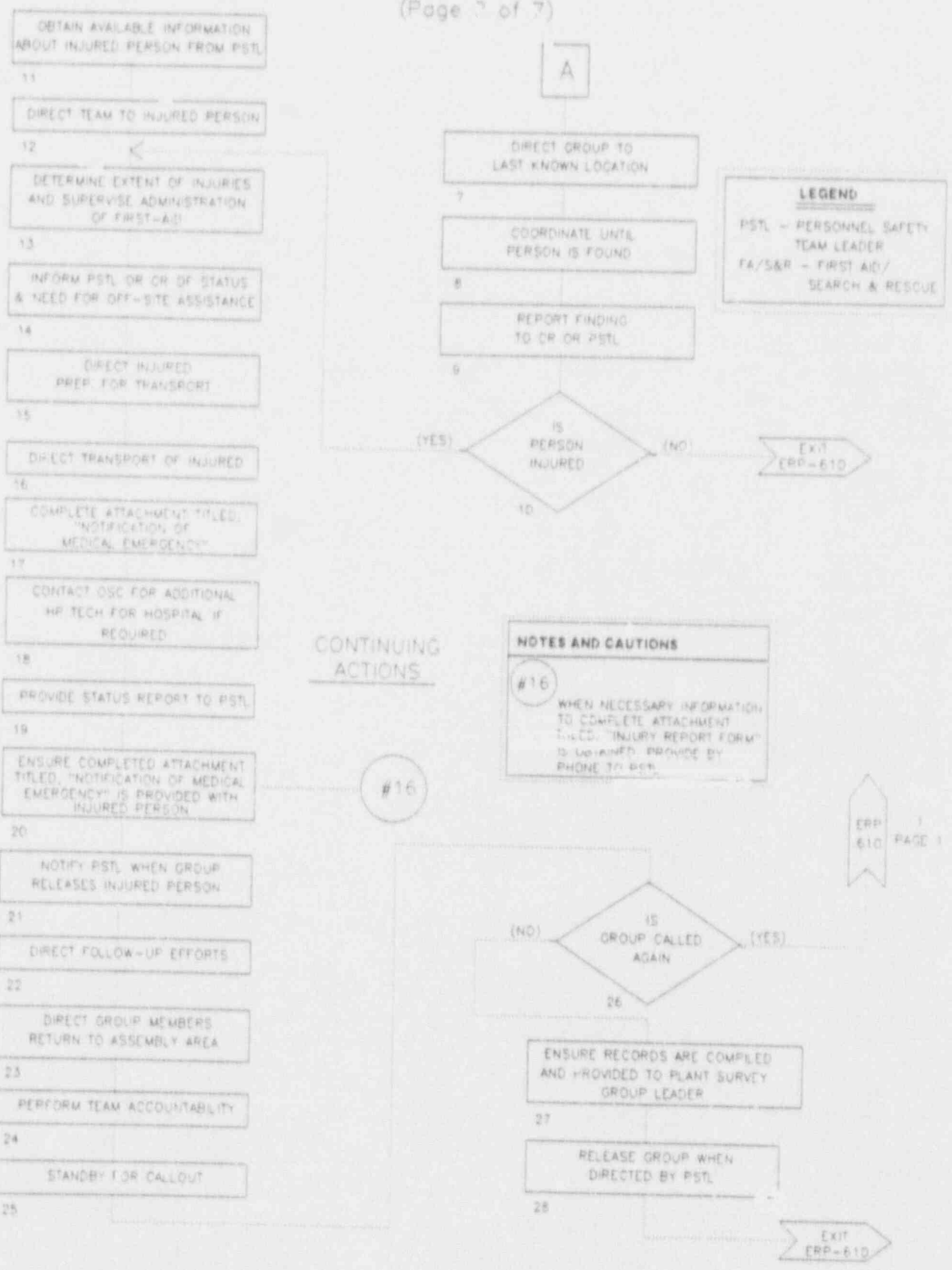
(#12) PERSONNEL EXPOSURE SHOULD BE LIMITED TO LEVELS IN APPENDIX TITLED, EMERGENCY EXPOSURE GUIDELINES.

(#13) GROUP MEMBERS SHALL CONTROL THEIR OWN EXPOSURE IN ACCORDANCE WITH ALARA CONCEPTS.

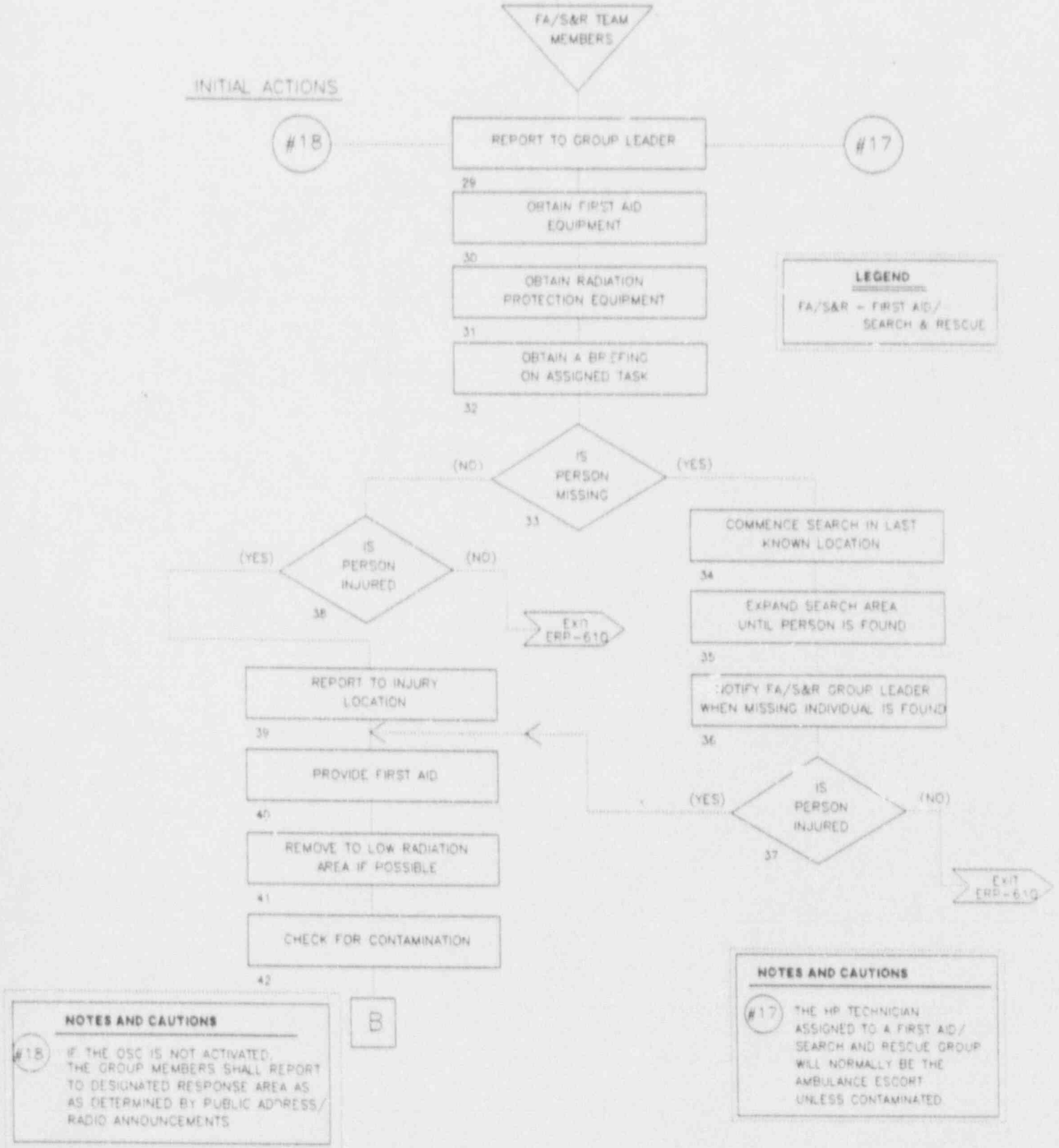
(#14) IF WAITING FOR EMERGENCY DIRECTOR (ED) APPROVAL COULD ENDANGER PERSONNEL, THE FIRST AID/SEARCH AND RESCUE GROUP LEADER MAY DIRECT THE REMOVAL OF THE INJURED PERSON(S) TO A NON-AFFECTED AREA.

(#15) MINIMUM FIRST AID/SEARCH AND RESCUE TEAM COMPOSITION SHALL CONSIST OF: 1 PROTECTION TECHNICIAN, TWO STATION QUALIFIED FIRST AID RESPONDERS AND, IN ADDITION, ONE QUALIFIED HEALTH PHYSICS TECHNICIAN.

ATTACHMENT 1
FIRST AID/SEARCH AND RESCUE GROUP FLOW CHART
(Page 3 of 7)



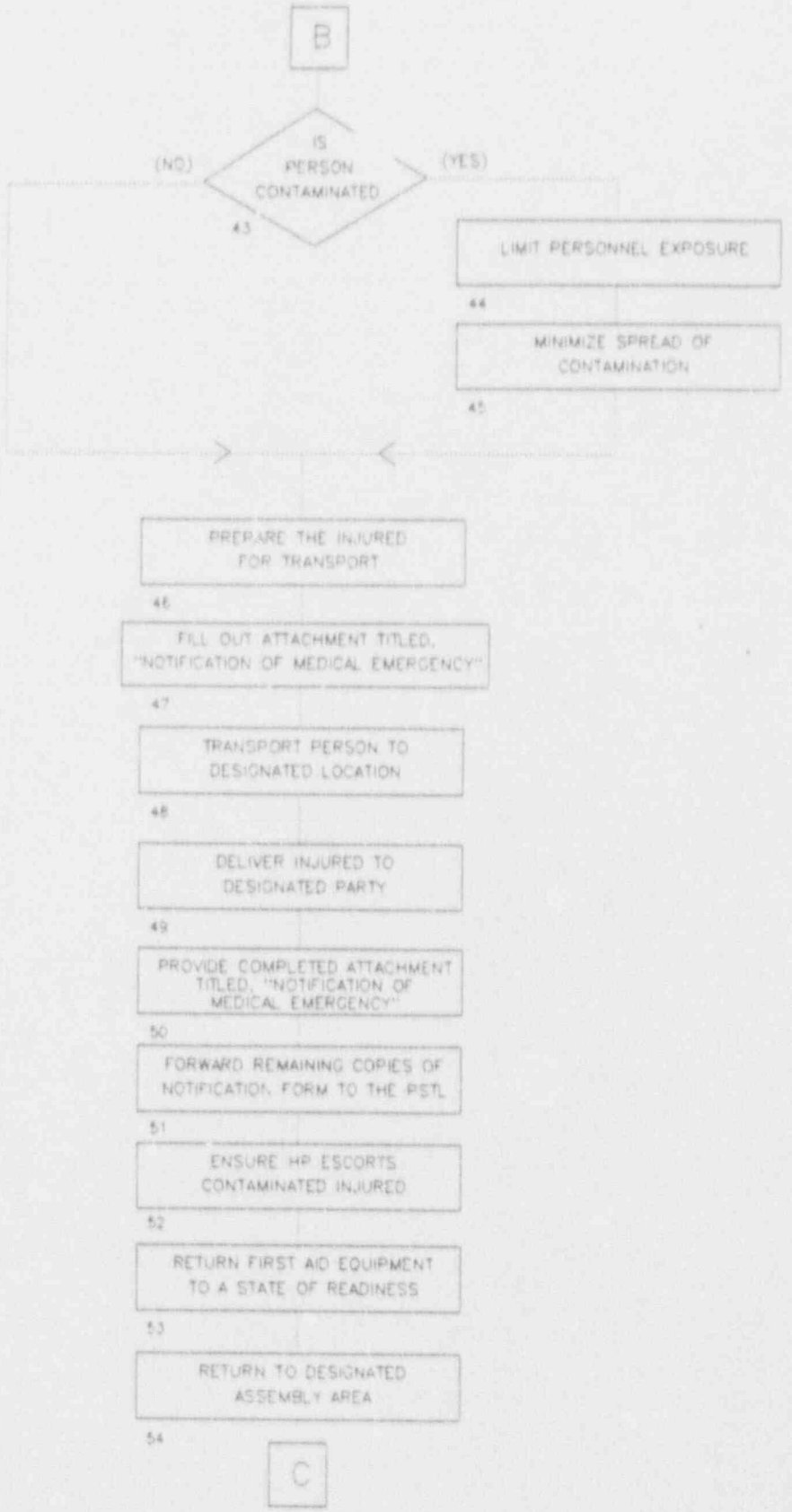
ATTACHMENT 1
FIRST AID/SEARCH AND RESCUE GROUP FLOW CHART
(Page 3 of 7)



ATTACHMENT 1

FIRST AID/SEARCH AND RESCUE GROUP FLOW CHART

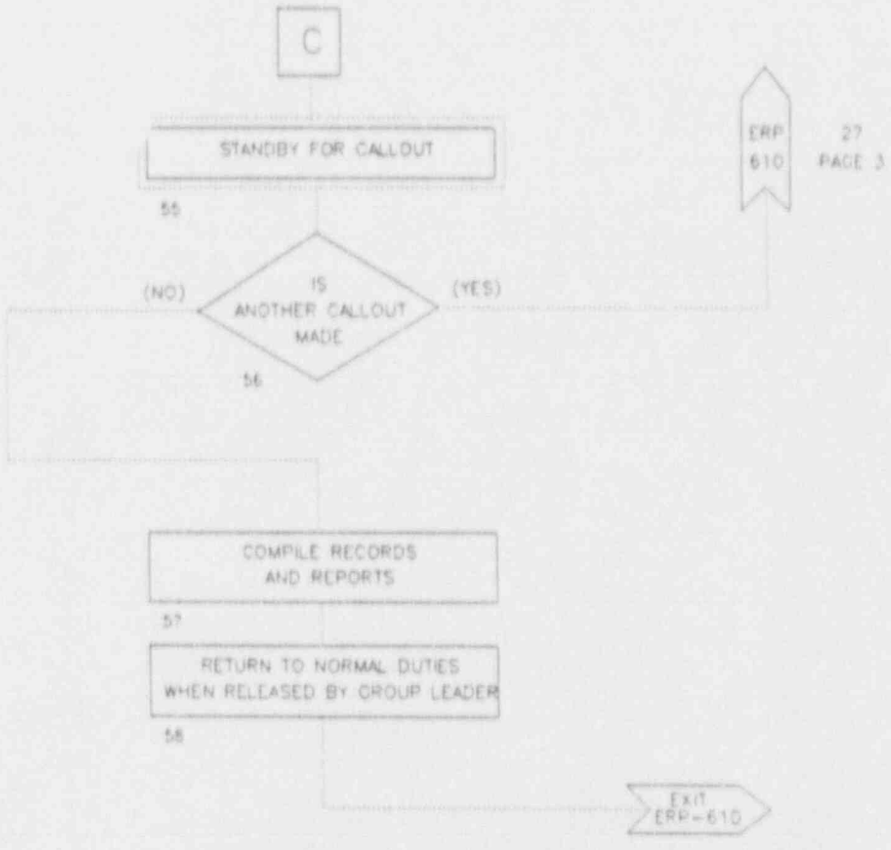
(Page 4 of 7)



ATTACHMENT 1

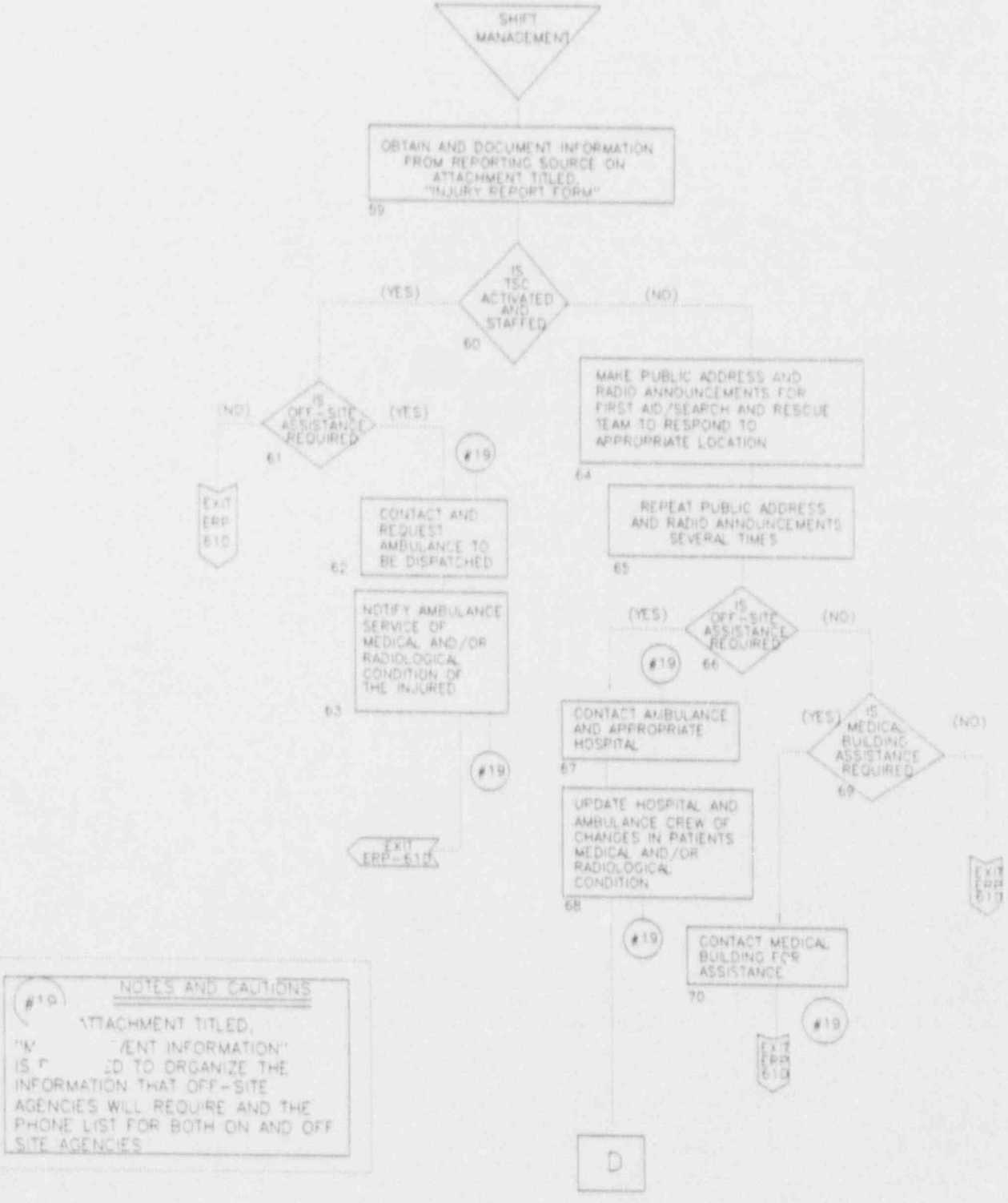
FIRST AID/SEARCH AND RESCUE GROUP FLOW CHART

(Page 5 of 7)



ATTACHMENT 1
FIRST AID/SEARCH AND RESCUE GROUP FLOW CHART

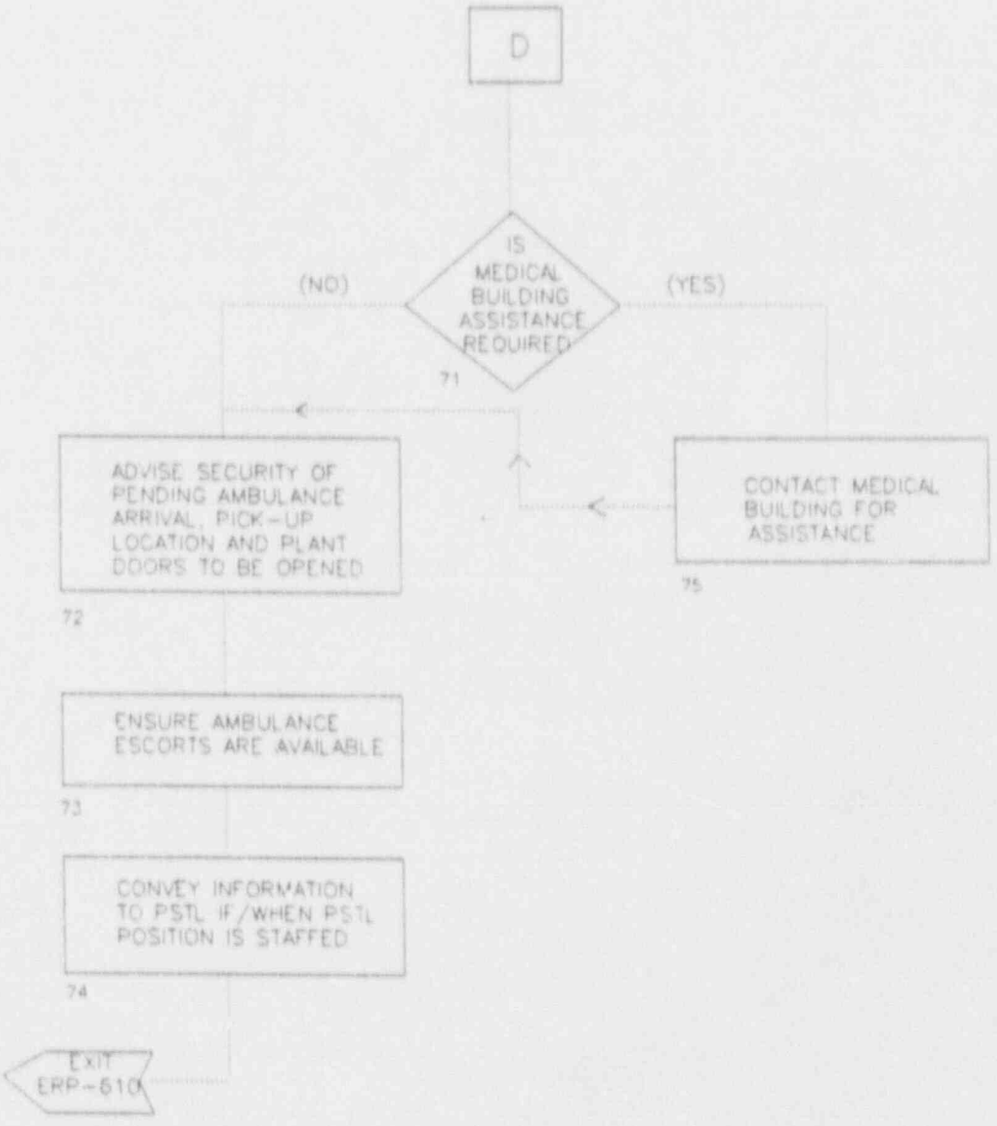
(Page 6 of 7)



ATTACHMENT 1

FIRST AID/SEARCH AND RESCUE GROUP FLOW CHART

(Page 7 of 7)



ATTACHMENT 2

FIRST AID KIT LOCATIONS

NOTE: Each kit consists of a first aid supply box, blanket and a stretcher.

Inside Power Block

Turbine 3, 116' elevation entrance
Turbine 3, 116' elevation o/s HP instrument cage
Turbine 165' elevation o/s Control Room
Radwaste 135' elevation Control Room
Rx 2, 234' elevation Fuel Floor
Rx 3, 234' elevation Fuel Floor

Outside Power Block

Administration Bridge
Operations Break Trailer
Outside Maintenance Tool Room entrance
Outside Construction Tool Room entrance
Security Building entrance
Security Building exit
Aux. Boiler Building
Administration Building Main Lobby
Unit One Lobby
Sewage Plant
Low Level Radwaste Building
D and E Cooling Tower Pump House
Conference Center Lobby
North Sub Station
South Sub Station

ATTACHMENT 3
NOTIFICATION OF MEDICAL EMERGENCY
(sample)

196-23139 REV. 8 90

NOTIFICATION OF MEDICAL EMERGENCY

LOCATION _____

NAME _____ DATE ___/___/___ TIME _____

AGE _____ DOB ___/___/___ SS # _____ EMPLOYER _____

CHIEF COMPLAINT _____

PATIENT HISTORY

___ ON MEDICATION

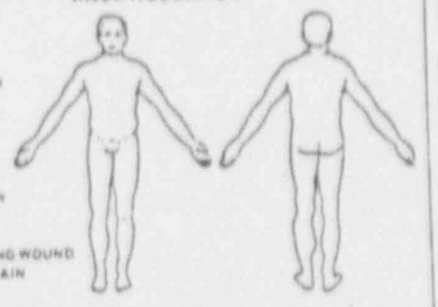
___ ASTHMA
___ CARDIAC
___ COPD
___ DIABETES
___ EMPHYSEMA
___ EPILEPSY
___ HYPERTENSION
___ OTHER

___ ALLERGIES

___ BLIND L R
___ DEAF L R

INJURY/LOCATION

AB ABRASION
AM AMPUTATION
B BURN
F FRACTURE
G GUNSHOT
I INTERNAL INJURY
L LACERATION
PA PAIN
PR PARALYSIS
PW PENETRATING WOUND
S SPRAIN/STRAIN
O OTHER



TEMPERATURE

___ NORMAL
___ HOT
___ COLD

LUNG SOUNDS

___ NORMAL
___ ABNORMAL
___ NOT CHECKED

MEDICAL EMERGENCIES

___ ALLERGY
___ CARDIAC ARREST
___ CARDIAC SYMPTOMS
___ CONVULSION/SEIZURE
___ DIABETIC ILLNESS
___ DIZZY/FAINT/WEAK
___ INTERNAL HEMORRHAGE
___ OTHER

___ IMPAIRMENT
___ OB DELIVERY
___ POISON (INCL. DRUGS)
___ RESP. DISTRESS
___ SHOCK (EXCEPT ELEC.)
___ STROKE (CVA)

VITALS

TIME	PULSE	BP	RESP RATE
		___/___	
		___/___	
		___/___	
		___/___	

CAPILLARY REFILL

___ NORMAL
___ DELAYED
___ NONE

CHEST EXP.

___ NORMAL
___ RETRACTIVE
___ NONE

PUPILS

___ ___ REACTIVE
___ ___ FIXED
___ ___ DILATED
___ ___ CONST
___ ___ SLUGGISH

ANATOMIC SITE INVOLVED

___ HEAD
___ FACE
___ NECK
___ SHOULDER/UPPER ARM
___ ELBOW/LOWER ARM
___ WRIST/HAND
___ BACK
___ CHEST
___ ABDOMEN
___ OTHER

___ PELVIS/HIP
___ BUTTOCKS
___ UPPER LEG/KNEE
___ LOWER LEG
___ ANKLE/FOOT
___ GENITO-URINARY
___ UPPER AIRWAY
___ MULTIPLE SITES

EYES OPEN

___ 4 SPON
___ 3 VOICE
___ 2 PAIN
___ 1 NONE

BEST MOTOR RESPONSE

___ 6 OBEYS COMMAND
___ 5 LOCALIZES PAIN
___ 4 WITHDRAWS
___ 3 FLEX ABNORMAL
___ 2 EXTENSION/RIGID
___ 1 NO RESPONSE

VERBAL RESPONSE

___ 5 ORIENTED
___ 4 CONFUSED
___ 3 INAPPROPRIATE
___ 2 INCOMPREHENSIBLE
___ 1 NO RESPONSE

GLASGOW SCALE ___ ___ / LEVEL OF CONSCIOUSNESS

SKIN

___ PALE
___ BLUE
___ GREY
___ NORMAL
___ MOIST
___ DRY

CONTAMINATION

YES ___ NO ___

CHEMICAL
GENERAL ___
ISOLATED ___
POTENTIAL ___
MSDS ___
CHEMICAL NAME _____

RADIOACTIVE
GENERAL ___
ISOLATED ___
POTENTIAL ___
≥ 10,000 CPM ___
< 10,000 CPM ___

	Y	N
HEALTH PHYSICS TECHNICIANS ACCOMPANYING PATIENT	___	___
PLANT PROTECTION TECHNICIANS ACCOMPANYING PATIENT	___	___

HARFORD MEMORIAL HOSPITAL 301-838-2400 ___
301-879-7550 ___
YORK HOSPITAL 717-771-2345 ___
717-771-2311 ___
717-771-2672 ___
OTHER MEDICAL FACILITY ___
TRANSPORTED BY: ___

PLANT PROTECTION TECHNICIAN ___

NARRATIVE

_____
_____
_____
_____
_____
_____
_____
_____

ATTACHMENT 4

MEDICAL EMERGENCY CONTACT FORM

I. Medical Event Information

A. Inform hospital and ambulance:

a. This is Peach Bottom Atomic Power Station Unit 2 ___ or Unit 3 ___
b. My name is_____
c. We request your services for injured person

Patient information follows:
Number of injured persons:_____
Extent of injuries:_____
Patient is: contaminated/not contaminated (circle one)

B. Inform hospital of estimated time of arrival:_____

C. Inform Delta - Cardiff Fire Company you are requesting an ambulance for transport to _____ hospital.

II. Phone List

Time/Initials

A. Ambulance:

Delta - Cardiff Fire Company
911 or 456-7133 _____/_____

B. Hospital

1) Harford Memorial Hospital
301-575-7550 _____/_____

OR

2) York Hospital
771-2311, 2673 _____/_____

C. Medical Building
Extension 4585
(between 0800 and 1630)

D. Security
Extension 4292/Public Address/Radio

APPENDIX 1

EMERGENCY EXPOSURE GUIDELINES

Projected Whole Body Function	Authorized Dose	Thyroid Dose	Authorized By
1. Life Saving and Reduction of Injury	75 Rem*	375 Rem	Emergency** Director
2. Operation of Equipment to Mitigate an Emergency	25 Rem*	125 Rem	Emergency** Director
3. Protection of Health and Safety of the Public	5 Rem	25 Rem	Emergency Director
4. Other Emergency Activities	10CFR20 Limits	10CFR20 Limits	Emergency Director
5. Re-Entry/Recovery Activities	Administrative Guidelines	Administrative Guidelines	N/A

NRC QUARTERLY LIMITS (10CFR20)

	REM
Whole body, head and trunk, blood forming organs, lens of eyes, gonads	1 1/4****
Skin of whole body	7 1/2***
Hands and forearms, feet and ankles	18 3/4***
Inhalation (thyroid)	520 MPC-hours integrated exposure

* References: EPA-520/1-75-001, Table 2.1
** Such exposure shall be on a voluntary basis
*** There are no separate emergency exposure guidelines; use whole body limits
**** 3 Rem with NRC - 4 form completed

Number	Title	Sponsor Number	Review Date	Rev. No.	Revision Date
ERP-101	CLASSIFICATION OF EMERGENCIES	(000000)	05/16/90	8	12/31/91
ERP-110	EMERGENCY NOTIFICATIONS	(000000)	03/27/90	5	12/31/91
ERP-110 APPENDIX 1	EMERGENCY CLASSIFICATION NOTIFICATION TELEPHONE LIST FOR AN UNUSUAL EVENT OR ALERT	(000000)	06/22/90	20	12/31/91
ERP-110 APPENDIX 2	EMERGENCY CLASSIFICATION NOTIFICATION TELEPHONE LIST FOR A SITE EMERGENCY OR GENERAL EMERGENCY	(000000)	06/20/90	17	12/31/91
ERP-120	PARTIAL PLANT EVACUATION	(000000)	03/27/90	2	07/22/91
ERP-130	SITE EVACUATION	(000000)	03/27/90	4	07/22/91
ERP-140	TELEPHONE LISTS FOR EMERGENCY USE	(000000)	04/30/90	7	12/31/91
ERP-140 APPENDIX 1	EMERGENCY DIRECTOR (ED) (CALL IN 2)	(900000)	06/20/90	16	10/16/91
ERP-140 APPENDIX 2	TECHNICAL SUPPORT TEAM LEADER (TSTL)	(900000)	03/27/90	19	10/16/91
ERP-140 APPENDIX 3	DOSE ASSESSMENT TEAM LEADER (DATL)	(000000)	07/11/90	21	10/16/91
ERP-140 APPENDIX 4	CHEMISTRY SAMPLING & ANALYSIS TEAM LEADER (CSATL)	(000000)	03/16/90	14	10/16/91
ERP-140 APPENDIX 5	DAMAGE REPAIR TEAM LEADER (DRTL)	(000000)	03/16/90	13	10/16/91
ERP-140 APPENDIX 6	SECURITY TEAM LEADER (STL)	(000000)	03/16/90	12	10/16/91
ERP-140 APPENDIX 7	PERSONNEL SAFETY TEAM LEADER (PSTL)	(000000)	03/16/90	16	10/25/91
ERP-140 APPENDIX 8	COMPANY CONSULTANTS AND CONTRACTORS	(000000)	03/21/91	8	06/14/91

Number	Title	Sponsor Number	Review Date	Rev. No.	Revision Date
ERP-140 APPENDIX 9	NEARBY PUBLIC AND INDUSTRIAL USERS OF DOWNSTREAM WATER	(000000)	03/16/90	10	10/16/91
ERP-200	EMERGENCY DIRECTOR (ED)	(000000)	10/17/90	8	12/31/91
ERP-205	EMERGENCY RESPONSE COORDINATOR/TSC	(000000)	07/22/91	0	07/22/91
ERP-210	EMERGENCY RESPONSE MANAGER (ERM)	(000000)	10/17/90	3	10/17/90
ERP-215	PLANNING & SCHEDULING COORDINATOR (P&SC)	(000000)	03/27/90	0	06/02/88
ERP-220	OPERATIONS SUPPORT CENTER (OSC) OPERATIONS PERSONNEL	(000000)	03/27/90	4	08/14/91
ERP-230	OPERATIONS SUPPORT CENTER (OSC) ACTIVATION	(000000)	07/02/90	8	12/31/91
ERP-240	AUXILIARY OPERATIONS SUPPORT CENTER (AUX OSC) ACTIVATION -CANCELLED- NO REPLACEMENT	(000000)	08/01/88		
ERP-250	TECHNICAL SUPPORT CENTER (TSC) ACTIVATION	(000000)	09/12/90	9	12/31/91
ERP-260	EMERGENCY OPERATIONS FACILITY (EOF) ACTIVATION	(000000)	02/02/90	9	07/22/91
ERP-270	ALTERNATE EMERGENCY OPERATIONS FACILITY (ALT EOF) ACTIVATION	(000000)	09/12/90	2	09/12/90
ERP-300	DOSE ASSESSMENT TEAM LEADER (DATL)	(000000)	05/02/90	2	03/20/89
ERP-305	DOSE ASSESSMENT GOUP LEADER (DAGL)	(000000)	07/02/90	3	07/02/90
ERP-310	DOSE ASSESSMENT GROUP	(000000)	06/12/90	4	04/30/91
ERP-315	OPERATION OF THE PEACH BOTTOM COMPUTER DOSE ASSESSMENT SYSTEM	(000000)	05/11/90	5	12/31/

Number	Title	Sponsor Number	Review Date	Rev. No.	Revision Date
ERP-316	CUMULATIVE POPULATION DOSE CALCULATIONS FOR AIRBORNE RELEASES - MANUAL METHOD CANCELLED - REPLACED BY ERP-315	( )	/ /	3	12/31/91
ERP-317	DETERMINATION OF PROTECTIVE ACTION RECOMMENDATIONS CANCELLED - REPLACED BY ERP-200 & ERP-101	( )	/ /	3	12/31/91
ERP-318	LIQUID RELEASE DOSE CALCULATIONS AT DOWNSTREAM WATER INTAKE FACILITIES	(000000)	09/11/90	1	08/29/88
ERP-319	LIQUID RELEASE DOSE CALCULATIONS FOR FISH INGESTION	(000000)	05/03/90	1	08/29/88
ERP-320	USE OF THE CONTAINMENT RADIATION MONITOR TO ESTIMATE RELEASE SOURCE TERM AND NOBLE GAS MONITOR READINGS CANCELLED - REPLACED BY ERP-315	( )	/ /	2	12/31/91
ERP-330	FIELD SURVEY GROUP LEADER (FSGL)	(000000)	09/06/90	5	09/06/90
ERP-340	FIELD SURVEY GROUP	(000000)	05/01/90	2	01/14/91
ERP-350	THYROID DOSE COMMITMENT USING TCS AIR SAMPLING SYSTEM	(000000)	04/18/90	0	04/18/90
ERP-400	CHEMISTRY SAMPLING AND ANALYSIS TEAM LEADER (CSATL)	(000000)	03/27/90	2	01/03/92*
ERP-410	CHEMISTRY SAMPLING AND ANALYSIS TEAM	(000000)	03/27/90	1	08/29/88
ERP-500	SECURITY TEAM LEADER (STL)	(000000)	10/17/90	5	01/31/91

Number	Title	Sponsor Number	Review Date	Rev. No.	Revision Date

END OF REPORT FOR ERP INDEX

Number	Title	Sponsor Number	Review Date	Rev. No.	Revision Date
ERP-316	CUMULATIVE POPULATION DOSE CALCULATIONS FOR AIRBORNE RELEASES - MANUAL METHOD CANCELLED - REPLACED BY ERP-315	( )	/ /	3	12/31/91
ERP-317	DETERMINATION OF PROTECTIVE ACTION RECOMMENDATIONS CANCELLED - REPLACED BY ERP-200 & ERP-101	( )	/ /	3	12/31/91
ERP-318	LIQUID RELEASE DOSE CALCULATIONS AT DOWNSTREAM WATER INTAKE FACILITIES	(000000)	09/11/90	1	08/29/88
ERP-319	LIQUID RELEASE DOSE CALCULATIONS FOR FISH INGESTION	(000000)	05/03/90	1	08/29/88
ERP-320	USE OF THE CONTAINMENT RADIATION MONITOR TO ESTIMATE RELEASE SOURCE TERM AND NOBLE GAS MONITOR READINGS CANCELLED - REPLACED BY ERP-315	( )	/ /	2	12/31/91
ERP-330	FIELD SURVEY GROUP LEADER (FSGL)	(000000)	09/06/90	5	09/06/90
ERP-340	FIELD SURVEY GROUP	(000000)	05/01/90	2	01/14/91
ERP-350	THYROID DOSE COMMITMENT USING TCS AIR SAMPLING SYSTEM	(000000)	04/18/90	0	04/18/90
ERP-400	CHEMISTRY SAMPLING AND ANALYSIS TEAM LEADER (CSATL)	(000000)	03/27/90	2	01/03/92*
ERP-410	CHEMISTRY SAMPLING AND ANALYSIS TEAM	(000000)	03/27/90	1	08/29/88
ERP-500	SECURITY TEAM LEADER (STL)	(000000)	10/17/90	5	01/31/91

Number	Title	Sponsor Number	Review Date	Rev. No.	Revision Date
ERP-510	PERSONNEL ACCOUNTABILITY	(000000)	10/17/90	7	08/14/91
ERP-520	SECURITY TEAM ACTIVATION	(000000)	02/02/90	2	01/10/91
ERP-600	PERSONNEL SAFETY TEAM LEADER (PSTL)	(000000)	04/05/90	5	12/31/91
ERP-610	FIRST AID/SEARCH AND RESCUE GROUP	(000000)	10/12/90	4	12/31/91
ERP-620	PLANT SURVEY GROUP	(000000)	04/05/90	5	08/20/91
ERP-630	DOSIMETRY, BIOASSAY, AND RESPIRATORY PROTECTION GROUP	(000000)	06/22/90	3	01/10/91
ERP-640	VEHICLE AND EVACUEE CONTROL GROUP	(000000)	04/05/90	2	01/14/91
ERP-650	TRANSPORT OF CONTAMINATED INJURY OFF-SITE	(000000)	09/06/90	3	09/06/90
ERP-660	ENTRY FOR EMERGENCY REPAIR AND OPERATIONS	(000000)	07/02/90	5	08/20/91
ERP-670	EMERGENCY RADIATION EXPOSURE GUIDELINES AND CONTROLS	(000000)	04/05/90	1	12/31/91
ERP-680	CONTROL OF THYROID BLOCKING POTASSIUM IODIDE (KI) TABLETS	(000000)	04/05/90	2	12/31/91
ERP-700	TECHNICAL SUPPORT TEAM LEADER (TSTL)	(000000)	03/30/90	3	07/22/91
ERP-710	TECHNICAL SUPPORT TEAM	(000000)	03/30/90	4	07/22/91
ERP-800	DAMAGE REPAIR TEAM LEADER (DRTL)	(000000)	03/30/90	1	01/13/89
ERP-810	DAMAGE REPAIR GROUP	(000000)	04/11/90	4	08/14/91
ERP-900	RECOVERY PHASE IMPLEMENTATION	(000000)	04/11/90	1	07/22/91
ERP-910	RECEPTION AND ORIENTATION OF SUPPORT PERSONNEL	(000000)	04/11/90	1	01/10,

Number	Title	Sponsor Number	Review Date	Rev. No.	Revision Date

END OF REPORT FOR ERP INDEX

1-3-92

PHILADELPHIA ELECTRIC COMPANY

PEACH BOTTOM UNITS 2 AND 3

EMERGENCY RESPONSE PROCEDURE

ERP-400 CHEMISTRY SAMPLING AND ANALYSIS TEAM LEADER (CSATL)

1.0 RESPONSIBILITIES

1.1 Report to the Technical Support Center (TSC) and take direction from the Emergency Director (ED).

1.2 Coordinate activity of the Chemistry Sampling and Analysis Team.

1.3 Report Chemistry analysis results to the ED and Dose Assessment Group Leader (DAGL).

2.0 INITIAL ACTIONS

NOTE: ATTACHMENT 1, CHEMISTRY SAMPLING AND ANALYSIS TEAM LEADER (CSATL) FLOW CHART, MAY BE USED AS A GUIDE FOR THE FOLLOWING ACTIONS.

NOTE: PROCEDURAL STEPS ARE IN LOGICAL ORDER, HOWEVER STEPS MAY BE PERFORMED IN ANY LOGICAL SEQUENCE AS CONDITIONS DICTATE.

2.1 Report to the TSC and log in on the Emergency Support Personnel Information Board.

2.2 Report to the ED and obtain a plant conditions brief and initial instructions.

2.3 Request briefing from the Shift Chemist/Group Leader on abnormal results of the following:

a. Status of chemistry actions underway

b. Abnormal plant chemistry immediately prior to emergency

c. Chemistry Lab and Counting Room status

d. Chemistry Lab and Counting Room habitability

2.4 Assume the CSATL duties from the shift chemist or group leader.

2.5 Evaluate Chemistry Lab/Counting Room habitability using Appendix 2, Habitability Guidelines - Essential Facilities. Consider use of the Unit 1 Chemistry Lab or other facilities if habitability of the Chemistry Lab and Counting Room is degraded.

2.6 Brief Chemistry Sampling and Analysis Group Leader on plant conditions and initial sampling request.

2.7 Direct Chemistry Sampling and Analysis Group Leader to activate CSA Team in accordance with ERP-410, Chemistry Sampling and Analysis Team.

2.8 Consider how plant status could impact ability to control plant chemistry.

2.9 Discuss sample requests with ED or Technical Support Team Leader (STL).

2.10 Contact the Personnel Safety Team Leader (PSTL) for a briefing on radiological concerns.

NOTE: CONSIDERATION SHOULD BE GIVEN TO BYPASSING THE NORMAL ENTRY AND EXIT POINTS AND ACCESS CONTROL POINTS IF RADIOLOGICAL CONDITIONS DICTATE.

2.11 Conduct the following activities, when directed or requested to sample by the ED or DAGL.

2.11.1 Establish sampling priorities.

2.11.2 Discuss personnel safety considerations and job exposure limits with PSTL.

2.11.3 Plan and coordinate access paths with PSTL, TSTL and Security Team Leader (STL).

2.11.4 Request exposure limit extension authorizations from the PSTL when the Chemistry Sampling and Analysis Group members expected exposure will exceed NRC Quarterly Limits listed in Appendix 1, Emergency Exposure Guidelines.

3.0 FOLLOW-UP ACTIONS

3.1 The CSATL shall:

3.1.1 Brief Chemistry Sampling and Analysis Group Leader and direct that samples be taken and analyzed in accordance with appropriate station or emergency procedures.

3.1.2 Remain apprised of group activities including:

a. Team member radiation exposures

b. Facility habitability

c. PASS operability

d. Sampling and analysis results status

3.1.3 Provide Chemistry Sampling and Analysis Group leader with periodic plant status reports which may affect team functions including:

a. Emergency classification

b. Radiation and contamination problem areas

c. Plant status indicators

d. Planned operational evolutions

3.1.4 Provide sample analyses results, as requested, to the following:

a. ED

b. DAGL

c. EOF DATL (if activated)

3.1.5 Request additional personnel and technical support through the EOF HP Support Liaison.

3.1.6 Consider how plant status could impact ability to control plant chemistry.

3.1.7 If necessary because of facility habitability concerns, equipment failure or other reason, request ED approval for utilization of the Babcock and Wilcox Research Center post-accident sample analysis facilities. Refer to procedure CH-922, Off-Site Analysis of High Activity Samples.

4.0 FINAL CONDITIONS

4.1 Emergency event is terminated and plant conditions are stabilized, or as directed by the ED.

4.2 Direct group to take final actions in accordance with ERP-410, Chemistry Sampling and Analysis Team.

5.0 ATTACHMENTS AND APPENDICES

5.1 Attachment 1 - Chemistry Sampling and Analysis Team Leader (CSATL) Flow Chart

2 Appendix 1 - Emergency Exposure Guidelines

3 Appendix 2 - Habitability Guidelines - Essential Facilities

SUPPORTING INFORMATION

.1 PURPOSE

This procedure defines the responsibilities and actions of the CSATL.

6.2 CRITERIA FOR USE

This procedure may be activated at the Unusual Event Alert, Site Emergency or General Emergency levels of classification or at the discretion of the ED and when the ED directs the Chemistry Sampling and Analysis Team to obtain and analyze chemistry samples.

6.3 REFERENCES

6.3.1 Chemistry Procedures for Emergency Conditions:

CH-910, Operation of Post Accident Sampling Station

CH-911, Obtaining Drywell Gas Samples from Containment Atmosphere Dilution Samples

CH-912, Retrieving and Changing Sample Filters and Cartridges from Drywell Radiation Monitor During Emergencies

CH-913, Obtaining Drywell Gas Samples from Drywell Radiation Monitor Sampling Station

CH-914, Obtaining Reactor Water Samples from Sample Sinks Following Accident Conditions

CH-915, Obtaining Canal Discharge Water Samples Following Radioactive Releases After Accident Conditions

CH-916, Obtaining Iodine and Particulate Samples from Main Stack and Roof Vents Following Accident Conditions

CH-917, Obtaining Liquid Radwaste Samples from Radwaste Sample Sink Following Accident Conditions

CH-918, Obtaining Samples from Condensate Sample Sink Following Accident Conditions

CH-919, Obtaining Off-Gas Samples from Off-Gas Hydrogen Following Accident Conditions

CH-920, Sample Preparation and Handling of Highly Radioactive Particulate Filters and Iodine Cartridges

CH-921, Sample Preparation and Handling of Highly Radioactive Liquid and Gas Samples

CH-922, Off-Site Analysis of High Activity Samples

CH-923, Guideline for Order of Analysis on Post-Accident Samples

CH-924, Storage of Post-Accident Samples

CH-925, Obtaining a Gas Sample from Main Stack Under Accident Conditions

6.3.2 ERP-410, Chemistry Sampling and Analysis Team

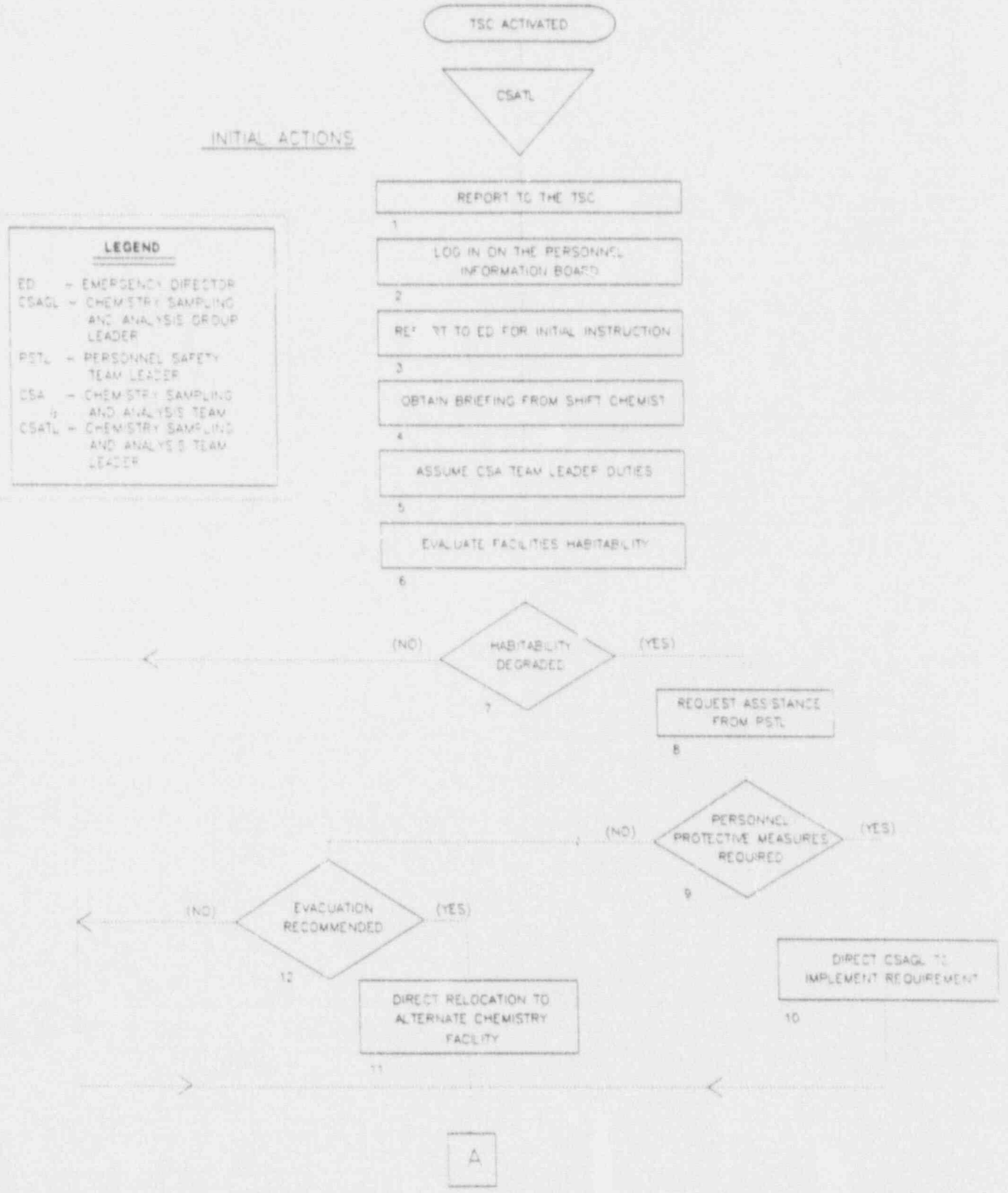
6.3.3 NUREG-0654, Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants

6.3.4 Peach Bottom Atomic Power Station (PBAPS) Emergency Plan.

ATTACHMENT 1

CHEMISTRY SAMPLING AND ANALYSIS TEAM LEADER (CSATL) FLOW CHART

(Page 1 of 4)



ATTACHMENT 1

CHEMISTRY SAMPLING AND ANALYSIS TEAM LEADER (CSATL) FLOW CHART

(Page 2 of 4)

LEGEND

TSTL – TECHNICAL SUPPORT TEAM LEADER
PSTL – PERSONNEL SAFETY TEAM LEADER
STL – SECURITY TEAM LEADER
CSA – CHEMISTRY SAMPLING & ANALYSIS TEAM
ED – EMERGENCY DIRECTOR

A

BRIEF CHEMISTRY SAMPLE AND ANALYSIS GROUP LEADER ON PLANT CONDITIONS
13

DIRECT CSA GROUP LEADER TO ACTIVATE CSA TEAM PER ERP-410
14

CONSIDER HOW PLANT STATUS COULD IMPACT ABILITY TO CONTROL PLANT CHEMISTRY
15

CHEMISTRY CONTROL ACTIONS NECESSARY
16

(YES)

(NO)

RECOMMEND CHEMISTRY ACTIONS TO ED
17

DISCUSS SAMPLE REQUESTS WITH ED OR TSTL
18

CONTACT PSTL FOR RADIOLOGICAL CONCERNS BRIEFING
19

PREPLAN ANTICIPATED SAMPLING REQUIREMENTS
20

ESTABLISH PRIORITIES FOR SAMPLING
21

DISCUSS PERSONNEL SAFETY CONSIDERATIONS WITH PSTL
22

PLAN AND COORDINATE ACCESS PATHS WITH PSTL AND STL
23

#10

B

NOTES & CAUTIONS

#10 CONSIDERATION SHOULD BE GIVEN TO BYPASSING THE NORMAL ENTRY AND EXIT POINTS, AND ACCESS CONTROL POINTS IF RADIOLOGICAL CONDITIONS DICTATE

ATTACHMENT 1

CHEMISTRY SAMPLING AND ANALYSIS TEAM LEADER (CSATL) FLOW CHART

(Page 3 of 4)

LEGEND

PSTL - PERSONNEL SAFETY TEAM LEADER
CSA - CHEMISTRY SAMPLING & ANALYSIS
DATL - DOSE ASSESSMENT TEAM LEADER

B

EMERGENCY EXPOSURE AUTH NEEDED
24

(NO)

(YES)

REQUEST THROUGH PSTL
25

CONTINUING ACTIONS

BRIEF CSA GROUP LEADER ON SAMPLE REQUESTS
26

DIRECT CSA GROUP LEADER INITIATE SAMPLING
27

REMAIN APPRAISED OF GROUP ACTIVITIES
28

PROVIDE GROUP LEADER PERIODIC PLANT STATUS REPORTS
29

PROVIDE ANALYSIS RESULTS TO
- EMERGENCY DIRECTOR
- DOSE ASSESSMENT GROUP
- TECHNICAL SUPPORT TEAM
- EOF DOSE ASSESSMENT TEAM LEADER

30

IS OFFSITE OR BACKUP SUPPORT NECESSARY
31

(NO)

(YES)

REQUEST SUPPORT FROM HP LIAISON
32

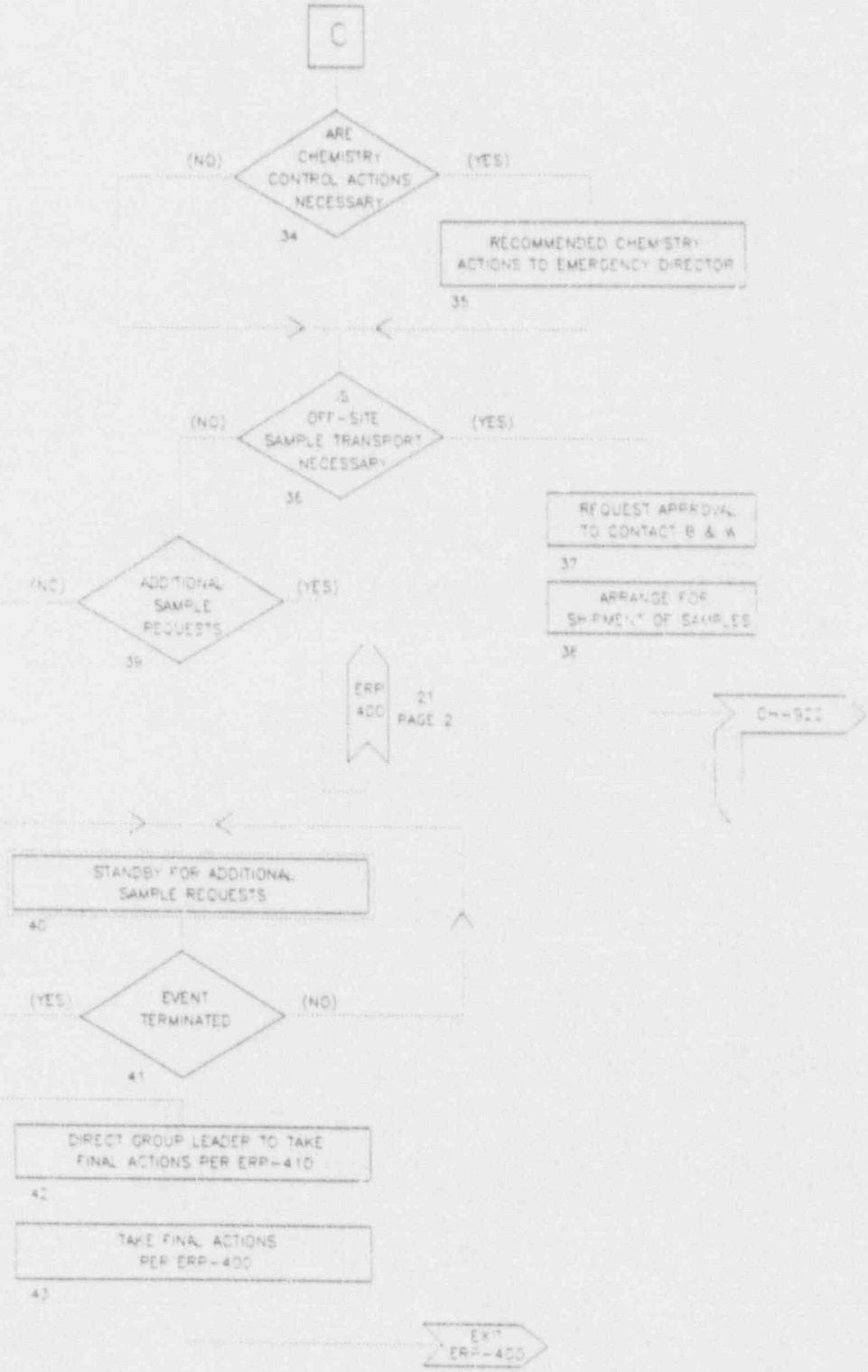
CONSIDER HOW PLANT STATUS COULD IMPACT ABILITY TO CONTROL CHEMISTRY
33

C

ATTACHMENT 1

CHEMISTRY SAMPLING AND ANALYSIS TEAM LEADER (CSATL) FLOW CHART

(Page 4 of 4)



APPENDIX 1

EMERGENCY EXPOSURE GUIDELINES

Function	Projected Whole Body Dose	Thyroid Dose	Authorized by
1. Life Saving and Reduction of Injury	75 Rem*	375 Rem	Emergency** Director
2. Operation of Equipment to Mitigate an Emergency	25 Rem*	125 Rem	Emergency** Director
3. Protection of Health and Safety of the Public	5 Rem	25 Rem	Emergency Director
4. Other Emergency Activities	10CFR20 Limits	10CFR20 Limits	Emergency Director
5. Re-Entry/Recovery Activities	Administrative Guidelines	Administrative Guidelines	N/A

NRC QUARTERLY LIMITS (10CFR20)

	REM
Whole body, head and trunk, blood forming organs, lens of eyes, gonads	1 1/4****
Skin of whole body	7 1/2***
Hands and forearms, feet and ankles	18 3/4***
Inhalation (thyroid)	520 MPC-hours integrated exposure

* References: EPA-620/1-75-001, Table 2.1
** Such exposure shall be on a voluntary basis
*** There are no separate emergency exposure guidelines; use whole body limits
**** 3 Rem with NRC - 4 form completed

APPENDIX 2

HABITABILITY GUIDELINES - ESSENTIAL FACILITIES

Values are approximate

RADIATION	ALERT*	ACTION**
Gamma Radiation (Whole body)	35 mR/hour	350 mR/hour
Noble Gas	6 MPCs	50 MPCs
(Xe-133)	6 x 10-5 uCi/cc	5 x 10-4 uCi/cc
Particulate B-G	6 MPCs	50 MPCs
(unidentified count)	2 x 10-9 uCi/cc	1.5 x 10-8 uCi/cc
(isotopic analysis)	2 x 10-8 uCi/cc	1.5 x 10-7 uCi/cc
Iodine	6 MPCs	50 MPCs
(I-131)	5 x 10-8 uCi/cc	4 x 10-7 uCi/cc

* Notify PSTL that area has reached the alert habitability guideline (7 12 hour shift occupancy to reach quarterly limit).

** Notify PSTL that area has reached the action habitability guideline (8 hour shift to reach quarterly limit).