

File this instruction sheet in your manual as a record of changes.

The following checklist is furnished as a guide for inserting the revisions into the Trojan Plant Emergency Procedure Manual. The revision is denoted by the revision number in the lower outside corner of the page.

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TROJAN NUCLEAR PLANT
PLANT OPERATING MANUAL
RADIOLOGICAL EMERGENCY RESPONSE PLAN IMPLEMENTING PROCEDURES

Volume 4, Section 3

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*Safety Related

RADIOLOGICAL EMERGENCY RESPONSE PLAN IMPLEMENTING PROCEDURE

EP-5*

SAFETY-RELATED

EMERGENCY NOTIFICATION

APPROVED BY

CP Gundt

DATE

8/24/82

A. PURPOSE

This procedure is to be followed to perform initial onsite and offsite emergency notifications. In the event a required notification is not made, it is the calling party's responsibility to ensure the notification sequence is not broken.

B. PROCEDURE

1. Initiation of Notification

- a. Emergency notification procedures will be enacted following the declaration of an Unusual Event, Alert, Site Area Emergency or General Emergency.
- b. Notifications will follow the sequences shown in Figures 5-1 to 5-5. Telephone numbers are contained in PGE-1008A, "Radiological Emergency Response Notification Call Lists and Work Sheets".

2. Shift Supervisor[a] Notifications

- a. Upon declaration of an Unusual Event, Alert, Site Area Emergency or General Emergency, fill out Table 5-1 as completely as possible using available applicable information on emergency status.
- b. Notify the Duty Plant General Manager via telephone or executive. On off-hours, call the Duty Manager at home. Transmit all information listed on the Notification Checklist (Table 5-2), Part I if available. Obtain concurrence on the emergency classification if possible.
- c. Notify the Security Watch Supervisor via telephone or executive. Transmit information listed on the Notification Checklist (Table 5-2), Part II. Be sure to include protective action recommendations for the Columbia River (if any).

[a] Or his designee.

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- 7) Fill out the Notification Worksheet (Table 3 of PGE-1008A) as notifications are made.

c. During Off-Hours

- 1) Notify the Cowlitz County Communications Center, Columbia County Central Dispatch, the Washington Department of Emergency Services, the US Coast Guard (if necessary), Rainier Ambulance (if necessary) and Good Samaritan Hospital (if necessary) as described in 4.b(1-5) above.
- 2) If the emergency is declared an Unusual Event:
 - a) Notify the following off-duty Plant personnel (or their alternate) by telephone.
 - Duty Manager, Technical Services
 - Duty Manager, Plant Services
 - Duty Maintenance Supervisor
 - Duty Radiation Protection Supervisor
 - b) Inform the above personnel of the emergency classification.
- 3) If the emergency is declared an Alert, Site Area Emergency, or General Emergency:
 - a) Notify the following off-duty Plant personnel (or their alternate) by telephone:
 - Duty Manager, Technical Services
 - Duty Manager, Plant Services
 - Duty Maintenance Supervisor
 - Duty Radiation Protection Supervisor
 - Security Supervisor
 - b) Instruct the above personnel to report to the Plant, and inform them of the emergency classification.
 - c) Notify the following additional off-duty personnel shown on Figure 5-5 (if not already notified):
 - Maintenance Supervisor
 - Operations Supervisor
 - Engineering Supervisor

- b) Note: Further communications will be via the Insurance Advisor.
- 4) Bechtel (See Table 9 of PGE-1008A)
- a) For Alert - notify, relay accident status, emergency class and request to stand by (see Table 5-2, Part VII).
 - b) For Site Area Emergency or General Emergency - notify, relay accident status, emergency class, and request activation of Bechtel Emergency Plan (Table 5-2, Part VII).
 - c) Note: Further communications will be via the CSC Design Manager. Provide CSC telephone number of the Design Manager to Bechtel upon request (See Procedure EP-19).
- 5) Washington Public Power Supply System
- a) For Alert - notify, relay emergency class, and request to stand by.
 - b) For Site Area Emergency or General Emergency - notify, relay emergency class, and request to prepare to provide assistance if requested.
- 6) Pacific Northwest Bell (See Table 10 of PGE-1008A)
- a) For Alert - notify, relay emergency class and request to stand by.
 - b) For Site Area Emergency or General Emergency - notify, relay emergency class, and request to prepare to provide communications assistance if requested.
 - c) Note: Further communications will be via the CSC Communications Advisor.
- 7) Institute of Nuclear Power Operations (INPO)
- Notify, relay emergency class, type of accident, and Plant status (if known). (Note: The TSC will also be notifying INPO via the NOTEPAD computer system. Further updates on accident status will be transmitted over NOTEPAD, while verbal requests for assistance will come from the CSC Licensing Manager.)

8) Nuclear Safety Analysis Center (NSAC)

Notify, relay emergency class, type of accident, and Plant status (if known).

- c. Fill out Notification Work Sheet (Table 7 of PGE-1008A) as notifications are made.

14. Follow-up Communications

- a. Follow-up communications with offsite organizations will be provided at the following locations:

- 1) EOF: Coast Guard State and County EOCs.
- 2) TSC: Westinghouse and INPO (via NOTEPAD).
- 3) CSC: FAA
Burlington Northern Railroad
Bechtel
INPO (verbal)
Pacific Northwest Bell
WPPSS.

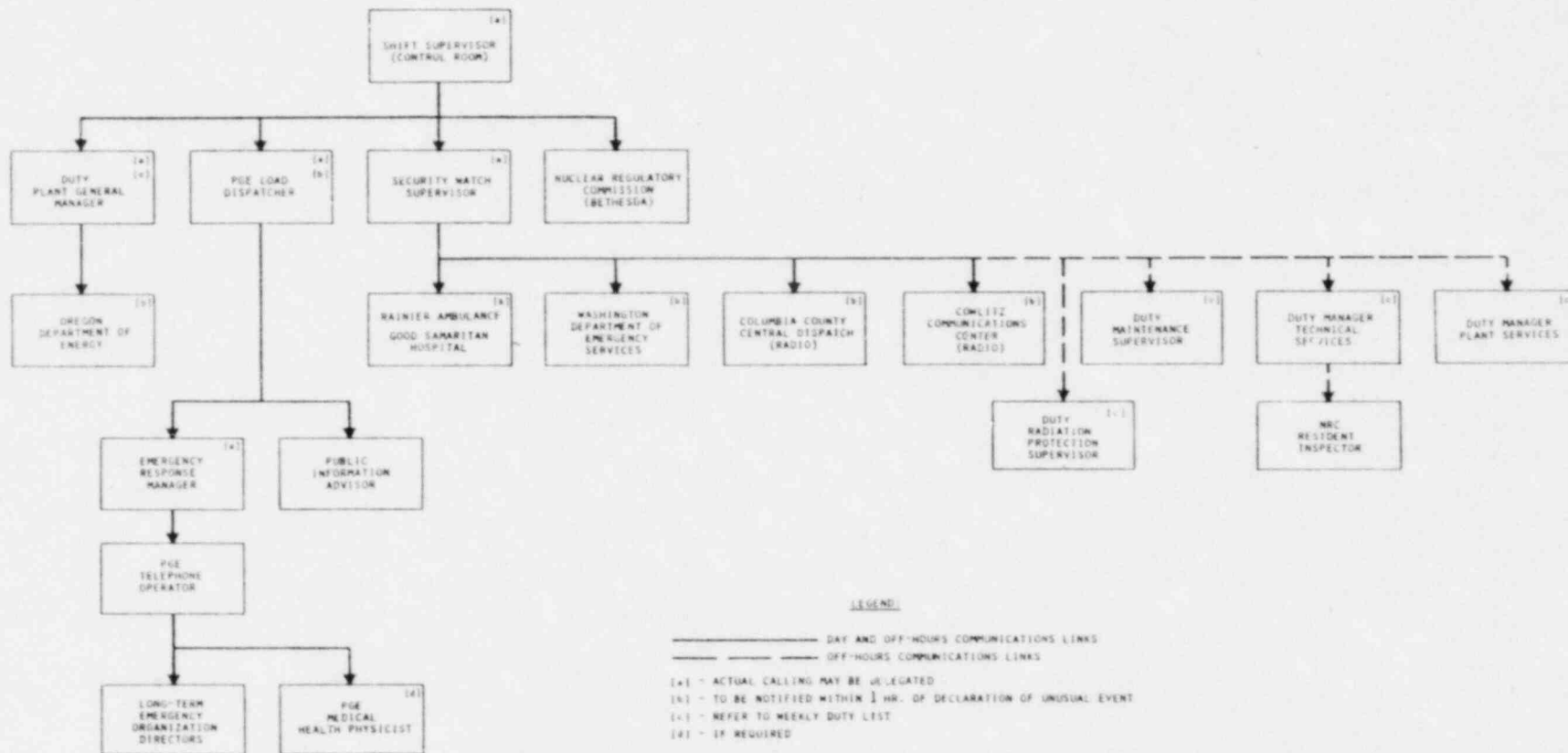


Figure 5-1 Notification Responsibilities, Unusual Event, Radiological Emergency Response Plan

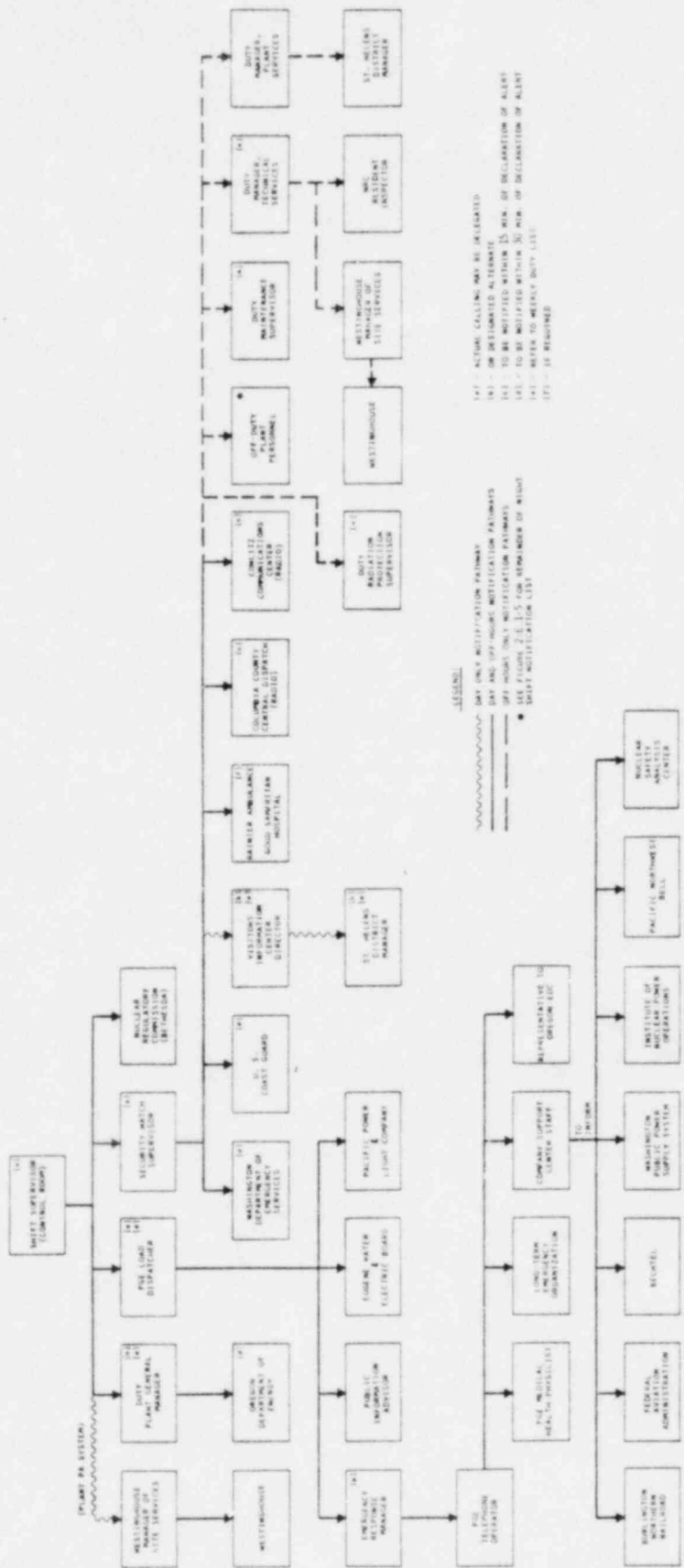


Figure 5-2 Notification Responsibilities, Alert, Radiological Emergency Response Plan

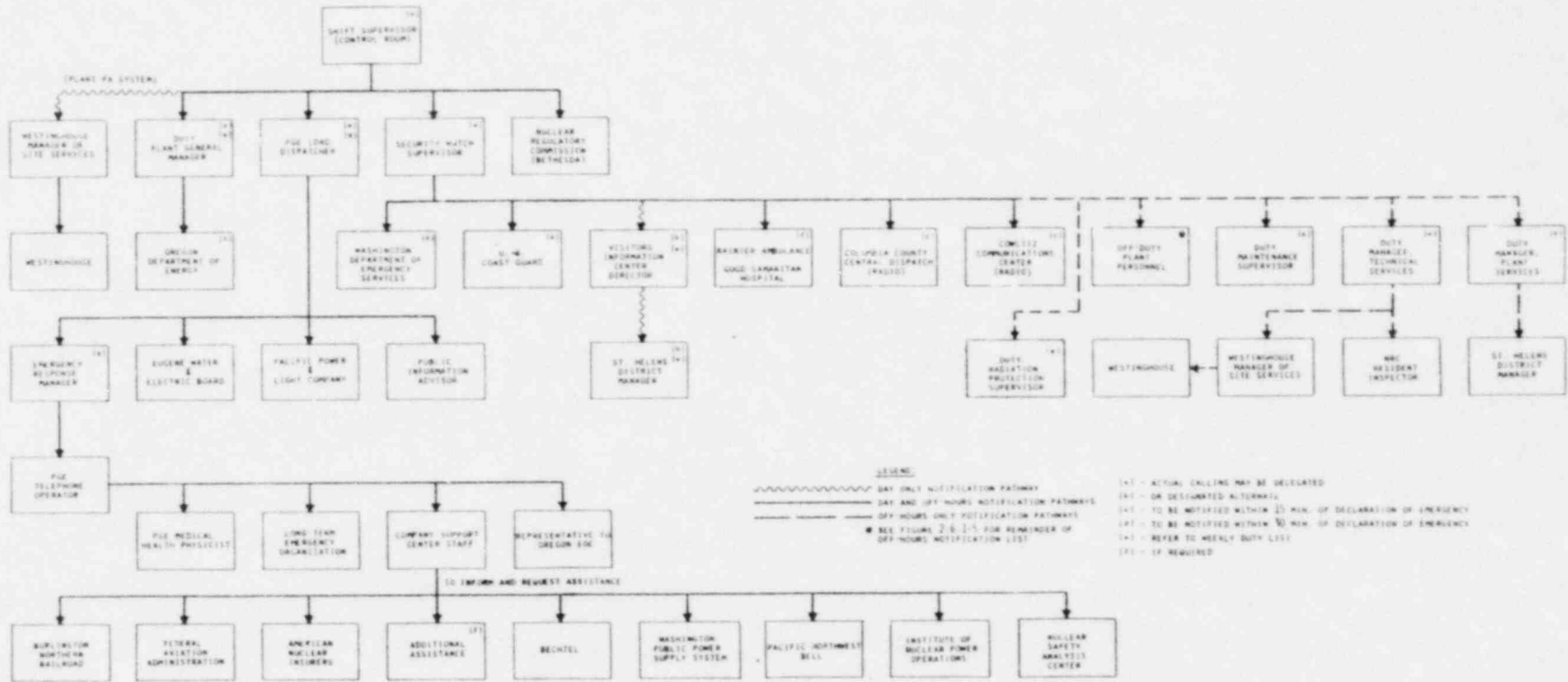


Figure 5-3 Notification Responsibilities, Site Area Emergency, Radiological Emergency Response Plan

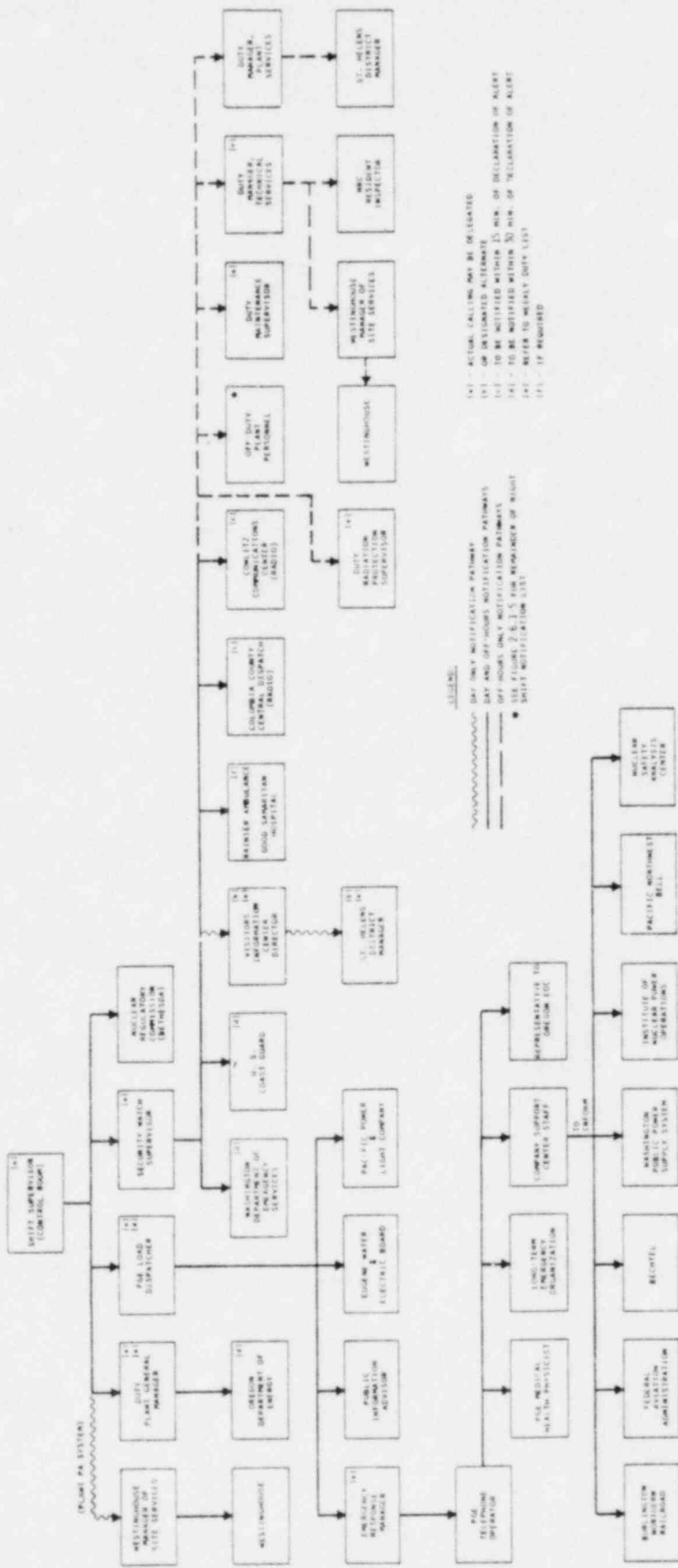
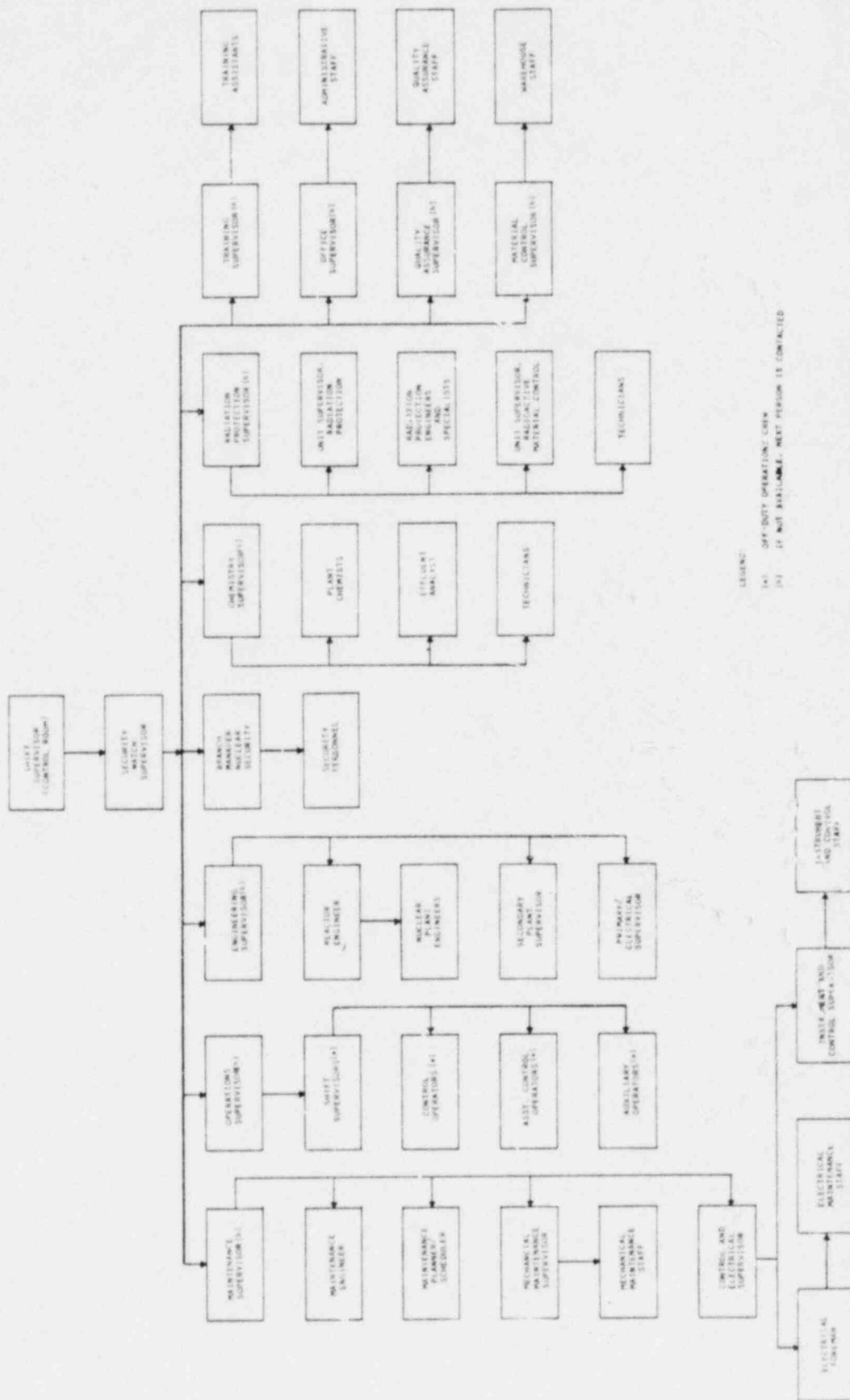


Figure 5-4 Notification Responsibilities, General Emergency,
Radiological Emergency Response Plan



LEGEND:
 (1) OFF-DUTY OPERATING CREW
 (2) IS NOT AVAILABLE, NEXT PERSON IS CONTACTED

Figure 5-5 Off-Hours Notification Response Plan, Radiological Emergency Response Plan

RADIOLOGICAL EMERGENCY RESPONSE PLAN IMPLEMENTING PROCEDURE

EP-8

SAFETY-RELATED

Operation of Emergency Operations Facility

Approved By

CP Jundt

Date

8/24/82

A. PURPOSE

The purpose of this procedure is to describe the operation of the Emergency Operations Facility (EOF) during the initial phase of an emergency.

B. OPERATION OF FACILITY

In the event of an Alert, Site Area Emergency or General Emergency, the Trojan Visitors Information Center (VIC) will become the EOF. The EOF consists of an area for communications, and an area for dose assessment, an area for assembly and decontamination and an office area. Figure 8-1 shows the floor plan of the EOF. The alternate EOF is the PGE St. Helens Office, Figure 8.21-1 shows the floor plan of the alternate EOF.

1. Communications Area

- a. The E communications area is located on the auditorium stage of the EOF (see Figure 3-1). Figure 8-2 shows a floor plan of the communications area.
- b. The following EOF personnel will report to this area:

EOF Director
Security Director
Public Information Representatives
Communications Director
Communications Staff
EOF Instrumentation and Control (I&C) Team

- 1) The position of EOF Director will be initially filled by the Duty Manager, Plant Services, who is on call 24 hours a day. In the absence of any of the remaining communications area personnel, an alternate or subordinate may be designated by the Emergency Coordinator to assume the position.

- 2) These personnel may be relieved by Headquarters support personnel or other Plant personnel as the emergency progresses and the Recovery phase is entered. The authority, responsibilities and duties of the communications area staff are given in Emergency Procedures EP-8.1, -8.2, -8.4, -8.5, -8.6 and -8.7. The authority, responsibilities and duties of the Public Information Representatives are described in Procedure EP-22.
 - 3) The Emergency Response Manager also has a location available for his use within the communications area (see EP-24, Long-Term Emergency Organization Procedures).
- c. The communications area will perform the following functions:
- 1) Receive Plant status and meteorological data from the TSC. This data will be recorded on the EOF Plant Status Data Form (Table 8-1).
 - 2) Advise local agencies directly affected by the emergency of recommended protective actions to be taken until the State Emergency Operations Centers (EOCs) can assume this advisory responsibility for their respective states. These protective action recommendations will be made by the Plant Emergency Coordinator and will include the reason for the recommendation(s).
 - 3) Transmit Plant data summaries, dose assessment results and subsequent protective action recommendations as required to the Company Support Center (CSC), the Oregon EOC, Washington EOC, Cowlitz County EOC, Columbia County EOC, the U. S. Coast Guard, and the Oregon Health Division AOC. Frequent updates of this information (about every 30 minutes) will be provided to the State and county EOCs. See Table 8-2 (Accident Assessment Report Form) for required information to be relayed.
 - a) Prior to the arrival of state representatives to the EOF, the Emergency Coordinator may transmit protective action recommendations to the State and County EOCs based on TSC and EOF (dose assessment area) recommendations.
 - b) After the arrival of the State representatives to the EOF, the Emergency Coordinator will consult with the State representatives at the EOF on protective action recommendations made by the TSC or the dose assessment area prior to the transmission of the recommendations to the State and County EOCs.

- c) To provide for quick information, updates will only include information that has changed or has been added since the last report. When only new or changed information is given, the reporter will clearly state what information is new and what information has changed.
- 4) Coordinate exclusion area evacuation and access control.
- 5) Interpret accident status data for transmission to the Public Information Advisor in the CSC and to the Emergency News Center.
- 6) Provide a location for periodic EOF staff briefings.
- d. The following communications equipment will be available in the communications area:
 - 1) Dedicated telecommunications system (DTS), consisting of:
 - a) Automatic Ringdown Telephone (ARD).
 - b) Selective Signaling Telephone (SS).
 - c) Public Information Telephone.
 - d) Hardcopy Data Transmission System (HDT).
 - 2) PGE Executone.
 - 3) Commercial (Pacific Northwest Bell) telephone system (with Intercom).
 - 4) PGE radio (blue band and brown band).
 - 5) Speaker for ground and aerial radio systems.
 - 6) USNRC dedicated telephone system [Emergency Notification System (ENS) and Health Physics Network (HPN)].
- e. The HDT system will be used to transmit the technical information supporting protective action recommendations and provide technical updates to the State and county EOCs. The following package of information shall be transmitted over the HDT system for normal information updates:
 - 1) Table 8-2.
 - 2) Short computer output.

Table 8-1 and the long computer output may also be transmitted upon request only.

NOTE: The transmittal of technical hardcopy information from the EOF shall take precedence over information transmitted by the EOCs via the HDT system.

- f. The SS telephone will be used for conducting technical discussions between the EOF and the State and county EOCs. The commercial telephone system will be used as a backup.
- g. The ARD telephone will be used for the following purposes:
 - 1) Summary transmittal of protective action recommendations and important information concerning the emergency (e.g., upgrades in emergency classification) to the State and county EOCs and the CSC.
 - 2) Consideration of and decisions on protective action recommendations among the EOF and the State and county EOCs.
- h. The PGE telephone system will be used as the primary means of communications with the Technical Support Center (TSC) and the Control Room. The Executone system will be used as the first backup and the PGE radio as the second backup.
- i. Messages for transmission or received over the communications system, for which a record is required or a response requested, will be recorded on the Standard Message Form (see Table 8-3).
- j. Detailed procedures for the use of the communications system are given in Emergency Procedure EP-19.

2. Dose Assessment Area

- a. The dose assessment area is located in the auditorium, as shown in Figure 8-1. Figure 8-3 shows the floor plan for the dose assessment area of the EOF.
- b. The following EOF personnel will report to this area:

Dose Assessment Director
Dose Assessment Staff
State Agency Representatives
Federal Agency Representatives

- 1) The position of Dose Assessment Director will be initially filled by the Duty Radiation Protector Supervisor who is on

call 24 hours a day. In the absence of the Duty Radiation Protection Supervisor, an alternate or subordinate will be assigned to this position by the Plant Emergency Coordinator. The initial dose assessment staff will consist of designated Plant engineers. PGE Headquarters personnel from the Radiological Engineering Branch will be dispatched as soon as possible to the EOF to relieve the Duty Radiation Protection Supervisor and the engineering staff. The Duty Radiation Protection Supervisor and Plant engineers will then report to the TSC. The authority, responsibilities and duties of the PGE personnel are given in Emergency Procedures EP-8.8 and EP-8.11.

- 2) The State agency representatives will be from the Oregon State Health Division (OSHD) and the Washington Department of Social and Health Services (DSHS). The Federal agency representatives may include NRC, EPA, FDA, or USDOE-Richland Operations personnel. The authority, responsibilities and duties of the State and Federal dose assessment representatives are given in Emergency Procedures EP-8.19 and EP-8.20.

c. The dose assessment area personnel will perform the following functions:

- 1) Direct PGE, State and Federal agency field and aerial monitoring teams and record and interpret monitoring team data. 2.5 and 10-mile radius survey grid maps are available in the EOF dose assessment area. Large-scale laminated 10-mile and 50-mile radius maps will be mounted on the walls of the EOF dose assessment area.
- 2) Perform offsite dose assessments and protective action evaluations for plume and ingestion exposure pathways using Plant effluent release data, meteorological data, and field team data. Dose assessment procedures are given in Emergency Procedure EP-29; protective action recommendation procedures are given in EP-30.
- 3) Report the results of dose assessments and any protective action recommendations (including public, Coast Guard, and emergency workers) to the EOF Director (to the Radiological Manager after he arrives) for communication to the Emergency Coordinator (Emergency Response Manager after he arrives), CSC and State and county EOCs, as appropriate (see Table 8-2).

- d. The following communications equipment will be available for use in the dose assessment area:
 - 1) Commercial telephone system (with Intercom).
 - 2) Two-way radio with air and ground monitoring team channels.
 - 3) Dedicated computer telephone line.
- e. One commercial telephone will be dedicated for use by the USDOE - Richland representative (after he arrives at the EOF).
- f. Messages to be transmitted or non-data messages received over the communications systems, for which a record is required or a response requested, will be recorded on the Standard Message Form (see Table 8-3).
- g. Detailed procedures for the use of the communications system are given in Emergency Procedure EP-19.

3. Assembly and Decontamination Area

- a. The assembly and decontamination area is located in the exhibit hall and maintenance room areas of the VIC (see Figure 8-1).
- b. The following personnel will report to this area:

Radiation Protection EOF Team
Designated Security Personnel

The authority, responsibility and duties of the personnel reporting to this area are given in Emergency Procedures EP-8.12 and EP-8.16.

- c. The following functions will be performed in the assembly and decontamination area of the EOF:
 - 1) Monitor and decontaminate personnel evacuated from the Plant.
 - 2) Assembly and dispatch point for essential Plant personnel not assigned to the Operational Support Center (OSC), TSC or other Plant areas.
 - 3) Assembly location for all personnel evacuated from the Plant.

- 4) Check-in and initial assignment of TLDs and PICs to personnel arriving at the EOF from offsite requiring entry to the Plant if, in the opinion of the Radiation Protection Supervisor, the access control area (Elevation 45 ft of the Control Building) or the OSC (Hagan Rack area) cannot be accessed without entering a radiation area.
- d. The commercial telephone system (with Intercom) will be available for use by the assembly and decontamination area.

4. Office Area

- a. The office area is located in the existing VIC office area (see Figure 8-1). Figure 8-4 shows floor plans of the Office Area.

- b. The following personnel will use this area:

Emergency Response Manager
Office Director
EOF Clerical Staff
NRC representatives
State agency representatives
Other Federal agency representatives

- 1) The position of Office Director will be initially filled by the Plant Office Supervisor. The Office Supervisor may be relieved by Headquarters support personnel as the emergency progresses.
 - 2) The authority, responsibilities and duties of the PGE personnel reporting to the office area are given in Emergency Procedures EP-8.13 and EP-8.14. State agency representatives are described in EP-8.18, and federal agency representatives are described in EP-8.19.
- c. The Office Area will perform the following functions:
 - 1) Provide office space and communications for NRC and other Federal representatives and State representatives.
 - 2) Provide reproduction and other clerical assistance to EOF personnel.
 - 3) Provide for the handling of incoming phone calls over the emergency PBX.
 - d. The following communications equipment will be available for use in the office area:
 - 1) Commercial telephone system (with Intercom).

5. Other Personnel

- a. Other personnel assigned to the EOF are:

Security Staff
VIC Staff
Radiation Protection Field Team
County Representatives

- b. The authority, responsibilities and duties of these personnel are described in Emergency Procedures EP-8.15 through EP-8.18.

C. ACTIVATION OF EOF

1. Day Shift

- a. The EOF will be activated within 30 minutes of the declaration of an Alert, Site Area Emergency, or General Emergency on day shifts.
- b. The EOF will be activated by the Duty Manager, Plant Services. The EOF communications staff, the VIC staff (if during VIC operating hours), the EOF security staff, and the EOF I&C Team will prepare the EOF for activation by:
- 1) Evacuating all members of the public from the VIC and the wildlife shelter areas (if during VIC operating hours).
 - 2) Setting up access control points, friskers and barriers (see Figure 8-1), assisted by the Radiation Protection EOF Team.
 - 3) Connecting EOF communications system in the communications and dose assessment areas including telephones, radio controls and hard copy data transfer. Emergency Procedure EP-19 describes the communications system setup.
 - 4) Setting up tables and chairs in the communications area (see Figure 8-2) and in the dose assessment area (see Figure 8-3).
 - 5) Distributing EOF supplies from the storage locations to the appropriate areas. A list of EOF supplies is given in Emergency Procedure EP-15. Their locations are shown in Figure 8-1.
- c. The Duty Manager, Plant Services will activate the various EOF areas based upon the following criteria:

1) Communications Area:

- a) When the communications equipment is set up and operating; and
- b) When sufficient staff personnel have arrived to man the communications links and to begin logging the accident chronology.

2) Dose Assessment Area:

- a) When the communications and computer equipment is set up and operating; and
- b) When the Duty Radiation Protection Supervisor (or an alternate or subordinate designated by the Emergency Coordinator) and at least one additional member of the Plant engineering staff has arrived; and
- c) When the Dose Assessment Director notifies the EOF Director that the dose area is ready for activation.

3) Assembly and Decontamination Area:

- a) When the barriers and friskers are set up and operating; and
 - b) When at least one member of the Radiation Protection EOF Team has arrived.
 - c) When the Duty Radiation Protection Supervisor informs the EOF Director that this area is ready for activation.
- d. The Duty Manager, Plant Services, will notify the Emergency Coordinator when the various EOF areas are activated.
- e. The Duty Manager, Plant Services (during VIC non-operating hours) or the VIC Director (during VIC operating hours) will notify the St. Helens District Manager or his alternate to prepare the alternate EOF for activation once the EOF is activated. Procedure EP-8.21 describes the operation of the Alternate EOF.

2. Off-Hour Shifts

The EOF will be activated within 60 minutes of the declaration of an Alert, Site Area Emergency, or General Emergency on off-hours shifts. On off-hour shifts, the Duty Manager, Plant Services will activate the EOF. The VIC staff, assisted by the EOF security staff and the

I&C EOF Team (when available), will help prepare the EOF for activation if the emergency occurs during VIC operating hours. At other times, the Security Watch Supervisor will direct a security guard to open the VIC. Security personnel, assisted by other members of the EOF staff as they arrive, will prepare the EOF for activation. The Duty Manager, Plant Services will contact the St. Helens District Manager or his alternate to prepare the alternate EOF. The criteria for activating the EOF areas are the same as for the day shift.

3. On activation of the EOF, the responsibility for offsite dose assessment and communications is shifted to the EOF.

D. EVACUATION OF THE EOF

1. The EOF shall be evacuated if one or more of the following conditions exist:
 - a. Gamma whole body dose rate measured by the EOF Radiation Protection Team in the EOF exceeds 1.0 rem/hr and persists for one (1) hour or more.
 - b. Iodine (I-131) air concentration measured by the EOF Radiation Protection Team in the EOF exceeds 100 MPC ($9.0E-7 \mu\text{Ci/cc}$) and persists for 1 hr or more.
 - c. Gamma whole body dose rate measured by the EOF Radiation Protection Team exceeds 10 rem/hr and persists for 5 min or more.
 - d. I-131 air concentration measured by the EOF Radiation Protection Team exceeds 1,000 MPC ($9.0E-6 \mu\text{Ci/cc}$) and persists for 5 min or more.

NOTE: The I-131 concentration limits specified in b. and d. above may be increased by a factor of 100 for all EOF personnel who have self-administered potassium iodide (KI) (see Procedure EP-14). KI tablets are stored at the EOF (see Procedure EP-15). Personnel for whom KI is not available will be evacuated when the limits in b. or d. are reached.

- e. The following Plant conditions as verified by the EOF Director exist for more than 2 min:
 - 1) Fuel melting indicated by Containment ARM reading or radiation dose rate measured outside Containment; and
 - a) Containment sprays and air coolers not functional; and containment pressure \geq 70 psig; or
 - b) Other conditions exist which will lead to loss of Containment integrity.

- f. EOF not habitable for any other reason.
2. The EOF Director shall notify the Emergency Coordinator when an EOF evacuation criterion is reached. The Emergency Coordinator shall make the decision on EOF evacuation.
3. The EOF Director shall notify the EOCs, the EOF staff and the alternate EOF if the EOF is to be evacuated. The TSC will assume functions of the EOF until the alternate EOF is activated.
4. The EOF personnel shall proceed as quickly as possible to the alternate EOF.
5. When evacuating the EOF, telephones shall be replaced in their cradles. Do not take maps, forms, etc, as these supplies are stored at the alternate EOF. Do take all records of accident events, security records, badges, personnel dosimeters, dosimetry records, the computer terminal and the hardcopy machine.

NOTE: A truck or van will be required to move the computer terminal and hardcopy machine. The EOF Director will obtain a truck or van if evacuation becomes imminent.

6. The Office Director (or designee) shall switch the EOF telephone system over to the alternate EOF before evacuating the EOF. This is done via a switch on the EOF PBX panel.
7. The EOF may be reactivated if the radiation levels fall below the limits given in D.1 above, as determined by measurements taken at the EOF by a field monitoring team, or Plant conditions change, and the Emergency Coordinator determines that the EOF is safe to reoccupy.

E. EOF SECURITY

1. Plant Security personnel will provide access control at the EOF entrances. Except as directed by the EOF Director, all personnel entering the EOF must have an assigned Trojan picture badge or a PGE Headquarters picture badge, or be a member of the following outside organizations who may supply members of the EOF staff:
 - a. Oregon Department of Energy
 - b. Oregon State Health Division
 - c. Washington Department of Emergency Services
 - d. Washington Department of Social and Health Services

- e. U. S. Nuclear Regulatory Commission
 - f. Federal Emergency Management Agency
 - g. U. S. Department of Energy - Richland Operations Office
 - h. U. S. Environmental Protection Agency
 - i. U. S. General Services Administration
 - j. U. S. Department of Agriculture
 - k. U. S. Food and Drug Administration
 - l. Columbia County Officials
 - m. Cowlitz County Officials
2. The above county, state, and federal personnel will be required to establish their identities before being admitted to the EOF.
 3. All personnel entering the EOF will be issued an EOF badge. EOF staff personnel will be issued EOF Staff badges. Plant evacuees who are not part of the EOF staff and who will remain at the EOF will be issued Plant Staff badges. All other personnel will be admitted only upon the approval of the EOF Director or the Emergency Response Manager and will be issued visitor badges. Non-EOF personnel will only be allowed in the office area, dose assessment area, communications area, or the assembly/decontamination area with permission from the EOF Director or the Emergency Response Manager and with an escort.
 4. Detailed EOF security procedures are contained in the PGE Nuclear Security Procedures.

F. LONG-TERM OPERATIONS

1. During the Long-Term and Recovery phases, the EOF will become the headquarters of the onsite Response Center. The EOF may remain activated until completion of all recovery operations. See Emergency Procedure EP-24 for the Long-Term Emergency Operations Procedures.
2. Population dose assessments for external and internal radiation exposure will continue to be performed by the Dose Assessment Staff using Emergency Procedure EP-29.
3. The EOF will continue to communicate recommendations for the implementation or the relaxing of protective actions using Emergency Procedure EP-30.

TABLE 8-1

EOF PLANT STATUS DATA FORM

DATE: _____ Time: _____

PLANT STATUS	METEOROLOGY DATA	RADIOACTIVE EFFLUENT RELEASE DATA
RCS PRESS _____	WIND SPEED (mph) _____	AIRBORNE _____
RCS TEMP _____	WIND DIRECTION _____	WATERBORNE _____
RCS FLOW _____	FROM _____ TOWARD _____	SOURCE OF RELEASE _____
PSZR LEVEL _____	PRECIPITATION _____	_____
Rx VESSEL LEVEL _____	OTHER INFORMATION _____	ESTIMATED RELEASE DURATION _____
CONT. PRESS _____	_____	EMERGENCY CLASSIFICATION _____
CONT. SPRAY STATUS _____	_____	_____
CONT. AIR CLR. STATUS _____	_____	_____
ECCS STATUS _____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
<p>OFFSITE PROTECTIVE ACTIONS RECOMMENDED</p> <p>ACTION: _____</p> <p>SECTOR(S): _____</p> <p>DISTANCE (MILES) _____</p>		

NOTE: MAKE WRITING DARK AND LEGIBLE

ACCIDENT ASSESSMENT REPORT FORM

Recorder:

Date:		Time:		Time of Accident:	
Check: Unusual Event () Alert () Site Area Emergency () General Emergency ()					
Brief Description (Accident; Plant Status; Prognosis): _____					
Check: Airborne Release () Waterborne Release () No Release ()					
Meteorology					
Wind Speed (mph):		Direction From[a]:		Direction Toward[a]:	
Stability Category:			Precipitation:		
<u>Recommended Offsite Protective Actions</u>					
Action(s):		_____	_____	_____	_____
Sector(s) ^[b] :		_____	_____	_____	_____
Distance (miles):		_____	_____	_____	_____
Onsite Protective Actions in Effect: _____					
Offsite Assistance Requested: _____					
Nontechnical Information: _____					

(Continued on Sheet 2)

NOTE: MAKE WRITING DARK AND LEGIBLE

Radioactive Effluent Release Data		
Radioactivity Release Rates		Estimated Release Duration (hr) [c]
Noble Gases (Ci/sec)	Iodine (Ci/sec)	Check if default value used () Other radionuclides (Ci/sec)

() Check here if listed on attached computer output.

	Projected Dose Rate and Doses			
	Dose Rate (rem/hr)		Integrated Dose (rem)	
	Whole Body	Thyroid	Whole Body	Thyroid
Exclusion Area Boundary (EAB)	_____	_____	_____	_____
2.5 miles	_____	_____	_____	_____
5.0 miles	_____	_____	_____	_____
10.0 miles	_____	_____	_____	_____

() Check here if listed on attached computer output.

Distance to which plume PAG doses may be exceeded (miles): _____

Distance to which ingestion PAG doses may be exceeded (miles): _____

Injured Personnel Status: _____

Technical Information: _____

NOTE: MAKE WRITING DARK AND LEGIBLE

[a] Give as one of the 16 cardinal compass directions (N, NNE, etc).

[b] Evacuation sector identifications are given in Emergency Procedure EP-30.

[c] Default value for release duration is 3 hours.

TABLE 8-3

RADIOLOGICAL EMERGENCY RESPONSE
STANDARD MESSAGE FORM

From: _____ Date/Time: _____
To: _____

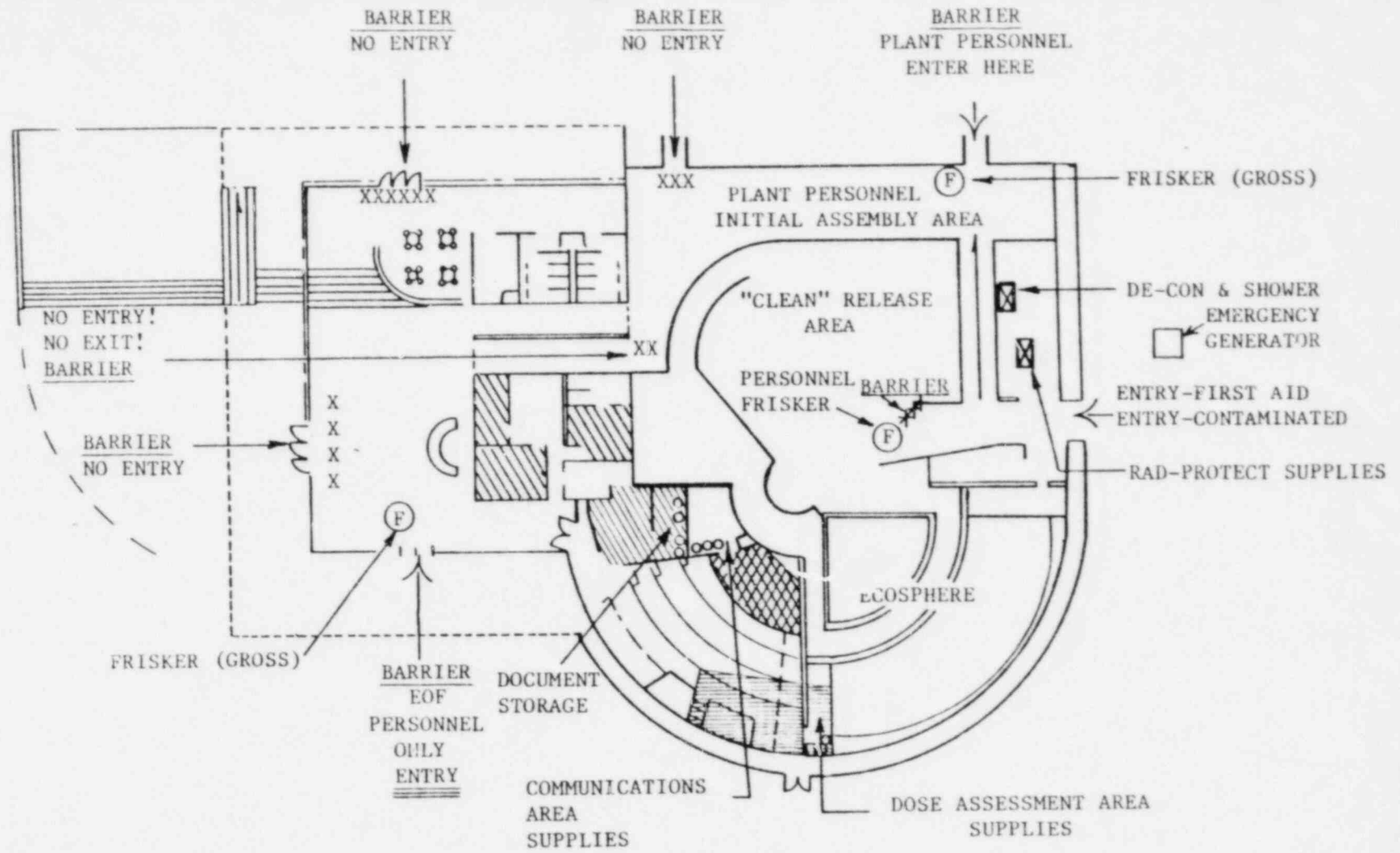
SIGNATURE _____

(FOR MESSAGE CENTER USE ONLY)




TRANSMITTED Ground Aerial DTS Other
TRANSMITTED BY: Radio _____ Radio _____ Tel. _____ Tel. _____ Messenger _____
TIME SENT/RECEIVED _____ OPERATOR _____

NOTE: MAKE WRITING DARK AND LEGIBLE

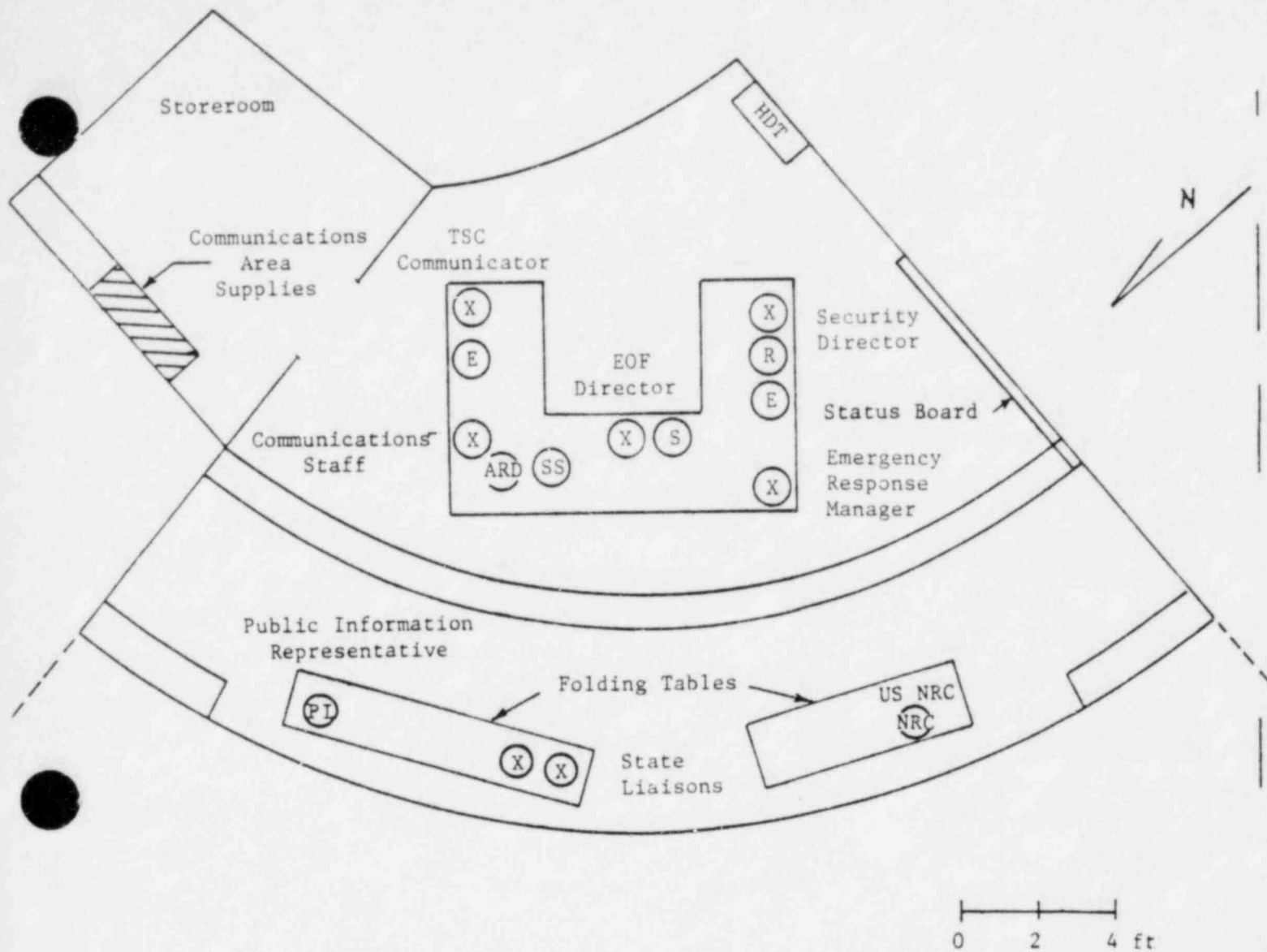
Figure 8-1 Emergency Operations Facility Floor Plan
(Visitors Information Center)



FIELD TEAM VEHICLE

-  OFFICE AREA
-  DOSE ASSESSMENT AREA
-  COMMUNICATIONS AREA (AUDITORIUM STAGE)

10 25 50



- (E) - Executone
- (S) - Aerial, Ground Radio Speaker
- (R) - PGE Radio Control
- (ARD) - Automatic Ringdown Dedicated Telephone
- (SS) - Selective Signaling Dedicated Telephone
- (PI) - Public Relations Representative Telephone
- (NRC) - NRC Telephones (4)
- (X) - Commercial Telephone
- HDT - Hard Copy Data Transmission Machine

Figure 8-2 Floor Plan, EOF Communications Area

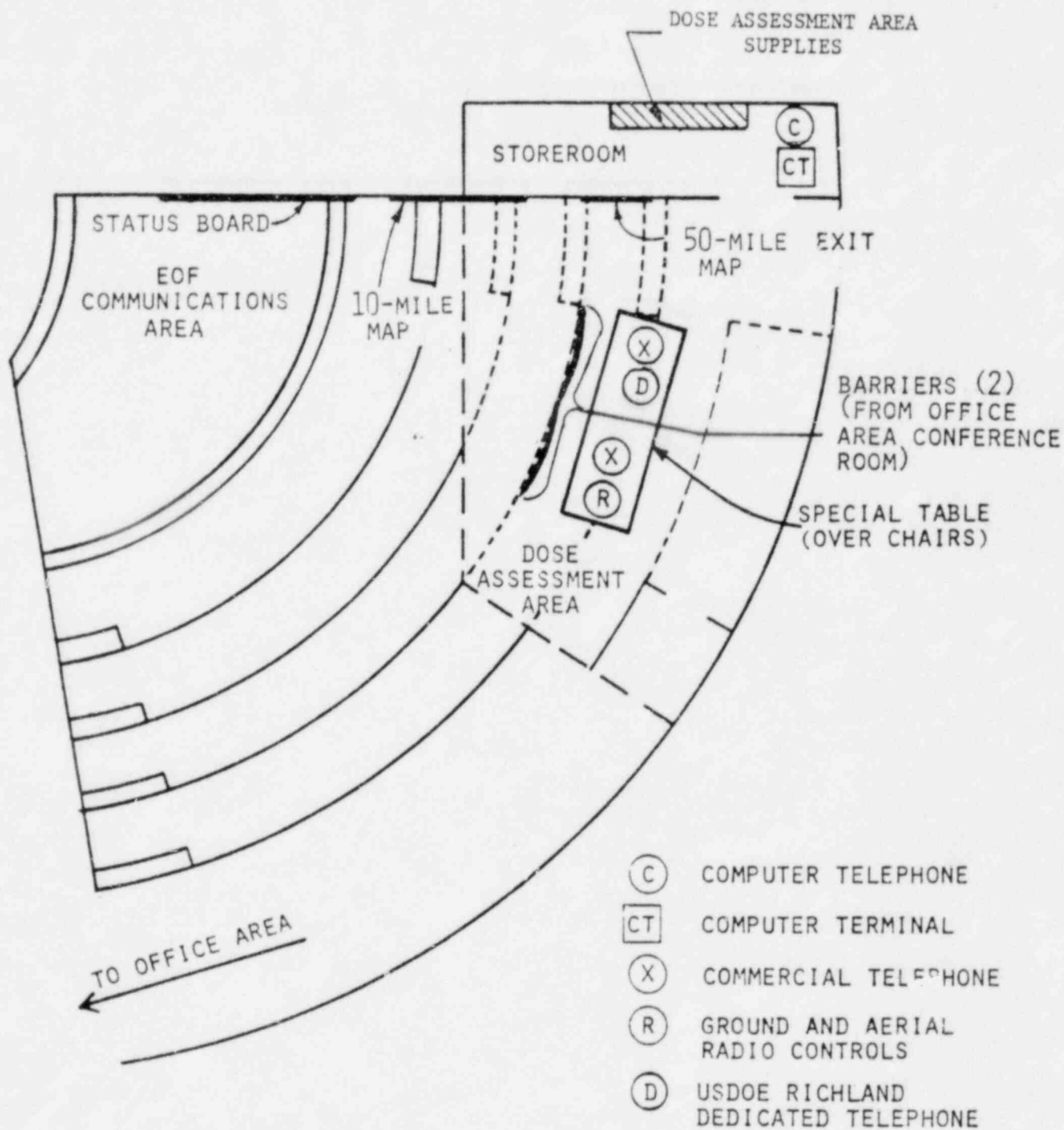
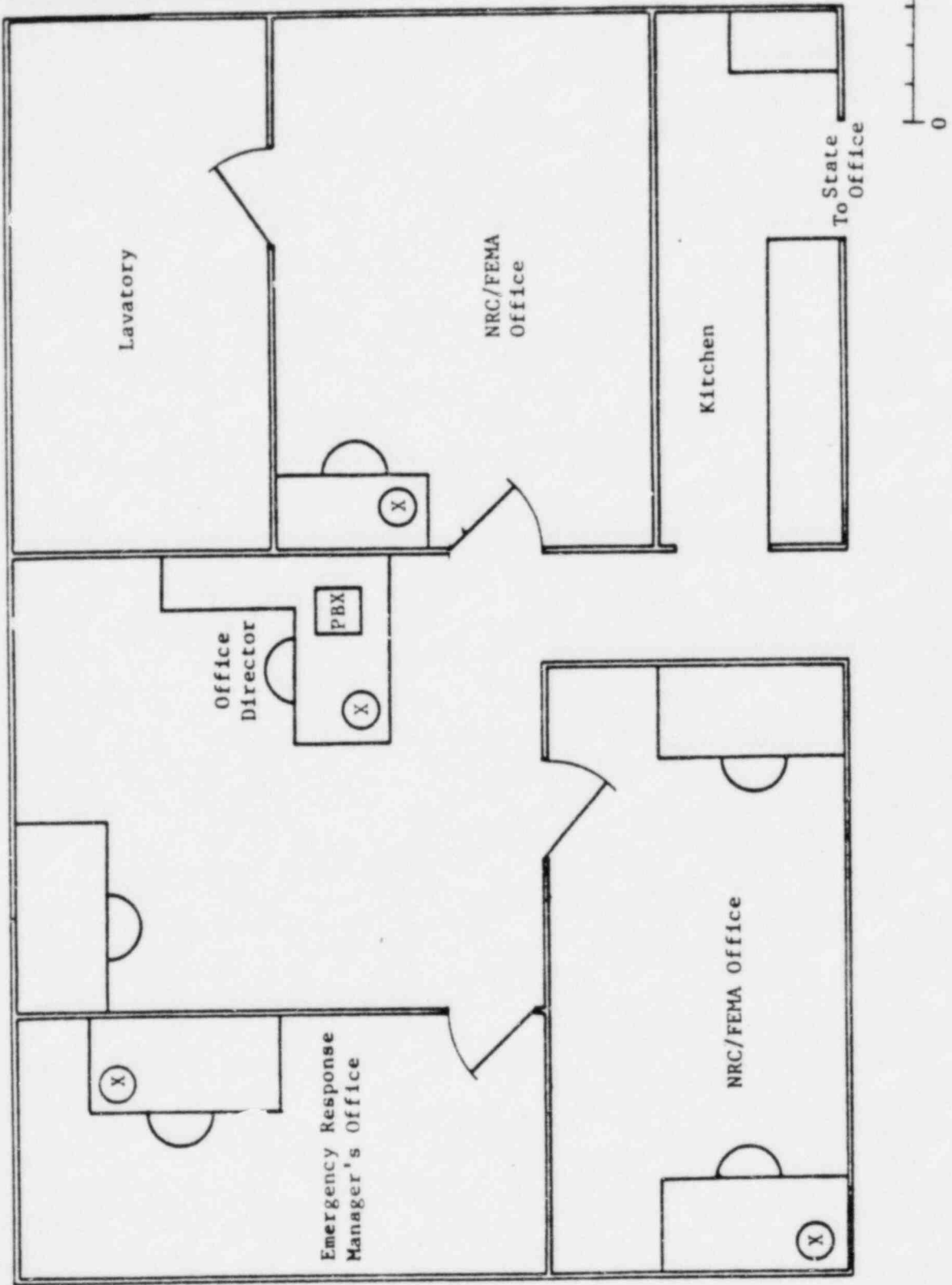


Figure 8-3 Floor Plan, EOF Dose Assessment Area

Figure 8-4
Page 1 of 2



(X) - Commercial Telephone
PBX - Emergency PBX

Figure 8-4 Floor Plan - FOF Office Area

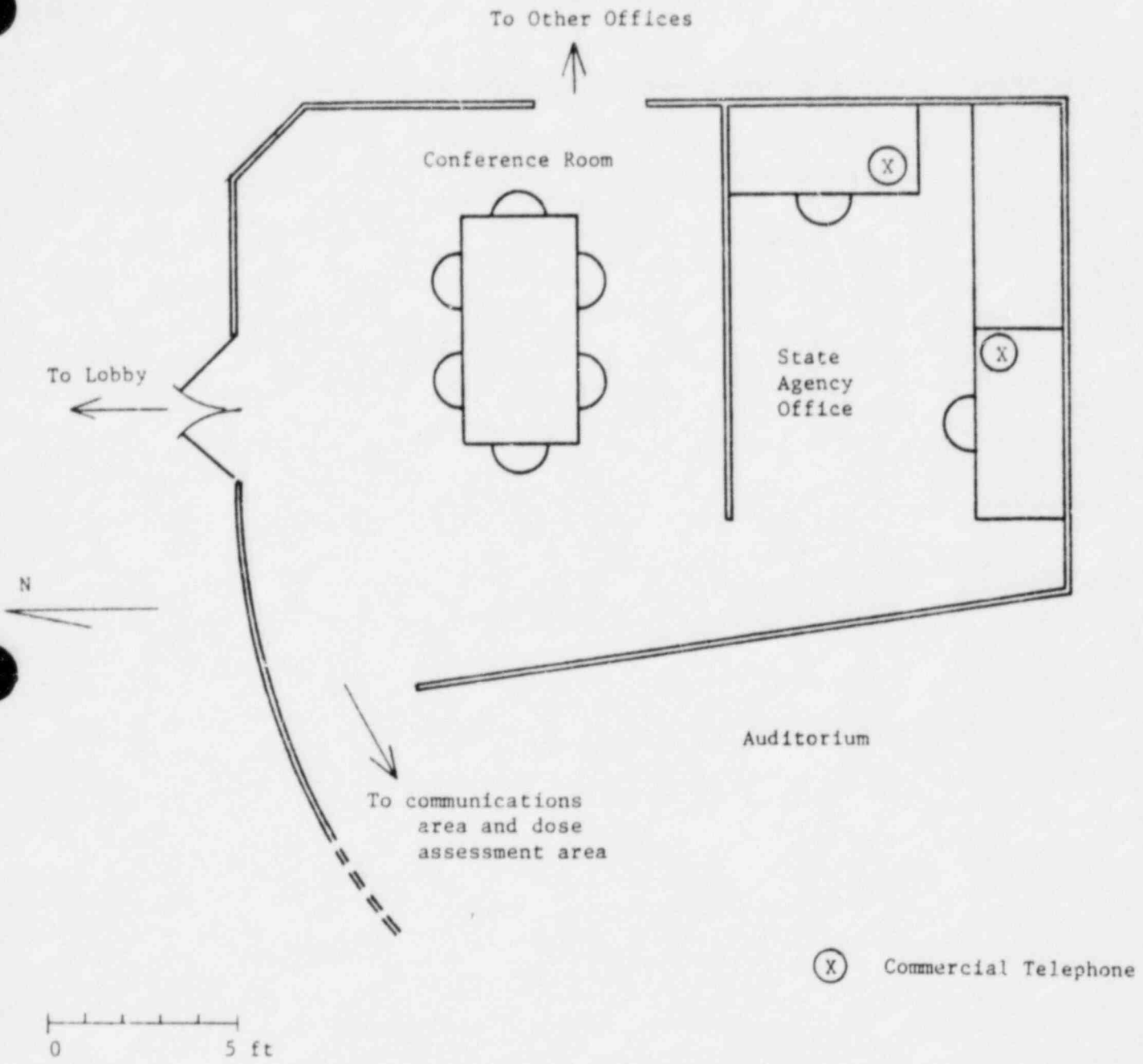


Figure 8-4 Floor Plan, EOF Office Area

RADIOLOGICAL EMERGENCY RESPONSE PLAN IMPLEMENTING PROCEDURE

EP-8.1

SAFETY-RELATED

EOF DIRECTOR

Approved by _____

R. Jundt

Date

8/23/82

A. PURPOSE

To describe the authority, responsibilities and duties of the EOF Director.

B. AUTHORITY

The EOF Director initially reports to the Emergency Coordinator in the Technical Support Center (TSC). He coordinates the operation of the Emergency Operations Facility (EOF). This position is initially assigned to the Duty Manager, Plant Services who is on call 24 hr a day. The Duty Manager is either the Manager, Plant Services, the Quality Assurance Supervisor, the Material Control Supervisor, or other qualified individuals designated by the Trojan General Manager. The EOF Director reports to the Emergency Response Manager upon his arrival at the EOF.

C. RESPONSIBILITIES

The EOF Director is responsible for coordinating the operation of the EOF. He is responsible for the communication of Plant status, offsite dose projections and protective action recommendations to the State and county Emergency Operation Centers (EOCs). He is also responsible for providing accommodations for Federal and State agency representatives at the EOF.

D. DUTIES

1. The duties of the EOF Director are as follows:

- a. Supervise communications between the EOF and the TSC over the in-Plant communications system.
- b. Supervise communications of Plant status data, offsite dose projections and protective action recommendations to the CSC, the Oregon and Washington EOCs, Columbia County EOC, Cowlitz County EOC and the Oregon Health Division AOC.
- c. Supervise the Security Director in his performance of Plant and site security duties, such as evacuation and site access control.

- d. Supervise the Office Director in his/her performance of clerical duties.
- e. Direct the VIC staff in setting up accommodations for State and Federal agency representatives at the EOF.
- f. Coordinate the overall operation of the EOF.
- g. Activate the EOF, including the communications, dose assessment, assembly and decontamination areas.
- h. Conduct periodic EOF staff briefings, as time permits.

RADIOLOGICAL EMERGENCY RESPONSE PLAN IMPLEMENTING PROCEDURE

EP-8.2

SAFETY-RELATED

SECURITY DIRECTOR

Approved by *R Yamst* Date 8/23/82

A. PURPOSE

To describe the authority, responsibilities and duties of the Security Director.

B. AUTHORITY

The Security Director reports to the Emergency Operations Facility (EOF) Director and directs Trojan security forces through the Security Watch Supervisors. This position is initially assigned to the Branch Manager, Nuclear Security, or in his absence, the Security Watch Supervisor.

C. RESPONSIBILITIES

The Security Director is responsible for security activities during an emergency, for traffic control and assuring that evacuation of the exclusion area is accomplished, and that the ambulance and hospital are notified and arrangements are made for transport and medical treatment of the injured. He is responsible for the presence and safety of all security personnel, and for accounting for all Plant and contractor personnel evacuated to the EOF. He is also responsible for maintaining communications with the U. S. Coast Guard from the EOF.

D. DUTIES

1. The duties of the Security Director are as follows:
 - a. Supervise and direct the evacuation of the exclusion area.
 - b. Supervise and direct access control to the site.
 - c. Supervise security at the EOF.
 - d. Supervise in-plant security.
 - e. Direct the notification of hospitals and the ambulance.

- f. Supervise arrangements for transport and medical treatment of injured personnel.
 - g. Supervise the accounting for Plant and contract personnel evacuated from the site.
 - h. Communicate emergency status and protective action recommendations for the Columbia River to the U. S. Coast Guard. Information to be transmitted is as follows:
 - 1) Information from Table 8-2:
 - a) Areas to be evacuated.
 - b) Physical form of release (airborne or waterborne).
 - c) Wind direction and wind speed.
 - d) Projected maximum whole body dose rate at EAB (rem/hr).
 - e) Recommendation for use of KI by Coast Guard personnel (if recommended by the Dose Assessment Director).
 - 2) Additional information:
 - a) Instructions to use all boat ramps within evacuated areas.
 - b) Commitment for further updates.
 - c) Additional Coast Guard assistance required.
2. The Security Director will perform his duties in accordance with procedures established in the Trojan Security Procedures.

RADIOLOGICAL EMERGENCY RESPONSE PLAN IMPLEMENTING PROCEDURE

EP-8.4

SAFETY-RELATED

COMMUNICATIONS DIRECTOR

Approved by CP Yundt Date 8/23/82

A. PURPOSE

To describe the authority, responsibility and duties of the Communications Director.

B. AUTHORITY

The Communications Director reports to the Emergency Operations Facility (EOF) Director. This position is initially filled by the Training Supervisor or his designated alternate.

C. RESPONSIBILITIES

The Communications Director is responsible for providing communications between the EOF, the TSC and the Control Room. He is also responsible for supervising and directing and Communications Staff at the EOF.

D. DUTIES

The duties of the Communications Director are as follows:

1. Supervise and direct the Communications Staff to assist the EOF Director as required.
2. Assist the EOF Director by providing communications between the EOF and the TSC and Control Room.

RADIOLOGICAL EMERGENCY RESPONSE PLAN IMPLEMENTING PROCEDURE

EP-8.6

SAFETY-RELATED

COMMUNICATIONS STAFF

Approved by _____

CP Yemast

Date

8/27/82

A. PURPOSE

To describe the authority, responsibilities and duties of the Communications Staff at the Emergency Operations Facility (EOF).

B. AUTHORITY

The Communications Staff reports to the Communications Director. The staff initially consists of all Plant training assistants.

C. RESPONSIBILITIES

The Communications Staff is responsible for providing communications between the EOF and the State and County Emergency Operations Centers (EOCs). The Communications Staff is also responsible for providing communications between the EOF and the Company Support Center (CSC) and any other outside agency or organization.

D. DUTIES

1. Assist the EOF Director by providing communications between the EOF, the CSC and the State and County EOCs via the dedicated telephone system (DTS).
2. Assist the EOF Director by providing communications between the EOF and any outside governmental or private agencies or organizations via the commercial telephone system.
3. Perform communications area status board updating.
4. Perform communications and other duties as specified by the Communications Director.

RADIOLOGICAL EMERGENCY RESPONSE PLAN IMPLEMENTING PROCEDURE

EP-8.8

SAFETY-RELATED

DOSE ASSESSMENT DIRECTOR

Approved by _____

CP Jundt

Date 8/23/82

A. PURPOSE

To describe the authority, responsibilities and duties of the Emergency Operations Facility (EOF) Dose Assessment Director.

B. AUTHORITY

The Dose Assessment Director has the authority to direct out-of-Plant dose assessments, radiation surveys, field monitoring, and environmental sampling. This position will be filled initially by the Duty Radiation Protection Supervisor or his designated alternate. The Duty Radiation Protection Supervisor reports administratively to the Manager, Technical Services at the Technical Support Center (TSC). When the Duty Radiation Protection Supervisor is serving as the Dose Assessment Director, he reports functionally to the EOF Director. When this position is filled by a member from the Headquarters Radiological Engineering Branch, the Dose Assessment Director reports to the Radiological Manager.

C. RESPONSIBILITIES

The Dose Assessment Director is responsible for dose assessments based on data received from the TSC and the field monitoring teams. The Dose Assessment Director is responsible for coordination of offsite dose assessments and protective action recommendations with PGE, Oregon State Health Division (OSHD), and Washington Department of Social and Health Services (DSHS) personnel at the EOF dose assessment area. He is also responsible for personnel decontamination and radiation surveys at the EOF and for providing advice to the Manager, Technical Services at the TSC on radiation protection matters (Radiation Protection Supervisor only).

D. DUTIES

1. The duties of the Dose Assessment Director are as follows:
 - a. Notify the EOF Director when the dose assessment area and the assembly and decontamination area are ready for activation.

- b. Assign and direct the designated staff personnel (both PGE and States) in performing dose assessments and protective action evaluations.
 - c. Coordinate offsite dose assessments and protective action recommendations with State agency representatives on the Dose Assessment staff.
 - d. Report dose assessment results and protective action recommendations to the EOF Director (the Radiological Manager after his arrival at the EOF) for communication to the State EOCs and to the Emergency Coordinator.
 - e. Provide the EOF Director (the Radiological Manager after his arrival at the EOF) with updated dose assessments and/or protective action recommendations when required.
 - f. Supervise communications with and direction of field and aerial monitoring teams.
 - g. Supervise and direct radiation surveys and decontamination operations by the Radiation Protection EOF Team (Radiation Protection Supervisor only).
 - h. Report the results of radiation surveys to the EOF Director.
 - i. Advise the Manager, Technical Services at the TSC regarding in-Plant radiological health matters (Radiation Protection Supervisor only).
2. When relieved by members of the Headquarters Radiological Engineering Branch, the Radiation Protection Supervisor will report to the TSC and will continue performing duties D.1.g through D.1.i at the TSC.

RADIOLOGICAL EMERGENCY RESPONSE PLAN IMPLEMENTING PROCEDURE

EP-8.11

SAFETY-RELATED

EOF DOSE ASSESSMENT STAFF

Approved by

CP Jundt

Date

8/23/82

A. PURPOSE

To describe the authority, responsibilities and duties of the Emergency Operations Facility (EOF) Dose Assessment Staff.

B. AUTHORITY

The EOF Dose Assessment Staff initially consists of Plant engineers designated by the Emergency Coordinator. The Dose Assessment Staff reports to the Dose Assessment Director for specific duty assignments. The Dose Assessment Staff fills the roles of dose assessor, recorder/communicator, Assistant Field Team Coordinator, and computer operator. In the short-term, until the State representatives arrive at the EOF, the Assistant Field Team Coordinator will also fill the roles of Field Team Coordinator.

C. RESPONSIBILITIES

The responsibilities of the Dose Assessment Staff are to perform radiation dose calculations, to provide communications between the dose assessment area and the TSC, EOF Director and monitoring teams, and to document all dose assessment activities.

D. DUTIES

1. Duties of the dose assessor role are to:

- a. Organize Plant data, meteorological data and field monitoring data for computer input (see EP-29).
- b. Instruct the computer operator on computer codes to be run, parameters to input and type of output report.
- c. Review and interpret dose assessment results.
- d. Complete the appropriate sections of the Accident Assessment Report Form (see Table 8-2).

- e. Report results to the Dose Assessment Director.
 - f. Perform worksheet dose calculations (see EP-10) when the computer terminal is unavailable.
 - g. Reassess dose projections for plume and ingestion exposure pathways for significant changes in Plant conditions and/or meteorology as required.
 - h. Maintain copies of Table 8-2, Table 8-3 and original computer outputs (if not transmitted to the EOF Director).
2. Duties of the recorder/communicator role are to:
- a. Staff the telephone to the TSC.
 - b. Record technical data received from the TSC/EOF on Dose Assessment Data Form 29A. After recording, give original copy of Form 29A to the dose assessor and retain the carbon copy for record purposes.
 - c. Record current Plant effluent release data, meteorological data and significant field monitoring data on the dose assessment status boards.
 - d. Review Accident Assessment Report Forms (see Table 8-2) for completeness of dose assessment and protective actions sections. Give original copy to the Dose Assessment Director for transmittal to the EOF Director (Radiological Manager) and keep the carbon copy for record purposes.
 - e. Maintain chronological records (copies) of Forms 29A, B, C, and D.
3. Duties of the Assistant Field Team Coordinator are to:
- a. Before the arrival of a State representative, perform the duties of the Field Team Coordinator as described in EP-8.18.
 - b. Assist the Field Team Coordinator, monitoring the ground and aerial radio transmission, or (if directed) man the ground and/or aerial radio controls.
 - c. If monitoring radio transmissions, record field team instructions from Field Team Coordinator to field teams on Standard Message Form (Table 8-3).
 - d. Record field team data received over radios on Form 29A.

- e. Maintain chronological records (copies) of any forms used to transmit field team information (Table 8-3).
 - f. Assist the Field Team Coordinator in recording field team positions and reports on the overhead projector screen in the dose assessment area (if available), the small 2.5-mile, 10-mile, and 50-mile maps in the dose assessment area, or the field team status board.
4. Duties of the computer operator are to:
- a. Operate the computer terminal as instructed by the Dose Assessor. (See EP-29.1, -29.2, -29.3 and -29.4.)
 - b. Maintain the carbon copy of each computer output for record purposes.
 - c. Assist the Dose Assessor in evaluating computer outputs.
 - d. Assist the Dose Assessor in performing worksheet calculations (EP-10) when the computer terminal is unavailable for use.
5. When relieved by members of the Headquarters Radiological Engineering Branch, Plant engineers serving as the Dose Assessment Staff will report to the Plant General Manager at the TSC for in-Plant duty assignments.

RADIOLOGICAL EMERGENCY RESPONSE PLAN IMPLEMENTING PROCEDURE

EP-8.12

SAFETY-RELATED

RADIATION PROTECTION EOF TEAM

Approved by CP Yundt Date 8/23/82

A. PURPOSE

To describe the authority, responsibilities and duties of the Radiation Protection EOF Team.

B. AUTHORITY

This team consists of designated C&RP Technicians assigned to the Chemistry Section. This team is directed by the Radiation Protection Supervisor.

C. RESPONSIBILITIES AND DUTIES

The responsibilities and duties of the Radiation Protection EOF Team are as follows:

1. Assist the VIC staff, if necessary, in setting up barriers and the decontamination area.
2. Notify the Dose Assessment Director when the assembly and decontamination area is ready for activation.
3. Monitor for contamination and decontaminate, as required, all personnel arriving at the EOF from the Plant.
4. Collect TLDs and PICs from all personnel evacuated from the Plant to the EOF.
5. Perform periodic radiation surveys at the EOF to determine if evacuation to the alternate EOF is required. Radiological evacuation criteria are as follows:
 - a. Gamma whole body dose rate measurement inside the EOF exceeds 1.0 rem/hr for 1 hr or more, or 10 rem/hr for 5 min or more; or
 - b. Airborne iodine concentration measurement inside the EOF exceeds 100 MPC ($9.0E-7$ μ Ci/cc) for one hour or more, or 1,000 MPC ($9.0E-6$ μ Ci/cc) for 5 min or more. Note: This limit may be increased by a factor of 100 for all EOF personnel who have self-administered KI (see EP-14).

6. Provide first aid to EOF personnel.
7. Issue TLDs and P³Cs to emergency personnel arriving from offsite who require entry to the Plant as directed by the Radiation Protection Supervisor according to radiation protection procedures.

RADIOLOGICAL EMERGENCY RESPONSE PLAN IMPLEMENTING PROCEDURE

EP-8.13

SAFETY-RELATED

OFFICE DIRECTOR

Approved by *P. J. ...* Date 8/23/82

A. PURPOSE

To describe the authority, responsibilities and duties of the Emergency Operations Facility (EOF) Office Director.

B. AUTHORITY

The Office Director reports to the EOF Director. Reporting to the Office Director are designated clerical personnel. This position is initially filled by the Plant Office Supervisor.

C. RESPONSIBILITIES

The Office Director is responsible for providing reproduction and other office services as required by the EOF staff and for staffing the emergency PBX at the EOF.

D. DUTIES

The duties of the Office Director are as follows:

1. Assign clerical staff personnel to the office, dose assessment, and communications areas as required.
2. Direct the EOF clerical staff personnel to provide reproduction, office services, and other services as required by the EOF staff.
3. Assign members of the clerical staff to man the emergency PBX located in the office area of the EOF. See EP-19 for procedure for operation of the commercial telephone system at the EOF.
4. Upon evacuation of the EOF, switch the EOF telephones over to the Alternate EOF (or assign a member of the clerical staff to perform this function).

RADIOLOGICAL EMERGENCY RESPONSE PLAN IMPLEMENTING PROCEDURE

EP-8.14

SAFETY-RELATED

EOF CLERICAL STAFF

Approved by

C.P. Jandt

Date

8/23/82

A. PURPOSE

To describe the authority, responsibilities and duties of the Emergency Operations Facility (EOF) clerical staff.

B. AUTHORITY

The clerical staff consists of clerical personnel designated by the Plant Office Supervisor to report to the EOF. The clerical staff reports to the Office Director.

C. RESPONSIBILITIES AND DUTIES

The responsibilities and duties of the clerical staff are as follows:

1. Provide reproduction and other office services as directed by the Office Director.
2. Act as messengers for the EOF staff.
3. Staff the emergency PBX located in the office area of the EOF.

RADIOLOGICAL EMERGENCY RESPONSE PLAN IMPLEMENTING PROCEDURE

EP-8.16

SAFETY-RELATED

SECURITY STAFF

Approved by CP Jandt Date 8/23/82

A. PURPOSE

To describe the authority, responsibilities and duties of the Security staff.

B. AUTHORITY

The Emergency Operations Facility (EOF) Security staff consists of the Security Watch Supervisor and security guards who have been designated to report to the EOF. The Security staff reports to the Security Director.

C. RESPONSIBILITIES AND DUTIES

1. The responsibilities and duties of the Security staff are as follows:
 - a. Perform evacuation of the exclusion area.
 - b. Control access to the Plant site through road blocks at the entrance roads.
 - c. Provide badging and access control for the EOF.
 - d. Provide security for the EOF.
 - e. Provide security for the alternate EOF, when required.
 - f. Provide in-Plant security.
 - g. If the Security Building has been evacuated, provide badging and security access control for Plant access.
2. Detailed procedures for security personnel are given in the Trojan Security Plan and associated Plant Nuclear Security Procedures.

EP-8.18

SAFETY-RELATED

EOF STATE AND COUNTY AGENCY REPRESENTATIVES

Approved by _____

C. J. Smith

Date _____

8/23/82

A. PURPOSE

To describe the authority, responsibilities and duties of State and County representatives at the Emergency Operations Facility (EOF) (other than dose assessment area).

B. AUTHORITY

The State and County representatives at the EOF may consist of personnel from the Oregon Department of Energy (ODOE), the Washington Department of Social and Health Services (DSHS), the Washington Department of Emergency Services (DES), Columbia County, and Cowlitz County.

The State and County representatives have the authority to request from PGE any information concerning the emergency. They report to their respective EOCs. Their primary contact at the EOF is the EOF Director.

The State and County representatives have no authority over operations and radiation protection activities (ie, personnel monitoring and decontamination) at the EOF itself.

C. RESPONSIBILITIES AND DUTIES

1. The duties of the ODOE Representative (if present) are as follows:

- a. Serve as a liaison between the EOF and the Oregon EOC.
- b. Interpret data and relay questions and answers concerning the emergency for the Oregon EOC.
- c. Consult with the Emergency Coordinator on protective action recommendations made by the TSC or dose assessment area before such recommendations are transmitted to the State and County EOCs.

2. The duties of the DSHS and DES Representatives are to:

- a. Serve as a liaison between the EOF and the Washington EOC.

- b. Interpret data and relay questions and answers concerning the emergency for the Washington EOC.
 - c. Consult with the Emergency Coordinator on protective action recommendations made by the TSC or dose assessment area before such recommendations are transmitted to the State and County EOCs.
3. The duties of the Columbia and Cowlitz Counties Representatives are to serve as a liaison between the EOF and their respective EOCs.

RADIOLOGICAL EMERGENCY RESPONSE PLAN IMPLEMENTING PROCEDURE

EP-8.19

SAFETY-RELATED

EOF FEDERAL AGENCY REPRESENTATIVES

Approved by _____

CP Jandt

Date

8/23/82

A. PURPOSE

To describe the authority, responsibilities and duties of the Federal agency representatives at the Emergency Operations Facility (EOF).

B. AUTHORITY

1. The Federal agency representatives at the EOF consist of:
 - a. NRC representatives.
 - b. USDOE-Richland representative(s) in the Dose Assessment Area.
 - c. Other Federal agency personnel (EPA, FDA, FEMA, etc.).
2. The NRC representatives have the authority, through the Emergency Coordinator, to direct the activities of PGE personnel at the EOF.
3. Other Federal agency representatives will provide assistance as requested to the EOF and will coordinate their activities through the Emergency Response Manager at the EOF.

C. RESPONSIBILITIES

1. The NRC is required to promptly obtain and then continually maintain a thorough understanding of the status of plant conditions, as well as actions proposed by the licensee, such that they can evaluate and assure that the licensee is taking prompt and appropriate actions to protect public health and safety during an incident at a nuclear power facility. NRC's responsibility is discharged by observing licensee actions and maintaining good communications with licensee representatives at both the EOF and onsite. NRC personnel will be in communication with the EOF, TSC, NRC Region V Incident Response Center (IRC) and the Headquarters NRC Operations Center (NRCOC). Information pertaining to the nuclear power facility and radiological conditions will be relayed to the NRC Region V IRC and NRCOC for assistance in the NRC evaluation of activities to assure proper protection measures are being taken to protect the public (see the NRC Incident Response Plan, NUREG-0728).

2. USDOE-Richland representatives are responsible for providing guidance and assistance in the evaluation of offsite radiation doses. They are responsible for providing guidance on plume and ingestion pathways protective actions and on personnel dosimetry. They are also responsible for providing additional field monitoring teams to augment the PGE, and State field teams.
3. Other Federal agency personnel are responsible for providing guidance and assistance to EOF personnel as needed, as described in the "Agreement in Principle for U. S. Federal Government's Response to a Commercial Nuclear Power Plant Incident Within the States of Oregon and Washington" (Attachment 1).

D. DUTIES

1. The duties of the NRC representatives are as follows:
 - a. Observe the licensee's actions for mitigating an incident and make recommendations or direct as necessary to ensure the health and safety of the public.
 - b. Report accident status to the NRC Operations Center and NRC Region V Incident Response Center.
 - c. Coordinate NRC activities with other Federal agency and State agency representatives.
2. The duties of the USDOE-Richland representatives are as follows:
 - a. Provide guidance and assistance, as requested, to the EOF in offsite dose assessment, plume and ingestion pathways protective actions, and personnel dosimetry (see Attachment 1).
 - b. Communicate with the USDOE-Richland office via a dedicated commercial telephone in the dose assessment area or office area.
 - c. Provide additional field monitoring teams, as requested by PGE and the State EOCs.
3. The duties of the other Federal agency representatives are as follows:

Provide guidance and assistance as requested to the EOF staff, as described in Attachment 1.

ATTACHMENT 1

AGREEMENT IN PRINCIPLE
FOR
U. S. FEDERAL GOVERNMENT'S
RESPONSE TO A COMMERCIAL NUCLEAR
POWER PLANT INCIDENT WITHIN THE STATES OF
OREGON AND WASHINGTON

1. Background and Purpose

This Agreement represents the framework of cooperation between the following Federal agencies; Nuclear Regulatory Commission, Region V office; 6th Army (DOD); General Services Administration RX (NCS); National Weather Service (Portland and Seattle) EPA RX; Food Safety and Quality Service (USDA); Food and Drug Administration RX (HHS); 13th Coast Guard District (OPC); Regional Emergency Transportation Coordinator (RETCO RX); Richland Operation Office (DOE); and FEMA RX. This framework of cooperation is sought to insure a coordinated response by Federal Agencies in support of NRC and the States to an event at a commercial nuclear power plant.

This Agreement in Principle and the various plans and procedures of these Agencies are in response to 44 CFR 351 (FR 69904 10/22/80), the Master Plan - Response for Commercial Nuclear Power Plant Accident (FR Notice 12/23/80), 10 CFR, Part 50, Appendix E, and the planning and coordinating efforts under way by the various agencies (Regional elements).

The Parties herein agree to implement their plans and procedures in accordance with the provisions of this Agreement with respect to a commercial nuclear power plant.

2. Responsibility

In the event of an incident classified as an Alert, Site Area or General Emergency, the parties will respond in accordance with FEMA's RX Interim Plan, their individual agency plans and procedures, and in accordance with this Agreement.

3. Notification

NRC RV will receive notification of all reportable incidents (unusual event, Alert, Site Area Emergency, and General Emergency). NRC RV will promptly notify FEMA RX of all events classified as an Alert, Site Area Emergency, or General Emergency.

FEMA RX will then promptly notify FDA, DOE, EPA, GSA, National Weather Service, CCGD13 (OPC) and then 6th Army. CCGD will notify FAA and RETREP. FDA (HHS) will notify FSQS (USDA). See attachment A for summary of response efforts.

4. Response

All parties will maintain a state of readiness to deploy resources and activate their teams upon receipt of notification of an incident classified as a Site Area Emergency or General Emergency.

Upon notification, the parties will alert and notify their emergency response teams. A portion of these teams will deploy to the field and others will report to their headquarters (in accordance with their plans and this Agreement). Activation time is assumed to be one-half hour for NRC RV and two hours for other regional headquarters and four to six hours for field position after notification of a Site Area Emergency or General Emergency. See attachment A for summary of response efforts.

5. Concept of Operation

a. The parties recognize three distinct phases of response (not necessarily in this order):

(1) When only the National Office Headquarters are involved.

(2) When both the Regional office and National headquarters offices are involved (Regional offices establishing presence at their respective EOC's and field team are in travel status).

(3) When the Regional Federal Response Teams are at the Site.

b. During phases two and three, the parties agree to exchange information and coordinate notifications, status reports, etc.

During Phase three, the parties agree to respond to NRC's Director of Site Operations and the lead FEMA official, who will be primarily co-located at the power plant's near site Emergency Operation Facility (EOF). Following is the location of the various Federal agencies for response purposes. See Attachment A for summary of response efforts.

(1) Plant Near Site EOF

NRC RV (Site Director, State liaison, Emergency Coordinator, Operations and Radiation Protection staff personnel)

FEMA RX (lead Federal Coordination Officer and RAC chairman)

Richland Operation DOE (off-site Technical Director)

FDA RX (Regional Radiological Health Representative)

GSA RX (Federal Emergency Communication Coordinator)

(2) Designated Press Center

NRC RV Public Affairs Officer (PAO)

FEMA RX Public Affairs Officer (PAO)

(3) Field Response

Richland Operation DOE (FRMAP Assistance to the States)

EPA (Las Vegas, Nevada Lab's assistance to Richland Operation, if requested)

FDA (HHS) and FSQS (USDA) 100 + field inspectors to assist State(s) in gathering ingestion exposure emergency planning zone samples; HHS provide assistance at State/County Reception Center

FEMA (Liaison Officials to the State(s) EOC(s))

DOT - 13th Coast Guard river evacuation

DOT - FAA direction and control of air space

NRC will handle on-site radiological evaluation and assist, as practical, in off-site monitoring. Also, NRC RV Independent Measurements Van will be deployed and will monitor its TLD program.

(4) Regional Response

NRC, FEMA, FDA (HHS), DOT, DOD, DOE, EPA, FSQS, and National Weather Service will maintain a presence as necessary (up to 24-hours a day) in order to provide logistical support to either NRC, DOE or to FEMA via State(s) request for support. The types of support required will vary on the incident and what the situation requires.

6. Deactivation

Upon termination of the incident, NRC RV will notify FEMA RX by telephone that an incident classified as an Alert, Site Area, or General Emergency no longer exists. FEMA will then notify all parties listed in number three.

7. Drills and Exercises

The parties will participate at their own expense in drills and exercises at nuclear power plants at the request of the power companies and the States of Oregon and Washington. It is not anticipated that a full response will be required more often than once every five years. Each party may exercise portions of their emergency response capabilities at their discretion on a more frequent basis.

8. Terms of Contents

This Agreement will become effective upon receipt of each Regional Agency's acknowledgement and acceptance of this Agreement and continue until cancelled by any party by written letter to FEMA RX.

SUMMARY OF RESPONSE EFFORTS
RX REGIONAL FEDERAL AGENCIES
TO
A COMMERCIAL NUCLEAR POWER PLANT
WITHIN THE STATES OF OREGON AND WASHINGTON

1. Notification: All events classified as an Alert, Site Area Emergency or General Emergency will cause these Agencies to implement their notification, alerting, and, if necessary, mobilization procedures.

<u>AGENCY</u>	<u>TYPE OF RESPONSE - NOTIFICATION</u>
NRC RV	Notify FEMA RX
FEMA RX	Notifies: DOE-RO, FDA RX, GSA RX, Weather Service - Portland and/or Seattle, DOT RX, DOD 6th Army, and EPA RX.
FDA RX	Notifies FSQS (USDA) - Salem, Oregon.

Each Agency will activate their Incident Response Plan or Radiological Emergency Plan upon receipt of notification by NRC RV or FEMA RX.

2. Activation of Regional Response Group at Regional Headquarters: All events classified as an Alert, Site Area Emergency and General Emergency will cause these Agencies to activate their emergency operation center: NRC RV, FEMA RX, DOE RO, FDA RX, Weather Service - Portland, DOD 6th Army, and FSQS - Salem, Oregon.

3. Activation of Field Response: All events classified as a Site Area Emergency or General Emergency will cause these Agencies to implement the following field responses:

<u>AGENCY</u>	<u>FIELD RESPONSE</u>
NRC RV	<ul style="list-style-type: none"> a. Dispatch response team to incident site. b. Dispatch Independent Measurements Van. c. Dispatch PAO to designated Press Center.
FEMA RX	<ul style="list-style-type: none"> a. Dispatch response team to incident site. b. Dispatch State liaison officers to Salem, Oregon and Olympia, Washington. c. Dispatch PAO to designated Press Center.

ATTACHMENT 1

AGENCY

FIELD RESPONSE

DOE

- a. Dispatch FRMAP response team to incident site.
- b. Dispatch off-site Technical Director to incident site.
- c. Provide other assistance as requested by State(s) or NRC.

Health and Human
Services (Food and
Drug Admin. and
others)

- a. Dispatch FDA Regional Radiation Health Representative to incident site.
- b. At Site or General Emergency, dispatch field inspectors (Food and Drug and Agriculture will work together) to assist State(s) with ingestion samples to perform sampling for NRC, DOE or Food and Drug, HHS.
- c. Dispatch other assistance (doctors, nurses, emergency medical, etc.) as requested by State(s) through FEMA.

General Services
Administration

- a. Dispatch Federal Emergency Communication Coordinator to incident site.

National
Weather
Service

- a. Upon request of responsible agency, provide special weather support to meet needs as fully as possible of the requesting agency. This would often include current and forecast surface winds, winds aloft (lower levels), airmass stability, mixing layer, inversions (height, intensity, time of formation and breakup); weather phenomena (especially precipitation); hydrological information, and radar reports.
- b. Initiate action to obtain weather and related information not available at the forecast office that has been requested by responsible agency.
- c. Upon request of responsible agency and when available, dispatch a meteorologist and van to incident site to assist with data collection and forecast interpretation.

Food Safety
and Quality Service
USDA

- a. At site or General Emergency dispatch, in coordination with Food and Drug, field inspectors to assist State(s) with ingestion sampling or perform sampling for NRC, DOE, Food and Drug or FSQS.

DOT
13th Coast Guard
FAA and DOT

- a. At Site or General Emergency, the Coast Guard will implement procedures to secure that section of the river, if any, that is affected by the plume exposure emergency planning zone.

AGENCY

FIELD RESPONSE

Dept. of
Defense

b. At Site or General Emergency, the FAA will implement procedures to secure that section of the air space that is affected by the plume exposure emergency planning zone.

c. The RETREP will dispatch, upon request through FEMA, Federal Transportation response to support State and local authorities.

a. Dispatch, upon request through FEMA, logistical support to support State(s) dislocated (evacuated) population.

b. Dispatch, upon request through FEMA, emergency medical transportation service to State(s)/local government.

c. Dispatch, upon request through FEMA, manpower to perform radiological monitoring (beta/gamma) for the U.S. Department of Energy.

d. Dispatch, upon request through FEMA, logistical support to State(s) for recovery operations.

RADIOLOGICAL EMERGENCY RESPONSE PLAN IMPLEMENTING PROCEDURE

EP-8.20

SAFETY-RELATED

EOF DOSE ASSESSMENT STATE AGENCY REPRESENTATIVES

Approved by _____

C. J. Yundt

Date

8/23/82

A. PURPOSE

To describe the authority, responsibilities and duties of State representatives assigned to the Emergency Operations Facility (EOF) dose assessment area.

B. AUTHORITY

State representatives assigned to the EOF dose assessment area will consist of one or two persons each from the Oregon State Health Division (OSHD) and the Washington Department of Social and Health Services (DSHS). They have the authority to direct field and aerial monitoring teams, make protective action recommendations to the EOCs, and perform dose assessments. The OSHD and DSHS accept the authority of the Dose Assessment Director for the operation and direction of all dose assessment activities at the EOF.

C. RESPONSIBILITIES

The OSHD and DSHS representatives are responsible for making radiation dose assessments, providing protective action recommendations to their State EOCs, and directing State, PGE and Federal field and aerial monitoring teams.

D. DUTIES

The OSHD and DSHS representatives report to the Dose Assessment Director for duty assignments, and fill the roles of protective action evaluator and field team coordinator.

1. The duties of the protective action evaluator role are as follows:

- a. Determine offsite protective actions for both plume and ingestion exposure pathways to be recommended to State and county EOCs (use Procedure EP-30 for determining offsite protective actions).
- b. Document and record reasons for protective action recommendations.
- c. Complete the recommended offsite protective actions section of the Accident Assessment Report Form (see Table 8-2).

- d. Determine protective action recommendations for emergency workers (see EP-30). Record on Standard Message Form (see Table 8-3).
 - e. Report recommendations and updated recommendations every 30 min or as required to the Dose Assessment Director for the duration of the emergency.
 - f. During the long-term and recovery phases of the emergency, continue to evaluate protective actions using EP-30.
2. The duties of the field team coordinator role are as follows:
- a. Direct and coordinate all field and aerial monitoring teams.
 - 1) Man the ground and aerial radio controls.
 - 2) Keep all teams fully informed on the status of the emergency as it may affect them, wind direction, and protective measures (eg, how long to remain in a radiation area, when to take KI).
 - 3) Give field teams considerable freedom of movement. Specific routes for movement to a grid location should not be prescribed unless necessary for a dose evaluation or confirmation.
 - 4) Account for location of teams at all times. Position of field teams shall be marked on the appropriate grid maps in the dose assessment area.
 - 5) Direct the aerial team to "scope out" the plume, locating boundaries and centerline (see OSHD Procedures, Tab B).
 - 6) Direct field teams to confirm aerial measurements, make radioiodine air concentration measurements, obtain environmental samples, and place and retrieve TLD monitors (see EP-12).
 - 7) Coordinate field team activities with the needs of the Dose Assessor and protective action evaluator.
 - b. Review and analyze field and aerial data obtained from the radio operator on Form 29A.
 - 1) Post significant data on the status board and/or overhead projector.
 - 2) Identify data to be used by the dose assessor for updating dose projections.

- 3) Report significant data to the Dose Assessment Director.
- c. During the long-term and recovery phases of the emergency:
- 1) Provide directions to field monitoring teams for conducting radiation surveys of evacuated areas for reentry evaluation.
 - 2) Provide directions to field monitoring teams for the collection of environmental samples (type, location) for ingestion exposure pathway evaluations. Coordinate this activity with the Oregon AOC and Washington EOC.
 - 3) Coordinate with the Oregon AOC and the Washington EOC the establishment of centralized collection points for environmental samples. Direct field teams to transport their samples periodically to the collection points for transportation to laboratories.
 - 4) Record, review and report radiation survey data and laboratory data on environmental samples.

RADIOLOGICAL EMERGENCY RESPONSE PLAN IMPLEMENTING PROCEDURE

EP-8.21

SAFETY-RELATED

Alternate Emergency Operations Facility

Approved By

CP Jundt

Date

8/24/82

A. PURPOSE

To describe the operation of the Alternate Emergency Operations Facility (EOF).

B. DESCRIPTION OF FACILITY

In the event that the EOF is evacuated, the PGE St. Helens District Office will become the EOF (Alternate EOF). Figure 8.21-1 shows the floor plan of the Alternate EOF. The Alternate EOF consists of the following functional areas:

1. Communications area.
2. Dose assessment area.
3. Emergency worker center.
4. Office space for State and Federal Agency Representatives.

C. ALTERNATE EOF PROCEDURES

1. The communications, dose assessment, and office areas will be staffed by the same personnel that staff the Trojan EOF at the time it is evacuated. The functions and communications for these three areas are the same as described in EP-8. The authority, responsibilities and duties of the personnel staffing these areas are described in Emergency Procedures EP-8.1 through EP-8.20.
2. The Emergency Worker Center provides the location for assembly, radiological monitoring, decontamination and dosimetry for Oregon emergency response personnel and for personnel evacuated from the Plant while the Alternate EOF is operational. The Center will have been activated by Oregon State Health Division (OSHD) personnel by the time the Alternate EOF is activated. The Radiation Protection EOF Team will perform the duties described in Emergency Procedure EP-8.12 at the Emergency Worker Center in cooperation with OSHD.

D. ACTIVATION OF THE ALTERNATE EOF

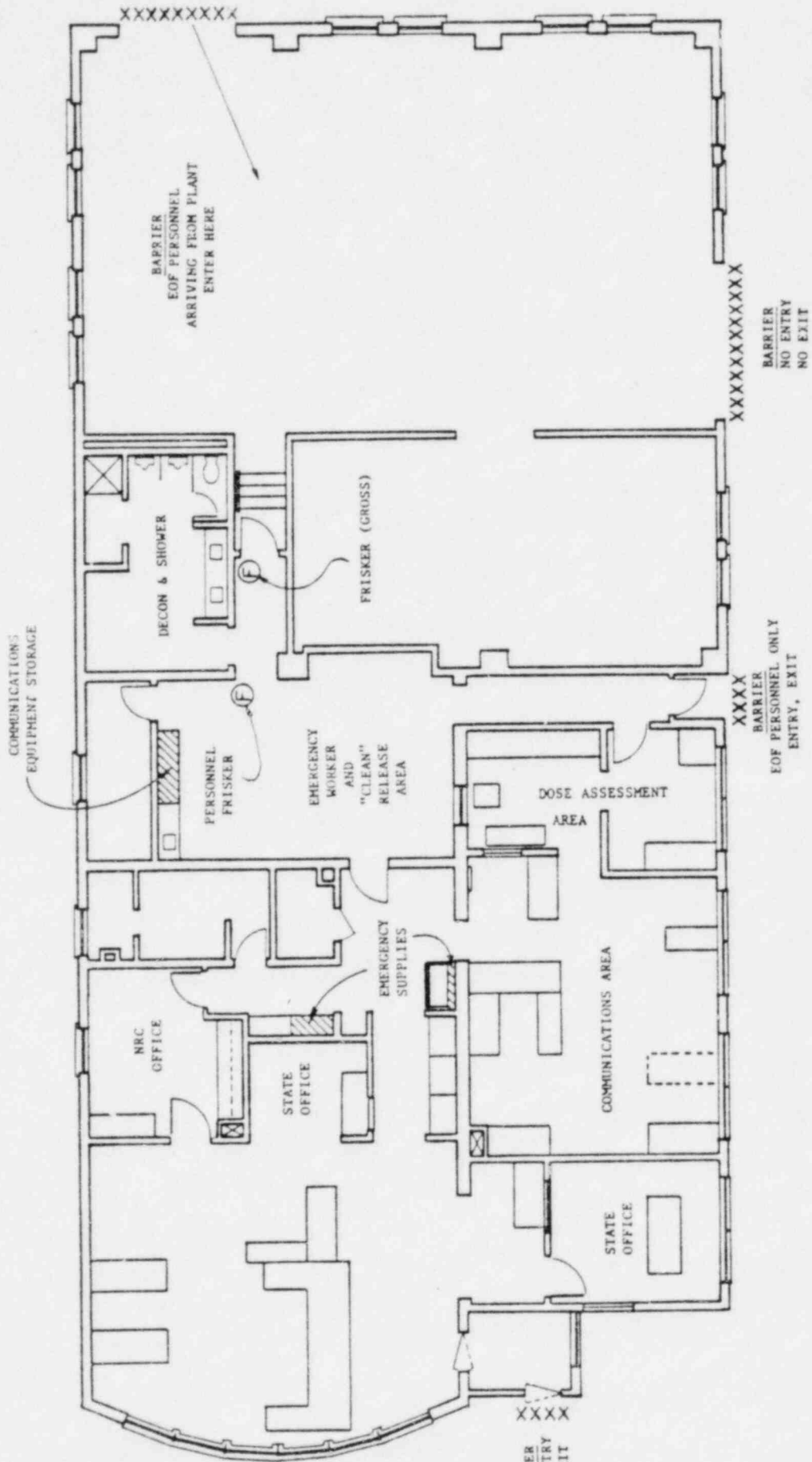
1. Activation of the Alternate EOF will be the same for day and off-hour shifts.
2. The St. Helens District Manager, or his alternate, will be notified by the Duty Manager, Plant Services or the VIC Director to prepare the Alternate EOF for activation once the EOF is activated. The St. Helens District Manager will prepare the alternate EOF for activation by:
 - a. Evacuating all members of the public from the District Office (if during operating hours).
 - b. Setting up access control points, friskers and barriers (see Figure 8.21-1). Friskers and barrier materials are stored in the alternate EOF supply cabinet.
 - c. Connecting the EOF communications system in the communications center and the dose assessment area, including telephones and radio controls. The telecopier and computer terminal will be brought from the EOF with the evacuating EOF Staff. The locations of the communications equipment are shown in Figure 8.21-2. Communications equipment is stored under the counter in the "Clean Release Area" on Figure 8.21-1.
 - d. Setting up necessary tables and chairs in appropriate areas. See Figure 8.21-2 for table(s) to be moved.
 - e. Distributing EOF supplies from the storage locations (shown in Figures 8.21-1 and 8.21-2) to the appropriate areas.
3. The EOF Director will notify the Alternate EOF when the near-site EOF is being evacuated.
4. The EOF Director will activate the Alternate EOF upon his arrival. The criteria for activating the alternate EOF are the same as for the EOF (see EP-8).
5. When the Emergency Coordinator determines that the near-site EOF may be safely reactivated, the Alternate EOF is placed in a standby status after EOF personnel return to the Trojan EOF.

E. ALTERNATE EOF SECURITY

The EOF Security Staff will provide access control at the Alternate EOF entrances. Other security provisions will be as described in Emergency Procedure EP-8.



Figure 8.21-1
Page 1 of 1



XXXX
BARRIER
NO ENTRY
NO EXIT

XXXX
BARRIER
EOF PERSONNEL ONLY
ENTRY, EXIT

XXXXXXXXXXXXXXXX
BARRIER
NO ENTRY
NO EXIT

Figure 8.21-1 Alternate Emergency Operations Facility
Floor Plan (St. Helens District Office)

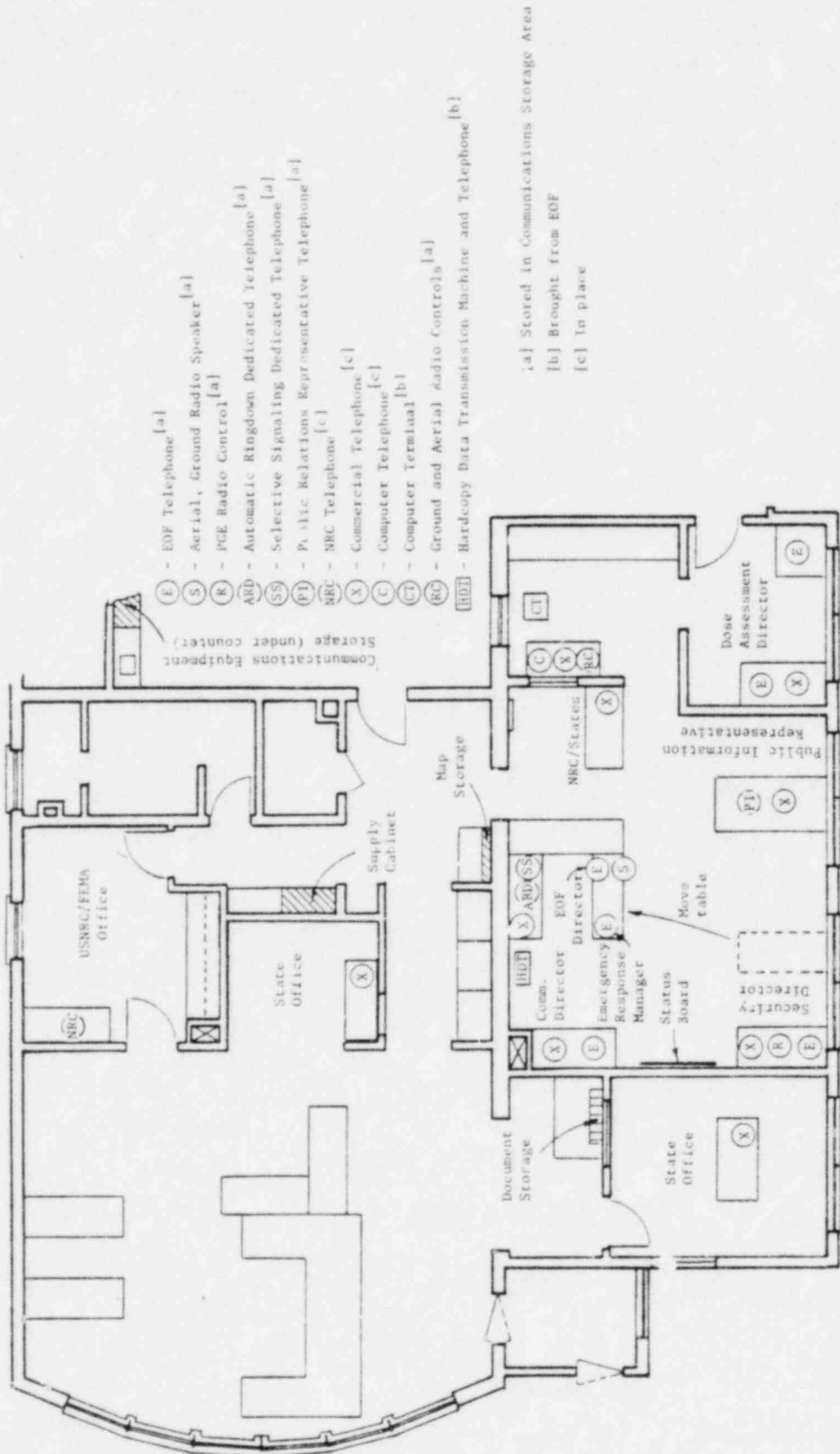


Figure 8.21-2 Alternate Emergency Operations Facility Communications Plan (St. Helens District Office)

RADIOLOGICAL EMERGENCY RESPONSE PLAN IMPLEMENTING PROCEDURE

EP-29.1

SAFETY-RELATED

INSTRUCTIONS FOR USE OF COMPUTER TERMINAL

Approved by CP Jundt

Date 8/23/82

A. PURPOSE

The purpose of this procedure is to describe the procedure for logging on the computer terminal and executing the dose assessment programs.

B. COMPUTER PREPARATION

1. Visitors Information Center Computer Terminal

- a. Ensure the "HS" (High Speed) button is depressed on the Dataphone. All other buttons on the Dataphone should not be depressed.
- b. Turn the computer terminal ON (the switch is located below the keyboard on the left side of the front panel) and wait approximately 2 seconds for terminals to perform self test.
- c. Ensure the computer terminal is in the on-line mode by checking the ON LINE light on the keyboard. If the terminal is in the local mode, depress the button labeled "LINE/LOCAL" to return to the on-line mode.
- d. Ensure the key labeled "CAPS/LOCK" is depressed.

2. TSC Computer Terminal

- a. Ensure the "HS" (High Speed) button is depressed on the Dataphone. All other buttons on the Dataphone should not be depressed.
- b. Turn the computer terminal ON (the TSC terminal is usually on, however the switch is on the back of the terminal on the left). The power on light on the left of the keyboard will indicate terminal power.
- c. Adjust the switches on the right front of the terminal to "HALF" and "120".
- d. Ensure the key labeled "ALL CAPS" on the left of the keyboard is depressed.

C. LOGON PROCEDURE

1. Lift telephone handset from telephone cradle and depress the button labeled "TALK". The depressed TALK button will not be illuminated at this time.
2. Dial one of the following telephone numbers. If a carrier tone is not received after the number is dialed, hang up and dial an alternate number.

<u>Primary Number</u>	<u>First Alternate</u>	<u>Second Alternate</u>

3. When a carrier tone commences, depress the red button labeled "DATA" and hang up the telephone. At this time the TALK button will be illuminated.
4. When responding to prompting from the computer, always use the "RETURN" key (noted as CR) in this procedure) following the typing of data.
5. Type the character S ten (10) consecutive times, CR.
6. a. When the computer responds, type MM CR.
b. If the computer responds with a message that Center M is unavailable, type RR CR.
7. When the computer responds, type GPS CR.
8. When the computer responds, type KFX019,UDAC,RERP CR.
9. When the computer responds with the data, time and other miscellaneous data and an exclamation symbol (!) is printed, the computer is ready to process computer programs.
10. To run a program, type the program name (ie, SUBIN, INGEST, LIQUID) CR.
11. To correct mistypes before input, use the BACKSPACE or "+" key.
12. If the computer code terminates execution, go to Step 14.
13. To interrupt program output, use the BREAK key; no RETURN key is necessary following the BREAK key. The computer will respond with a !, and any code can be initiated by going to Step 14 (on the TSC computer terminal, use the "INTERRUPT" key instead of "BREAK").
14. To log off, type OFF CR.

EP-29.2

SAFETY-RELATED

USE OF THE SUBIN COMPUTER CODE

Approved By _____

CP Jundt

Date _____

8/23/82

A. PURPOSE

To provide a rapid calculation of external skin, whole body and inhalation thyroid doses due to accidental airborne releases of radioactive material.

B. DESCRIPTION OF CODE

The computer code SUBIN calculates radiation doses via the airborne pathways of inhalation and immersion in a semi-infinite cloud. Up to 17 isotopes of iodine, krypton and xenon are considered, and doses at up to 10 downwind distances from the Plant (ranging from 0.1 to 20 miles) may be calculated simultaneously.

C. OPERATION OF CODE

1. Input Parameters:

After typing in the command "SUBIN", which calls and begins execution of the program, an introduction is printed (along with optional instructions) followed by a list of input categories:

- L=1, INSTRUCTIONS
- L=2, ENTER SOURCE TERMS
- L=3, ENTER RELEASE DURATION
- L=4, ENTER DOWNWIND DISTANCES
- L=5, ENTER WINDSPEED
- L=6, ENTER WIND DIRECTION
- L=7, ENTER ATMOSPHERIC STABILITY DATA
- L=8, ENTER STRUCTURE SHIELDING FACTORS
- L=9, CALCULATE
- L=10, DATA USED IN LAST CALCULATION
- L=11, QUIT
- L=12, STANDARD RUN

The user is then prompted to input the integer associated with the category desired. If the option selected is an input variable,

the user is prompted to enter the value of that parameter. Failure of the user to input a numerical parameter causes a default value of zero to be taken by the program. For subsequent executions, individual input categories may be modified without altering data in the other categories.

Input options include the choice between entering nuclide source terms recorded at the Plant (release rates, effluent stream concentrations, PRM readings, ARM readings, exposure rate measured outside Containment at contact or exposure rate measured outside Containment at 50 ft) and offsite field monitoring data (dose rates, ^{131}I concentrations). The type of atmospheric stability data input is also optional (ΔT or $\sigma\theta$). The wind direction (L=6) is entered as wind toward.

The option to include structure shielding factors (L=8) allows the user to enter factors both for shielding from external gamma radiation and for reduction of thyroid dose due to shutting doors and windows. When the option is chosen, the user is asked whether he wishes to take no credit for structures (factors = 1.0), use default values conservatively calculated for average western homes (gamma factor = 0.75, thyroid factor = 0.65) or enter his own factors.

2. Calculational and Output Options:

When the "CALCULATE" option (L=9) is selected, the user is immediately prompted with "OUTPUT OPTION (0 = DETAILED OUTPUT, 1 = SUMMARY OUTPUT) =". Selection of the "summary output" option causes a tabular output to be printed which lists whole body and thyroid total dose rates and doses vs distance. The input wind direction (toward) is included in the table heading, along with the wind speed and Pasquill Class. The computer code uses terrain correction factors to calculate dose rates, dose receptor direction(s) and plume width(s) for each downwind distance to include the effects of the local terrain features and wind patterns near the Trojan site. In addition, the interpolated distance at which Protective Action Guide (PAG) doses are exceeded is printed. This option is recommended when a quick output for more than one downwind distance is desired.

Selection of the "detailed output" option causes a separate tabular printout to be generated for each of the (up to 10) downwind distances entered plus the distance at which PAG doses are exceeded. This table includes dose rates and doses for each individual nuclide for which data has been entered, along with a listing of input parameters and calculated parameters (χ/Q , plume depletion and Pasquill stability class), and protective action recommendations. The input wind direction and resulting receptor direction(s) and plume width(s) are included in the heading of each table set of dose rate (rem/hr) and total dose (rem) for each downwind distance. Terrain correction factors are used

by the computer code to calculate the dose and dose rate data to include the effects of the local terrain features and wind patterns near the Trojan site.

It should be noted that when either field data or PRM readings are input, the code models the releases as consisting entirely of I-131 and Xe-133; no other isotopes are considered.

When the "DATA USED IN LAST CALCULATION" option (L=10) is selected, a listing of all input parameters used in the previous calculation is printed.

3. Standard Run:

Should a standard run (L=12) be selected, the user will be prompted for all information required. The program will assume no shielding in its calculations and produce a summary output at the exclusion area boundary for the given wind direction, at 2.5, 5.0, and 10.0 miles.