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**Nuclear Management Company, LLC**
**Prairie Island Nuclear Generating Plant**
1717 Wakonade Dr. East • Welch MN 55089

August 14, 2000

US Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
Docket Nos. 50-282 License Nos. DPR-42
Docket Nos. 50-306 License Nos. DPR-60

Prairie Island EOF Emergency Plan
Implementing Procedures - F8

EOF Emergency Response Plan Implementing Procedures

Furnished with this letter are the NSP Prairie Island Nuclear Generating Plant EOF Emergency Plan Implementing Procedures F8. This revision includes the following procedures:

INDEXES: EOF Emergency Plant Implementing Procedures TOC

REVISIONS:

| | | |
|---|---|---|
| F8-1 | Emergency Operations Facility Organization | Rev 5 |
| F8-2 | Responsibilities During an Alert, Site Area or General Emergency in the EOF | Rev 7 |
| F8-4 | Emergency Support & Logistics | Rev 4 |
| F8-5 | Offsite Dose Assessment & Protective Action Recommendations | Rev 5 |
| F8-6 | Radiological Monitoring & Control at the EOF | Rev 5 |
| F8-8 | Offsite Agency Liaison Activities | Rev 4 |
| F8-9 | Event Termination or Recovery | Rev 6 |
| F8-11 | Transfer to the Backup EOF | Rev 3 |
| F8-12 | Emergency REMP | Rev 3 |

A045

INSTRUCTIONS:

Please post changes in your copy of the Prairie Island Nuclear Generating Plant EOF Emergency Implementing Procedures. Procedures which have been superseded or deleted should be destroyed. Please sign and return the acknowledgment of this update to Bruce Loesch, Prairie Island Nuclear Generating Plant, 1717 Wakonade Drive East, Welch, MN 55089.

If you have any questions, please contact Mel Agen at 651-388-1121 Extension 4240.

Joel P. Sorensen

Joel P. Sorensen
Site General Manager
Prairie Island Nuclear Generating Plant

c: USNRC – James Foster, Region III (2 copies)
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J Silberg (w/o attachment)
M Agen (w/o attachment)
Records Management (Doc Control Copy) (w/o attachment)
NL File (w/o attachment)

Mfst Num: 2000 - 0529 Date : 08/10/00
FROM : Bruce Loesch/Mary Gadient Loc : Prairie Island
TO : UNDERWOOD, BETTY J
Copy Num: 515 Holder : US NRC DOC CONTROL DESK
SUBJECT : Revisions to CONTROLLED DOCUMENTS
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| Procedure # | Rev | Title |
|---|---|---|
| F8-1 | 5 | EMERGENCY OPERATIONS FACILITY ORGANIZATION |
| F8-2 | 7 | RESPONSIBILITIES DURING AN ALERT, SITE ARE GENERAL EMERGENCY IN THE EOF |
| F8-4 | 4 | EMERGENCY SUPPORT & LOGISTICS |
| F8-5 | 5 | OFFSITE DOSE ASSESSMENT & PROTECTIVE ACTIO RECOMMENDATIONS |
| F8-6 | 5 | RADIOLOGICAL MONITORING & CONTROL AT THE E |
| F8-8 | 4 | OFFSITE AGENCY LIAISON ACTIVITIES |
| F8-9 | 6 | EVENT TERMINATION OR RECOVERY |
| F8-11 | 3 | TRANSFER TO THE BACKUP EOF |
| F8-12 | 3 | EMERGENCY REMP |

Revisions:
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UPDATING INSTRUCTIONS
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Place this material in your Prairie Island Controlled Manual or File. Remove revised or cancelled material and recycle it. Sign and date this letter in the space provided below within ten working days and return to Bruce Loesch or Mary Gadient, Prairie Island Nuclear Plant, 1717 Wakonade Drive E., Welch, MN 55089.
Contact Bruce Loesch (ext 4664) or Mary Gadient (ext 4478) if you have any questions.

Received the material stated above and complied with the updating instructions

_____ Date _____

| PRAIRIE ISLAND NUCLEAR GENERATING PLANT NORTHERN STATES POWER COMPANY | Title: EOF Emerg Plan Implementing Procedures TOC<br>Effective Date : 08/10/00 |
|---|---|
| Approved By: Joyce Chitty BPS Supt | |

| Document # | Title | Rev |
|---|---|---|
| F8-1 | EMERGENCY OPERATIONS FACILITY ORGANIZATION | 5 |
| F8-2 | RESPONSIBILITIES DURING AN ALERT, SITE AREA OR GENERAL EMERGENCY IN THE EOF | 7 |
| F8-3 | ACTIVATION & OPERATION OF THE EOF | 4 |
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| F8-9 | EVENT TERMINATION OR RECOVERY | 6 |
| F8-10 | RECORD KEEPING IN THE EOF | 2 |
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|---|---|---|
| | | REV: 5 |

Reviewed By: _____ Gen. Supt. Radiation Protection

Approved By: _____ Plant Manager

Effective Date: 8-10-00

OC Review: 7-24-00 SC

***REFERENCE USE***

- ***Procedure segments may be performed from memory.***
- ***Use the procedure to verify segments are complete.***
- ***Mark off steps within segment before continuing.***
- ***Procedure should be available at the work location.***

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## 1.0 PURPOSE

The purpose of this procedure is to:

**1.1** Describe the Emergency Operations Facility (EOF) Emergency Response Organization (ERO).

**1.2** Describe general responsibilities for key emergency organization positions.

The EOF ERO is illustrated in Figure 1. Key EOF positions are listed in the Emergency Preparedness Phone Directory with names of those individuals qualified to staff those positions. F8-2, Responsibilities During an Alert, Site Area or General Emergency in the EOF, describes detailed responsibilities and actions of the key EOF ERO positions.

## 2.0 APPLICABILITY

This procedure applies to all persons reporting to and operating in the EOF whenever the Emergency Response Organization (ERO) is activated. The ERO will be activated at an Alert, Site Area Emergency or General Emergency. The ERO may be activated at a Notification of Unusual Event (NUE), if necessary.

## 3.0 PRECAUTIONS

**3.1** Prairie Island site staff **SHOULD NOT** make any information releases to members of the news media or the public. All inquiries by the news media should be directed to ERO Communications Personnel at the Joint Public Information Center (JPIC) located at the Minnesota EOC in St. Paul. Any persistent news media inquiries should immediately be reported to the Emergency Manager.

**3.2** In the event that an individual is assigned to more than one ERO position, the positions that are required to implement immediate actions at the EOF should take precedence over all other positions.

**3.3** All Prairie Island emergency response personnel should carry their company Picture ID for access through potentially established road blocks and access to the EOF.

## 4.0 RESPONSIBILITIES

### 4.1 Emergency Manager (EM)

**4.1.1** The Emergency Manager position **SHALL** be staffed by a person named on the Emergency Manager call list. In the rare case that none of the primary Emergency Manager designees are present, an extra Emergency Director may temporarily staff this position. A call list of designated EMs are maintained in the Nuclear Emergency Preparedness Telephone Directory.

**4.1.2** The general responsibilities of the Emergency Manager are:

A. Determine the extent of the offsite response;

B. Authorize reclassifications including event termination or recovery (classification escalations are formulated by TSC);

C. Authorize offsite Protective Action Recommendations (PARs are formulated by the RPSS);

D. Supervise the operation of the EOF;

E. Direct personnel to provide the necessary offsite support for the plant as requested by the Emergency Director;

F. Provide technical support as necessary;

G. Provide direction to personnel performing offsite radiation surveys and dose estimates as to the desired types of samples and sample location;

H. Direct assessment and implementation of a modified Radiological Environmental Monitoring Program as needed;

I. Direct personnel to provide the necessary logistics support for the plant and EOF operation;

J. Provide information to the utility management, as necessary, to assist in development of news releases;

K. Provide a direct interface with NRC representatives assigned to the EOF.

L. Provide information to utility management, as necessary, concerning Severe Accident Management Strategies.

## 4.2 Emergency Operations Facility Coordinator (EOF Coordinator)

**4.2.1** The EOF Coordinator should be staffed by qualified Prairie Island site personnel assigned to the Nuclear Generation Services or Prairie Island Training Center. This position is filled from a call list maintained in the Nuclear Emergency Preparedness Telephone Directory.

**4.2.2** The general responsibilities of the EOF Coordinator are:

A. Establish startup of the EOF ventilation system as necessary.

B. Coordinate activities of EOF and non-EOF personnel located in the EOF or who arrive at the EOF.

C. Assign personnel as necessary to the following positions and supervise their activities:

- EOF Coordinator Assistant
- Emergency Communicators
- Administrative Staff
- Security Coordinator

D. Maintain or designate individuals to maintain records throughout the emergency conditions.

E. Ensure communications are established between the necessary off-site emergency centers and the EOF.

F. If necessary, request assistance from ERO Communications Personnel.

G. Ensure EOF access control is established and maintained.

H. Provide periodic updates to the Emergency Manager concerning the operational status of the EOF.

I. Assist the Emergency Manager in screening in-coming phone calls to the EOF command table.

J. Implement the Fitness For Duty Program during off hours activation of the EOF.

K. Determine a 24 hour EOF shift rotation as necessary.

## 4.3 Radiation Protection Support Supervisor (RPSS)

**4.3.1** The Radiation Protection Support Supervisor should be staffed by qualified Prairie Island site personnel assigned to the plant's Radiation Protection Group or Prairie Island Training Center. This position is filled from a call list maintained in the Nuclear Emergency Preparedness Telephone Directory.

**4.3.2** The general responsibilities of the Radiation Protection Support Supervisor are:

A. Assign personnel as necessary to the following positions and supervise their activities:

- RPSS Assistant (State Liaison)
- RPSS Assistant (Field Team & Dose Assessment)
- Field Team Communicator
- Radiation Protection Status Board Keeper

B. Supervise the activities of the following personnel that have been assigned by the Radiological Emergency Coordinator:

- MIDAS Operator
- Countroom Radiation Protection Specialist
- Field Survey Teams
- Field Team Drivers for Monticello Field Survey Teams
- Sample Couriers

C. Supervise the activities of the following personnel that have been sent by the Monticello Nuclear Generating Plant.

- Field survey Teams
- EOF Radiation Protection Monitor

D. Taking responsibility for the following offsite functions from the Radiological Emergency Coordinator:

- Offsite dose assessment
- Formulating offsite protective action recommendations
- Offsite radiation surveys
- Providing offsite agency updates

E. Establish and verify radiological monitoring for the EOF as necessary.

F. Provide periodic updates to the Emergency Manager concerning the offsite survey results, dose estimates, offsite and onsite protective actions and EOF habitability.

G. Assume responsibility for the HPN communications when required and NRC radiological assessment interface.

H. Provide radiological assistance in support of a plant site evacuation.

I. Notify the REMP (Radiological Environmental Monitoring Program) Coordinator to provide the necessary assistance during a significant radiological release.

## 4.4 Technical Support Supervisor (TSS)

**4.4.1** The Technical Support Supervisor should be staffed by qualified Prairie Island site personnel. This position is filled from a call list maintained in the Nuclear Emergency Preparedness Telephone Directory.

**4.4.2** The general responsibilities of the Technical Support Supervisor are:

A. Assign personnel as necessary to the following positions and supervise their activities:

- Technical EOF-TSC-Control Room Communicator
- Event Status Board Keeper
- Technical Corporate Communicator
- ENS/ NRC Communicator
- Narrative Log Keeper
- Technical Support Staff

B. Access plant data via the ERCS (Emergency Response Computer System) and established plant communication links.

C. Provide accident assessment and technical analysis during the course of the emergency.

D. Update the EOF staff and Emergency Manager of changes or potential changes in plant parameters and their potential results.

| NOTE: | The TSC is the primary source of possible reclassifications; however, the Emergency Manager is responsible to authorize reclassifications. |
|---|---|

E. Evaluate plant conditions for possible emergency reclassifications.

F. Provide periodic updates to the technical support personnel at the HQEC (Headquarters Emergency Center) and utility office at the Minnesota State Emergency Operations Center (EOC).

G. Assume responsibility for the ENS communications when required and NRC technical assessment interface.

H. Coordinate the trending of Severe Accident Management strategies, as necessary.

I. Assist the TSC in developing a short term and long term actions needed to return the plant to normal operational status.

## 4.5 Recovery Manager

**4.5.1** The Recovery Manager should be staffed by site management personnel. This position is filled from a call list maintained in the Nuclear Emergency Preparedness Telephone Directory.

**4.5.2** The general responsibilities of the Recovery Manager are:

A. Assess with the Emergency Manager and Emergency Director the extent of damage, overall plant conditions, and when Recovery is likely to be initiated.

B. Help coordinate the establishment of long and short term goals to keep the plant environs in a safe condition.

C. Establish a recovery organization made up of appropriate plant support organizations similar to plant outage organizations.

## 5.0 DISCUSSION

### 5.1 Initial Stages Of An Emergency

During the initial stages of an emergency condition, the Emergency Director has overall coordinating authority for NMC. The Emergency Director position is staffed initially by the operations Shift Manager and later relieved by the Plant Manager or another qualified member of plant management.

The Emergency Director has the authority and responsibility to immediately initiate any emergency actions including providing Protective Action Recommendations to offsite authorities responsible for implementing offsite emergency measures.

### 5.2 Activation of EOF And Monticello & Prairie Island Offsite Emergency Response Organizations

#### 5.2.1 EOF Organization

During an Alert, Site Area or General Emergency, the EOF organization **SHALL** be activated. The EOF organization may be activated at an NUE, if deemed necessary by plant management. It is expected that the EOF can be staffed and ready to assume its emergency responsibilities within about one (1) hour of notification. Following activation of the EOF and when the TSC is prepared to transfer emergency responsibilities, the Emergency Manager **SHALL** assume, from the Emergency Director, responsibility for overall management of all offsite support. The Emergency Director **SHALL** retain the responsibility for onsite operations.

Some of the offsite functions transferred from the Emergency Director to the Emergency Manager are:

A. Authorization of emergency reclassifications (re-classifications are formulated by TSC).

B. Authorization of offsite Protective Action Recommendations (PARs are formulated by RPSS).

C. Direction of offsite communications.

D. Direction of offsite dose assessment.

E. Direction of offsite radiological survey teams.

**5.2.2** Monticello & Prairie Island Offsite Emergency Response Organization

The Mo & PI Offsite ERO is responsible for control of the NMC & NSP offsite resources.

Their responsibilities include:

A. Provide managerial and other support to the Emergency Manager.

B. Coordinate the efforts of public affairs during the emergency.

C. Provide technical input for press releases.

D. When appropriate, designate qualified individuals who will be dispatched to the Minnesota State EOC/JPIC as the NMC Executive Spokesperson and the Technical Resource Person. The Executive Spokesperson will give direction to other licensee personnel at the EOC/JPIC.

E. Provide interface with Utility Executive Management.

F. Serve as the INPO contact for providing updated communication.

G. Work with the Emergency Director and Emergency Manager to ensure adequate NMC & NSP resources are made available for the emergency effort.

## 5.3 Recovery

When plant conditions stabilize and allow for transition to the Recovery phase, a Recovery Manager will be assigned. The Recovery Manager will establish an appropriate recovery or post-accident outage organization and manage the overall recovery plans as work is done to return the plant to a normal operational or shutdown status.

## 6.0 PREREQUISITES

An Alert, Site Area or General Emergency has been declared at Prairie Island Nuclear Generating Plant or the EOF organization has been activated.

| F8 Section | TITLE: EMERGENCY OPERATIONS FACILITY ORGANIZATION | NUMBER: F8-1 REV: 5 |
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## 7.0 PROCEDURE

All EOF emergency response personnel **SHALL** report to the EOF and perform their emergency duties as described in F8-2, Responsibilities During an Alert, Site Area or General Emergency, and other emergency procedures, as necessary.

| F8 Section | TITLE: EMERGENCY OPERATIONS FACILITY ORGANIZATION | NUMBER: F8-1 REV: 5 |
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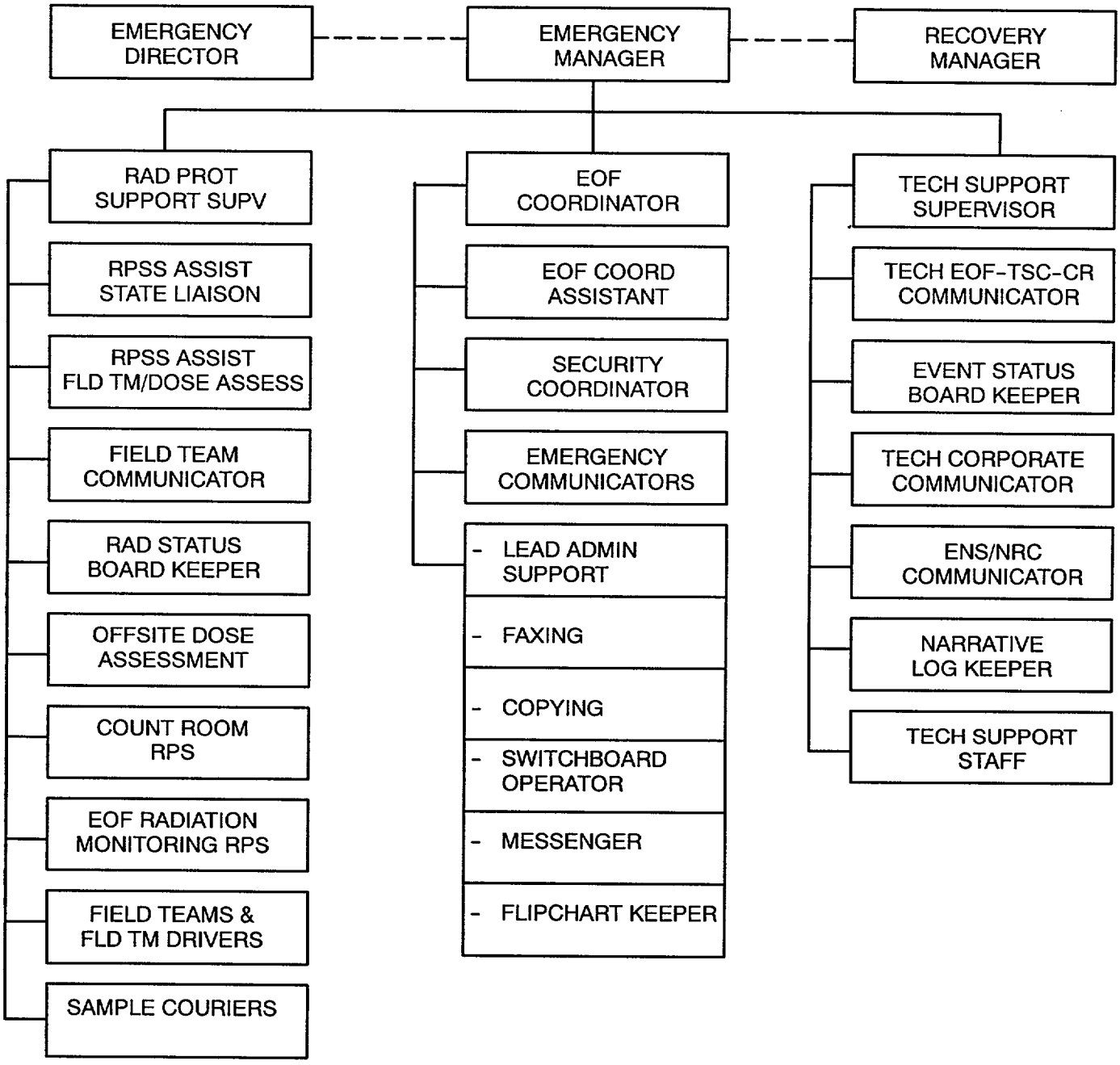
## FIGURE 1 - PRAIRIE ISLAND EOF ORGANIZATION




EOF STAFF F8-1

| F8 Section | TITLE: RESPONSIBILITIES DURING AN ALERT, SITE AREA OR GENERAL EMERGENCY IN THE EOF | NUMBER: F8-2 |
|---|---|---|
| | | REV: 7 |

Reviewed By: _____ Gen. Supt. Radiation Protection

Approved By: _____ Plant Manager

Effective Date: 8-10-00

OC Review: 7-24-00 SC

***REFERENCE USE***

- ***Procedure segments may be performed from memory.***
- ***Use the procedure to verify segments are complete.***
- ***Mark off steps within segment before continuing.***
- ***Procedure should be available at the work location.***

| F8 Section | TITLE: RESPONSIBILITIES DURING AN ALERT, SITE AREA OR GENERAL EMERGENCY IN THE EOF | NUMBER: F8-2 |
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## 1.0 PURPOSE

The purpose of this procedure is to describe the specific duties of emergency response personnel who activate and operate the Emergency Operations Facility (EOF).

## 2.0 APPLICABILITY

This procedure applies to all persons reporting to and operating in the EOF anytime the EOF organization is activated.

## 3.0 PRECAUTIONS

All Prairie Island emergency response personnel should carry their company Picture ID for access through potentially established road blocks and access to the EOF.

## 4.0 RESPONSIBILITIES

### 4.1 Emergency Manager (EM)

**4.1.1** Complete the initial Emergency Manager actions as specified on the "EM WALLET CARD."

**4.1.2** Locate and use PINGP 1052, Emergency Manager Checklist, (see Figure 1 for an example).

### 4.2 Emergency Operations Facility Coordinator (EOF Coord)

Assume the role of EOF Coordinator. Use PINGP 1051, EOF Coordinator Checklist, (see Figure 2 for an example).

### 4.3 Radiation Protection Support Supervisor (RPSS)

Assume the role of Radiation Protection Support Supervisor. Use PINGP 1049, RPSS Checklist, (see Figure 3 for an example).

### 4.4 Technical Support Supervisor (TSS)

Assume the role of Technical Support Supervisor. Use PINGP 1050, Technical Support Supervisor Checklist, (see Figure 4 for an example).

### 4.5 Offsite Emergency Communicator

Assume the role of Offsite Communicator. Use PINGP 1089, Offsite Communicator Checklist, (see Figure 5 for an example).

### 4.6 Administrative Staff

Assume role of Administrative Staff. Use PINGP 1043, Administrative Staff Checklist as a guide (see Figure 6 as an example).

### 4.7 Security Coordinator

Assume the role of security coordinator. Use PINGP 1044, EOF Security Force Checklist, (see Figure 7 as an example).

### 4.8 Recovery Manager

**4.8.1** Report to the EOF during the later stages of the emergency phase to review the events of the emergency and become updated on the present status of the plant.

**4.8.2** Assess the status of the plant and implement F8-9, Event Termination or Recovery, as necessary.

## 5.0 DISCUSSION

NONE

## 6.0 PREREQUISITES

An Alert, Site Area, or General Emergency has been declared at Prairie Island Nuclear Generating Plant or the EOF organization has been activated.

## 7.0 PROCEDURE

All EOF emergency response personnel **SHALL** report to the EOF and perform their emergency duties as described in this procedure and other emergency procedures, as necessary.

| F8 Section | TITLE: RESPONSIBILITIES DURING AN ALERT, SITE AREA OR GENERAL EMERGENCY IN THE EOF | NUMBER: F8-2 REV: 7 |
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## FIGURE 1 - PINGP 1052, EMERGENCY MANAGER CHECKLIST

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1052, Rev. 11
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Retention: Life of Plant

### EMERGENCY MANAGER CHECKLIST

_____ 1. If not already done so, notify an ERO Communications Representative and Chief Nuclear Officer of the emergency situation as directed on the "EM Wallet Card."

_____ 2. Ensure the EOF Coord, RPSS, and Tech Support Supv positions are being staffed.

_____ 3. Contact the TSC and determine the extent of the emergency situation and need for offsite Rad. Protection support.

_____ 4. Direct the RPSS to implement offsite rad monitoring (F3-15 or F3-16) as appropriate.

| | |
|---|---|
| ***NOTES:*** | **1) EOF should be staffed and ready to assume its offsite responsibilities within about one(1) hour from notification.**<br>**2) Do not transfer control to EOF during a classification.**<br>**3) Attempt to transfer all responsibilities at once.**<br>**4) TSC should complete all classification notifications they initiate.**<br>**5) Transfer of control to the EOF should occur as soon as possible and no later than 90 minutes after the ERO is notified.** |

_____ 5. When the EOF is ready to assume control of the following functions, inform the Emergency Director.

_____ Offsite Communications
_____ Offsite Rad Surveys and Dose Assessment
_____ Authorization of Reclassifications and PARs

_____ 6. Announce to entire EOF when EOF has assumed offsite responsibilities and document in EM log.

_____ 7. Direct Offsite Emerg Communicator to inform offsite agencies of transfer of control to EOF.

_____ 8. Authorize emergency reclassifications (F3-2) per the recommendations received from the TSC. The ED is responsible to assess and recommend reclassifications to the EM.

_____ 9. If escalating to a General Emergency, immediately initiate PARs in accordance with Figure 4, F3-8; otherwise, authorize offsite PARs as appropriate per recommendations from the RPSS and F3-8 and F8-5.

_____ 10. When issuing PARs, ensure MN and WI State Health Depts. have been given the basis for the PARs by the RPSS before or simultaneously with issuing the PARs.

_____ 11. Approx. 30 minutes after a PAR has been issued, update TSC and EOF concerning its implementation by the states (check with RPSS on PAR implementation status).

1052 Emergency Manager Checklist.DOT

## FIGURE 1 - PINGP 1052, EMERGENCY MANAGER CHECKLIST [CONT'D]

**EXAMPLE ONLY**
**USE CURRENT REVISION**

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**EMERGENCY MANAGER CHECKLIST**

_____ 12. If a Site Area Emergency is declared, ensure the RPSS performs an assessment concerning Casino precautionary shutdown recommendation (PINGP 585). (The Indian Community Stutter Siren will be activated at SAE level to alert the Indian Community of the SAE, regardless of Casino shutdown decision.)

_____ 13. Ensure State EOCs, NRC and HQEC are updated periodically (approx. 30 minutes) with emergency information via PINGP 582, Emergency Notification Follow-up Message.

_____ 14. Conduct periodic EOF updates using PINGP 1039. Prepare staff by announcing updates 5 minutes prior to update.

_____ 15. Verify that the Tech Support Supv assumes control of the ENS line and the RPSS assumes control of the HPN line as necessary.

_____ 16. If assistance is needed from any vendors or consultants, direct the Tech Support Supv to notify the vendors or procure services in accordance with F8-4.

_____ 17. If the ED initiates a Site Evacuation, provide for assembly point or monitoring & decon support in accordance with F3-19.

_____ 18. If Goodhue/Red Wing requests NSP personnel at the Red Wing Fire Department for rad monitoring and decon assistance at the Site Area Emergency, request support in this effort from site construction group.

_____ 19. Refer to F8-6 for guidance on EOF radiological habitability, as necessary.

_____ 20. If there is a need for post release environmental monitoring, ensure the RPSS has contacted the NSP REMP Administrator for assistance.

_____ 21. If non-NSP agencies arrive at the EOF (e.g., NRC Site Team), ensure the EOF Coordinator manages their needs per F8-8.

_____ 22. If news media arrives at EOF, redirect them to the MN State JPIC for receiving formal news releases.

_____ 23. If TSC initiates Severe Accident Management, ensure EOF Technical group trends TSC's SAM strategies and provides technical support as necessary.

_____ 24. If a turnover of Emergency Manager duties is required, ensure the on-coming Emergency Manager performs a thorough review of the sequence of events and conditions before turnover. They may use PINGP 1052, EM Checklist, as a guide. Announce when the turnover has occurred.

_____ 25. When the emergency phase of the event is passed, consider terminating the emergency and transition to Recovery in accordance with F8-9.

_____ _____
EMERGENCY MANAGER DATE

## FIGURE 2 - PINGP 1051, EOF COORDINATOR CHECKLIST

**EXAMPLE ONLY**
**USE CURRENT REVISION**

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### EOF COORDINATOR CHECKLIST

_____ 1. Assign an EOF Coord Assist to assist with implementing your duties (PINGP 1051). (Use of an assistant allows you to stay in command center while your assistant completes remote EOF Coordinator duties.)

_____ 2. During normal work hours activation, ensure a PITC emergency announcement page has been made.

_____ 3. Ensure EOF emergency ventilation has been initiated per F8-3.

_____ 4. Assign personnel and supervise their activities:

_____ Offsite Emergency Communicators (PINGP 1089).
_____ Administrative Staff (PINGP 1043).

- Facsimile Operator
- Copying
- Messenger
- Flip Chart Recorder
- Switchboard Operator

_____ Security Coordinator (PINGP 1044).

_____ 5. Ensure the Security Coordinator (PINGP 1044) is setting up access control at the north end of the EOF.

_____ 6. Initiate EOF wireless mic/speaker system by using Job Aide located on speaker amplifier in EOF Communications Room. (Key Card or key on keyring in EOF Locker)

_____ 7. During off-normal hour activation, ensure all EOF personnel entering the EOF are subject to FFD emergency call-in requirements.

A. EOF reporting staff upon entry of the access control point should document on PINGP 1041, EOF Entry Log, if they have ingested alcohol within the last five (5) hours.
B. Individuals who have ingested alcohol within the five hours preceding their arrival should await breath analysis.
C. Individuals with Blood Alcohol Content (BCA) less than 0.04% may be allowed immediate participation in the EOF.
D. Individuals with BAC greater than 0.04% should either wait until their BAC is below 0.04% to participate in the EOF or wait until the individual can be taken home.

J:\TEMPLATE\1051 EOF Coordinator Checklist.dot

## FIGURE 2 - PINGP 1051, EOF COORDINATOR CHECKLIST [CONT'D]



**EXAMPLE ONLY
USE CURRENT REVISION**

E. Under extreme emergency conditions the EOF Coordinator may require the services of an individual having a BAC greater than 0.04%. Under these circumstances, the coordinator should establish the necessary controls, e.g., constant escort, etc., to assure that the individual performs the duties as required.

F. The breath analysis results printouts should be attached to the EOF Entry Log (PINGP 1041) at the termination of the emergency and kept in compliance with all other emergency plan activation records.

_____ 8. Ensure someone assists, as necessary, the Security Coordinator in issuing dosimetry to all personnel already present in EOF.

_____ 9. Ensure RPSS-REC communication link and Field Team communications can be established.

_____ 10. Ensure Tech EOF-TSC-CR 3-way communication link is established.

_____ 11. Ensure Offsite Emergency Communicators are ready to assume offsite communications with state, county and tribal agencies per PINGP 1089.

_____ 12. Verify that the Tech Support Supv has assigned a Narrative Log Keeper at or near the EM table and PINGP 598 is being used.

_____ 13. If the RPSS position has not been staffed, request the REC to send a person to the EOF.

_____ 14. Inform EM when your people are ready (the goal is to be ready in <1 hour after notification) to assume offsite communications.

_____ 15. Ensure the EOF Organizational status board and PINGP 1063 are updated as necessary.

_____ 16. Ensure all the EOF clocks are synchronized per ERCS time. (Include clocks in EOF classrooms if they are expected to be used.)

_____ 17. If there are non-emergency personnel residing in non-EOF training center rooms or areas, assess the need to move them to an EOF area or dismiss them from the training center to the public sector.

_____ 18. Ensure the EOF classrooms receive their appropriate signage. Signs (located in the EOF locker) may be placed over the installed signs and windows.

_____ 19. Provide technical assistance to the Emergency Manager as necessary.

_____ 20. Ensure the required offsite notifications are performed within the required times (15 minutes for classifications and PARs).

_____ 21. Assist EM by screening his phone calls.

## FIGURE 2 - PINGP 1051, EOF COORDINATOR CHECKLIST [CONT'D]

**EXAMPLE ONLY USE CURRENT REVISION**



_____ 22. Remind the EM to perform periodic (approx. 30 minutes) updates and provide status report concerning EOF staffing and operation using PINGP 1039.

_____ 23. Direct the EOF Coord Assistant to review the needs for EOF personnel food and lodging and manage as necessary (F8-4).

_____ 24. If evacuation of EOF to Backup EOF is expected, prepare for transition using F8-11.

_____ 25. Contact plant communications engineer for assistance concerning any communication equipment problems.

_____ 26. If necessary, request HQEC to supply an ERO Communications Personnel representative to EOF as necessary.

_____ 27. Establish 24 hour staffing plan of EOF as necessary. PINGP 1063 and current EOF staff roster (in EP phone directory) may be used. Include FFD considerations related to fatigue, stress, illness, etc.

_____ 28. Direct EOF Coordinator Assistant (or another EOF knowledgeable individual) to perform offsite liaison duties for NRC, state, county, Tribe, RACES members in the EOF, as necessary, in accordance with F8-8. Inform EM of offsite agency arrivals.

_____ 29. Upon termination of emergency condition, coordinate efforts for transition of EOF to standby status.

_____ _____
EOF COORDINATOR DATE

| F8 Section | TITLE: RESPONSIBILITIES DURING AN ALERT, SITE AREA OR GENERAL EMERGENCY IN THE EOF | NUMBER: F8-2 |
|---|---|---|
| | | REV: 7 |

## FIGURE 3 - PINGP 1049, RPSS CHECKLIST

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1049, Rev. 14
Page 1 of 3
Document Type: 7.42J
Retention: Life of Plant

### RPSS CHECKLIST

_____ 1. Contact REC to receive plant update and extent of offsite surveys, dose estimates and any offsite protective actions.

_____ 2. Request REC to provide MIDAS Operator, Field Team Communicator, Count Room RPS, 2 Field Tm Drivers, 2 Sample Couriers and RPSS Assistant.

_____ 3. Assign personnel as necessary.

_____ 1st RPSS Assistant State Liaison (PINGP 1046)
_____ 2nd RPSS Assistant (if available) (oversee Field Team work & Dose Assessment)
_____ Field Tm communicator (PINGP 1048)
_____ Rad Prot Status Board Keeper
_____ Field Tm Drivers (PINGP 1045)
_____ Sample Couriers (PINGP 1045)
_____ MIDAS Operator (PINGP 1312)

_____ 4. Ensure sample couriers have survey maps and a field team radio.

_____ 5. Direct RPSS Assistants to assist you with the many specific duties to enable you to be available to the EM and oversee overall RP Support operation.

_____ 6. Ensure the CAM and AM2 are operational per F8-3.

_____ 7. Inform EM when you are ready (the goal is within about 1 hour of notification) to take PAR formulation, offsite dose projections and survey team coordination duties.

_____ 8. Inform both state rad assessment groups via RPSS Assistant State Liaison when EOF has taken over offsite communications and dose assessment.

_____ 9. If a Site Area Emergency is declared, immediately assess the need for precautionary recommended actions for nearsite special populations (i.e., casino) according to PINGP 585 (PAR Checklist).

_____ 10. If several site personnel are leaving the site because of Early Release, Post-Plant Evacuation dismissal or Site Evacuation, ensure Goodhue/Red Wing EOC is notified of this information for road control purposes.

1049 RPSS Checklist.dot

## FIGURE 3 - PINGP 1049, RPSS CHECKLIST [CONT'D]

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1049, Rev. 14
Page 2 of 3

_____ 11. Formulate and communicate offsite PARs to the EM as necessary. A General Emergency requires a PAR. Use F3-8 and F8-5.

_____ 12. Ensure PINGP 577 (Emerg. Notif.) and PINGP 585 (PAR Checklist) are completed, as necessary, and review the contents with the EM for his authorization.

_____ a. Ensure authorized PINGP 577 form is immediately given to Offsite Communicators for notifications and faxing.

_____ b. Ensure authorized PINGP 585 form is given to Offsite Communicators for faxing and the RPSS Assistant immediately updates MN & WI rad assessment groups of approved PARs.

_____ 13. Ensure the RPSS Assist. is periodically updating the state health depts. via facsimile of PINGP 582 (Followup Message) and its content is reviewed via a phone contact.

_____ 14. Obtain state survey information, if available.

_____ 15. Periodically review and compare offsite survey results (PINGP 647) and dose projections.

| ***NOTE:*** | **Monti will send two (2) field teams and one (1) RPS to the EOF.** |
|---|---|

_____ 16. Determine status of Monticello survey teams and Cottage Grove Reception Center Team as appropriate. A call to TSC SEC may be made or monitor survey team radios to assess their arrival time.

_____ 17. Ensure dosimetry is being issued to EOF staff and have staff periodically check if rad levels are detected in EOF.

_____ 18. Provide EOF Security a list of Rad Prot persons who may leave the EOF with dosimetry (survey teams, etc.).

_____ 19. Assess habitability of EOF in accordance with F8-6. If personnel exposures are expected to approach 10 mRem, then implement Rad Exposure Controls per F8-6.

_____ 20. Assess the need to continue operating the EOF emergency ventilation. If no offsite releases are imminent, normal EOF ventilation may be used.

_____ 21. Ensure contamination control is established at the EOF entrance if a release has occurred or samples are sent to the EOF. EOF Countroom person should assist.

_____ 22. Review offsite sample results from EOF Countroom.

## FIGURE 3 - PINGP 1049, RPSS CHECKLIST [CONT'D]

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1049, Rev. 14
Page 3 of 3

_____ 23. Request updates on status of PARs from state health departments and check siren status in TSC via the SEC (ext. 4369). Update PAR status board area.

_____ 24. Provide periodic updates to the EM concerning radiological issues listed on PINGP 1039, EOF Update Checklist.

_____ 25. Assume responsibility of HPN Line as necessary. Maintain this line open until directed otherwise by NRC.

_____ 26. If Goodhue/Red Wing requests NSP personnel at the Red Wing Fire Department for rad monitoring and decon assistance, request support in this effort via the EM from site construction group.

_____ 27. Provide recommended evacuation routes for personnel in the event of a Site Evacuation to an alternate offsite assembly area such as Red Wing Service Center, Goodhue County Monitoring and Decon Center, Dakota County Monitoring and Decon Center, or MN Public Reception Center. The counties should be notified of a site evacuation.

_____ 28. If there is a radiological release, request the NSP REMP Administrator to provide assistance for post release monitoring.

_____ 29. Periodically contact REC staff to exchange information concerning inplant dose rates, evacuation plans, fission product boundary conditions, etc.

_____ 30. When EM is considering termination of an emergency action level or relaxing a PAR, include assessment of confirmatory radiological readings.

_____ _____
RPSS DATE

| F8 Section | TITLE: RESPONSIBILITIES DURING AN ALERT, SITE AREA OR GENERAL EMERGENCY IN THE EOF | NUMBER: F8-2 |
|---|---|---|
| | | REV: 7 |

## FIGURE 4 - PINGP 1050, TECH SUPPORT SUPERVISOR CHECKLIST

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1050, Rev. 6
Page 1 of 2
Document Type: 7.42K
Retention: Lifetime

**TECH SUPPORT SUPERVISOR CHECKLIST**
**(F8-2)**

**TIME**

_____ 1. Assign personnel as necessary. (See Nuc. E.P. Telephone Directory for ERO)

- _____ Technical Communicator (EOF-TSC-CR Conference Call)
- _____ ERCS Operator (F3-26.1)
- _____ Event Status Board Keeper
- _____ Technical Corporate Communicator (JPIC-HQEC-EOF)
- _____ ENS/NRC Communicator (PINGP 1296)
- _____ EOF Narrative Log Keeper (PINGP 1047)
- _____ Technical Support Staff

_____ 2. Direct the EOF Narrative Log Keeper to locate near the EM and keep a narrative log of important emergency events using PINGP 1047 as a guide.

_____ 3. Ensure plant data is accessed via the ERCS (F3-26.1) and Tech Communicator.

_____ 4. Ensure your group is providing parameter trending, accident assessment and technical analysis during the course of the event.

_____ 5. Assess the need for more technical manuals, documents and prints in the EOF and acquire as necessary from training center library.

_____ 6. Assume the responsibility for the ENS line from the TSC as necessary. Update NRC by consulting approved message forms and status boards (PINGP 1296).

_____ 7. Ensure continuous or regular updates are provided to the NMC Executive Spokesman or Tech Resource Person at the MN State EOC by the Tech. Corporate Communicator.

_____ 8. Ensure Tech Staff is trending key data and update EOF of significant changes and its potential results.

- Status of threatened systems
- Status of systems or components approaching design limits
- Water level inventories
- Leak rates
- Reactor vessel water level
- Reactor pressure
- Reactor temperature
- Containment pressure, temperature, humidity, sump levels, and radiation levels
- Have any safety limits been exceeded?

J:\TEMPLATE\1050 Tech Support Supervisor Checklist.dot

## FIGURE 4 - PINGP 1050, TECH SUPPORT SUPERVISOR CHECKLIST [CONT'D]

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1050, Rev. 6
Page 2 of 2

### TECH SUPPORT SUPERVISOR CHECKLIST

**TIME**

_____ 9. Evaluate plant conditions for possible emergency reclassifications (F3-2), (The TSC is the primary source of reclassifications, however, the EM is responsible to authorize reclassifications).

- Fission product barrier degradation (R70, 71 or R48, 49, R50 or R51/52 readings)
- Containment degradation, containment pressure, temperature or ventilation
- Release rate
- Potential for uncovering the core
- Availability of water for the core
- Changes in the magnitude of the source term

_____ 10. Evaluate plant conditions for possible system or function restoration such as alternate electrical or fluid flow paths.

_____ 11. Inform the RPSS of any actual or potential loss of fission product boundaries or loss of containment (loss of core cooling, containment pressure trends).

_____ 12. Provide periodic status reports to the EM concerning plant status and accident assessment. Use PINGP 1039, EOF Update Checklist.

_____ 13. Provide assistance in preparation for NRC site team arrival to EOF per F8-8.

_____ 14. Consider the need to contact and update Westinghouse. Westinghouse is initially notified by the SEC in the TSC.

_____ 15. Ensure all logistics information for requests or services is logged on PINGP 1042, Logistics Information Sheet.

_____ 16. Provide for exchange of information with vendors and/or NRC technical analyst located in the EOF (F8-4).

_____ 17. Trend SAM strategies, if initiated, and provide technical support, as necessary.

_____ 18. Provide transition to Recovery support to the TSC by developing short and long term actions needed for Recovery (PINGP 1017).

_____ _____
TECH SUPPORT SUPV. DATE

| F8 Section | TITLE: RESPONSIBILITIES DURING AN ALERT, SITE AREA OR GENERAL EMERGENCY IN THE EOF | NUMBER: F8-2 REV: 7 |
|---|---|---|

## FIGURE 5 - PINGP 1089, OFFSITE COMMUNICATOR CHECKLIST

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1089, Rev. 5
Page 1 of 2 (FRONT)
Retention: 2 years
Document Type: 7.971

### OFFSITE COMMUNICATOR CHECKLIST

| | |
|---|---|
| *NOTES:* | 1) **The EOF should be ready to assume offsite communications within one hour of the emergency notification.**<br>2) **The Offsite Communicator Area may initially be staffed by one person if additional staff is not available.** |

**TIME**

_____ 1. Retrieve PINGP 1054, PINGP 1056 and PINGP 597.

_____ 2. Position yourself in the Offsite Communicator Area and review the location of:

a. The communicator's notification phone

b. The Wisconsin NAWAS phone

c. The radio console

d. The facsimile machines

e. The EOF main telephone switchboard.

_____ 3. Review the use of PINGP 1054 & PINGP 1056.

_____ 4. Locate the telephone headset, review its setup and decide if you want to use it.

_____ 5. If time is available and the TSC Shift Emergency Communicator is NOT making a government notification, verify operation of your notification phone by contacting MN, WI, Goodhue, Dakota, and Pierce county government contacts.

_____ 6. Compare the current government notification numbers with the notification numbers listed and programmed on your notification phones. Prepare for any phone number changes, as necessary.

Minnesota: _____

Wisconsin: _____

Goodhue Co.: _____

Dakota Co.: _____

Pierce Co.: _____.

1089 Offsite Communicator Checklist.DOT

| F8 Section | TITLE: RESPONSIBILITIES DURING AN ALERT, SITE AREA OR GENERAL EMERGENCY IN THE EOF | NUMBER: F8-2 |
|---|---|---|
| | | REV: 7 |

## FIGURE 5 - PINGP 1089, OFFSITE COMMUNICATOR CHECKLIST [CONT'D]

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1089, Rev. 5
Page 2 of 2 (BACK)

**TIME**

_____ 7. Notify the EOF Coordinator or EOF Coordinator Assistant when you are ready to assume offsite communications.

_____ 8. When directed by the Emergency Manager or EOF Coordinator to assume offsite communications, contact the offsite notification contacts as listed in PINGP 1054 and inform them that the EOF has assumed the responsibility for offsite emergency communications.

_____ 9. Notify the TSC SEC that the EOF has assumed offsite emergency communications, but they should complete any call lists they have already started.

_____ 10. Use PINGP 1054 for notification of any new emergency reclassification.

_____ 11. Use PINGP 1056 for faxing PINGP 585 (Protective Action Recommendation Checklist Attachment).

| *NOTE* | **The RPSS or EM should have already discussed the contents of PINGP 585 with state authorities by the time you are faxing it.** |
|---|---|

_____ 12. Unexpected incoming calls should be forwarded to the responsible EOF supervisor or Emergency Manager and logged on the Contact Report Log (PINGP 597).

_____ 13. Be prepared to fax various documents as requested by responsible EOF supervisors.

Offsite Emergency Communicator _____

Date _____

## FIGURE 6 - PINGP 1043, ADMINISTRATIVE STAFF CHECKLIST

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1043, Rev. 8
Page 1 of 4
Document Type: 7.97A
Retention: 2 Years

**ADMINISTRATIVE STAFF CHECKLIST**

**Lead Administrative Support Person:**

_____ 1. Report to the EOF Coordinator (or EOF Coordinator Assistant) the Admin Support assignments.

_____ 2. Assist the Admin Staff and EOF Staff as requested.

_____ 3. Provide the necessary supplies to support the EOF operation and record keeping:

A. Pens, pencils, markers
B. Writing paper and note pads, flip chart paper, copy paper, various sizes of stick notes
C. See that the form files are supplied
D. EOF Supply cabinet is inventoried and supplied

_____ 4. Contact EOF Security Coordinator to make arrangements to acquire supplies outside the EOF envelope. Check with Rad Prot. Support Supv. for any Radiological concerns.

_____ 5. Answer the ringing unattended telephone, and take appropriate message for EOF personnel.

_____ 6. Arrange for meals and beverages as directed by EOF Coordinator (or EOF Coordinator Assistant).

_____ 7. Request assistance from the EOF Coordinator (or EOF Coordinator Assistant) for any problems encountered.

**Fax/Switchboard Operator:**

_____ 1. Check the paper supply in the Fax machine. Verify correct Date/Time and in "AUTO ON" mode.

_____ 2. Perform FAX transmissions as requested by EOF Communicators or any EOF Staff.

| ***NOTE:*** | **The RPSS will fax PINGP 582 & request copies to be made.** |
|---|---|

_____ 3. Verify success of fax transmission by reviewing the Transaction Report from the fax machine.

_____ 4. Attach the Transaction Report to each faxed document, and notify the communicator that the faxing is complete.

_____ 5. Maintain File for the following faxed forms:

A. Emergency Notification Report Form, PINGP 577
B. Emergency Notification Follow-up Message, PINGP 582
C. Offsite PAR Checklist, PINGP 585

J:\TEMPLATE\1043 Administrative Staff Checklist.DOT

## FIGURE 6 - PINGP 1043, ADMINISTRATIVE STAFF CHECKLIST [CONT'D]

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1043, Rev. 8
Page 2 of 4

**ADMINISTRATIVE STAFF CHECKLIST**

**Fax/Switchboard Operator (Cont'd):**

_____ 6. Maintain control of EOF telephone console.

_____ 7. Transfer calls to appropriate EOF personnel, as necessary.

_____ 8. Report any problems with the fax or phone to the Lead Admin person or EOF Coordinator.

_____ 9. Request assistance, if needed from Lead Admin, EOF Coordinator or EOF Coordinator Assistant.

**Flip Chart Keeper:**

_____ 1. Receive contents of the Narrator's basket and any other messages or information that are given to you, write the following on the flip chart:

A. Time of event, message (use 24 hr. military time)
B. Summary of event, message, etc.

_____ 2. When flip chart sheet is filled, post it in EOF command center area.

_____ 3. Request assistance, if needed, from Lead Admin., the EOF Coordinator or EOF Coordinator Assistant.

_____ 4. A Technical person will be asked to transcribe Recovery Action Items, if any, when they are produced.

**Copy Activities/Messages:**

_____ 1. Post the "Emergency Form Copy Distribution List" (Attachment 1) near the copy machine.

_____ 2. Verify forms signed by Responsible EOF person.

_____ 3. Perform copying as requested by EOF staff.

_____ 4. Distribute copies per distribution list.

_____ 5. Maintain File for the following original forms:

A. Emergency Center Narrative Log, PINGP 598
B. Sample Results Log PINGP 647 and PINGP 956

_____ 6. Return the Original of PINGP 577, 582, 585 to the file.

_____ 7. Pick up messages, make copies and distribute as necessary.

_____ 8. Check to be sure there is a supply of forms in the form racks.

_____ 9. Request assistance if needed from Lead Admin.

| F8 Section | TITLE: RESPONSIBILITIES DURING AN ALERT, SITE AREA OR GENERAL EMERGENCY IN THE EOF | NUMBER: F8-2 |
|---|---|---|
| | | REV: 7 |

## FIGURE 6 - PINGP 1043, ADMINISTRATIVE STAFF CHECKLIST [CONT'D]

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1043, Rev. 8
Page 3 of 4

**ADMINISTRATIVE STAFF CHECKLIST**

**Routing:**

1. PINGP 577 should normally be routed from Emergency Manager to:
   A. Offsite Communicators (must complete notifications within 15 min.) to
   B. Fax Operator to
   C. Copy Person to
   D. Appropriate File and Distribution

2. PINGP 585 should normally be routed from Emergency Manager to:
   A. Offsite Communicators to (must complete notifications within 15 min.)
   B. Fax Operator to
   C. Copy Person to
   D. Appropriate File and Distribution

| *NOTE:* | **If RPSS does NOT fax PINGP 582, then route PINGP 582 the same as PINGP 585.** |
|---|---|

3. PINGP 582 should normally be routed from RPSS area to:
   A. Copy Person to
   B. Appropriate File and Distribution

## FIGURE 6 - PINGP 1043, ADMINISTRATIVE STAFF CHECKLIST [CONT'D]

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1043, Rev. 8
Page 4 of 4

**ADMINISTRATIVE STAFF CHECKLIST**

**ATTACHMENT 1**
**EMERGENCY FORM COPY DISTRIBUTION**

DISTRIBUTION FOR:

PINGP 577, Emergency Notification Report Form
PINGP 582, Emergency Notification Follow-up Message
PINGP 585, Offsite Protective Action Recommendation Checklist

Copy Distribution 12

| | | | |
|---|---|---|---|
| Emergency Communicators | 2 | Facsimile Operator | 1 |
| EM/Narrative Log Keeper | 1 | Rad Prot Support Supv | 1 |
| EOF Coordinator | 1 | Tech Support Supv | 1 |
| ENS Phone Operator | 1 | NRC - - Classroom #8 | 1 |
| NRC - - Classroom #9 | 1 | State & Local Govt. Classroom #12 | 2 |
| File Original | | | |

---

DISTRIBUTION FOR:

PINGP 598, Emergency Center Narrative Log

Copy Distribution 9

| | | | |
|---|---|---|---|
| EOF Coordinator | 1 | Flip Chart Keeper | 1 |
| Rad Prot Support Supv | 1 | Tech Support Supv | 1 |
| ENS Phone Operator | 1 | NRC - - Classroom #8 | 1 |
| NRC - - Classroom #9 | 1 | State & Local Govt. Classroom #12 | 2 |
| File Original | | | |

---

DISTRIBUTION FOR:

PINGP 647, Emergency Sample Results Log
PINGP 956, Ground Deposition Sample Results Log

Copy Distribution 3

| | | | |
|---|---|---|---|
| Rad Prot Support Supv | 1 | NRC - - Classroom #8 | 1 |
| NRC - - Classroom #9 | 1 | File Original | |

| F8 Section | TITLE: RESPONSIBILITIES DURING AN ALERT, SITE AREA OR GENERAL EMERGENCY IN THE EOF | NUMBER: F8-2 REV: 7 |
|---|---|---|

## FIGURE 7 - PINGP 1044, EOF SECURITY FORCE CHECKLIST

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1044, Rev. 8
Page 1 of 5
Document Type: 7.97B
Retention: 2 Years

### EOF SECURITY FORCE CHECKLIST

| TIME | EOF Security Coordinator Actions: |
|---|---|
| _____ | 1. Request a Security Force Member to respond to the EOF to establish and maintain security of the EOF by calling the CAS at ext. 4318. |
| _____ | 2. Establish EOF entry control point adjacent to the receiving area next to the wall phone ext. 5232. |
| | A. Obtain tables and chairs from classroom #12 for the Entry Control Point. |
| | B. Obtain signs, dosimeters, TLDs and zeroing equipment from the Rad Protection equipment locker located in the receiving area. |
| | C. Ensure a timepiece is available for use. |
| | D. Acquire EOF Entry Log (PINGP 1041) from EOF forms file or EOF Coordinator. |
| | E. Place the FFD Requirement sign at EOF Entry Point. |
| _____ | 3. Ensure access to the EOF can be made by unlocking the north emergency entrance. |
| _____ | 4. Post designated signs on all entrances to the Training Center. |
| _____ | 5. Post designated signs on all doors leading into the EOF. |
| _____ | 6. Secure all perimeter doors of the EOF. |
| _____ | 7. Search interior of the EOF to ensure only authorized personnel are in the EOF. |
| _____ | 8. Contact the security representative at the TSC (ext. 4456) and determine the security status of site and any security needs. |

| *NOTE:* | **Contract Security should also provide an EOF Security Monitor person to assist in EOF security supervision and assist the EOF Security Coordinator, as necessary.** |
|---|---|

| | |
|---|---|
| _____ | 9. Brief Security Force personnel on their duties. Provide Security personnel with Attachment A of this checklist. |
| _____ | 10. Ensure that all personnel that are in the EOF prior to establishing the Entry Control Point are logged on PINGP 1041. |

1044 EOF Security Force Checklist.DOT

## FIGURE 7 - PINGP 1044, EOF SECURITY FORCE CHECKLIST [CONT'D]

**EXAMPLE ONLY**
**USE CURRENT REVISION**



### EOF SECURITY FORCE CHECKLIST

| | |
|---|---|
| *NOTE:* | **If this is an off normal hours staffing of the EOF, all personnel reporting to the EOF are subject to the Fitness for Duty emergency call-in requirements.**<br>**A. Individuals who have ingested alcohol within the five hours preceding their arrival should await breath analysis.**<br>**B. Individuals with Blood Alcohol Content (BAC) less than 0.04% may be allowed immediate participation in the EOF.**<br>**C. Individuals with BAC greater than 0.04% should either wait until their BAC is below 0.04% to participate in the EOF or wait until the individual can be taken home.**<br>**D. Under extreme emergency conditions, the EOF Coordinator may require the services of an individual having a BAC greater than 0.04%. Under these circumstances, the Coordinator should establish the necessary controls, e.g., constant escort, etc., to assure that the individual performs the duties as required.** |

_____ 11. If breath analysis is performed, ensure the breath analysis printout is attached to EOF Entry log (PINGP 1041).

_____ 12. If frisking is required (check with RPSS), brief Security Force Personnel on frisking requirements for personnel entering the EOF. Assistance may be acquired from RPS in EOF Count Room

_____ 13. If radiological contamination is present, ensure a RPS is present at the EOF Entry Control Point to assist in monitoring the whole body frisking of personnel entering the EOF. Refer to F8-6 for specific guidance on setting up Contamination Control at the EOF. The EOF Count Room person should assist on contamination control setup.

_____ 14. Provide status reports to Emergency Manager as requested per PINGP 1039, EOF Update Checklist.

_____ 15. Maintain presence at the Security Coordinators desk to keep abreast of emergency conditions and security status and needs of the site and EOF.

_____ 16. Establish periodic contact with TSC security representative to keep abreast of plant security issues that need Emergency Manager attention.

## FIGURE 7 - PINGP 1044, EOF SECURITY FORCE CHECKLIST [CONT'D]

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1044, Rev. 8
Page 3 of 5

**EOF SECURITY FORCE CHECKLIST**

_____ 17. Ensure security is provided for retrieval and delivery of supplies for the operation of the EOF.

_____ 18. If required, establish and help coordinate command post facilities for the local law enforcement agency at the EOF. Provide assistance to the local law enforcement agency commensurate with available resources.

_____ _____
EOF Security Coordinator Date

## FIGURE 7 - PINGP 1044, EOF SECURITY FORCE CHECKLIST [CONT'D]

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1044, Rev. 8
Page 4 of 5

**EOF SECURITY FORCE CHECKLIST**

**ATTACHMENT A**

| TIME | EOF Entry Controller Actions: |
|---|---|
| _____ | 1. Assume duties as EOF Entry Controller. |
| _____ | 2. Control personnel as follow: |
| | A. PI site personnel should provide their company identification card or have another employee verify they are a site employee |
| | B. Non-site personnel will be allowed access only with approval by the EOF Coordinator, EOF Coordinator Assistant, Emergency Manager, or Security Coordinator. |
| _____ | 3. As time permits, rezero pencil dosimeters reading greater than 50 millirem for the 0-200 millirem dosimeters. Remove defective dosimeters from inventory. |
| _____ | 4. Ensure all individuals granted access to the EOF completes PINGP 1041, EOF Entry Log. |
| | A. Issue a TLD and pencil dosimeter that reads less than 50 millirem. |
| | B. Instruct each individual to enter: Name, SS#, Organization, Dosimeter reading, TLD#, dose in/dose out and dose received. |
| | C. Ensure the FFD Requirement sign is positioned so all personnel entering EOF can observe it. |
| | D. Any individual indicating they are unfit for duty will be held at the Entry Control Point and the Security Coordinator should be contacted immediately for instructions. |
| _____ | 5. Ensure that personnel leaving the EOF read their dosimeters, sign out, record dose out and accumulated dose on the PINGP 1041, EOF Entry Log. |
| _____ | 6. Keep an accurate count of the number of people in the EOF. |
| _____ | 7. Contact the Count Room RPS to assist with frisking for entry into or exit from the EOF |

| F8 Section | TITLE: RESPONSIBILITIES DURING AN ALERT, SITE AREA OR GENERAL EMERGENCY IN THE EOF | NUMBER: F8-2 REV: 7 |
|---|---|---|

## FIGURE 7 - PINGP 1044, EOF SECURITY FORCE CHECKLIST [CONT'D]

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1044, Rev. 8
Page 5 of 5

**EOF SECURITY FORCE CHECKLIST**

**ATTACHMENT A (CONT'D)**

_____ 8. Provide security as directed by the EOF Security Coordinator for the delivery of supplies at doors other than the Main Entry Control Point.

_____ 9. Ensure the EOF perimeter doors remain secure by performing random door checks as directed by the EOF Security Coordinator.

_____ 10. Contact the Security Coordinator to resolve any security concerns you may have (ext. 4508).

_____ 11. Review Security Coordinator directions as listed in F8-2 (request copy from Security Coordinator).

_____ _____
Name Date

## FIGURE 8 - PINGP 1045, FIELD SURVEY TEAM DRIVERS/SAMPLE COURIER CHECKLIST

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1045, Rev. 3
Page 1 of 2
Retention: 2 Years

**FIELD SURVEY TEAM DRIVERS/SAMPLE COURIER CHECKLIST**

**Field Survey Team Drivers:**

| NOTE: | Keys to survey vehicles are located in the NPSA key locker. |
|---|---|

_____ 1. Report to the EOF with a Vehicle and check in with EOF Radiation Protection Support Supervisor (RPSS).

_____ 2. Serve as a driver for the survey team which consists of at least one Radiation Protection Specialist (RPS). The EOF, by radio, will indicate the sample points which they want you to drive to. Maps are provided in the survey team kits.

_____ 3. Request advice from the RPS regarding procedures or special precautions which should be considered when approaching or searching for the plume.

_____ 4. Provide assistance to the RPS as requested.

_____ 5. Ensure Traffic Safety due to Survey Team activities in and around vehicle. Utilize safety vests and yellow flashing beacon installed on vehicle.

_____ _____
Field Team Driver Date

J:\TEMPLATE\1045 Field Survey Team Drivers - Sample Courier Checklist.dot

## FIGURE 8 - PINGP 1045, FIELD SURVEY TEAM DRIVERS/SAMPLE COURIER CHECKLIST [CONT'D]

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1045, Rev. 3
Page 2 of 2

**FIELD SURVEY TEAM DRIVERS/SAMPLE COURIER CHECKLIST**

**Sample Courier:**

_____ 1. Report to the EOF with a Vehicle and check in with EOF Radiation Protection Support Supervisor (RPSS).

| *NOTE:* | **The REMP vehicle may be used as a courier vehicle. It has a radio installed for your use. REMP and Emergency Vehicle keys are located in the NPSA key locker.** |
|---|---|

_____ 2. Request the RPSS to explain your duties and any personal protection which may be required (specifically anti-contamination clothing and respirator use).

_____ 3. Obtain a field team radio and a survey map. Stand by for dispatch to pick up samples from the survey teams or the plant. If time permits, monitor survey team communications and locations on the survey maps while in standby.

_____ 4. Obtain a whip antenna for your vehicle. Two antenna's are located in the EOF Receiving Area, next to the receiving locker.

_____ 5. When directed by RPSS to pick up samples from survey teams, request if there are any particular radiological precautions (route, etc.) before departing EOF.

_____ 6. As you pick up the sample from the RPS, request him to inform you whether any radiological precaution is necessary regarding the sample and if the sample has been properly labeled.

_____ 7. Once you have the sample, radio the EOF Communicator for instructions. The sample should be returned to the EOF as soon as possible, unless otherwise instructed by the EOF Communicator.

_____ 8. Samples should be taken to the EOF receiving area (loading dock) and the RPS staffing the count room should be notified.

| *NOTE:* | **Do not bring samples into the EOF without them first being checked by an RPS.** |
|---|---|

_____ 9. EOF Count Room RPS should verify samples okay to bring into EOF Receiving Area.

_____ 10. After delivering the sample, radio the EOF and inform them that you are clear for additional sample pick up.

_____ Sample Courier _____ Date

## FIGURE 9 - PINGP 1046, RADIOLOGICAL/METEOROLOGICAL COMMUNICATOR CHECKLIST

PINGP 1046, Rev. 4
Page 1 of 2
Retention: 2 years

**EXAMPLE ONLY
USE CURRENT REVISION**

### RADIOLOGICAL/METEOROLOGICAL COMMUNICATOR CHECKLIST (RPSS ASSISTANT STATE LIAISON)

| NOTE: | **Your primary job is to ensure that both State Health Departments are kept updated with all the appropriate emergency response information for the protection of the health and safety of the public.** |
|---|---|

_____ 1. Request copies of any Emergency Notification Followup (PINGP 582) from the TSC REC group and determine the extent of offsite surveys and both present and prior radiological and meteorological data.

_____ 2. Request weather forecast information from either the MIDAS operator or TSC REC group.

_____ 3. Establish initial communications with the MN & WI radiological assessment groups by calling each at their listed numbers and announce who the RPSS is and yourself as the RPSS Assistant.

_____ 4. Request the name and phone number of:

MN PAC Planning Leader _____ _____

MN PAC Technical Advisor _____ _____

WI State Rad Coord _____ _____

WI Dose Assessment _____ _____

_____ 5. Inform MN & WI radiological assessment groups when the EOF has taken over offsite communications and dose assessment.

_____ 6. Fax PINGP 582 (Followup Message) approximately every 30 minutes to the broadcast list on your fax machine.

7. After each faxing of PINGP 582 (Followup Message):

_____ a. Review its content with MN & WI radiological assessment groups emphasizing important changes and overall plant conditions.

_____ b. Give a copy of the form to admin staff for copying and EOF distribution.

_____ 8. Initiate PINGP 577, Emergency Notification Report Form whenever a possible reclassification may occur.

J:\TEMPLATE\1046.DOT

| F8 Section | TITLE: RESPONSIBILITIES DURING AN ALERT, SITE AREA OR GENERAL EMERGENCY IN THE EOF | NUMBER: F8-2 |
|---|---|---|
| | | REV: 7 |

## FIGURE 9 - PINGP 1046, RADIOLOGICAL/METEOROLOGICAL COMMUNICATOR CHECKLIST [CONT'D]

PINGP 1046, Rev. 4
Page 2 of 2

**EXAMPLE ONLY
USE CURRENT REVISION**

_____ 9. Make PINGP 585, Protective Action Recommendation Checklist, available as necessary.

_____ 10. When formulating Protective Action Recommendations (PARs), if time allows, consult with both MN & WI radiological assessment groups informing them what PAR NSP is formulating and its basis.

11. If PINGP 585 (PAR Checklist) is generated and approved by the EM:

_____ a. Update MN & WI radiological assessment groups immediately of the approved PAR.

_____ b. Ensure the PINGP 585 Attachment is given to the Offsite Communicators for faxing to MN & WI.

_____ 12. About 30 minutes after PARs are issued, request updates from MN & WI radiological assessment groups concerning the status of the states issuance of the Protective Action.

_____ 13. About 30 minutes after PARs are issued, request the plant SEC (ext. 4369) to check if the area sirens have been activated per the siren monitor system in the TSC.

_____ 14. Update both MN & WI radiological assessment groups to update them on changing Rad, Met and Plant conditions including:

a. Changing wind direction or speed or precipitation.
b. Start or termination of rad release and duration.
c. Changes in rad release rates.
d. Iodine fraction in the release rate.
e. Significant field team rad readings.
f. Time of reactor trip.
g. Possible loss of core cooling or evidence of core damage.
h. Status of Containment integrity and rad trends.

_____ 15. If escalating to a Site Area Emergency, assist RPSS to determine if NSP should recommend a precautionary casino shutdown within 30 minutes of the declaration. Use PINGP 585 (PAR Checklist) as a guide to make determination for this special population.

| F8 Section | TITLE: RESPONSIBILITIES DURING AN ALERT, SITE AREA OR GENERAL EMERGENCY IN THE EOF | NUMBER: F8-2 |
|---|---|---|
| | | REV: 7 |

## FIGURE 10 - PINGP 1048, FIELD TEAM COMMUNICATOR CHECKLIST

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1048, Rev. 8
Page 1 of 3
Document Type: 7.97F
Retention: 2 Years

**EOF FIELD TEAM COMMUNICATOR CHECKLIST**

_____ 1. Perform the Field Team Communicator duties as directed by the RPSS or RPSS Assistant.

_____ 2. Obtain current plant status, release information and met data.

_____ 3. Establish radio communications with the Survey Teams (Ch. Rad1). If radio communication not possible, utilize telephone system.

| | |
|---|---|
| ***NOTE:*** | **1) When communicating with survey teams, preface each communication with the title of the receiving party (e.g., "PI Team #1").**<br>**2) During drills, always include the words, "THIS IS A DRILL", with each transmission.** |

_____ 4. Identify teams as PI Team #1, PI Team #2, Monti Team #3, Monti Team #4 and obtain team member names.

_____ 5. Remember to update survey teams on:

- Rad release information
- Met data
- Dose rate projection
- Emergency classification changes
- Offsite Protective Actions for the public

_____ 6. Document all reported survey results on the PINGP 647, Field Team Communicator Emergency Sample Results Log, and/or PINGP 956, Ground Deposition Sample Results Log.

_____ 7. When communicating sample point locations, use the phonetic alphabet as follows:

| | | | | | |
|---|---|---|---|---|---|
| A | ALPHA | J | JULIET | S | SIERRA |
| B | BRAVO | K | KILO | T | TANGO |
| C | CHARLIE | L | LIMA | U | UNIFORM |
| D | DELTA | M | MIKE | V | VICTOR |
| E | ECHO | N | NOVEMBER | W | WHISKEY |
| F | FOXTROT | O | OSCAR | X | X-RAY |
| G | GOLF | P | PAPA | Y | YANKEE |
| H | HOTEL | Q | QUEBEC | Z | ZULU |
| I | INDIA | R | ROMEO | | |

_____ 8. Use the Field Team Status Board and the Sample Point Map to keep track of the field team's locations.

_____ 9. When directed by the RPSS, inform the field teams that the EOF will be taking over the responsibility of directing their activities.

J:\TEMPLATE\1048 EOF Field Team Communicator Checklist.dot

## FIGURE 10 - PINGP 1048, FIELD TEAM COMMUNICATOR CHECKLIST [CONT'D]

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1048, Rev. 8
Page 2 of 3

**EOF FIELD TEAM COMMUNICATOR CHECKLIST**

_____ 10. Dispatch teams in the downwind direction, to conduct a search where the plume is expected. **DO NOT** let teams sit idle. Utilize every extent possible to track the plume or obtain samples. Crossing of the plume by field teams should be limited in order to minimize personnel dose.

| | |
|---|---|
| ***NOTE:*** | **When directed by RPSS Staff:**<br>**a) If the wind is from the north or west, instruct a Survey Team to proceed on the Emergency Route from the plant, through Red Wing, to Diamond Bluff, to Prescott, to Hastings and back to the plant.**<br>**b) If the wind is from the south or east, instruct a Survey Team to proceed on the Emergency Route from the plant, to Hastings, to Prescott, to Diamond Bluff, to Red Wing and back to the plant.** |

_____ 11. When the plume has been encountered, instruct the teams to obtain Gas, Particulate and Iodine samples, as directed by the RPSS (or Assist.). Air samples taken within the plume (beta activity detected) should be taken in areas of low dose rates, if possible.

| | |
|---|---|
| ***NOTE:*** | **1) A beta plus gamma reading will indicate that the plume has been encountered. A gamma reading with zero beta reading indicates the plume is elevated or displaced. A gamma reading and a beta reading indicates that the plume is at ground elevation.**<br>**2) If the wind is from the East or West such that the plume is traveling towards the Minnesota or Wisconsin bluffs, consider that plume diversion is likely to occur. Deploy the survey teams to conduct a plume search both beyond the bluffs and up and down the valley, where plume diversion is likely to occur.** |

Obtaining a sample for iodine and radioactive gas and determining the ratio of gas to iodine is crucial for verifying the offsite doses and can affect protective action recommendations. Therefore, these samples should be taken as soon as possible when the plume is encountered. These samples must be taken in the plume (area where beta detectable).

| | |
|---|---|
| ***NOTE:*** | **These samples take approximately 20-30 minutes to accomplish. Communicator should minimize radio contacts with sampling team until the team reports sampling results** |

_____ 12. Instruct the teams to return samples to the EOF Count Room for analysis, or make arrangements to dispatch a sample courier.

## FIGURE 10 - PINGP 1048, FIELD TEAM COMMUNICATOR CHECKLIST [CONT'D]

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1048, Rev. 8
Page 3 of 3

**EOF FIELD TEAM COMMUNICATOR CHECKLIST**

_____ 13. Develop a plume map as follows:

a) Obtain dose projection data, if available, and plot on survey map (use red marker). Also plot the time on the mile markers when the plume is expected to arrive.

b) Plot team results on map (use blue marker). Log gamma and true beta survey results in MILLIREM/HR, and air sample results in μCi/cc.

c) Determine plume edges and plot on the map.

d) Plot or outline areas (using green marker) indicating where protective actions have been implemented or recommended.

e) Occasionally have survey team check location of plume front edge and note on map with time circled.

_____ 14. Perform a comparison of radiological data as follows:

a) Compare offsite monitoring results for consistency. Re-monitor area of concern, as required.

b) Compare offsite monitoring results with dose calculation projections. Re-monitor areas of concern, as required.

c) Compare plume dose rates close to plant with projected dose rates. This will allow dose projection adjustments and may affect offsite protective action recommendations.

d) Inform RPSS of results.

_____ 15. Periodically (about every 30 minutes when working in plume), request the teams to read their dosimeters and log results (may log in Narrative Log).

_____ 16. For a better understanding for what the field teams are performing and guidance on dose rate and respirator donning, (and if time allows) review F3-15 and/or F3-16.

_____ _____
FIELD TEAM COMMUNICATOR DATE

## FIGURE 11 - PINGP 1047, NARRATIVE LOG KEEPER CHECKLIST

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1047, Rev. 3
Page 1 of 1
Document Type: 7.97G
Retention: 2 Years

### NARRATIVE LOG KEEPER CHECKLIST

_____ 1. Retrieve a set of Emergency Center Narrative Log sheets, PINGP 598.

_____ 2. Locate yourself near the Emergency Manager to facilitate the flow of information in a timely and accurate manner.

_____ 3. All entries should be made in chronological order.

_____ 4. Each entry should include the time of the event and a brief summary of the event or action.

_____ 5. Each page should be sequentially numbered.

_____ 6. Periodically request EOF Coord. or Admin. Staff to copy and distribute the Emerg. Center Narrative Log to: the Flip Chart Recorder, Emergency Manager, Recovery Manager, RPSS, EOF Coordinator, Technical Support Supervisor, and NRC Site Team leader.

_____ 7. File completed pages (or copies) in a loose-leaf binder.

_____ 8. If a late entry needs to be entered, an asterisk should precede the time and the words "late entry" used to start the summary.

_____ 9. The following are examples of events and data that should be recorded in the Emergency Center Narrative Log.

a. Significant events and conversation directed by or to the Emergency Manager.

b. Emergency Manager decisions.

c. Times of emergency reclassifications or Protective Action Recommendations.

d. Times of offsite emergency notifications.

e. Plant and offsite evacuation status changes.

f. Injuries and medical care.

g. EOF status updates.

_____ _____
Narrative Log Keeper Date

## FIGURE 12 - PINGP 1039, EOF UPDATE CHECKLIST

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1039, Rev. 7
Page 1 of 1
Document Type: 7.97D
Retention: 2 Years

**EOF UPDATE GUIDE**

EOF updates should be conducted:

1. After an Emergency Classification change has occurred.
2. Following a shift turnover.
3. Whenever the EM deems necessary, but approximately every 30 minutes.
4. To reflect **CHANGES AND TRENDS** since last update.

The EOF Microphone should be used for updates.

Update Time(s): ___ ___ ___ ___ ___ ___

A. Update by Technical Support Supervisor

1. General review of plant status board
2. Key plant parameter changes or trends
3. Plant/Equipment status, and maintenance priorities
4. Release path and duration
5. Potential for classification upgrading or termination
6. Personnel injuries and any over exposures
7. Overall accident prognosis for each unit (improving/degrading/unchanging/unknown)
8. Recommendations of future action or assessment

B. Update by RPSS

1. Release path/rates/dose projections (trends of R22, R50, R15, R51/52)
2. Comparison of field surveys with MIDAS projections
3. Offsite Protective Action Recommendations
4. Offsite Implementation of Protective Actions
5. EOF habitability
6. Recommendations of future action or assessment

C. Update by EOF Coordinator

1. Status of EOF staffing
2. Status of off-site communications
3. Status of EOF access
4. Logistics (Are there any needs?)
5. Recommendations of future action

D. Update by Security Coordinator (if necessary)

1. Status of EOF access control
2. Summary of pertinent plant security issues

E. Update by NRC (Director of Site Operations) (optional)

F. Summary by Emergency Manager

1. Latest technical developments of plant conditions.
2. Status of Fission Product Boundaries.
3. Overall accident prognosis for each unit (improving/degrading/unchanging/unknown).
4. Request for questions.

_____ _____
Emergency Manager Date/Time

| F8 Section | TITLE: EMERGENCY SUPPORT AND LOGISTICS | NUMBER: F8-4 |
|---|---|---|
| | | REV: 4 |

Reviewed By: _____ Gen. Supt. Radiation Protection

Approved By: _____ Plant Manager

Effective Date: 8-10-00

OC Review: 7-20-00 SC

## 1.0 PURPOSE

| ***REFERENCE USE*** |
|---|
| • ***Procedure segments may be performed from memory.*** |
| • ***Use the procedure to verify segments are complete.*** |
| • ***Mark off steps within segment before continuing.*** |
| • ***Procedure should be available at the work location.*** |

The purpose of this procedure is to provide guidance for implementing various emergency support and logistic activities that may be needed to support the plant's emergency response or support operation of the EOF. Emergency support and logistic activities include: coordinating services of nuclear consultants and vendors, emergency processing of purchase orders and providing logistics support for extended EOF operation.

## 2.0 APPLICABILITY

This procedure applies to the Emergency Manager, Technical Support Supervisor, EOF Coordinator, EOF Coordinator Assistant or anyone in the EOF that may need to coordinate activities related to emergency support or logistics.

## 3.0 PRECAUTIONS

NONE

## 4.0 RESPONSIBILITIES

**4.1** The Emergency Manager is responsible to ensure that the EOF is providing the plant the necessary support and coordination of offsite vendor, consultant or contractor services in support of the emergency.

**4.2** The Technical Support Supervisor is responsible to ensure appropriate and necessary technical support actions are provided according to this procedure.

**4.3** The EOF Coordinator is responsible to ensure that the necessary emergency support actions related to the effective operation of the EOF are completed according to this procedure.

**4.4** The EOF Coordinator Assistant is responsible to assist the EOF Coordinator as necessary.

## 5.0 PREREQUISITES

An Alert, Site Area or General Emergency has been declared at Prairie Island Nuclear Generating Plant.

## 6.0 PROCEDURE

### 6.1 Coordinating Services of Nuclear Consultants and Vendors

| | |
|---|---|
| ***NOTE:*** | **The plant notifies Westinghouse Electric Corporation (W) and INPO of the emergency event as part of the initial notification for an Alert, Site Area or General Emergency. The plant does not provide periodic updates to these organizations.** |

**6.1.1** Emergency Manager

A. Review the need to update W of the emergency condition and direct the Technical Support Supervisor to update W, as necessary.

B. If site assistance from W is required, direct the Technical Support Supervisor to request that W send a site response team to the EOF.

C. Review the need to update INPO and direct personnel at HQEC to provide update information to INPO as necessary.

D. Determine the need for additional assistance from any other vendor, consultant or contractor and direct the Technical Support Supervisor or the EOF Coordinator, as appropriate, to initiate the procurement of the necessary services. See Table 1 for a list of vendors, consultants and contractors to consider.

**6.1.2** Technical Support Supervisor

A. Refer to Table 1 for a list of vendors, consultants and contractors when considering the need for possible assistance.

B. Provide emergency status updates to W as directed by the Emergency Manager.

C. If necessary, identify equipment or assistance that is desired from the vendor.

D. If directed by the Emergency Manager, request that the vendor send a site response team to the EOF.

E. The procurement of equipment or services should be coordinated with PI Materials and Procurement Services group. See Section 6.3 for more guidance on emergency processing of purchase orders.

F. If vendor assistance will be required for more than three days, initiate procedures to procure long-term services in accordance with section 6.3.

G. Ensure that appropriate contacts are established to facilitate the timely ordering of equipment or services.

H. Ensure all logistics information concerning requests for services or purchases are logged on PINGP 1042, Logistics Information Sheet, Figure 1.

**6.1.3** EOF Coordinator

A. Refer to Table 1 for a list of vendors, consultants or contractors when considering the need for assistance in support of EOF operation.

B. Contact the plant's Communication System Specialist for assistance with EOF Communication System modification or repairs.

C. If possible, use the normal local food supply vendors for continued EOF operation. If widespread contamination exists offsite, consult with the RPSS before ordering the delivery of food to the EOF.

D. When the Emergency Manager approves the request for goods or services, direct the EOF Coordinator Assistant or an administrative staff person to notify the vendor and order the goods or services.

E. Ensure that appropriate contacts are established to facilitate the timely ordering of goods or services.

F. Ensure all logistics information concerning requests for goods or services are logged on PINGP 1042, Logistics Information Sheet, Figure 1.

## 6.2 Vendor and Consultant Services

**6.2.1** A partial list of vendors, consultants, and contractors are listed in Table 1. Additional vendors, consultants, and contractors are known by Site Materials Engineering personnel and site engineers.

**6.2.2** Telephone numbers for the listed organizations are located in the Nuclear Emergency Preparedness Telephone Directory.

**6.2.3** Ensure all logistics information concerning requests for services or purchases are logged on PINGP 1042, Logistics Information Sheet, Figure 1.

**6.2.4** When requesting equipment or services, contact the organization and describe plant conditions.

**6.2.5** The vendor will control the contacting of applicable organizations within his own company to supply whatever assistance is required.

## 6.3 Emergency Processing of Purchase Orders

**6.3.1** When the need for equipment and/or services are realized, the Site Materials Engineering group should be requested to assist in the procurement of the equipment and/or services.

**6.3.2** The Technical Support Supervisor (or EOF Coordinator, as appropriate) should ensure that one individual is assigned to be responsible for the processing of the purchase order.

**6.3.3** Maintain a list of all arrangements for services or equipment that are obtained or being negotiated. All logistics information concerning requests for services or purchases should be logged on PINGP 1042, Logistics Information Sheet, Figure 1.

**6.3.4** When assigned to process a purchase request for the Technical Support Supervisor (or EOF Coordinator), the responsible individual should review the following guidance:

A. Determine the applicable sources to supply the equipment or service requested.

B. Contact the vendor or supplier and order the equipment or service.

C. If it is necessary to obtain a purchase order for the vendor or supplier before they will provide their service or work, the Materials Engineering group will provide a purchase order number.

D. As time permits, fill out a purchase requisition.

E. Assist in making arrangements for production and shipment with the vendor, as applicable.

F. Assist in coordinating delivery and transportation schedules.

G. Provide feedback concerning the projected deliveries, or other information concerning the assigned purchase order, to the Technical Support Supervisor (or EOF Coordinator, as appropriate).

## TABLE 1 - VENDOR AND CONSULTANT SERVICES

- Telephone numbers for these organizations are located in the Nuclear Emergency Preparedness Telephone Directory.
- Ensure all logistics information concerning requests for services or purchases are logged on PINGP 1042, Logistics Information Sheet, Figure 1.
- When requesting equipment or services, contact the organization and describe plant conditions.
- The vendor will control the contacting of applicable organizations within his own company to supply whatever assistance is required.

PRAIRIE ISLAND'S NSSS

NSSS - Westinghouse Electric Corporation

A. The plant's Shift Emergency Communicator only notifies W of the initial emergency classification of an Alert, Site Area or General Emergency.

B. Be prepared to discuss as many facts as are available at the time of the follow-up call and identify a cognizant individual in your group to provide continuing updates to W.

C. PINGP/NMC has a letter of agreement for receiving necessary emergency support from W.

GENERAL SUPPORT SERVICES AND VENDORS

1. Emergency Response Coordination Assistance - INPO

A. The plant's Shift Emergency Communicator only notifies INPO of the initial emergency classification of an Alert, Site Area or General Emergency. The HQEC provides periodic updates to INPO, as necessary.

B. Be prepared to discuss as many facts as are available at the time of the follow-up call.

C. INPO has access to many supplier's and contracting firm's emergency contact telephone numbers.

D. INPO may provide additional technical assistance as requested.

E. The INPO Resources Manual has additional nuclear emergency support information.

F. PINGP/NMC has a letter of agreement for receiving necessary emergency support from INPO.

## TABLE 1 - VENDOR AND CONSULTANT SERVICES [CONTINUED]

2. Radio Repair - Folsom Communications, Inc.

   Folsom Communications, Inc. provides radio repair services.

3. Emergency Siren Repair - Nelson Radio Communications

   Nelson Radio Communication provides periodic maintenance and repair to the emergency sirens.

4. Helicopter Service - Imperial International Inc.

   A. Imperial International Inc.
   Fleming Field
   South St. Paul, MN

   B. Imperial International Inc. may provide immediate transportation via helicopter.

   C. This organization flies only Bell Jet Rangers that carry five (5) passengers.

5. Radiological Protection Services

   A. Before contacting these contractors, contact the REC to assess the total need for radiological services.

   B. Radiological monitoring and decontamination services may be provided by:

   Bartlett Nuclear Inc.
   P.O. Box 1800
   Plymouth Industrial Park
   Plymouth, MA 02360

   C. Additional GMR-I Canisters provided by:

   MSA
   Mine Safety Appliances Co.
   121 Gamma Drive
   Pittsburgh, PA 15238-2937

## TABLE 1 - VENDOR AND CONSULTANT SERVICES [CONTINUED]

6. Emergency Radiological Laboratory Facilities and Assistance

   A. The following vendors have personnel and laboratory facilities available for emergency response:

      1) Environmental, Inc.
      Midwest Laboratory
      700 Landwehr Road
      Northbrook, IL 60062

      Midwest Labs has 24 hour lab service. Contact Bronia Grob.

      2) Scientech, Inc
      910 Clopper Rd
      Gaithersburg, MD 20878

      Scientech, Inc has 24 hour lab service.

      3) Duke Engineering & Services
      E-LAB Dosimetry Services Group
      25 Research Drive
      Westborough, MA 01582

      Contact Nick Panzarino

   B. Before contacting these contractors, contact the REC to assess the total need for radiological services.

| F8 Section | TITLE: EMERGENCY SUPPORT AND LOGISTICS | NUMBER: F8-4 |
|---|---|---|
| | | REV: 4 |

## FIGURE 1 - LOGISTICS INFORMATION SHEET

PINGP 1042, Rev. 0
(Front)
Retention: Lifetime

LOGISTICS INFORMATION SHEET

DATE _____

| Requested Activity Description (organization, services, item, amount, etc.) | Name of Individual Expediting Request | Phone Number of Individual Expediting Request | Time of Request | Projected Arrival Time |
|---|---|---|---|---|
| **Consultant/Vendor Service** | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| **Purchase Orders** | | | | |
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| | | | | |
| | | | | |
| **Food/Beverage** | | | | |
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| | | | | |
| **Lodging** | | | | |
| | | | | |
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| | | | | |
| **Transportation** | | | | |
| | | | | |
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| | | | | |
| **Miscellaneous** | | | | |
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| | | | | |
| **Problems or Comments** | | | | |
| | | | | |
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| | | | | |
| | | | | |

Reviewed By _____ Date _____

## FIGURE 1 - LOGISTICS INFORMATION SHEET [CONTINUED]

PINGP 1042, Rev. 0
(Back)

The Logistics Information Sheet should be maintained as follows:

A. An entry for each purchase or request for services.

B. Entry should adequately describe the request.

C. Entry should indicate the name of the individual who is expediting the request at the organization we are requesting services of.

D. Entry should indicate the phone number of the individual who is expediting the request at the organization we are requesting services of.

E. Entry should indicate time of request.

F. Entry should indicate the projected arrival time of goods or services requested.

| F8 Section | TITLE: OFFSITE DOSE ASSESSMENT AND PROTECTIVE ACTION RECOMMENDATIONS | NUMBER: F8-5 |
|---|---|---|
| | | REV: 5 |

Reviewed By: _____ Gen. Supt. Radiation Protection

Approved By: _____ Plant Manager

Effective Date: 8-10-00

OC Review: 7-20-00 BC

**REFERENCE USE**

- *Procedure segments may be performed from memory.*
- *Use the procedure to verify segments are complete.*
- *Mark off steps within segment before continuing.*
- *Procedure should be available at the work location.*

| F8 Section | TITLE: OFFSITE DOSE ASSESSMENT AND PROTECTIVE ACTION RECOMMENDATIONS | NUMBER: F8-5 |
|---|---|---|
| | | REV: 5 |

## TABLE OF CONTENTS



### ATTACHMENTS



### LIST OF TABLES



### LIST OF FIGURES

| F8 Section | TITLE: OFFSITE DOSE ASSESSMENT AND PROTECTIVE ACTION RECOMMENDATIONS | NUMBER: F8-5 |
|---|---|---|
| | | REV: 5 |

## 1.0 PURPOSE

The purpose of this procedure is to provide guidance for assessing the consequences of a radioactive release and formulating Protective Action Recommendations (PARs) for the general public during the early and intermediate phases of a radiological emergency.

## 2.0 APPLICABILITY

This instruction **SHALL** apply to all Radiation Protection Support Supervisors (RPSS) and all Emergency Managers.

## 3.0 PRECAUTIONS

**3.1** Declaration of a General Emergency requires immediate initial protective action recommendations (PARs) to offsite agencies. Under these circumstances, NO dose projections are required for formulating the initial offsite protective action recommendation.

**3.2** Implementation of protective actions for offsite areas is the responsibility of the State of Minnesota and the State of Wisconsin. If it is determined, by the Emergency Manager, that immediate protective actions are required, and the State EOCs are not activated, the Emergency Manager **SHALL** authorize such recommendations to be made directly to the local authorities. Once the State EOCs are activated, all Protective Action Recommendations **SHALL** be made to the State EOCs.

**3.3** It is the responsibility of the county and state agencies and the National Weather Service to notify members of the Prairie Island community of approved protective actions. Protective action notification is accomplished by the activation of the Public Alert and Notification System (PANS).

**3.4** Offsite protective actions for the ingestion exposure pathway (ingestion of contaminated food and water) will be determined and implemented by the appropriate state authorities during the intermediate phase of an emergency.

## 4.0 RESPONSIBILITIES

**4.1** Upon activation of the EOF, the Emergency Manager (EM) **SHALL** assume the non-delegatable authority and responsibility for issuing offsite Protective Action Recommendations from the Emergency Director.

**4.2** The RPSS, once the EOF is activated, **SHALL** be responsible to promulgate Protective Action Recommendations (PARs) and **SHALL** channel all such recommendations through the EM for approval.

## 5.0 DISCUSSION

**5.1** This procedure has several parts. The first four (4) parts are for use during the early phase of a declared emergency condition; the other parts (ground deposition, ingestion pathway and return) are for use during the intermediate phase.

**5.2** Definitions - See Attachment 1.

## 6.0 PREREQUISITES

**6.1** A General Emergency has been or will be declared.

**6.2** A Site Area Emergency has been or will be declared and there is an actual or potential airborne radioactive release that meets or exceeds the PAGs.

**6.3** An Alert or Site Area Emergency has been or will be declared and there is an actual or potential liquid radioactive release that meets or exceeds the PAGs.

## 7.0 PROCEDURE

### 7.1 General Emergency Initial Protective Action Recommendations

**7.1.1** If a General Emergency is declared, the RPSS **SHALL** refer to F3-8, Recommendations For Offsite Protective Actions, and formulate PARs in accordance with the F3-8 guidance contained in the section entitled "Protective Action Recommendation For a General Emergency".

**7.1.2** The RPSS **SHALL** perform the duties and responsibilities as stipulated for the REC and route the particular forms to the Emergency Manager for review and approval prior to transmission to the Offsite agencies.

## 7.2 Site Area Emergency Initial Protective Action Recommendations

**7.2.1** **No** initial offsite Protective Action Recommendations for the general public are warranted during a Site Area Emergency unless the offsite dose projections exceed the established Protective Action Guides.

**7.2.2** Precautionary recommendations may be warranted for the nearsite special population (Treasure Island Casino) under certain conditions.

A. After the declaration of a Site Area Emergency, the RPSS (or REC if EOF is not activated) should review plant conditions listed on PINGP 585, Protective Action Recommendation Checklist.

B. If the accident prognosis at the Site Area Emergency is degrading or unknown, then a recommendation for shutting down the casino and dismissal of casino patrons should be given to the Goodhue County EOC per PINGP 585.

C. If the accident prognosis is known to be improving, then the Goodhue County EOC should be notified that no precautionary actions for casino operation are recommended at this time. See PINGP 585.

## 7.3 Radioactive Plume Release Assessment

### 7.3.1 Plume Projected Dose

A. Run the dose projection model to obtain information on the magnitude of plume projected doses, the likely location of affected areas, and time-related aspects of the release. (This includes potential, as well as, actual releases.)

B. For potential releases, base the projections on the approximate releasable activity, considering the most probable release path, current as well as forecast weather conditions, a rapid release or a slow extended release.

C. Post the current dose projection results on the status board. If projections are based on potential or hypothetical cases, be careful to clearly label as such.

### 7.3.2 Deployment of Field Teams

A. Deploy field teams (refer to Table 2 for guidance) to perform measurements and collect samples (per EPIP F3-15) with the objective of defining affected areas and providing data for comparison to the results of the dose projection model. In the case of a potential release, field teams should be used to confirm that no releases are occurring.

| | |
|---|---|
| ***NOTE:*** | **Two important pieces of data are the ratio of radioiodines to noble gases and the magnitude of any radioparticulates in the release. If data is not available through sampling ahead of the release point, field sampling should be initiated to supply the information.** |

B. Keep field teams informed of the plant status and projected plume exposure rate levels. Ensure that survey team members are instructed to take appropriate protective actions.

C. Record field team measurements using EMERGENCY SAMPLE RESULTS LOG (PINGP 647). Field measurements may be posted on a status board for easy reference and plotting results on the area maps is recommended as an aid to defining affected areas.

D. Compare model results to field team measurements to establish the reliability of the model, including the thyroid and particulate dose projection components which are dependent on a good estimate of the radioiodine and particulate release terms.

| | |
|---|---|
| ***NOTE:*** | **If the dose assessment system is determined to be unreliable (e.g., field measurements greater than model results), stop the distribution of results and decision-making based on them. Consider the possibility of an unmonitored release. Options for dose assessment include adjusting the primary dose assessment system, switching to a back-up method, and using field measurements.** |

E. When releases have substantially decreased, consider retrieval of the EMERGENCY TLDs, which are part of the Radiological Environmental Monitoring Program, to provide additional information on actual doses. Contact the REMP Coordinator/Administrator for guidance, and ensure radiological support is provided to persons entering contaminated areas for TLD retrieval.

**7.3.3** Determine PARs in accordance with F3-8, Recommendations for Offsite Protective Actions, section entitled "Protective Action Recommendations Based On Offsite Dose Projections".

## 7.4 Liquid Release Assessment

**7.4.1** Obtain sample analysis data on the liquid being released, either directly by having a survey team collect a sample for analysis (per EPIP F3-16), or indirectly from Plant RP personnel.

**7.4.2** Determine the off-site radiological consequences of the release according to directions given to F3-8, Recommendations for Offsite Protective Actions.

**7.4.3** Determine PARs in accordance with F3-8, Recommendations for Offsite Protective Actions.

## 7.5 Ground Deposition Assessment

### 7.5.1 Ground Deposition Projections (Relocation Projected Doses)

A. After the plume has dissipated and the release is terminated, ground deposition projections and field team measurements in contaminated areas may begin.

B. Run the appropriate dose projection model to obtain information on the potential magnitude of ground deposition and likely location (footprint) of ground contaminated areas.

C. Use the projected footprint and contamination magnitudes as a guide to determine where field team measurements may begin.

D. Determination of secondary evacuations or relocation of the public will be based on actual field team measurements and ground deposition projections and NOT solely on ground deposition projections.

E. As a backup to the computer ground deposition dose projection model, Figure 1 may be used to establish a very rough estimate of potential contaminated areas and their relative magnitudes. Carefully note the assumptions used for developing the ground deposition graph described in Table 1.

### 7.5.2 Deployment of Field Teams

A. Deploy field teams (refer to Table 2 for guidance) to obtain ambient dose rates and collect samples (per EPIP F3-15) in areas that are not evacuated, but with in the footprint. Within this region, concentrate first on areas suspected of having the highest deposition.

B. Priority should be given to initially performing dose rate surveys, with more detailed smear surveys to follow.

C. Target areas with dose rates above 0.1 mrem/hr or direct frisker readings above 20,000 cpm for collection of smear samples.

D. Enough dose rate surveys/smear samples should be obtained to have confidence that "hot spots" have not been overlooked. Ten survey points per square mile is suggested as a minimum in areas where roads will allow this to be practical.

E. Take care to ensure that areas not within the projected footprint are surveyed sufficiently to verify that the affected area has been identified completely.

F. Plot the field team results on a map. Compare them to the ground deposition projections, and direct follow-up surveys as appropriate to ensure the affected area is identified.

### 7.5.3 Relocation Protective Action Recommendations

A. As exposure rate data is obtained, calculate relocation projected doses using the conversion factor of 5000 mrem per mR/hr (i.e., 5000 mrem relocation projected dose per 1 mR/hr initial gamma exposure rate 1 meter above the ground).

| *NOTE:* | **This conversion factor could be very conservative. The factor depends on the isotopic deposition. With actual isotopic data, a better conversion factor can be calculated using the data in Table 3.** |
|---|---|

B. As smear samples are analyzed and isotopic data is obtained, use Table 3 to refine the relocation projected doses.

C. Plot the relocation projected doses on a map. (Consider using a dedicated map to avoid confusion.)

D. Determine PARs in accordance with Table 4, Relocation Protective Action Guide.

## 7.6 Ingestion Pathway Assessment

### 7.6.1 Field Team Deployment

A. Contact the Health Department of each affected state and see if they have sample collection needs of particular priority in which we could assist.

| | |
|---|---|
| ***NOTE:*** | **Monticello NGP and Prairie Island NGP survey teams have the capability of performing dose rate, smear, liquid, soil/snow and air sampling and analysis. If there is a need for more sophisticated environmental samples have the REMP Administrator contact Teledyne Isotopes Midwest Laboratory and implement the letter of agreement. Once notified, Teledyne will dispatch a team to the affected site. They will also make their laboratories available for use should we need to send samples for analysis.** |

B. Direct the field teams to obtain samples according to the State(s) needs or to collect samples to confirm the results of the State(s) survey team.

### 7.6.2 Ingestion Pathway Dose Assessment

A. Ingestion pathway dose assessment will not be performed by the PINGP. The plant will instead concentrate available resources on the collection, analysis, and transmittal of results to the States of smear, liquid, soil, and/or snow samples.

B. Ingestion pathway protective actions will be determined by the Minnesota Departments of Health and Agriculture and/or the Wisconsin equivalents.

## 7.7 Return Assessments

### 7.7.1 Field Team Deployments

A. As soon as resources allow, obtain dose rate surveys and smear samples per EPIP F3-15 in evacuated areas that are believed to be outside the contaminated areas or footprint.

B. As the priority for return to evacuated areas within the known footprint increases (per the State recommendation), obtain dose rate surveys and smear samples per EPIP F3-15.

### 7.7.2 Relocation Projected Dose

A. Use Table 3 and calculate relocation projected doses based on known (measured) ground deposition.

B. Plot the relocation projected doses on a map.

### 7.7.3 Return Recommendation

A. PINGP may recommend return of the general public to previously evacuated areas that are confirmed not contaminated. |

B. PINGP will NOT make recommendations on the return of the general public to previously evacuated areas that have various levels of measured contamination. Appropriate state and local agencies will make these decisions based on contamination data and other social-economic considerations. |

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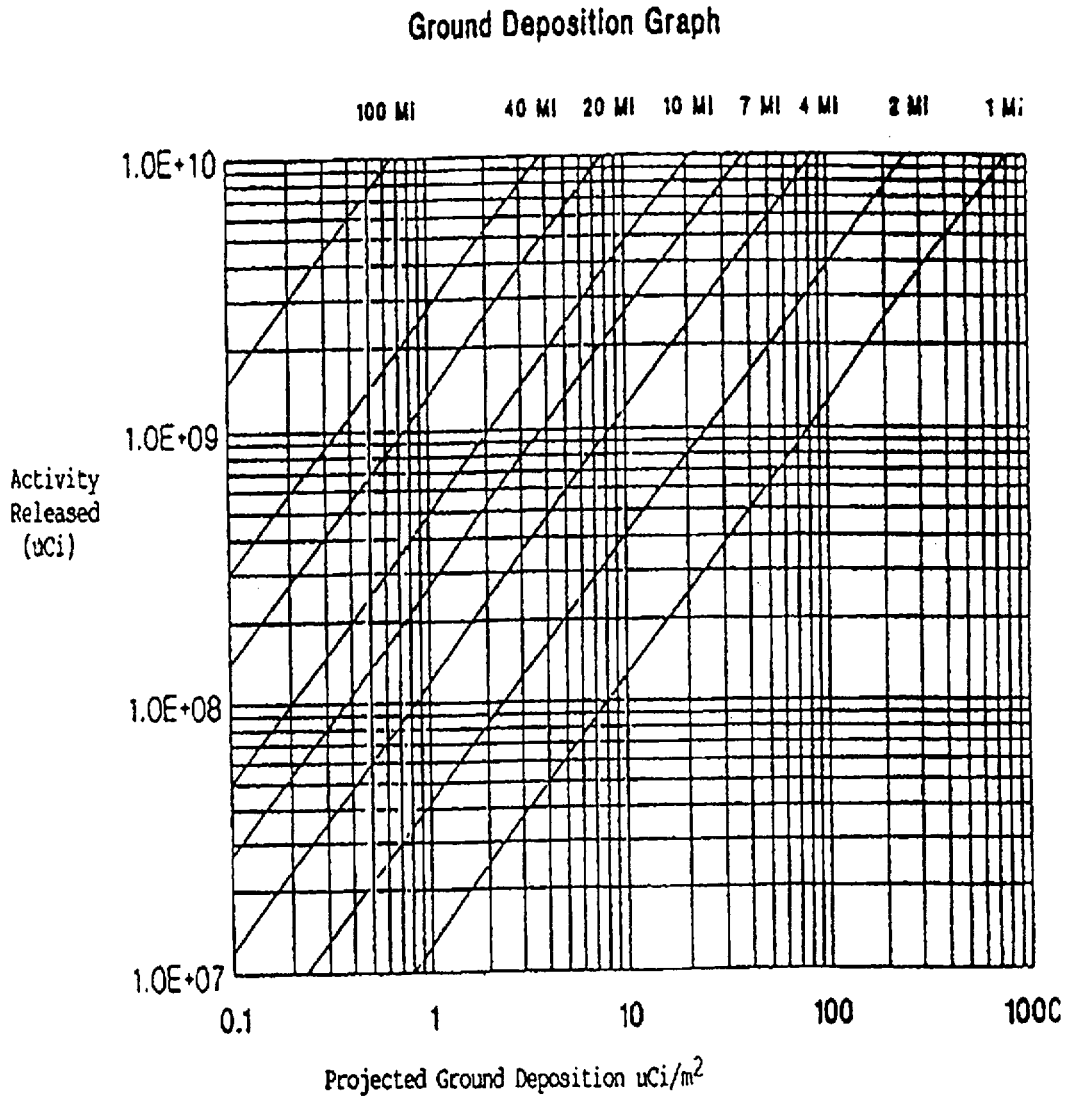
## FIGURE 1 - GROUND DEPOSITION GRAPH



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## TABLE 1 - GROUND DEPOSITION GRAPH BASIS

The ground deposition graph was calculated using relations in R.G. 1.109 & R.G. 1.111. The following assumptions pertain to the graph:

1. Unstable (A,B,C) Pasquill stability class. This results in the highest depositions for elevated releases. For ground level releases, the stability class has little effect on calculated deposition rates. For a stable stability class, actual ground deposition could be zero out of many miles from the plant.

2. Elevated (100 meter) release height. For ground level releases, deposition rates will be slightly higher out to 20 miles, and somewhat less beyond 20 miles.

3. The plume is deposited uniformly within half-width of a sector arc (about 11 degrees), for constant wind directions. Actual plume widths for unstable stability classes are significantly wider than this. This assumption causes the projected area ground contamination to be at least as high as the highest (centerline) actual deposition that would occur under stable conditions for deposition i.a.w. a normal distribution with distance from the centerline.

| ***NOTE:*** | **If several wind shifts occurred during the release, determine the approximate number of sectors into which the plume deposited material for each release period of interest. Divide this value by 0.5 and divide the result into the ground depositions predicted by the graph, to obtain an estimate of the degree the deposition was "diluted". For example, if the plume was spread out over 2 sectors, the ground deposition values obtained from the graph should be divided by 4.** |
|---|---|

4. Wind speeds and stability classes vary often. The Van der Hoven study concludes there is a 50/50 chance of a significant wind shift within 2-4 hours at any given location. Therefore, the plume could be spread out more than the graph assumes and alter the resulting deposition. Rain showers could increase deposition greatly.

## TABLE 2 - GUIDANCE ON FIELD TEAM DEPLOYMENT

The following is a discussion of strategy and some of the more important kinds of information which can be obtained through the use of field teams.

1. An approximation of the downwind and horizontal dimensions of a plume can be developed using the plume search technique. This information should be a high priority because of the limitations of the straight-line model used in MIDAS.

2. The maximum or centerline exposure rate from a plume, as measured at ground level, can be compared to dose projection results as a check on the accuracy of the model.

3. The isotopic mix of gaseous releases is only estimated by MIDAS. If samples for isotopic analysis are not or cannot be obtained from plant systems, field samples should be collected and analyzed to provide more accurate information on the release components.

4. If fuel integrity is good, radioiodines and radioparticulates should not be a problem. In order to remove any uncertainty or to assess the core status, the ratio of iodine to noble gas should be evaluated and used to update the default value (.0001) used by MIDAS. It may be necessary to re-evaluate this parameter several times in the course of an event.

5. Since the plume from a serious accident is essentially a quickly moving high radiation area, large doses can be received, or prevented, over relatively small time frames. Unlike the plume, the time available to effect evacuation due to ground shine should be much greater (e.g., a 5-rem dose due to Cs-134 initially exhibits an exposure rate of about 1 mR/hr). Therefore, plume surveys and plume dose projections are of higher priority.

6. At Prairie Island, consider that plume diversion may occur if the plume is traveling towards the bluffs (Wisconsin and/or Minnesota). Deploy the survey teams to conduct a plume search both beyond the bluffs and down the valley, where plume diversion is likely to occur.

7. Ground deposition surveys are generally lower priority than plume activities. However, if the release rate has substantially lowered and plume exposure rates are also low (e.g., less than 10 mrem/hr), some ground deposition surveys may be considered. Resources available for ground deposition surveys should be allocated first to areas affected by the plume which remain populated.

## TABLE 3 - RELOCATION OR SECONDARY EVACUATION DOSE PROJECTION

| Isotope | Ground shine Dose (mrem per uCi/$m^2$) | Inhalation Dose (mrem per uCi/$m^2$) | Relocation Projected Dose -TEDE (mrem per uCi/$m^2$) | Initial Exp. Rate (mR/hr per uCi/$m^2$) | Relocation Projected Dose - TEDE per Initial Exp. Rate (mrem per mR/hr) |
|---|---|---|---|---|---|
| Sr-90 | - - - - - | 11 | 11 | - - - - - | - - - - - |
| Zr-95 | 34 | - - - - - | 34 | 0.0162 | 2100 |
| Ru-103 | 7.4 | - - - - - | 7.4 | 0.0055 | 1300 |
| Ru-106 | 14 | 1.4 | 15 | 0.0023 | 6700 |
| I-131 | 1.3 | - - - - - | 1.3 | 0.0047 | 280 |
| Cs-134 | 118 | - - - - - | 118 | 0.0183 | 6400 |
| Cs-137 | 52 | - - - - - | 52 | 0.0073 | 7200 |
| Ba-140 | 11 | - - - - - | 11 | 0.0279 | 390 |
| Ce-144 | 3.3 | 1.4 | 4.7 | 0.0023 | 2000 |

**NOTES:**

1. Ground shine is the whole body dose (1 meter above the ground) received after a 1-year exposure to unit ground contamination (uCi/$m^2$) as measured at the beginning of the exposure period.

2. Inhalation is the committed effective dose received from the inhalation for 1 year of resuspended unit ground contamination (uCi/$m^2$) as measured at the beginning of the exposure period. A re-suspension rate of 1E-6/meter is assumed.

3. The Relocation Projected Dose - TEDE per Initial Exposure Rate column is the TEDE that would be received after a 1-year exposure to contamination that caused an initial unit exposure rate (mR/hr, i.e., gamma only) at 1 meter above the ground. (the effective mrem per mR/hr for a mixture would be equal to a weighted average of the values in this column, which is computed by multiplying the value in this column times the ratio of the individual isotope to the total.)

4. The projected doses pertain to adults. Infant projected doses are not more than two times higher than the adult doses (other than for iodine which does not contribute greatly to overall dose for infants or adults).

5. Doses could be significantly lowered due to shielding from homes, decontamination, etc.

## TABLE 3 - RELOCATION OR SECONDARY EVACUATION DOSE PROJECTION (Cont'd)

6. Elimination of the source term due to weathering as well as radioactive decay is assumed.

7. The doses listed include the dose from radioactive daughters.

SECONDARY EVACUATION DOSE ASSESSMENT

| Isotope | Smear (dpm) | Direct Frisk (cpm) | Ground Contam (uci/$m^2$) | Reloc Dose TEDE (mrem) | Initial Dose Rate (mrem/hr) |
|---|---|---|---|---|---|
| Ru-106 | 260,000 | 58,000 | 130 | 2000 | 0.30 |
| Cs-134 | 34,000 | 7,400 | 17.0 | 2000 | 0.32 |
| I-131 | 3,000,000 | 660,000 | 1,500 | 2000 | 7.2 |

Rules of Thumb

1. The most restrictive nuclide in terms of projected relocation dose per measured initial dose rate is Cs-137 (about 7000 mrem per mrem/hr). Cesium-134 is the most restrictive nuclide in terms of projected relocation dose per unit contamination (about 120 mrem per uCi/$m^2$).

2. Assuming a 10% smear collection efficiency, 10% counter efficiency, and 20 $cm^2$ area "seen" by the probe for a direct frisk, the following relationships were developed:

   a. Direct frisk $\mu Ci/m^2 = \frac{\text{net cpm}}{400}$

   Where net cpm is frisker count rate about 1" from surface in question.

   b. Smear $\mu Ci/m^2 = \frac{\text{smear net cpm}}{200}$

   Where smear net cpm is frisker count rate of 100$cm^2$ smear from a smooth surface.

3. Based on assumed radiological characteristics of releases from fuel melt accidents, gamma exposure rates in areas where the projected relocation dose is in the range of 1-5 rems would be between about 2 and 10 mR/hr during the first few days after shutdown following an SST-2 accident severity type. Ground deposition values in the range of 200-800 uCi/$m^2$ could also be expected.

## TABLE 4 - RELOCATION PROTECTIVE ACTION GUIDE

**PAGs For Intermediate Phase Relocation Projected Doses**

| Relocation Projected Dose (mrem, TEDE[1]) | PINGP Recommended Protective Actions [2] | Comments |
|---|---|---|
| TEDE < 2000 mrem | Apply simple dose reduction techniques.[3] | These protective actions should be taken to reduce doses to as low as practicable levels. |
| TEDE >= 2000 mrem | Relocate general public from affected areas not previously evacuated.[4] | Beta dose to skin may be up to 50 times higher. |

***NOTES:***

1. **Total Effective Dose Equivalent from one year of exposure to ground contamination and inhalation of resuspended material.**
2. **Protective actions based on EPA 400-R-92-001, May 1992.**
3. **Simple dose reduction techniques include scrubbing and/or flushing hard surfaces, soaking or plowing soil, minor removal or soil from hot spots, and spending more time than usual indoors or in other low exposure rate areas.**
4. **Because of unanticipated local conditions and constraints known to state and local officials, WI and/or MN may choose to relocate general public from affected areas at a lower or higher doses than the PAG of 2000 mrem TEDE.**
5. **Significant unavoidable contribution to the total dose from ingestion of food and water could influence the state's relocation decision.**
6. **First priority should be given to cleanup of residences of pregnant women who may exceed a TEDE of 500 mrem from the first year of exposure.**
7. **It is an objective of these PAGs to assure that 1) doses in any single year after the first will NOT exceed 500 mrem, and 2) the cumulative dose over 50 years (including the 1st and 2nd years) will NOT exceed 5000 mrem.**

## ATTACHMENT 1 - DEFINITIONS RELATED TO PARs

**1.0** **Affected Area** is any area where radiation emanating from a plume or deposited material from the plume can be detected using field instruments. (Also known as the footprint.)

**2.0** **Affected Sectors** refer to those sectors that are in a downwind direction from the plant. If the wind speed $\geq 5$ mph, the affected sectors are the 2 sectors on either side of the downwind sector and the downwind sector. If the wind speed <5 mph, all sectors are affected sectors (because of meandering).

**3.0** **Dose Terms:**

**3.1** **Dose Equivalent (rem)** refers to the product of absorbed dose (rad) and the quality factor (i.e., rads X QF = rem).

**3.2** **Effective Dose Equivalent (rem)** is the sum of the products of the dose equivalent (rem) to each organ and a weighting factor, where the weighting factor is the ratio of the stochastic risk arising from an organ or tissue to the total risk when the whole body is irradiated uniformly.

**3.3** **Committed Dose Equivalent (rem)** refers to the dose equivalent to organs or tissues that will be received from an intake of radioactive material by an individual during the 50-year period following the intake.

**3.4** **Committed Effective Dose Equivalent (rem) (CEDE)** refers to the sum of the products of the weighting factors applicable to each of the body organs or tissues that are irradiated and the committed dose equivalent to these organs or tissues.

**3.5** **Deep Dose Equivalent (rem)** refers to the external whole body exposure due to external radiation from the radioactive plume or deposited radioactive material.

**3.6** **Total Effective Dose Equivalent (rem) (TEDE)** refers to the sum of the deep dose equivalent and the committed effective dose equivalent (TEDE = Deep Dose Equivalent + CEDE).

**3.7** **Thyroid Committed Dose Equivalent (rem) (Thyroid CDE)** refers to the committed dose equivalent to the thyroid due to the internally deposited radionuclides from inhalation.

## ATTACHMENT 1- DEFINITIONS RELATED TO PARs (Continued)

**4.0** **Emergency Planning Zone (EPZ)** is a defined area around the Prairie Island plant to facilitate emergency planning by state and local authorities, to assure that prompt and effective actions are taken to protect the public in the event of a release of radioactive material. It is defined for:

**4.1** **Plume Exposure Pathway (10 mile EPZ)**

The 10 mile radius around the Prairie Island plant defined for the early phase plume exposure. The principal exposure sources from this pathway are:

**4.1.1** External exposure from the radioactive plume (either overhead of submergence);

**4.1.2** External exposure from the radionuclides deposited on the ground by the plume; and

**4.1.3** Internal exposure from the inhaled radionuclides deposited in the body.

**4.2** **Ingestion Exposure Pathway (50 mile EPZ)**

A 50 mile radius around the Prairie Island plant where the principal exposure would be from the ingestion of contaminated water or foods such as, milk or fresh vegetables.

**5.0** **Evacuation** is the urgent removal of people from an area to avoid or reduce high-level, short-term exposure, usually from the plume or from deposited activity.

**6.0** **Geopolitical Subareas** are subareas of the 10 mile EPZ defined by predetermined geographic and/or political boundaries. A map of the geopolitical subareas and a table for selecting the affected geopolitical subareas are shown in the "Protective Action Recommendation Checklist," PINGP 585.

**7.0** **Keyhole Area** is a subarea of the 10 mile EPZ defined by a 360 degree area surrounding the plant out to a distance of 2 or 5 miles and continuing in a downwind direction which should include 2 sectors on either side of the affected sector, out to a distance determined by the Protective Action Guides.

## ATTACHMENT 1- DEFINITIONS RELATED TO PARs (Continued)

**8.0** **Nuclear Incident Phases** relate to three time periods following the beginning of an nuclear incident. See Figure 2 for potential protective actions during the different emergency phases.

**8.1** **Early Phase** or emergency phase is the period immediately following the beginning of the incident. There may be a threat of a radiological release or an actual ongoing radiological release to the environment. Immediate decisions concerning protective actions are required and usually based on plant conditions or offsite dose projections. This phase may last from hours to days.

**8.2** **Intermediate Phase** is the period beginning after the source and releases have been brought under control. Based on environmental measurements, additional protective actions may be made. This phase may overlap the early and late phase and may last from weeks to many months.

**8.3** **Late Phase** is the period beginning when offsite recovery action designed to reduce radiation levels in the environment to acceptable levels for unrestricted use are commenced. This period may extend from months to years.

**9.0** **Projected Dose** refers to the future dose calculated for a specified time period on the basis of estimated or measured initial concentration of radionuclides or exposure rates and in the absence of protective actions.

**9.1** **Plume Projected Dose** refers to future calculated doses from plume submersion, plume shine, plume inhalation and 4 days of ground deposition exposure.

**9.2** **Relocation Projected Dose** refers to future calculated doses from one year of exposure to ground deposition groundshine and inhalation of resuspended material, but excluding internal dose from consuming contaminated foodstuffs.

**9.3** **Ingestion Pathway Projected Dose** is the projected CEDE (ICRP-30) from consuming contaminated foodstuff.

## ATTACHMENT 1- DEFINITIONS RELATED TO PARs (Continued)

**10.0** **Protective Action** refers to an action taken to avoid or reduce radiation dose to members of the public.

**11.0** **Protective Action Guide (PAG)** refers to a projected dose level that warrants protective actions.

**12.0** **Public Alert and Notification System (PANS)** is used to alert the public within the 10 mile Emergency Planning Zone of an emergency condition at Prairie Island. Once alerted, the public should then turn to local commercial broadcast messages for specific protection action instructions. The PANS consists of the following:

**12.1** Fixed sirens for 100% coverage throughout the 5 mile zone and in population centers in the 5-10 mile zone.

**12.2** Emergency vehicles with sirens and public address in the 5-10 mile areas not covered by fixed sirens.

**12.3** National Oceanic and Atmospheric Administration (NOAA) activated tone alert radios in institutional, educational, and commercial facilities.

**12.4** The Emergency Alert System (EAS) which has access to television and radio stations within the area.

**13.0** **Return** refers to people permanently reoccupying their normal residence within a previously evacuated area.

**14.0** **Reentry** refers to temporary entry into an evacuated area under controlled conditions.

**15.0** **Relocation** refers to removal or continued exclusion of people from contaminated areas to avoid chronic radiation exposure.

**16.0** **Sheltering** refers to the use of a structure for radiation protection from an airborne plume and/or deposited radioactive material.

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|---|---|---|

## FIGURE 2 - EXPOSURE PATHWAYS, INCIDENT PHASES, AND PROTECTIVE ACTIONS

| | POTENTIAL EXPOSURE PATHWAYS AND INCIDENT PHASES | | PROTECTIVE ACTIONS |
|---|---|---|---|
| 1. | External radiation from facility | | Sheltering<br>Evacuation<br>Control of access |
| 2. | External radiation from plume | EARLY | Sheltering<br>Evacuation<br>Control of access |
| 3. | Inhalation of activity in plume | | Sheltering<br>Administration of stable iodine<br>Evacuation<br>Control of access |
| 4. | Contamination of skin and clothes | INTERMEDIATE | Sheltering<br>Evacuation<br>Decontamination of persons |
| 5. | External radiation from ground deposition of activity | LATE | Evacuation<br>Relocation<br>Decontamination of land and property |
| 6. | Ingestion of contaminated food and water | | Food and water controls |
| 7. | Inhalation of resuspended activity | | Relocation<br>Decontamination of land and property |

| NOTE: | 1. Based on EPA 400-R-92-001, May 1992<br>2. The use of stored animal feed and uncontaminated water to limit the uptake of radionuclides by domestic animals in food chain can be applicable to any of the phases. |
|---|---|

| F8 Section | TITLE: RADIOLOGICAL MONITORING AND CONTROL AT THE EOF | NUMBER: F8-6 |
|---|---|---|
| | | REV: 5 |

Reviewed By: A. Johnson
Gen. Supt. Radiation Protection

Approved By: D. A. Schuelke
Plant Manager

Effective Date: 8-10-00

OC Review: 7-20-00 SS.

## 1.0 PURPOSE

| REFERENCE USE |
|---|
| • *Procedure segments may be performed from memory.* |
| • *Use the procedure to verify segments are complete.* |
| • *Mark off steps within segment before continuing.* |
| • *Procedure should be available at the work location.* |

The purpose of this procedure is to provide guidance for the radiological protection of personnel responding to the EOF. Protective guidelines for EOF personnel and control of radioactive materials are discussed in this procedure.

## 2.0 APPLICABILITY

This procedure is applicable to all EOF personnel responding in support of a declared emergency at Prairie Island Nuclear Generating Plant.

## 3.0 PRECAUTIONS

**3.1** The dose guidelines for EOF personnel are as per F3-12, and no one may exceed 5000 mRem TEDE per year, per 10CFR20.

**3.2** Monitoring of the EOF for direct radiation, contamination levels, airborne iodine and airborne particulate radioactivity **SHALL** be performed to ensure the habitability of the EOF.

**3.3** Protective actions for individuals located in the EOF **SHALL** be taken at the prescribed levels of direct radiation, contamination, or airborne radioactivity.

| F8 Section | TITLE: RADIOLOGICAL MONITORING AND CONTROL AT THE EOF | NUMBER: F8-6 |
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| | | REV: 5 |

## 4.0 RESPONSIBILITIES

**4.1** The Emergency Manager has the overall responsibility for the radiological protection of the EOF personnel.

**4.2** The RPSS has the following responsibilities:

**4.2.1** Verify and supervise the records of exposure control.

**4.2.2** Determine when individual exposure controls should be implemented.

**4.2.3** Assign and direct qualified personnel for dose assessment.

**4.2.4** Provide the Security Force with a list of individuals who may leave the EOF with dosimetry (field survey teams, etc.).

**4.2.5** Control radioactive materials and limit contamination at the EOF.

**4.2.6** Initiate radiological surveys of the EOF to determine habitability and control contamination areas. Provide routine status reports of the EOF atmosphere to the EM.

**4.2.7** Remind personnel on a periodic basis, as required by measured doserates, to read their dosimeters.

**4.2.8** Inform the EM when the EOF exposure levels are above administrative guidelines.

**4.3** The EOF Coordinator has the responsibility to ensure personnel have been assigned to maintain EOF Entry Log, issue and collect dosimetry, and assist in establishing a radiological control point for access to the EOF as necessary.

**4.4** The EOF Entrance Security Watchperson has the following responsibilities:

**4.4.1** Initiate the EOF Entry Log in accordance with F8-2.

**4.4.2** Issue and collect dosimetry, and record dosimeter readings upon issue and collection.

**4.4.3** Notify the Security Coordinator in the event of lost, damaged, or off-scale dosimeter readings.

**4.5** The Radiation Protection Specialists (RPS) have the following responsibilities:

**4.5.1** Establish radioactive material control measures as specified in this procedure.

**4.5.2** Control access and monitor frisking of potentially contaminated personnel to EOF as appropriate.

**4.5.3** Direct personnel decontamination measures in accordance with F3-19, Personnel and Equipment Monitoring and Decontamination.

**4.5.4** Control receipt and transport of samples within the EOF.

**4.5.5** Complete surveys within the EOF as requested by the RPSS.

**4.5.6** Direct EOF facility decontamination activities as required.

## 5.0 DISCUSSION

EOF personnel should be issued a TLD and a self-reading dosimeter upon entering the EOF. When permanently leaving the EOF, or upon completion of assigned duties, personnel should surrender the TLD and self-reading dosimeter to the EOF Entrance Security Watchperson.

At the discretion of the EOF Coordinator, personnel may be allowed to exit the EOF other than through a potentially contaminated access control area. Prior to exiting however, all personnel must follow security procedures for leaving the EOF.

During special emergency conditions, normal exposure practices may have to be waived to protect equipment and/or life.

## 6.0 PREREQUISITES

Prairie Island Staff has declared an Emergency Classification of an Alert, Site Area, or General Emergency.

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## 7.0 PROCEDURE

**7.1** Radiological Access Control into the EOF for potentially contaminated personnel or radioactive materials **SHALL** be initiated when any of the following conditions have occurred:

**7.1.1** Emergency response personnel which may have been exposed to a plume or radioactive materials require access to the EOF.

**7.1.2** A release of radioactive materials has occurred and samples from the Offsite Survey Teams are being returned to the EOF for analysis.

**7.1.3** Radioactive samples have been sent from the plant to the EOF for analysis.

**7.1.4** Contaminated personnel have been transported to the EOF for decontamination.

**7.2** Establish Radiological Access Control for personnel as follows:

**7.2.1** The EOF Coordinator should direct set up of radiological access control at the rear EOF access control area in accordance with Figure 1, Access Control for Radioactive Materials at the EOF.

**7.2.2** Security should ensure that the airlock door and all other doors to the EOF are CLOSED.

**7.2.3** The RPS should establish a barrier rope for contamination control and radiological screening (see Figure 1). This will establish an EOF radiological access holding area.

**7.2.4** The RPS should set up a Step-off-Pad and friskers (see Figure 1).

**7.2.5** Security should direct personnel entering the EOF to pass through the control point, using the frisker to detect possible contamination. Ensure RPS is available when potentially contaminated personnel enter the EOF.

**7.2.6** Personnel which have been screened and are not contaminated should be allowed access to the EOF. Personnel not involved with EOF activities (e.g. evacuated plant personnel) should be instructed to assemble in the unoccupied classrooms until they are released from site.

**7.2.7** Contaminated personnel should be instructed to assemble in the EOF radiological access holding area.

**7.2.8** The RPS should direct personnel decontamination in accordance with F3-19, Personnel and Equipment Monitoring and Decontamination.

| | |
|---|---|
| ***NOTE:*** | **The decontamination shower drains to a 1000 gallon liquid waste holding tank that is equipped with a high level alarm. The alarm indicator is located on the South wall of the decon shower. The RPS should notify the RPSS when the high level alarm comes in. There is a 4" withdrawal pipe outside the receiving area door for pumping out the tank.** |

**7.2.9** After decontamination, personnel should be checked at the control point and allowed access to the EOF.

**7.3** Establish Radiological Access Control for Radioactive Materials as follows:

**7.3.1** The RPS should establish barriers and Step-off-Pads as specified in Figure 1, Access Control for Radioactive Materials at the EOF.

**7.3.2** Security should ensure all samples are held in the access holding area until checked and released by the RPS.

**7.3.3** The RPS assigned to the EOF Count Room should ensure that, prior to transporting samples to the EOF Count Room, all samples have dose rates checked, are bagged or rebagged as necessary, before passing through clean area.

**7.3.4** If necessary, samples should be rebagged and stored in the shielded sample storage area.

**7.4** Specific Radiation Exposure Controls

The RPSS should implement specific exposure controls if personnel exposures in the range of 10 mRem are expected at the EOF. The following actions are then necessary.

**7.4.1** An RPS should have temporary personnel complete NRC-4 and NRC-5 forms.

**7.4.2** If the site computer is available, the individuals' personal and exposure data should be added to the computer exposure system as per the Radiation Protection Manual.

**7.4.3** If the computer is not available, the individuals' data should be added to the Emergency Weekly Exposure Record, PINGP 755.

**7.4.4** Obtain current administrative dose guidelines and yearly doses from plant records for personnel who have a current plant TLD issued.

**7.4.5** At the end of each shift, the RPS should record the exposures from the EOF Entry Log, and enter in the computer as per the Radiation Protection Manual; or if the computer is not available, add the exposure to the Emergency Weekly Exposure Record, PINGP 755.

**7.4.6** The RPSS should track exposures received, and limit each individual's exposure in accordance with 10CFR20 NRC limits in RPIP-1110, Administrative Dose Controls, unless the Emergency Manager authorizes higher exposure.

**7.5** Protective Guidelines for EOF Personnel

**7.5.1** EPA 400 Guidelines for Recommended Protective Action to limit total exposure to personnel are:

| Projected TEDE Dose Limit (mrem) | Activity | Condition |
|---|---|---|
| 5,000 | All | Lower dose not practical |
| 10,000 | Protecting valuable property | Lower dose not practical |
| 25,000 | Life saving or protection of large populations | Lower dose not practical |
| >25,000 | Life saving or protection of large populations | Only on a voluntary basis to persons fully aware of the risks involved. |

| | |
|---|---|
| ***NOTE:*** | **1. Based on EPA 400-R-92-001, May 1992**<br>**2. TEDE = Total Effective Dose Equivalent**<br>**3. These are doses to nonpregnant adults from external exposure and intake during an emergency.**<br>**4. Workers should limit dose to the lens of the eye to 3 times the listed values and doses to extremities and any other organ to 10 times the doses listed above.** |

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**7.5.2** The following guidance may be used, at the discretion of the Emergency Manager, for determining protective actions at the EOF:

| External (DDE) Exposure Rates (mRem/hr) | Protective Action | Comments |
|---|---|---|
| greater than 1 | Evacuate non-EOF areas of the Training Building and personnel who are not part of the emergency response organization. | |
| greater than 15 | Consider evacuation of declared pregnant women and non-essential personnel | |
| greater than 100 | Consider activation of the Backup EOF. Execute exposure authorization for those personnel approaching administrative limits and deemed by the Emergency Manager as vital to the emergency response effort. Evacuate all others. | **CAUTION**: Consider only if levels are expected to be sustained for a significant period of time and would cause excessive exposure to emergency personnel or levels are such that they seriously reduce the effectiveness of the emergency organization. |
| greater than 1000 | Evacuation to the Backup EOF is recommended. | |

DDE = Deep Dose Equivalent - external dose rate in mrem/hr.

| Smearable Surface Contamination Levels (dpm/100 cm2) | Protective Action | Comments |
|---|---|---|
| greater than 100 | Evacuate non-EOF areas of the Training Building and personnel who are not part of the emergency response organization. Control eating, drinking and smoking. | |
| greater than 500 | Consider use of protective clothing, evacuate non-essential personnel. | Operation may continue as long as restrictions on personnel movements to limit the spread of contamination do not become limiting to operations. |
| greater than 5000 | Ensure use of protective clothing. | |

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| Airborne Radioactive Levels | Protective Action | Comments |
|---|---|---|
| **CAM - Particulate** | | |
| 1. $1X10^{-9}$ uCi/cc | No protective action necessary. | |
| 2. > $1X10^{-9}$ uCi/cc, but < $1X10^{-6}$ uCi/cc | Consider evacuation of unnecessary personnel and establish a program of regular portable air samples and counting to determine the DAC. | |
| a. If portable air sample results > .3 DAC | | |
| | Evacuate non-EOF areas of the Training Building and personnel who are not part of the emergency response organization. | This measure is to ensure that classrooms and other non-EOF areas do not contain personnel being trained, i.e., badging classes, visitors, consultants, etc. |
| b. If portable air sample results > 1 DAC | | |
| | Consider evacuation of unnecessary personnel and limit exposures to less than 40 DAC-hours per week, if possible. | Prolonged exposure to excessive airborne levels without protection that would lead to a exposure of 5000 mrem Committed Effected Dose Equivalent in one year should be avoided. |
| c. If portable air sample results > 10 DAC | | |
| | Evacuate all personnel not deemed by the Emergency Manager as vital to the emergency response effort. Consider relocation of the EOF to the Backup EOF. | **CAUTION**: Consider evacuation only if levels are expected to be sustained for a significant period of time and would cause excessive exposure to emergency personnel or levels are such that they seriously reduce the effectiveness of the emergency organization. |
| 3. > $1X10^{-6}$ uCi/cc | Evacuation to the Backup EOF is recommended. | |

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| Airborne Radioactive Levels | Protective Action | Comments |
|---|---|---|
| **CAM - Iodine** | | |
| 1. If CAM alarms for iodine ($2 \times 10^{-9}$ uCi/cc) | Establish a program of regular portable air samples and counting to determine the DAC. | Prolonged exposure to excessive airborne levels without protection that would lead to an exposure of 5000 mrem Committed Effective Dose Equivalent in one year should be avoided. |
| 2. If portable air sample results > 1 DAC | Consider evacuation of unnecessary personnel and limit exposures to less than 40 DAC-hrs per week, if possible. | |
| 3. If portable air sample results > 10 DAC | Consider evacuation to the Backup EOF. | **CAUTION:** Consider evacuation only if levels are expected to be sustained for a significant period of time and would cause excessive exposure to emergency personnel or levels are such that they seriously reduce the effectiveness of the emergency organization. |

| ***NOTE:*** | **The RPSS should recommend the use of potassium iodide pills (thyroid blocking agent) if the projected thyroid exposure approaches 25 REM. See F3-18, Thyroid Iodine Blocking Agent (Potassium Iodide), for determining projected thyroid exposures.** |
|---|---|

**7.5.3** Generally, operational limits are flexible considering the "stay time" in the radiation area. A Total Effective Dose Equivalent (TEDE) in excess of 5000 mRem in one year should be avoided. Consideration to the exposure of key individuals should be used to determine the advisability of long term operation of the EOF in any area greater than 100 mR/hr.

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| NOTE: | Radiation levels are probably from the plume. Consideration should be given to a potential wind shift and/or decrease of rad levels prior to ordering an evacuation. |
|---|---|

The time to reach yearly limit at various radiation levels is:

| Radiation Level | Number of 12 Hour Shifts |
|---|---|
| 5 mR/hr | 80 |
| 10 mR/hr | 40 |
| 25 mR/hr | 16 |
| 50 mR/hr | 8 |
| 100 mR/hr | 4 |

**7.5.4** When the decision to evacuate the EOF is made, refer to F8-11, Transfer to the Backup EOF, for specific guidance.

| F8 Section | TITLE: RADIOLOGICAL MONITORING AND CONTROL AT THE EOF | NUMBER: F8-6 |
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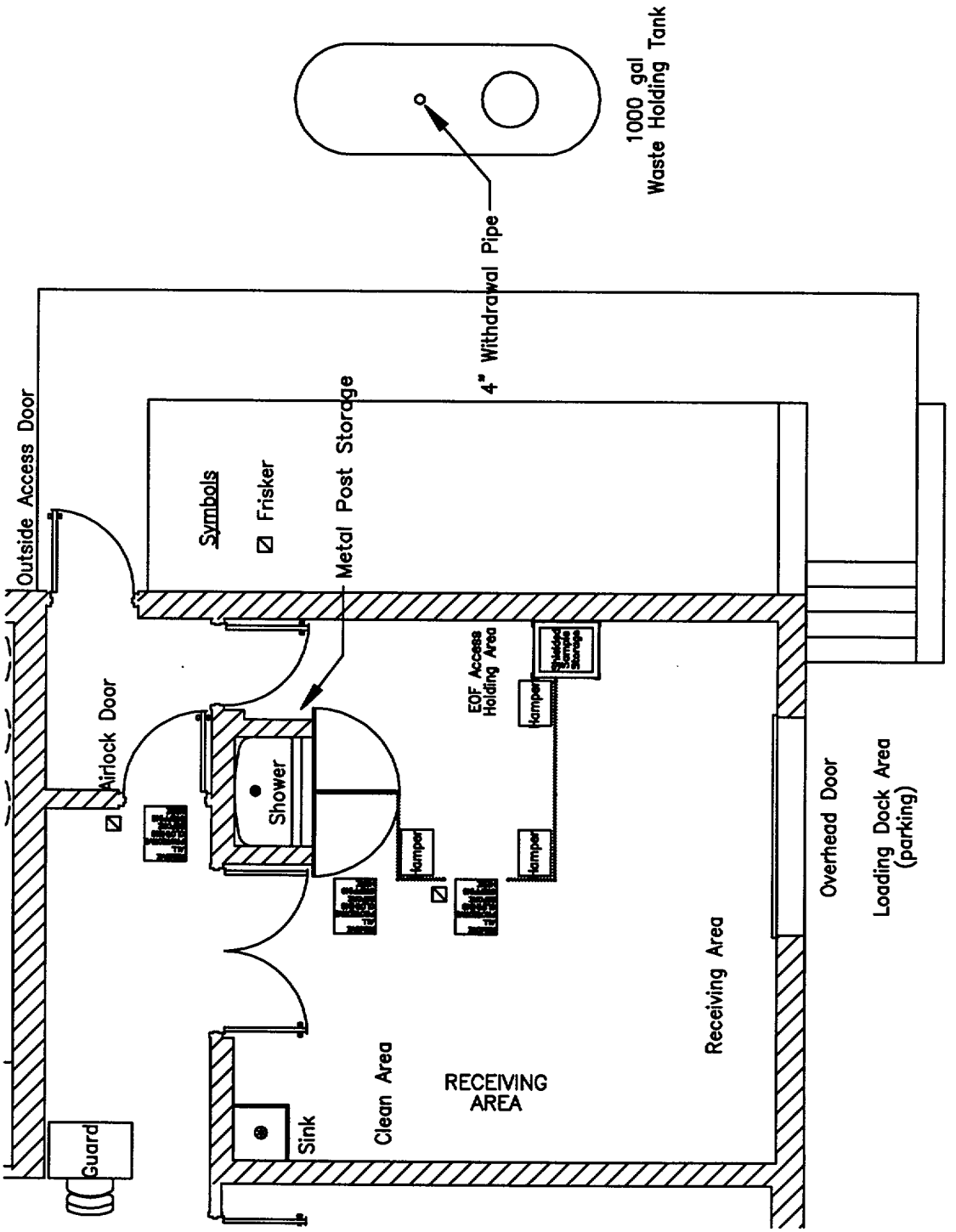
## FIGURE 1 - ACCESS CONTROL FOR RADIOACTIVE MATERIALS AT THE EOF



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| | |
|---|---|
| Reviewed By: _____ Gen. Supt. Radiation Protection | Effective Date: 8-10-00 |
| Approved By: _____ Plant Manager | OC Review: 7-24-00 |

## 1.0 PURPOSE

| REFERENCE USE |
|---|
| • *Procedure segments may be performed from memory.* |
| • *Use the procedure to verify segments are complete.* |
| • *Mark off steps within segment before continuing.* |
| • *Procedure should be available at the work location.* |

The purpose of this procedure is to provide guidance for interfacing with those offsite organizations that may establish residency in the EOF (locate and operate from the EOF).

## 2.0 APPLICABILITY

This procedure applies to the Emergency Manager, EOF Coordinator, EOF Coordinator Assistant or anyone in the EOF that may be designated as the Prairie Island (PI) Liaison to the offsite organization in the EOF.

## 3.0 PRECAUTIONS

The Emergency Manager should make every attempt to direct news media to the MN State JPIC for news releases.

## 4.0 RESPONSIBILITIES

**4.1** The Emergency Manager is responsible to ensure that a person is assigned as the PI Liaison to each offsite agency or organization that is establishing residency in the EOF.

**4.2** The EOF Coordinator is responsible to assign an PI Liaison person to each offsite offsite agency or organization that is establishing residency in the EOF and ensure that the operational logistic needs of their organization are met.

**4.3** The EOF Coordinator Assistant is responsible to assist the EOF Coordinator and if assigned as the PI Liaison person, then he/she should follow the guidelines as outlined in this procedure.

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## 5.0 PREREQUISITES

An offsite agency or organization has or is scheduled to arrive and establish residency at the EOF for the purpose of performing emergency operations from the EOF.

## 6.0 PROCEDURE

### 6.1 General

**6.1.1** During an extended emergency, a number of offsite agencies or organizations may and will establish residency at the EOF for the purpose of setting up a command center for their own emergency response activities (e.g., NRC Incident Response Team) or for coordinating information to their own offsite organization (e.g., State and Local Agencies).

**6.1.2** In some cases, accommodation plans have been established for those organizations which are expected to respond to the EOF. Attachments A through D describe the general needs that should be considered for these organizations.

**6.1.3** Figures 2 and 3 contain EOF floor plans which describe the desired locations of the different organizations in the EOF and locations of the key EOF emergency response personnel in the EOF command center, respectively. Figure 4 contains a floor plan of the entire training center.

**6.2** The Emergency Manager should direct the EOF Coordinator to assign a person to act as an PI Liaison to offsite agencies or organizations that are scheduled to establish residency at the EOF.

**6.3** When directed by the Emergency Manager to staff the PI Liaison position, the EOF Coordinator should assign the EOF Coordinator Assistant or another qualified EOF knowledgeable individual to fill this position.

**6.4** The PI Liaison should follow the guidance outlined for each offsite agency or organization provided in the attachments.

**6.4.1** State, Local, and Tribal Agencies -- Attachment A

**6.4.2** NRC Incident Response Team -- Attachment B

**6.4.3** Vendor or Contractor Response Teams -- Attachment C

**6.4.4** Local or National News Media -- Attachment D

**6.5** If the visiting offsite organization is not one of the organizations listed above, consult with the EOF Coordinator and/or Emergency Manager to assess their need for access in the EOF. If access is permitted, attend to the visitor's needs, as appropriate.

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## ATTACHMENT A - STATE, LOCAL AND TRIBAL AGENCIES [CONT'D]

### 1. GENERAL INFORMATION

Both Minnesota (MN) and Wisconsin (WI) will activate their State Emergency Operations Center (EOC) during a significant declared emergency at Prairie Island. Also, WI representatives will be stationed at the MN State EOC for the purpose of coordinating information and making joint press releases at the Joint Public Information Center (JPIC).

Goodhue, Dakota, and Pierce Counties also activate and staff their respective EOC. The City of Red Wing shares an EOC facility with Goodhue County. The local Indian Community Representatives are provided an area at the Goodhue Cty/Red Wing EOC and will establish a communication network within their tribal organization.

During Emergency Preparedness planning meetings, it has been acknowledged that both MN and WI may each staff at least one person at the EOF for the purpose of coordinating information from the EOF and following the progress of the plant's emergency response. Most likely this would be a person from each state's health department. Likewise, each county may send a representative to the EOF.

One room in the EOF has been designated for the location of state and local agency representatives or communicators.

Goodhue County may station local RACES (HAM Radio Operators) communicators in the state and local agency classroom for the purpose of providing backup emergency communications, if necessary. Plant employees are members of the local RACES group.

### 2. LIAISON GUIDELINES

A. Inform EOF Security of the expected arrival time and identity of the individuals arriving at the EOF.

B. Provide visitors with EOF floor plans showing their room assignment, location of the command center and location of key emergency response stations. See Figures 2 and 3.

C. Provide visitors with a copy of the current EOF staffing organization chart, PINGP 1063, for assisting their identification of key PI emergency positions.

D. Ensure the assigned room has their telephone cabinet unlocked and emergency phone directories available. See Table 1.

## ATTACHMENT A - STATE, LOCAL AND TRIBAL AGENCIES

E. Introduce the state, local or tribal government individuals with the PI emergency response person to whom they may have need to interface.

F. Make available the necessary office supplies for their residency.

G. Remain available to respond to other needs as necessary.

## ATTACHMENT B - NRC INCIDENT RESPONSE TEAM

### 1. GENERAL INFORMATION

NRC activation may occur in two phases: Initial Activation and Expanded Activation. The Initial Activation may occur during an Alert or Site Area Emergency and will occur at a General Emergency. Expanded Activation may occur at a prolonged Site Area Emergency and will occur at a prolonged General Emergency.

An Initial Activation includes the regional NRC office sending an NRC Initial Site Team to the plant and EOF numbering from about 12 to 24 individuals. About 4 to 6 will go to the plant while the remainder will stay in the EOF. PINGP should be notified by the NRC Base Team (in Illinois) when the decision is made to send an Initial Site Team. This advance notice should provide a 4 to 8 hour preparation time before receiving the Initial Site Team at the EOF. This time should be used for preparation of the assigned classrooms, setting up phones, gathering appropriate procedures (Tech Specs and EPIPs).

Shown on Figure 1 is the overall concept of the NRC Initial Site Team Organization, including the management relationship of the various positions. Refer to NRC Response Coordination Manual (RCM), Concept of Operations, for a description of these positions; that is, to whom the incumbent will report, where that individual will normally be located, and what functions are to be carried out by an individual filling that position.

| F8 Section | TITLE: OFFSITE AGENCY LIAISON ACTIVITIES | NUMBER: F8-8 |
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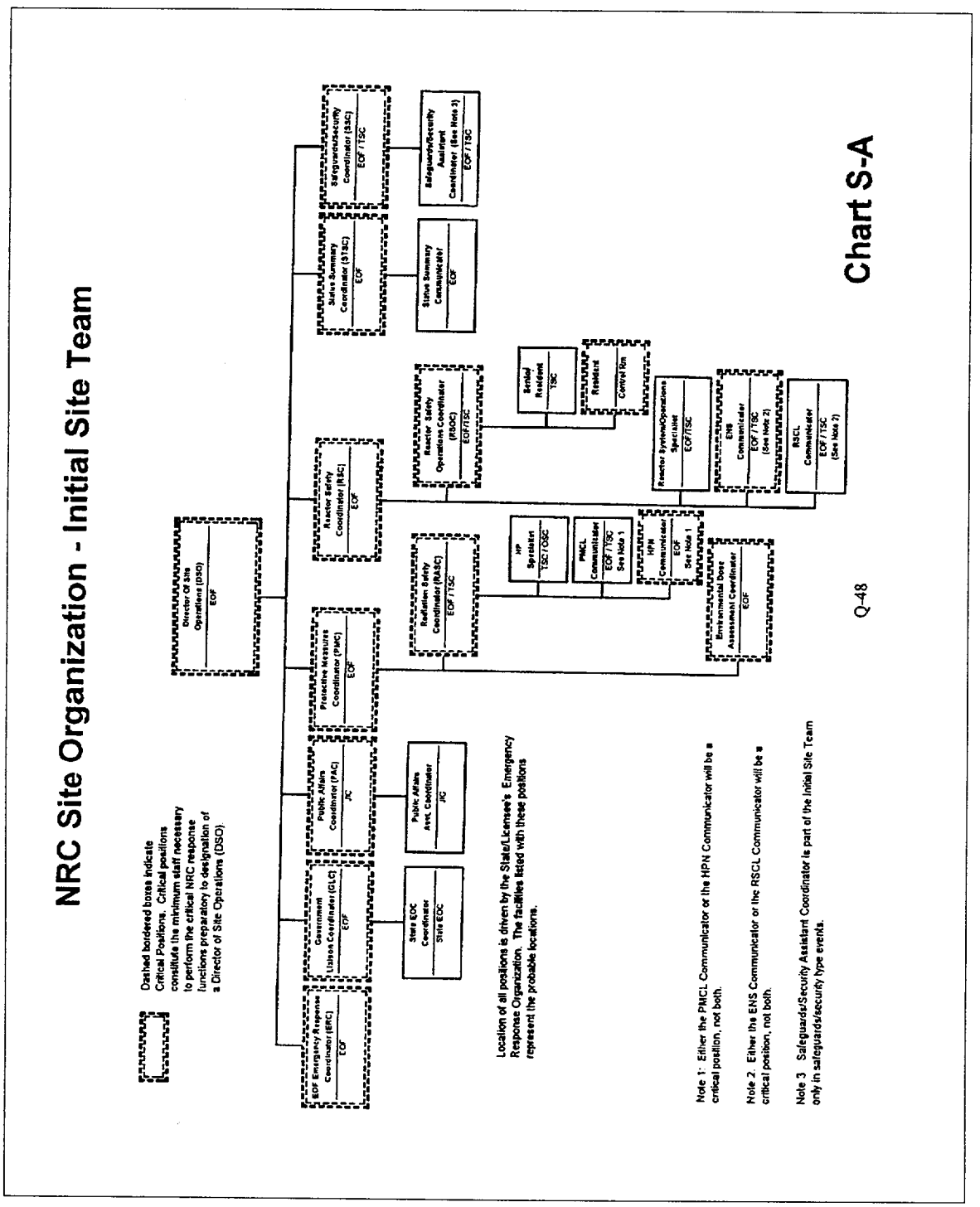
## FIGURE 1 - NRC INITIAL SITE TEAM



| F8 Section | TITLE: OFFSITE AGENCY LIAISON ACTIVITIES | NUMBER: F8-8 |
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## ATTACHMENT B - NRC INCIDENT RESPONSE TEAM [CONT'D]

### 2. LIAISON GUIDELINES

A. Inform EOF Security of the expected arrival time and identity of the individuals arriving at the EOF.

B. Prepare Classroom 9 for NRC:

1. Ensure all regular training center material is removed or put aside from tables.
2. Open phone cabinet and place all phones out on table.
3. Ensure all phone ringers are turned on and check phones to ensure operability.
4. Lay out at least two Emergency Phone Directories and non-emergency phone directories.
5. Set up "IN" and "OUT" stacker bins.
6. Collect and lay out at least two sets of plant Tech Specs, EOP's, F3, and F8 procedures.

C. Prepare Classroom 8 for NRC.

1. Ensure all regular training center material is removed or put aside from tables.
2. Check phone to ensure operability.

D. Ensure an NRC emergency status briefing is prepared to be delivered when the NRC Site Team first arrives.

1. Use PINGP 1297, NRC Briefing Guide, to develop the content of the NRC plant status briefing.
2. A knowledgeable individual from the Tech Support Area and RPSS Area may be used for delivering the briefing.

| F8 Section | TITLE: OFFSITE AGENCY LIAISON ACTIVITIES | NUMBER: F8-8 |
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## ATTACHMENT B - NRC INCIDENT RESPONSE TEAM [CONT'D]

E. When NRC first arrive, escort NRC to Classroom 9 for purpose of a briefing.

1. Provide visitors with EOF floor plans showing the EOF layout, EOF Command Center, and location of key PI emergency positions. See Figures 2 and 3.

2. Show NRC phones, phone directories and other applicable documents.

3. Provide visitors a copy of the current EOF staffing organization chart, PINGP 1063, for assisting their identification of key PI emergency positions.

4. Conduct a briefing concerning a brief history of the event and the details of the current status of the emergency.

F. Ensure NRC Response Team members know where the rest rooms, NRC Admin Support room (Classroom 8) and safeguards room are located. See Figure 2 and 3.

G. Introduce the NRC Response Team members with the PI emergency response person to whom they may have need to interface.

H. Continue to make available the necessary office supplies for their residency.

| F8 Section | TITLE: OFFSITE AGENCY LIAISON ACTIVITIES | NUMBER: F8-8 |
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| | | REV: 4 |

## ATTACHMENT C - VENDOR OR CONTRACTOR RESPONSE TEAMS

### 1. GENERAL INFORMATION

It may be necessary for a vendor or contractor to send an emergency response or emergency assessment team to the EOF. This is especially true if they need to interface with PI emergency response personnel during the emergency phase.

### 2. LIAISON GUIDELINES

A. Inform EOF Security of the expected arrival time and identity of the individuals arriving at the EOF.

B. Provide visitors with EOF floor plans showing them their room assignment and general layout of the EOF. See Figures 2, 3, or 4.

C. Provide visitors a copy of the current EOF staffing organization chart, PINGP 1063, for assisting their identification of PI emergency positions.

D. Ensure the assigned room has the necessary emergency phone directories available and show them where they may access telephones.

E. Introduce the visitor(s) with the PI emergency response person to whom they may have need to interface.

F. Make available the necessary office supplies for their residency.

| F8 Section | TITLE: OFFSITE AGENCY LIAISON ACTIVITIES | NUMBER: F8-8 |
|---|---|---|
| | | REV: 4 |

## ATTACHMENT D - LOCAL OR NATIONAL NEWS MEDIA

### 1. GENERAL INFORMATION

By design all formal news media releases will be made at the Joint Public Information Center (JPIC) located in St. Paul at/near the Minnesota State Emergency Operations Center (MN EOC). Representatives from federal, state, and local governments and utility management will participate in the joint news releases.

In the case that news media personnel arrive at the plant site or EOF, it may be necessary for the Emergency Manager to acknowledge their presence. The ERO Communications Personnel should be notified immediately when there is indication of news media personnel near the plant site or EOF. News media personnel should be reminded that periodic news media releases are occurring at the JPIC.

The Emergency Manager should make every attempt to send the news media personnel to the JPIC. If it becomes clear that the news media personnel can be controlled better in the training center, the Emergency Manager may choose to allow access.

### 2. LIAISON GUIDELINES

A. When informed that local or national news media personnel have arrived at the EOF, immediately notify the EOF Coordinator and/or Emergency Manager.

B. Remind the Emergency Manager or EOF Coordinator to notify ERO Communications Personnel or the Executive Spokesperson at the MN State EOC that news media personnel have arrived (or are arriving) at the EOF.

C. Direct news media to MN State JPIC for news release information.

D. Only allow news media access to the EOF or training center upon approval from the Emergency Manager.

E. If news media access to the EOF has been approved by the Emergency Manager, then inform EOF Security they will be allowed access.

F. Introduce the news media individuals with the PI emergency response person to whom they have need to interface.

G. If news media access to the training center has been approved by the Emergency Manager, then escort the news media to the designated training center area and await utility management or ERO Communications Personnel.

| F8 Section | TITLE: OFFSITE AGENCY LIAISON ACTIVITIES | NUMBER: F8-8 |
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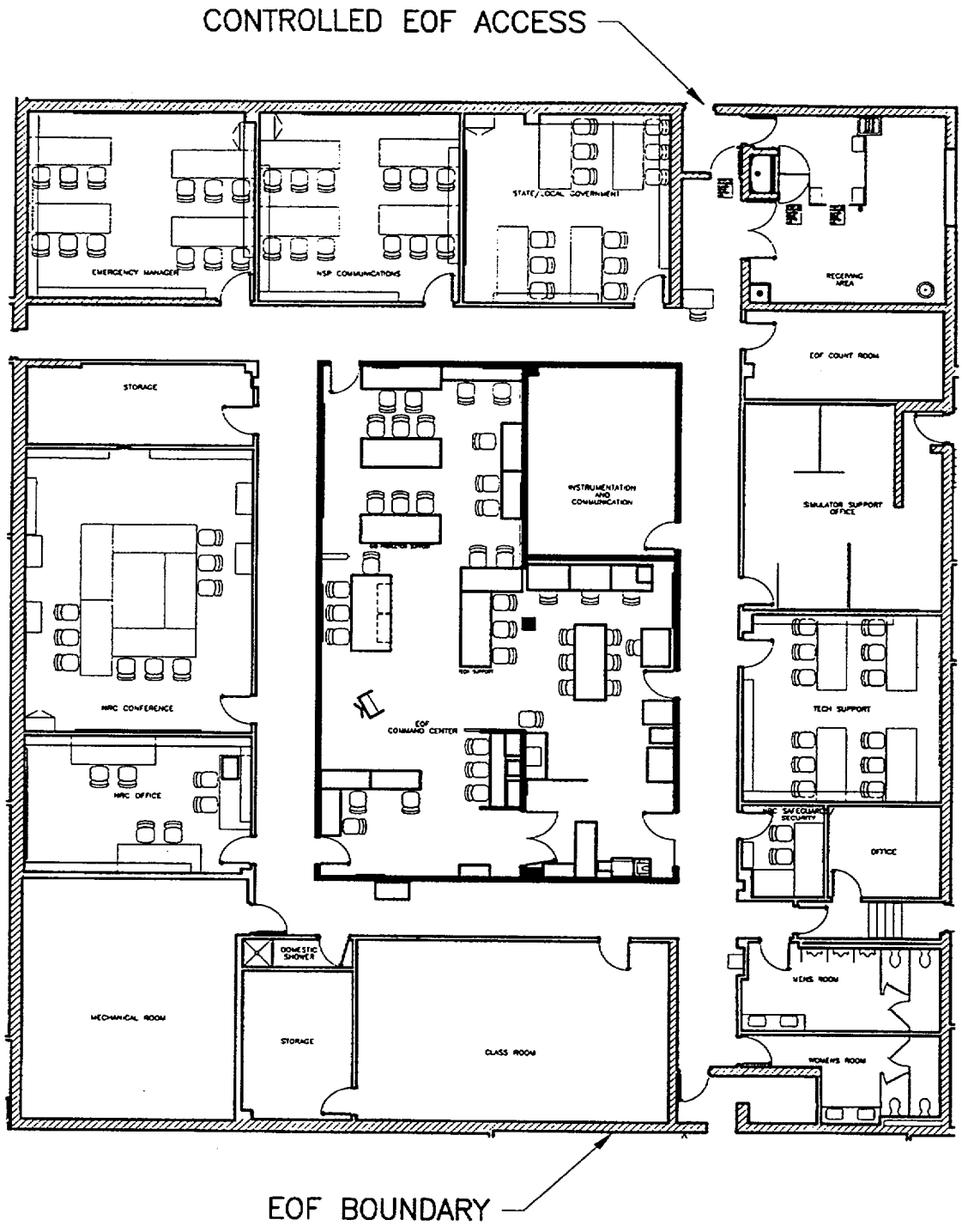
## FIGURE 2 - EMERGENCY OPERATIONS FACILITY



| F8 Section | TITLE: OFFSITE AGENCY LIAISON ACTIVITIES | NUMBER: F8-8 |
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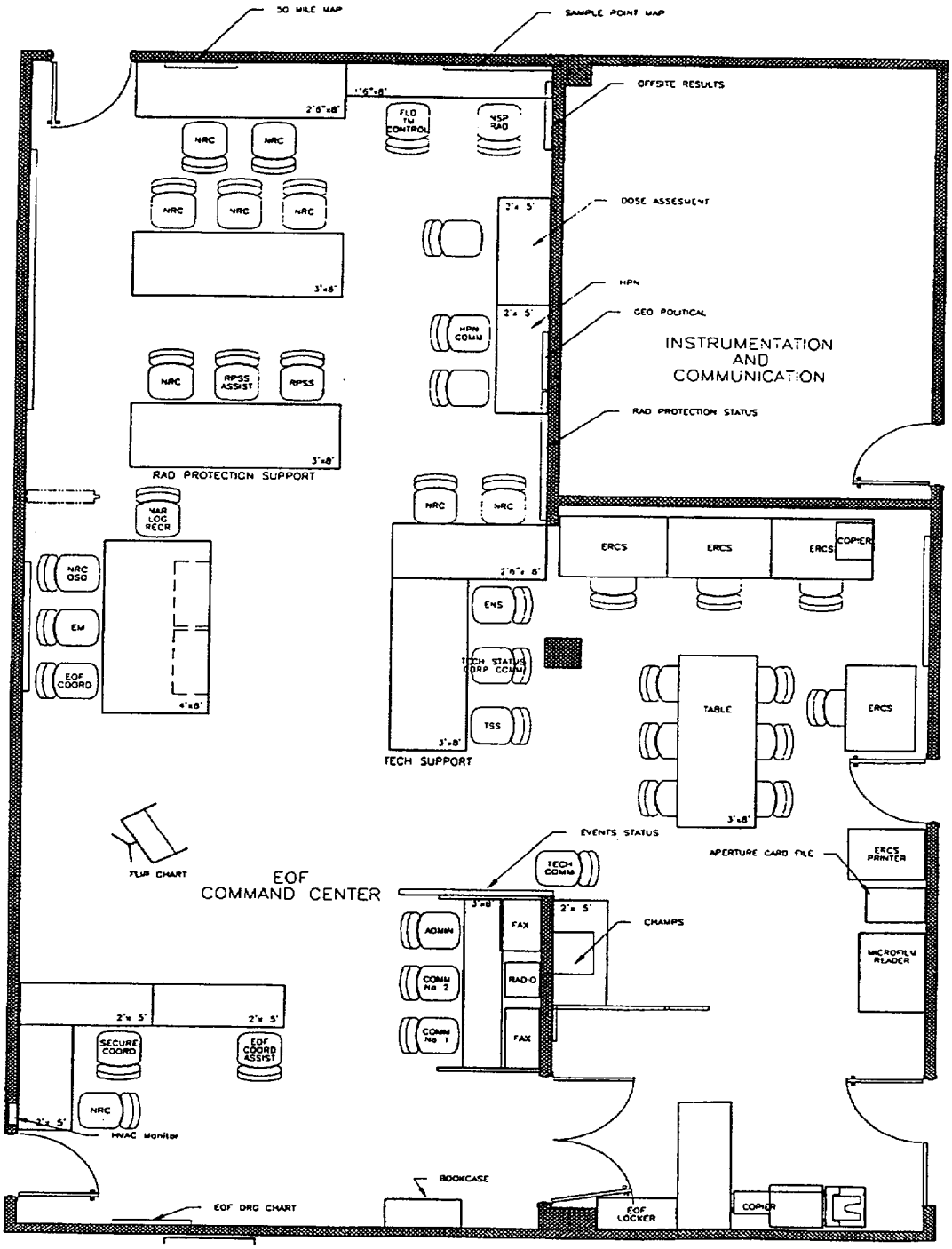
## FIGURE 3 - EOF COMMAND CENTER



| F8 Section | TITLE: OFFSITE AGENCY LIAISON ACTIVITIES | NUMBER: F8-8 |
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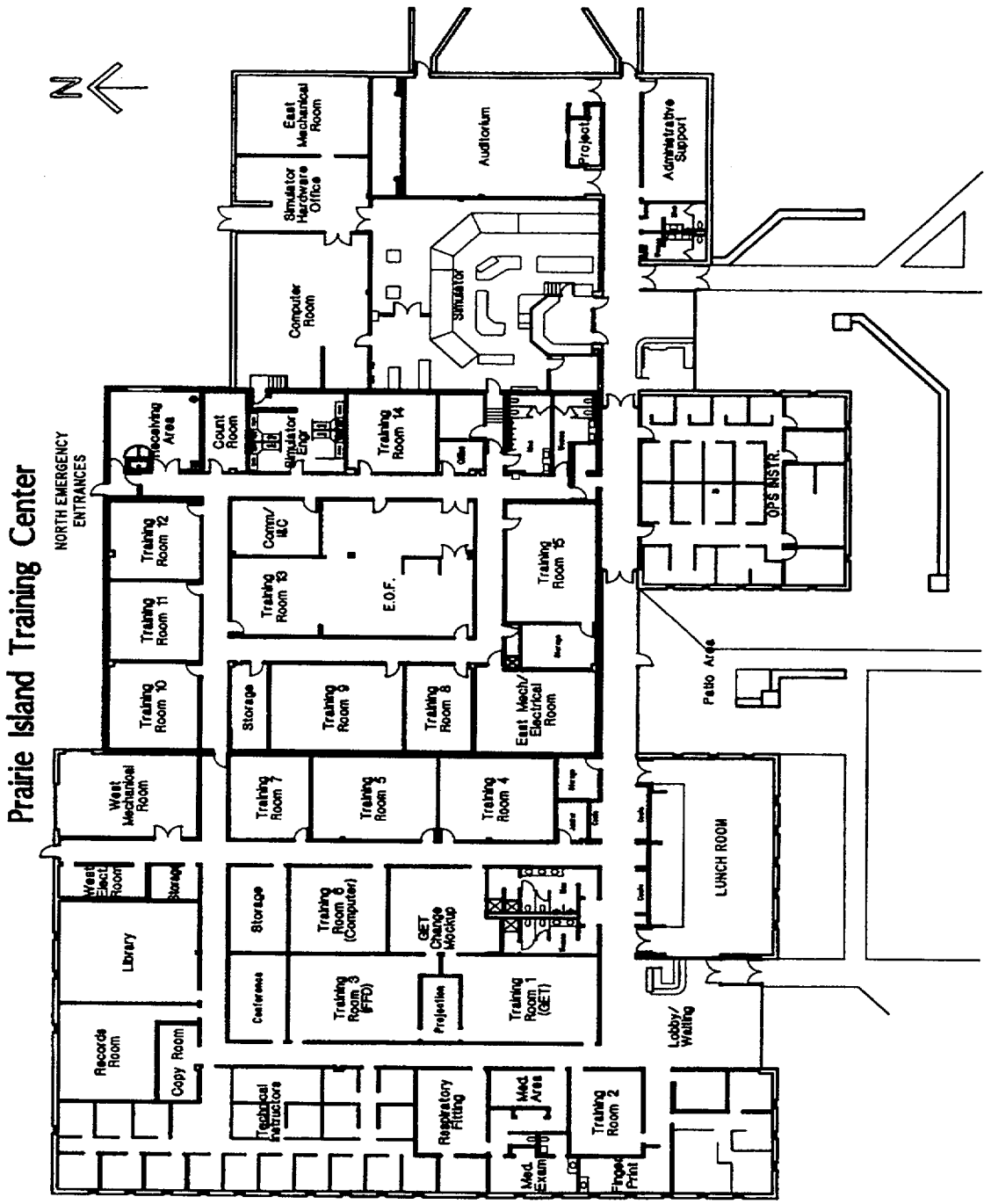
| | | REV: 4 |

## FIGURE 4 - TRAINING CENTER



| F8 Section | TITLE: OFFSITE AGENCY LIAISON ACTIVITIES | NUMBER: F8-8 |
|---|---|---|
| | | REV: 4 |

## TABLE 1 - EOF ROOM EQUIPMENT

| LOCATION | AREA | USE | EQUIPMENT | COMMUNICATIONS |
|---|---|---|---|---|
| Command Center | 1300 | PI/NRC | MIDAS Terminal<br>Fax Stations<br>ERCS Terminals<br>CAM<br>Maps & Status boards<br>Microfilm Reader<br>Tables & Chairs | Installed telephones<br>Base radio console<br>Rad Field Team radio<br>MN Highway Patrol<br>Radio-phone |
| Classroom #8 | 324 | NRC Admin | Tables & Chair | Installed telephones |
| Classroom #9 | 660 | NRC Conference Room | Tables & Chairs | Installed telephones |
| Classroom #10 | 400 | PI Emergency Manager | Tables & Chairs | Installed telephones |
| Classroom #11 | 400 | ERO Communications Personnel | Tables & Chairs | Installed telephones |
| Classroom #12 | 400 | State/Local/Tribal Officials | Tables & Chairs | Installed telephones |
| Classroom #14 | 400 | PI Tech Support | Tables & Chairs | |
| Count Room | 160 | PI/RPS | Multi-channel Analyzer<br>Alpha/Beta/Gamma Counting System | Installed telephones |

| F8 Section | TITLE: EVENT TERMINATION OR RECOVERY | NUMBER: F8-9 |
|---|---|---|
| | | REV: 6 |

Reviewed By: _____ Gen. Supt. Radiation Protection

Approved By: _____ Plant Manager

Effective Date: 8-10-00

OC Review: 7-24-00 SC

## 1.0 PURPOSE

| *REFERENCE USE* |
|---|
| • ***Procedure segments may be performed from memory.*** |
| • ***Use the procedure to verify segments are complete.*** |
| • ***Mark off steps within segment before continuing.*** |
| • ***Procedure should be available at the work location.*** |

The purpose of this procedure is to:

**1.1** Provide guidelines for termination of the emergency response phase and transition to the Recovery phase.

**1.2** Provide guidelines for transfer of control from the emergency organization to Recovery Organization.

## 2.0 APPLICABILITY

This procedure applies to the Emergency Manager, Recovery Manager, Technical Support Supervisor, Radiation Protection Support Supervisor and EOF Coordinator.

## 3.0 PRECAUTIONS

NONE

## 4.0 RESPONSIBILITIES

**4.1** The Emergency Manager is responsible for the implementation and conduct of this procedure and the decision to terminate the event or enter the Recovery phase.

**4.2** The Emergency Director is responsible for assisting the Emergency Manager in the decision to terminate the event or enter the Recovery phase.

**4.3** The Recovery Manager is responsible for overall management of the recovery activities necessary to return the plant to a normal operational or shutdown status.

**4.4** The Plant Manager is responsible for coordinating the onsite recovery activities and assisting the Recovery Manager.

**4.5** The EOF Technical Support Supervisor is responsible for developing short term and long term recovery actions necessary to return the plant to normal or shutdown status.

**4.6** The Radiation Protection Support Supervisor is responsible for developing short term and long term offsite radiological support activities for the Recovery phase.

**4.7** The EOF Coordinator is responsible for assisting the Emergency Manager in formulating recovery actions and ensuring emergency documents are collected and properly processed.

## 5.0 DISCUSSION

### 5.1 Recovery

In general, an Unusual Event or Alert may be terminated without transition to a Recovery phase. A Site Area Emergency or General Emergency will probably require a planned transition to a Recovery phase and the establishment of a Recovery Organization under the direction of the Recovery Manager.

Termination of an Alert classification includes the dismissal of the site Emergency Response Organization. Necessary in-plant or on-site follow-up activities should be coordinated and managed by the normal plant site organization. Post-Alert conditions may require the establishment of a Recovery Organization. The Emergency Director and Emergency Manager should make this determination based on the extent of damage or other considerations. I

If a Site Area Emergency does not require significant repairs or analysis beyond the capabilities of the normal plant site organization, the event may be terminated without transition to a Recovery phase.

### 5.2 NRC Post-Accident Assessment

It is expected that the NRC will, as a minimum, send an Augmented Inspection Team (AIT) to the plant to perform a thorough investigation of the incident. As a result, the AIT will request the following:

**5.2.1** Any failed equipment not necessary for safe shutdown or operation of the plant will be quarantined. No work on failed equipment should be performed unless absolutely necessary for plant safety. The NRC will want to perform failure analysis on the failed equipment.

**5.2.2** No written or electronic records be destroyed or erased.

**5.2.3** Schedules be adjusted or additional resources be made available for NRC interviews with plant personnel involved with the incident. A court reporter may be present to transcribe the interviews.

**5.2.4** Office space (or trailer space) be made available for the NRC AIT.

## 6.0 PREREQUISITES

The Emergency Manager has assumed authority for reclassifications from the Emergency Director and:

**6.1** An Alert has been declared and conditions indicate that plans for event termination may begin,

or

**6.2** A Site Area Emergency or General Emergency has been declared and conditions indicate the immediate emergency phase is over and transition plans to the Recovery phase may begin.

## 7.0 PROCEDURE

### 7.1 Termination from an Alert Condition

**7.1.1** As plant conditions stabilize during an Alert, consider terminating the event classification subject to the conditions below.

**7.1.2** Assess plant and environmental conditions. PINGP 1102 or PINGP 1103, Shutdown Safety Assessment, may be used as an assessment guide.

| F8 Section | TITLE: EVENT TERMINATION OR RECOVERY | NUMBER: F8-9 |
|---|---|---|
| | | REV: 6 |

**7.1.3** The emergency classification may be terminated once the following criteria are met:

A. The plant is in stable condition with at least one fission product barrier intact,

and

B. Radioactive gaseous and liquid effluent are being controlled within the following limits:

1. Gaseous effluent release rates (or resulting dose rates) are within plant limits as defined in Section 3.1 of H4, ODCM.

2. Liquid effluent release rates (or resulting concentrations) are within the plant limits as defined in Table II, Column 2 of H4, ODCM Table 4.3, Old 10CFR20 Appendix B (April 1992).

and

C. The potential for future degradation of plant conditions is small (PINGP 1102 or PINGP 1103, Shutdown Safety Assessment, may be used as an assessment guide).

**7.1.4** When the criteria for termination are met, terminate the Alert.

**7.1.5** Upon event termination, ensure the Emergency Director is advised of the termination.

**7.1.6** Review and approve the Notification Report Form (PINGP 577) and designate the Offsite Emergency Communicator to complete the notifications of state, local and site personnel in accordance with PINGP 1054, EOF Offsite Notification Call List For Reclassifications.

**7.1.7** Initiate outage planning if equipment and plant systems are significantly damaged and extended plant shutdown is required.

**7.1.8** Direct the EOF Coordinator to collect all EOF emergency checklists, documentation and records generated during the event.

**7.1.9** Provide the necessary resources to support the requirements of the NRC post-event investigation team.

**7.1.10** Develop and submit NRC follow-up reports through normal plant administrative procedures.

## 7.2 Termination from Site Area or General Emergency with Transition to the Recovery Phase

**7.2.1** WHEN the event has stabilized and plant conditions warrant possible transition to the Recovery phase, THEN assess plant and environmental conditions. PINGP 1102 and PINGP 1103, Shutdown Safety Assessment, may be used with other assessment tools to assess the condition of the plant.

**7.2.2** Direct the Technical Support Supervisor and the Radiation Protection Support Supervisor to assess conditions and identify recovery actions necessary to return the plant to a normal operational or shutdown status. The Recovery Action Item Form, PINGP 1017 should be used to identify recovery action items.

**7.2.3** Direct the EOF Coordinator to compile all identified recovery actions on the Recovery Action Item Form, PINGP 1017. The list should identify short-term corrective actions (to be completed within hours or days) and long-term actions which may require an extended plant outage (i.e., weeks or months).

**7.2.4** Direct the Recovery Manager to begin formulating a Recovery Organization.

**7.2.5** When formulating a Recovery Organization, the Recovery Manager should consider the following:

A. The Recovery Organization may resemble a combination of existing onsite plant and plant support organizations.

B. Involve the plant's outage planning group in recovery scheduling.

C. Recovery planning may closely resemble outage planning and scheduling.

D. There may be a need for offsite contract organizations to support recovery.

| F8 Section | TITLE: EVENT TERMINATION OR RECOVERY | NUMBER: F8-9 |
|---|---|---|
| | | REV: 6 |

| NOTE: | If the Site Area Emergency event does not require significant repairs or analysis beyond the capabilities of the normal plant site organization and the conditions of 7.1.3A, 7.1.3B, & 7.1.3C are met, then the Site Area Emergency may be terminated without a transition to Recovery phase. |
|---|---|

**7.2.6** Continue to assess plant and environmental conditions and when all of the following criteria are met, transition to the Recovery phase should be considered:

A. The plant is in a stable condition with at least one fission product barrier intact,

and

B. Radioactive gaseous and liquid effluents are being controlled within the following limits:

1. Gaseous effluent release rates (or resulting dose rates) are within plant limits as defined in Section 3.1 of H4, ODCM.

2. Liquid effluent release rates (or resulting concentrations) are within the plant limits as defined in Table II, Column 2 of H4, ODCM, Table 4.3 Old 10CFR20 Appendix B (April 1992),

and

C. If Severe Accident Management (SAM) was implemented, the SAM termination criteria per the SAMG Diagnostic Flow Chart are met,

and

D. The potential for future degradation of plant conditions is small,

and

E. NRC Headquarters (or the Director of Site Operations of the on-site response team) concurs with the transition to Recovery.

**7.2.7** When the criteria for transition to Recovery are met, contact the Emergency Director and discuss the conditions.

**7.2.8** If the Emergency Director concurs that conditions for transition to Recovery are met, discuss the proposed transition with the NRC.

| F8 Section | TITLE: EVENT TERMINATION OR RECOVERY | NUMBER: F8-9 |
|---|---|---|
| | | REV: 6 |

| NOTE: | **If the NRC Incident Response Team has not been mobilized or has not arrived, the proposal to enter the Recovery phase should be discussed with NRC Headquarters. If the NRC Response Team is onsite, the Emergency Manager and Emergency Director should meet with the Director of Site Operations to discuss the transition to Recovery.** |
|---|---|

**7.2.9** If the NRC concurs that transition to Recovery is appropriate, obtain the compiled list of short and long term corrective actions on the Recovery Action Item Form PINGP 1017. Review the list with the Technical Support Supervisor, RPSS, and Recovery Manager to ensure all items have been addressed.

**7.2.10** Upon review completion, schedule and conduct a meeting with the Emergency Director and Recovery Manager. The meeting should include:

A. Review of activities in progress, long term problems and established interfaces.

B. Review of the identified recovery actions.

C. Identification of additional resources or organizations needed to support Recovery.

D. Establishment of a Recovery Organization.

E. Establish a method and turnover rate of existing Emergency Organization to the Recovery Organization.

**7.2.11** The transition to Recovery meeting should conclude with the Emergency Manager authorizing the termination of the emergency event, authorizing Recovery and designating the Recovery Manager in charge of the plant's recovery activities.

**7.2.12** Advise the TSC when the transition to Recovery is made.

**7.2.13** Review and approve the Notification Report Form (PINGP 577) and designate the Offsite Emergency Communicator to complete the notifications of state, local and site personnel in accordance with PINGP 1054, EOF Offsite Notification Call List For Reclassification.

**7.2.14** Direct the EOF Coordinator to collect EOF emergency checklists, documentation and records generated during the event.

**7.2.15** Provide the necessary resources to support the requirements of the NRC post-event investigative team.

**7.2.16** The development and submittal of follow-up reports to the NRC should be conducted through normal plant administrative procedures.

## FIGURE 1 - EXAMPLE OF RECOVERY ACTION ITEM FORM

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1017, Rev. 4
Page 1 of 3
Retention: Life

**RECOVERY ACTION ITEM FORM**

Short Term = Hours or Days
Long Term = Weeks or Months

PERFORM ASSESSMENTS IN THE FOLLOWING AREAS AND IDENTIFY POTENTIAL SHORT TERM AND LONG TERM RECOVERY ACTION ITEMS:

A. Current operational status of plant systems and equipment involved in the emergency. Include reviews of "Operator Workarounds" and current "in progress" Work Orders to evaluate current plant configuration.

B. Current Operational status of the unaffected unit and its effect on the affected unit.

C. Identification of all systems, components, or equipment damaged or made inoperable during the event.

D. Estimate of necessary repairs, parts and tools to restore all affected systems and equipment back to a fully operational state.

E. Identification of special tools or equipment that may be required during the restoration period.

F. Estimate of additional personnel resources that may be required during the restoration period.

G. Identification of applicable plant surveillance tests and procedures required for post maintenance testing.

H. Identification of applicable system operability tests and procedures to restore plant systems to normal operational or shutdown configuration.

I. Estimate of liquid and solid radioactive waste generated during the event and recommendations on management and disposal.

J. Identification of special radiological considerations for personnel entry into affected areas with elevated dose rates or contamination levels (i.e.; temporary shielding engineering evaluations, robotics, etc.)

K. Estimate of the decontamination and monitoring activities necessary to restore affected areas inside and outside the plant site to pre-accident levels.

L. Identification of continued offsite radiological sampling and potential assistance to state or local agencies in the area of sampling, monitoring, and decontamination.

M. Following a containment LOCA, sample and adjust (if necessary) the pH of the primary coolant/recirculation loop within 48 hours after the accident. Acceptable range is between 7.0 and 10.5 to minimize the potential for stress corrosion cracking of the stainless steel piping and components.

1017 Recovery Action Item Form.DOT

| F8 Section | TITLE: EVENT TERMINATION OR RECOVERY | NUMBER: F8-9 |
|---|---|---|
| | | REV: 6 |

## FIGURE 1 - EXAMPLE OF RECOVERY ACTION ITEM FORM [CONT'D]

**EXAMPLE ONLY**
**USE CURRENT REVISION**



**RECOVERY ACTION ITEM FORM**

**SHORT-TERM RECOVERY ACTIONS**
**(Hours or Days)**
**PREPARED BY _____ TSC _____ EOF (Check one)**

| ITEM # | ACTION ITEM DESCRIPTION | COMMENTS |
|---|---|---|
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Reviewed by: _____ Date: _____
Emergency Director/Emergency Manager

| F8 Section | TITLE: EVENT TERMINATION OR RECOVERY | NUMBER: F8-9 |
|---|---|---|
| | | REV: 6 |

## FIGURE 1 - EXAMPLE OF RECOVERY ACTION ITEM FORM [CONT'D]

**EXAMPLE ONLY**
**USE CURRENT REVISION**

PINGP 1017, Rev. 4
Page 3 of 3

**RECOVERY ACTION ITEM FORM**

**LONG-TERM RECOVERY ACTIONS**
**(Weeks or Months)**
**PREPARED BY _____ TSC _____ EOF (Check one)**

| ITEM # | ACTION ITEM DESCRIPTION | COMMENTS |
|---|---|---|
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Reviewed by: _____ Date: _____
Emergency Director/Emergency Manager

| F8 Section | TITLE: TRANSFER TO THE BACKUP EOF | NUMBER: F8-11 |
|---|---|---|
| | | REV: 3 |

Reviewed By: _____ GEN. SUPT. RADIATION PROTECTION

Approved By: _____ PLANT MANAGER

Effective Date: 8-10-00

OC Review: 7-20-00 SC.

## 1.0 PURPOSE

***REFERENCE USE***

- ***Procedure segments may be performed from memory.***
- ***Use the procedure to verify segments are complete.***
- ***Mark off steps within segment before continuing.***
- ***Procedure should be available at the work location.***

This procedure specifies the actions to be taken if the EOF must be evacuated and the EOF functions transferred to the Backup EOF.

## 2.0 APPLICABILITY

This procedure is applicable to the Emergency Manager, RPSS, Technical Support Supervisor, and the EOF Coordinator.

## 3.0 PRECAUTIONS

**3.1** An evacuation of the EOF may be necessary due to the existence of a conventional hazard, e.g., fire in EOF, loss of power, hazardous gases, etc.

**3.2** Radiological conditions requiring an evacuation of the EOF may vary significantly based on the extent of operations in progress, the severity of the radiation levels, the estimated time that the radiation levels will be significant, and the integrated dose to personnel.

**3.3** Non-essential personnel (i.e., those not directly involved in the activities of the EOF organization) should be evacuated first from any areas that exhibit elevated radiation or contamination levels. These personnel would include vendors, consultants, and public employees of the state and local agencies.

| F8 Section | TITLE: TRANSFER TO THE BACKUP EOF | NUMBER: F8-11 |
|---|---|---|
| | | REV: 3 |

## 4.0 RESPONSIBILITIES

The Emergency Manager has the overall responsibility to direct and coordinate an evacuation of the EOF and will be supported directly by the RPSS and the EOF Coordinator.

## 5.0 PREREQUISITES

Radiological or conventional hazards exist in the EOF such that personnel are at risk to remain in the emergency center or the EOF has lost its functionality.

## 6.0 PROCEDURE

**6.1** Emergency Manager **SHALL**:

**6.1.1** Direct the EOF Coordinator and the RPSS to provide status reports of the EOF environment.

**6.1.2** Refer to F8-6, Radiological Monitoring and Control at the EOF, for protective action guidelines for EOF personnel.

**6.1.3** Ensure nonessential personnel (vendors, consultants, and state/local employees) are evacuated from the EOF if there is a high potential for a hazardous environment.

| F8 Section | TITLE: TRANSFER TO THE BACKUP EOF | NUMBER: F8-11 REV: 3 |
|---|---|---|

| NOTE: | The need to evacuate emergency response personnel for radiological reasons should be determined based on the following considerations:<br>1. The integrated dose that these personnel would receive if they remained in a radiation area.<br>2. The potential loss of the ability to utilize key technical personnel due to radiation exposure limits.<br>3. The effectiveness of the emergency organization operating in a condition of reduced mobility or communication due to use of protective clothing and equipment.<br>4. The potential exposure received during evacuation as compared to the potential exposure received by not evacuating. |
|---|---|

**6.1.4** If it becomes necessary to evacuate the EOF and time is available for a direct transfer to the Backup EOF, request that another Emergency Manager designee establish an EOF organization at the Backup EOF within the estimated evacuation time constraints. See Attachment A, Directions to the Backup EOF.

| NOTE: | A new EOF organization should be staffed and functional at the Backup EOF before the EOF is evacuated, if conditions permit. |
|---|---|

**6.1.5** If time is NOT available for a direct transfer to the Backup EOF (i.e., the EOF must be evacuated before the Backup EOF can be staffed by EOF personnel), transfer the EOF functions back to the TSC until the backup EOF is staffed.

A. Notify the Emergency Director of the need to quickly evacuate the EOF and the necessity of the TSC to temporarily receive the EOF offsite functions.

| NOTE: | The TSC will transfer the EOF functions to the Backup EOF when facility is staffed by EOF personnel. |
|---|---|

B. Consider the option of bussing the current EOF staff to the Backup EOF as opposed to setting up a new EOF staff.

**6.1.6** Ensure the Emergency Director is informed of the EOF evacuation to the backup EOF.

| F8 Section | TITLE: TRANSFER TO THE BACKUP EOF | NUMBER: F8-11 |
|---|---|---|
| | | REV: 3 |

**6.1.7** Notify the HQEC Manager or HQEC Coordinator of the need to evacuate the EOF.

**6.1.8** Direct the RPSS to determine the evacuation route that would limit exposure and provide a means of monitoring personnel evacuating the EOF.

**6.1.9** Direct the EOF Coordinator to prepare for evacuation by arranging for transportation of personnel, as appropriate.

| | |
|---|---|
| ***NOTE:*** | **The EOF organization at the Backup EOF should be ready to assume the EOF offsite functions when:**<br>**1. Plant status has been determined and is being tracked.**<br>**2. The MIDAS and ERCS are functioning and all necessary communication equipment is functioning.**<br>**3. Offsite communication links to state and local government are functioning.** |

**6.1.10** When the Backup EOF is prepared to receive the EOF offsite functions, perform an orderly turnover of the following EOF operations to the Backup EOF.

A. Offsite Communications

B. Offsite Dose Assessment and Field Team Monitoring

C. Reclassification and Offsite Protection Action Recommendation authorizations

| | |
|---|---|
| ***NOTE:*** | **The Backup EOF should inform the NRC, TSC, state and local governments of the change of EOF location.** |

**6.2** EOF Coordinator **SHALL**:

**6.2.1** When informed of the decision to evacuate the EOF, supervise the assembly of materials and equipment to be removed from the area.

| ***NOTE:*** | **Materials may be contaminated and thus may not be able to be removed. Everything that cannot be removed should be secured in a locked area.** |
|---|---|

Consider assembling and transferring the following material. Don't delay if material cannot be assembled.

A. "Plant Flow Diagrams" (one set exists at Ren Square 10th floor reference library)

B. "Logic Diagrams" (one set exists at Ren Square 10th floor reference library)

C. "Controlled Drawing File Index" (drawing aperture cards are located at 414 Nicollet Mall)

D. Cellular phone for EM and/or EOF Coordinator (used for communications in transit to HQEC)

E. Docking station computer (this may be used on LAN at Backup EOF area)

**6.2.2** Upon evacuation of the EOF, the EOF staff may be required to go to the Backup EOF to augment the Backup EOF staff members. Direct the Asst. EOF Coordinator to arrange for transportation of personnel and equipment.

**6.2.3** Contact each Sheriff's Department and inform them of the departure to the designated offsite assembly area or monitoring and decontamination facility.

**6.2.4** Transfer your offsite responsibilities to the backup EOF (or TSC if necessary) as directed by the Emergency Manager.

| F8 Section | TITLE: TRANSFER TO THE BACKUP EOF | NUMBER: F8-11 |
|---|---|---|
| | | REV: 3 |

**6.3** RPSS **SHALL:**

**6.3.1** When informed of the decision to evacuate the EOF determine possible evacuation routes that would limit exposure of personnel while enroute to the Backup EOF or an offsite monitoring and decontamination facility.

A. Selection of the offsite assembly area or monitoring and decon center will depend on various factors such as wind direction, weather conditions, and availability of the site. The following guidelines are used to assist in the selection of an assembly area or offsite monitoring and decon center:

1. Selected site should be upwind from any release.

2. Selected site should be accessible.

3. Evacuation routes to the selected site should minimize the time personnel would be exposed to any offsite radioactive release.

B. Any one of the following offsite facilities may be utilized as an assembly area or offsite monitoring and decon facility.

1. Red Wing Service (if used, monitoring and decon kits from the EOF will need to be transported to the facility for setup).

2. Goodhue County/City of Red Wing Monitoring and Decon Center at the Red Wing Fire Department.

3. Dakota County Monitoring and Decon Center in Hastings.

**6.3.2** If a county monitoring and decon facility is chosen, contact the appropriate county to notify and coordinate the logistics of the facility's use.

**6.3.3** Supervise the assembly of monitoring teams to help coordinate the monitoring and decontamination of personnel, as necessary, during the evacuation.

**6.3.4** Identify a collection point for Field Team samples to be transferred to a Monticello sample courier.

**6.3.5** Contact the Monticello Plant to arrange for a sample courier to pick up samples at the collection point and return them to the Monticello lab for analysis. Possibly, the helicopter service could be used for this courier service (see F8-4).

**6.3.6** Transfer your offsite responsibilities to the Backup EOF (or TSC if necessary) as directed by the Emergency Manager.

**6.4** The Technical Support Supervisor **SHALL**:

Supervise the transfer of Technical Support personnel to the Backup EOF.

| F8 Section | TITLE: TRANSFER TO THE BACKUP EOF | NUMBER: F8-11 |
|---|---|---|
| | | REV: 3 |

## ATTACHMENT A - DIRECTIONS TO BACKUP EOF

1. The Backup EOF will be set up on the 10th floor of NSP's Renaissance Square.
2. You must bring your company I.D. card to gain access to the facility.
3. If approaching from Interstate 94:
   A. Take Interstate 94 West to 5th Street off-ramp.
   B. Stay on 5th Street to Nicollet Mall.
   C. Park in either the ramp on the right side between Nicollet and Hennepin off 5th Street or park in the Skyway ramp at the corner of 4th and Nicollet.
4. If approaching from Interstate 35W:
   A. Take Interstate 35W to Interstate 94 West.
   B. Exit Interstate 94 West at Hennepin Avenue.
   C. Stay on Hennepin Ave. to 4th Street and turn right.
   D. Park in either the ramp between Hennepin and Nicollet or the Skyway ramp at the corner of 4th Street and Nicollet.
5. Renaissance Square (a reddish brown sandstone building) is located across 5th Street from NSP G.O. on Nicollet Mall.

| F8 Section | TITLE: EMERGENCY REMP | NUMBER: F8-12 |
|---|---|---|
| | | REV: 3 |

Reviewed By: _____ Gen. Supt. Radiation Protection

Approved By: _____ Plant Manager

Effective Date: 8-10-00

OC Review: 7-20-00 S.C.

## 1.0 PURPOSE

| ***REFERENCE USE*** |
|---|
| • ***Procedure segments may be performed from memory.*** |
| • ***Use the procedure to verify segments are complete.*** |
| • ***Mark off steps within segment before continuing.*** |
| • ***Procedure should be available at the work location.*** |

The purpose of this procedure is to describe the Emergency Radiological Environmental Monitoring Program (EREMP).

## 2.0 APPLICABILITY

This procedure applies to the Radiation Protection Support Supervisor (RPSS), REMP Administrator (REMP ADMIN), and the REMP Field Technician(s).

## 3.0 PRECAUTIONS

IF the REMP field technician is not a qualified Radiation Protection Specialist (RPS) THEN he/she should be accompanied by a RPS when collecting samples after a radiological emergency to prevent contamination.

## 4.0 RESPONSIBILITIES

**4.1** The Radiation Protection Support Supervisor (RPSS) is responsible for administering this procedure.

**4.2** The REMP Administrator assists in administering this procedure.

**4.3** The REMP Field Technician collects the samples in accordance with this procedure.

## 5.0 DISCUSSION

### 5.1 REMP

**5.1.1** REMP (Radiological Environmental Monitoring Program) is an established on-going program at the Prairie Island Nuclear Generating Plant. The program is designed to monitor radiation and radioactivity in the environs surrounding the plant. These measurements are then used as supporting evidence for evaluating the performance of plant equipment and systems that control release of radioactive material.

**5.1.2** REMP provides for various environmental samples at established intervals and locations. The following is a list of the samples and their normal sample frequency:

| | | |
|---|---|---|
| A. | Air particulate and radioiodine sample filters | - Continuous (changed weekly) |
| B. | TLD | - Quarterly |
| C. | Milk | - Monthly (Nov. through April)<br>- Biweekly (May through October) |
| D. | Well Water | - Quarterly |
| E. | Drinking Water | - Weekly |
| F. | Mississippi River Water | - Weekly |
| G. | Cultivated Crops | - Annually |
| H. | Fish and Invertebrates | - Semiannually |
| I. | Bottom Sediment | - Semiannually |
| J. | Shoreline Sediment | - Semiannually |

**5.1.3** REMP TLD's

A. There are five categories of REMP TLDs:

| Category | Location |
|---|---|
| A | This group surrounds the plant at the site boundary. |
| B | This group surrounds the plant at a 4 to 5 mile distance from the plant. |
| S | Special interest areas. |
| IA, IB | Area around ISFSI (These do not contain Emergency TLD badges). |
| C | Control location beyond the 10 mile EPZ. |

B. Maps which identify the REMP TLD and air monitoring station locations are available in each emergency response facility. See REMP sample location maps NF-114227 & NF-114231.

C. Two badges with 3 TLD's in each badge are encased in plastic with identification and placed at each exposure location.

1. One badge is identified as "Regular" and the other is marked "Emergency".

2. There are no "Emergency" badges in the ISFSI TLD's.

3. Under normal conditions, the plastic case is changed on a quarterly basis. In case of an unscheduled gaseous release, the "Emergency" badge may be detached from the "Regular" badge and sent to the laboratory for reading.

4. The "Regular" badges should be left in the holder until the next quarterly sampling period.

**5.1.4** REMP Air Monitoring Stations

A. In order to determine the airborne radioactivity in the area around the plant site, air monitoring equipment is located in the sectors most likely to yield high averages of airborne contamination.

B. There are four (4) REMP air monitoring stations near the plant which operate continuously to collect particulate material and radioiodine.

C. There is one (1) REMP control air monitoring station outside the 10 mile EPZ.

D. The location of each station is marked on the REMP sample location map NF-114231.

E. Each facility is fenced and locked and accessed by the REMP Technician.

F. The filters that collect particulate material and charcoal cartridges that collect radioiodine are changed weekly.

## 5.2 Emergency REMP

**5.2.1** In the case of a radioactive release during emergency conditions, the Emergency TLDs should be collected and read after the release has been terminated.

**5.2.2** It may be advantageous to collect the air particulate and radioiodine sample filters earlier than the normal weekly collection schedule depending on the release magnitude and time of the sampling cycle.

**5.2.3** The remainder of the normal REMP sampling should be collected at its regularly scheduled time.

**5.2.4** As a result of consultation with offsite officials, a modification of the existing REMP may be prudent as part of a long term monitoring plan.

## 6.0 PREREQUISITES

An emergency type release has occurred and the radioactive releases have been terminated.

| F8 Section | TITLE: EMERGENCY REMP | NUMBER: F8-12 |
|---|---|---|
| | | REV: 3 |

## 7.0 PROCEDURE

### 7.1 Radiation Protection Support Supervisor (RPSS)

**7.1.1** **Determine** if the Emergency TLDs should be collected and read or the air monitoring filters and cartridges should be collected.

A. For Alert and Site Area Emergency conditions, the Emergency set of TLDs may be collected for the affected sectors upon termination of the emergency condition or release.

B. For the General Emergency condition, the Emergency set of TLDs should NOT be exchanged during any known release period to prevent unnecessary dose to technician. Considerations for exchanging the TLDs should include:

1. Taking parallel actions with the state and NRC as deemed necessary.

2. Need for providing interim data concerning the long term effects of the release on the environment.

3. Need for providing immediate additional data concerning the extent of the release.

4. The Regular set of TLDs should NOT be exchanged, except at the normal ninety-one day exchange date.

**7.1.2** **Determine** if the air monitoring filters and cartridges should be collected earlier than the normal weekly collection.

A. For Alert and Site Area Emergency conditions, the air monitoring filters and cartridges may be collected for the affected sectors upon termination of the emergency condition or radioactive release. However, **consider** leaving them in the field till the next regularly scheduled collection time.

B. For the General Emergency condition, the air monitoring filters and cartridges should NOT be exchanged during any known release period to prevent unnecessary dose to technician. Considerations for exchanging the filters and cartridges should include:

1. Taking parallel actions with the state and NRC as deemed necessary.

2. Need for providing interim data concerning the immediate effects of the release on the environment.

3. Need for providing immediate additional data concerning the extent of the release.

4. Schedule for the regularly scheduled pickup of the filters and cartridges.

**7.1.3** **Determine** if other elements of the regular REMP should be modified.

A. This determination should be made in conjunction with consultation from other offsite agencies and consideration of the magnitude of the radioactive release.

B. Sampling modifications to the REMP should be in addition to the historical REMP sampling to maintain an historical comparison data base.

**7.1.4** IF it is determined by the RPSS that the Emergency TLD's and/or air monitoring filters and cartridges should be collected from the field, THEN:

A. **Notify** REMP Administrator if not already done.

B. **Direct** REMP Administrator or designee to collect the Emergency TLD's and/or air monitoring filters and cartridges from the field observing all the necessary precautions concerning radioactive contamination in the field.

C. **Provide** appropriate radiation protection coverage for the REMP technician(s) collecting the samples.

D. **Review** the laboratory results of the Emergency REMP sampling.

## 7.2 REMP Administrator

IF it is determined by the RPSS that the Emergency TLD's and/or air monitoring filters and cartridges should be collected from the field, THEN the REMP Administrator should:

**7.2.1** **Assist** RPSS in assessment of which samples should be collected and frequencies, if appropriate.

**7.2.2** **Consider** the need for special radioactive shipment arrangements when shipping air filters and cartridges to the laboratory.

**7.2.3** **Contact** REMP vendor and **request** that new sets of TLDs be immediately forwarded to the Prairie Island NGP.

A. **Call** the REMP vendor and **request** a set of Emergency TLDs be shipped "preferred air space" on the next commercial airline.

B. **Arrange** for someone to meet the plane and pickup the package of TLD badges at the airline baggage office.

C. **Return** the exposed badges by placing them in the carton which the replacement badges arrived in, and reversing the above shipping procedure.

D. **Place** the "control" badge in the lead-shielded case located in the environmental lab station.

E. **Remind** persons involved in handling badges that the TLD badges are not to be put through the airport x-ray machines. It is better to open the package for visual inspection.

**7.2.4** **Direct** REMP Technician(s) to collect the appropriate Emergency REMP samples.

**7.2.5** **Ensure** the REMP Field Technician has appropriate Radiation Protection Specialists along to prevent contamination.

**7.2.6** **Verify** sample completion from REMP Field Technician and **report** to RPSS.

**7.2.7** **Review** the laboratory results of the Emergency REMP sampling with the RPSS.

## 7.3 REMP Field Technician(s)

IF it is determined by the RPSS that the Emergency TLD's and/or air monitoring filters and cartridges should be collected from the field, THEN the REMP Field Technician should:

**7.3.1** **Collect** the requested samples in accordance with the appropriate REMP sample collection procedures (RPIP 4730 series) and the REMP sampling location maps.

**7.3.2** **Ensure** appropriate Radiation Protection measures are conducted to prevent contamination.

**7.3.3** IF collecting Emergency TLDs THEN:

A. **Detach** the Emergency TLD card from the Regular TLD card and **send** it to the laboratory for reading. The Regular TLD cards will be left in the holder until the next quarterly sampling period.

B. **Ensure** the beginning and ending exposure times have been recorded on the shipping tab for each TLD.

C. WHEN removing the Emergency TLDs, **take** them out of the plastic bag to prevent possible contamination, continued exposure and shipping of radioactive materials.

D. **Place** the Emergency Control TLD badges from the control shield with the Emergency TLDs during shipment to the laboratory. The control badge establishes the transit radioactive dose to the badges.

E. **Label** the package with "Do NOT X-Ray" labels prior to shipment.

F. IF additional replacement badges are needed, THEN **call** the REMP contract laboratory to order more badges.

**7.3.4** IF collecting air monitoring filters and cartridges THEN:

A. **Ensure** the following material is available:

1. Old substation key.

2. A supply of particulate filters.

3. A supply of charcoal filters.

4. A supply of glassine envelopes.

B. **Ensure** the beginning and ending exposure times have been recorded on the shipping tabs.

C. **Purge** the charcoal cartridges with clean air to purge out the xenon. An air sampler may be used in a clean area.

D. **Consult** with the REMP Administrator or RPSS to determine the type of desired shipping.

E. **Notify** REMP Administrator upon completion of sampling.